

University of Mississippi

eGrove

---

Electronic Theses and Dissertations

Graduate School

---

1-1-2022

## Meaning in Life and Psychological Distress: Examining Veterans and Psychological Adaptation to Civilian Life

Victoria McCutcheon

Follow this and additional works at: <https://egrove.olemiss.edu/etd>

---

### Recommended Citation

McCutcheon, Victoria, "Meaning in Life and Psychological Distress: Examining Veterans and Psychological Adaptation to Civilian Life" (2022). *Electronic Theses and Dissertations*. 2250. <https://egrove.olemiss.edu/etd/2250>

This Thesis is brought to you for free and open access by the Graduate School at eGrove. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

MEANING IN LIFE AND PSYCHOLOGICAL DISTRESS:  
EXAMING VETERANS AND PSYCHOLOGICAL ADAPTATION TO CIVILIAN LIFE

A Thesis  
Presented in partial fulfillment of requirements  
for the degree of Master of Arts  
in Clinical Psychology  
The University of Mississippi

by

Victoria E. McCutcheon

May 2022

Copyright © 2022 Victoria E. McCutcheon  
ALL RIGHTS RESERVED

## ABSTRACT

Veterans' transition from the military to civilian life can be conceptualized as a cultural transition (i.e., *acculturation*). This transition means leaving the familiarity and consistency of military life and attempting to integrate one's values, skills, expectations, and identity as a service member into the dominant civilian culture. The present study seeks to examine the *psychological adaptation* component of acculturation (i.e., the individual's feelings and perceptions of being in the new culture) in a veteran sample, as it relates to meaning in life. The existing body of veteran literature has demonstrated that meaning and purpose (a distinct component of meaning) are important protective factors for human flourishing and positive psychological functioning. However, research examining the role of meaning in veteran psychological adaptation specifically is lacking. The present study aimed to examine the relationship between meaning in life and veteran psychological adaptation to civilian life, as well as the role of psychological distress (i.e., symptoms of depression, anxiety, and stress) in this relationship. A significant positive relationship was observed between meaning in life and psychological adaptation among veterans. Additionally, psychological distress and the symptom categories of depression, anxiety, and stress emerged as significant mediators in the aforementioned relationship, as veterans who reported greater meaning in life tended to report lower levels of psychological distress and better psychological adaptation. Taken together, the present findings highlight the potential for meaning and psychological distress to serve as protective and risk factors, respectively, in veteran psychological adaptation to civilian life.

*Keywords:* Veterans, acculturation, psychological adaptation, meaning, purpose,  
psychological distress

## TABLE OF CONTENTS

I.	Introduction .....	5
II.	Method .....	41
III.	Results .....	47
IV.	Discussion .....	54
V.	List of References .....	65
VI.	List of Appendices .....	92

## LIST OF TABLES

1. Sample Demographics .....	93
2. Sample Military Demographics .....	94
3. Descriptive statistics and reliability coefficients for variables of interest .....	95
4. Pearson correlations among variables of interest .....	96

## LIST OF FIGURES

1. Path coefficients for simple mediation analysis.....	97
2. Path coefficients for simple mediation analysis with covariates .....	98
3. Path coefficients for supplemental depression mediation analysis .....	99
4. Path coefficients for supplemental anxiety mediation analysis .....	100
5. Path coefficients for supplemental stress mediation analysis .....	101

## I. INTRODUCTION

### **Veterans in America**

There are currently more than 18 million veterans in the United States, encompassing 7% of the national population (Vespa, 2020). Nearly four million current veterans have served in the United States military since the terrorist attacks occurring on September 11, 2001 (National Academies Press, 2018). Title 38 of the United States Code defines a “veteran” as “a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable” (U.S. Congress, 1964). The current veteran population consists of service members from several service periods over the past 80 years, including those who served in peacetime and during the following eras: World War II, the Korean War, the Vietnam Era, and the Gulf War Era (1990 to present, including those who served post-9/11). Although service members have the shared experience of serving in the United States Armed Forces, there are numerous factors highlighting the wide variety of service experiences. Depending on the service period and individual service member characteristics, veterans may have voluntarily enlisted or been drafted, served stateside, served in a non-combat capacity, or been deployed to a wide range of combat zones. The roles they assumed in any of these settings range from cooks to medics to infantrymen to strategists and more. Additionally, the length of service and age at enlistment or draft, as well as time and reason for discharge, are all part of each individual's military journey (Vespa, 2020).

A unifying factor shared by each of the 18 million veterans in the United States today is that every veteran must transition from life in the military to life as a civilian. In some ways, the process of “coming home” looks different for each service period specified above, as societal perceptions of the wars and responses to soldiers have varied. Over the decades, soldiers have been met with varying levels of support and respect from the public. These responses have ranged from widespread patriotism and reverence (e.g., World War Eras), to polarized perspectives and incidents of disrespect toward soldiers (e.g., the Vietnam Era), to criticism of the leaders and institutions pursuing the war effort, rather than soldiers themselves (e.g., the Gulf War Era; Pols & Oak, 2007). Regardless of the decade, veterans have faced the challenge of re-discovering life outside of the military. The transition from military life and culture to civilian society involves integrating and adapting one’s identity to a distinctly different context, while simultaneously navigating the psychological, social, cultural, and practical facets of this change.

### **Veteran Acculturation**

**Definition and Overview.** The term *culture* is generally understood as a way of life; a set of norms, values, beliefs, and practices shared by a group (e.g., Betancourt & López, 1993). In this way, the military environment is a culture. Military culture is characterized by structure, rules, well-defined roles and expectations, and core values that create uniformity (e.g., service, purpose, placing service of others above oneself, comradery, honor, patriotism, discipline, and courage) (McCaslin et al., 2020; McCormick et al., 2019; Tkachuck et al., 2021). From the moment an individual joins the United States Armed Forces, they are immersed in this culture. In training programs and classes, service members learn about military history, uniform customs, military values and ethics, how to listen to and follow orders, and how to function within the military chain of command (McCormick et al., 2019). Accordingly, every aspect of life is

approached with these norms and expectations at the forefront, and this way of living becomes normal. These standards, though largely common across the military, may also vary between branches, status, and service roles, further highlighting the nuances and complexities of each individual experience in the military to civilian transition (Redmond et al., 2015). Everything from what one wears to how one speaks and walks is adapted to conform to the military way of life. Accordingly, military culture becomes a part of the individual's identity and shapes their sense of self. When a service member exits the military, they must begin the process of transitioning back to a culture that does not necessarily share the same values and expectations, which can promote a sense of loss and struggle. The differences between military and civilian cultures demonstrate that transitioning from one to the other can be understood as a cultural transition at its core—a transition requiring adjustment and adaptation (McCormick et al., 2019).

Ahern et al. (2015) identified three primary themes that capture core difficulties associated with the adjustment from military to civilian culture: *military as family*; *normal is alien*; and *searching for a new normal*. The theme of *military as family* encompasses the idea that reintegrating into civilian life means leaving an environment that had provided structure, protection, and support of military life. During their time in the military, many veterans experience challenges and events that are unique to the military culture and lifestyle. The uniqueness of experiences such as combat, extreme weather conditions, and extended separation from family and friends are matched by the unique support and structure provided by the military family. These are experiences that people outside the military family may not be able to connect with or understand. Accordingly, leaving the military family can lead to a sense of loss (of camaraderie, community, purpose) and uncertainty about life without that support system. The theme of *normal is alien* emphasizes that the distinct differences between military and civilian

life can promote a sense of disconnection and isolation among veterans, as well as a loss of purpose. Ahern and colleagues (2015) report that many veterans describe feeling like their family and friends at home could not understand them and their difficulties since they had not shared in the military experience. Additionally, many report that the lack of structure and clear, common goals in civilian life presented a daunting challenge of suddenly needing to function without these expectations. Finally, the theme of *searching for a new normal* demonstrates that veterans must find ways to reconnect and find their place in civilian life. During their time in the military, veterans operated with a sense of meaning and purpose, as well as a clear identity that was developed and maintained through the military organization and structure. Accordingly, the transition to life as a civilian often means finding a new sense of meaning and purpose once their identity as a service member is no longer adaptive for their environment and goals (Ahern et al., 2015). In brief, the transition from active-duty service member to civilian is a complex period of adjustment and change for which there is no simple solution.

The concept of *acculturation* has been used to explain the complex dynamics at work when a group or individual attempts to navigate interaction and participation in a new cultural environment. In Berry's (2005) model, acculturation is defined as "the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" (p. 698). This model has been widely utilized and adopted for exploring and understanding the individual and societal impacts of cultural transition and integration. Though Berry's model was developed in the context of cross-cultural immigration, it provides a valuable framework for exploring the process of leaving the military and reintegrating into civilian society. Veterans' transition to civilian life is an acculturation process, as many individuals returning home from military service experience culture shock and adjustment

difficulties similar to those experienced by immigrants arriving in a new country (McCaslin et al., 2021; Tkachuck et al., 2021). Leaving the military means leaving the familiarity and consistency of military life (e.g., regimented schedules, understanding of specific role and responsibilities, community of camaraderie) and attempting to integrate one's values, skills, expectations, and identity as a service member into the dominant civilian culture (Arminio et al., 2018; McCaslin et al., 2021). Accordingly, these efforts impact adjustment in nearly every domain of life (e.g., psychological health, physical health, social and family functioning, employment, housing, financial, education, legal, spiritual; Elnitsky et al., 2017).

During the transition from military to civilian life, veterans must determine how the values, skills, priorities, and behaviors they developed in the military translate to civilian society. Some values and skills (e.g., courage, respect for authority) may translate more naturally and easily than others (e.g., aggression, defensive strategizing, uniformity). Behaviors and values that were central during service may no longer be appropriate or effective for navigating life in civilian society. This can present difficulties in various domains of a veteran's life. For example, in the context of social relationships, the emotional detachment and aggression that is necessary for survival in combat may create strained relationships at home (Danish & Antonides, 2013). As the striking difference between daily life in the military and daily life as a civilian become evident, a veteran may experience difficulty getting back into the routine of their household and family life following a return from service. This may lead to strain and disconnection in relationships with family members. While loved ones may expect the veteran to easily reintegrate into the group's norms and patterns, this can be a difficult process (Pease et al., 2015). The impact of veterans' adjustment difficulties on post-military life has been well-established in the literature. Following separation from military service, veterans are at a

significant and elevated risk for adverse psychological outcomes. Examples include problems associated with depression, anxiety, substance use, traumatic events, suicidality, isolation, and loneliness (e.g., National Center for Post-Traumatic Stress Disorder, 2020; Pemberton et al., 2016; Ramsey et al., 2017; Teo et al., 2018; Trivedi et al., 2015).

Some veterans may also face hardships in finding suitable employment opportunities following their exit from active-duty service. Several factors play a role in such difficulties. First, veterans in search of employment are impacted by the economic and societal factors that affect the country as a whole. Therefore, in times of decreased economic growth or decreased availability of jobs, veterans may struggle alongside civilians in their pursuit of gainful employment. An additional barrier many veterans face involves difficulty finding positions and workplaces for which they are qualified and equipped. Many of the skills and experiences gained through military service, such as weapons training, navigation, and mission planning, are not directly transferable to civilian occupations. This can contribute to feelings of frustration over having to apply for low-paying, entry level jobs despite their experience and expertise (Keeling et al., 2018; Zogas, 2017). Furthermore, veterans have reported difficulty adjusting to civilian workplace environments where military values (e.g., punctuality, professionalism, respect for authority) are perceived to be undervalued or underutilized (Kintzle et al., 2015; Zogas, 2017). Workplace adjustment is further complicated by psychological and physical health problems veterans may experience following their term of service. Such difficulties may limit veterans' abilities to work and may lead employers to have a greater hesitancy in hiring veterans (Keeling et al., 2018; Schult et al., 2019; Stone et al., 2018).

Struggles with unemployment can subsequently impact financial stability, access to housing, and the ability to meet survival needs (e.g., food, water, clothing). On any given day,

nearly 40,000 veterans experience homelessness, a number that accounts for approximately 11% of the overall population of individuals experiencing homelessness (NCHV, 2021). Risk factors for veteran homelessness include problematic substance use, financial distress, mental illness, and lack of social support (Tsai & Rosenhack, 2015). Homelessness in the veteran population has also been associated with increased risk behaviors including sensation seeking, substance use, risky sexual practices, and aggression (Harris et al., 2017), as well as increased risk for suicidal ideation and suicide attempts (Tsai et al., 2018). Data from a 2015 nationally representative survey of U.S. veterans showed that suicide attempts in the previous two years were five times higher (6.9% vs 1.2%) among veterans experiencing homelessness. Further, rates of two-week suicidal ideation were 2.5 times higher (19.8% vs 7.4%) in veterans with a history of homelessness compared to veterans without this history (Tsai et al., 2018). These findings demonstrate that the stakes of not acculturating successfully are high and wide-ranging for those returning home from military service. As veterans face the practical and personal aspects of this transitional period, they are also experiencing a disruption in their identities as service members. For many, this can lead to crises of identity, mental health, meaning, and purpose.

**Identity.** The term *identity* refers to the roles, traits, goals, values, beliefs, and experiences comprising one's sense of self and the sense of one's unique position in the world (Mitchell et al., 2020). The dissonance that occurs during the process of merging these two worlds (i.e., civilian society and the military) highlights two important identities that exist within each veteran: the civilian and the service member. In many ways, these can be considered incongruent identities, as many of the core components and experiences conflict with one another. For example, as a service member, one is expected to subscribe to the demands of deindividuation, obedience, and collectivism, whereas a civilian—in a Western, individualistic

culture like the U.S.—may be expected to embrace autonomy, self-advocacy, individualism, and personal connections with others (Smith & True, 2014). During their time in the military, service members' identities are continually shaped and strengthened by the values, expectations, beliefs, and experiences of military life. While they continue to have a complex network of identities rooted in various aspects of themselves (e.g., gender, race, religion, roles), their sense of self becomes deeply rooted in the military domain of their identity.

When the disruptive life event of transitioning out of the military and back into civilian life occurs, these identities—the military identity in particular—are called into question; the individual must resolve questions of who they are and how to exist in the world. Effective navigation of such an identity crisis involves evaluating the life event, making meaning of the struggle, and finding positive resolutions (Lilgendahl, 2015; Mitchell et al., 2020). In Park's (2010) meaning-making model, meaning-making processes occur when there is a discrepancy between a potentially stressful event and one's belief system (i.e., beliefs about the world, about the self, and about the self in the world). These meaning-making processes may include efforts to assimilate or accommodate the understanding of the event into the existing global meaning system, to develop a sense of comprehension or significance about the event, and to engage in cognitive-emotional processing about the event itself (Park, 2010). When meaning is made, it can produce various effects within the individual, including changes in identity (i.e., sense of self), as well as changes in beliefs, goals, and sense of meaning in life (Park, 2010). However, when meaning-making efforts are unsuccessful, the individual may experience crises of meaning and identity, as well as adverse psychosocial and psychopathological outcomes (Mitchell et al., 2020).

Navigating identity disruptions during civilian acculturation is a complex process impacted by numerous factors. While practical factors such as living conditions, employment, physical health, and financial stability play impactful roles in the transition from military to civilian life, the importance of psychological factors such as identity cannot be overlooked. There are numerous challenges encountered by veterans as they manage identity disruption. First, the experience of evaluating and adjusting their military identity to suit civilian society can promote existential crises and questions such as “Who am I and what do I do now?”. Accordingly, veterans may struggle with feeling like they do not belong anywhere as they exist between military and civilian life; they must now balance the understanding that they are no longer in the military with the stress of feeling out of place in civilian society. The ambiguity and lack of structure inherent in civilian existence—compared to the highly routinized schedules, expectations, and rules of military culture—can make it even more difficult to develop their identity beyond that of a service member. Additionally, markers of status such as rank, awards, achievements, and experiences that contribute to one’s identity as a service member are likely to be treated with less appreciation outside of a military context, as civilians typically do not have an accurate understanding of their significance (Orazem et al., 2017).

Compared to the military, there is no clear path or set of rules in civilian life to guide their developing identities outside that of a service member. Accordingly, veterans may struggle to find their footing as a civilian following their experiences in the military. As service members acculturate into civilian life, the accompanying freedom to be an individual is filled with uncertainty and the potential for crises of meaning and purpose (Keeling et al., 2018). Difficulty discovering meaning in the civilian world is another potential challenge for veterans as they find their place and role as a civilian. Finally, the distinct differences between military and civilian

cultures may lead veterans to hold negative views of life as a civilian. These perceptions can further create a sense of alienation and distress as veterans work to adjust to life outside the military (Orazem et al., 2017).

Although identity conflict and disruption can present numerous challenges to veterans as they acculturate to life as a civilian, there are efforts that can help bridge the gap and ease the transition. Readyng oneself for the transition through planning and consideration of how one can integrate into a new role(s) can help minimize the sense of loss experienced upon discharge from the military. This may occur through formal veteran assistance programs, Veterans Affairs (VA) services, non-profit service organizations, and individual efforts to prepare for separation from the military. Benefits of these efforts can be seen in both the practical (e.g., greater employment preparedness and financial security) and psychological (e.g., more realistic expectations, less culture shock) domains. Continued engagement with aspects of the military identity while exploring and evaluating how these values and goals operate in a new context can also help bridge this gap and ease the transition. This may include having meaningful and purposeful connections with others, such as family and friends (Keeling et al., 2018). Social support is a known protective factor for positive mental health functioning and decreased psychopathology (e.g., Pietrzak & Southwick, 2011; Renshaw, 2011). More specifically, receiving and giving social support through connections with other veterans can fulfill the spirit of comradery left behind in the military and lessen the culture shock one may experience returning to civilian life (Keeling et al., 2018). Through this military social support network, veterans may also learn how to discover and integrate the valued aspects of their military identity and experience (e.g., service, teamwork, honor) into their lives outside the military.

Identity conflict or disruption and subsequent identity adjustment efforts play an impactful role in veterans' civilian acculturation outcomes. Disruption in identity has been associated with increased psychopathology, including greater post-traumatic stress disorder (PTSD) symptom severity, higher rates of depression, and greater risk of suicidality (Baerger & McAdams, 1999; Chandler et al., 2003; Mitchell et al., 2020; Sokol & Eisenheim, 2016; Sokol & Serper, 2017). Identity disruption has also been associated with decreased life satisfaction and greater reintegration difficulty. Overall, veterans who experience identity disruption tend to have poorer psychosocial outcomes than those who do not (Mitchell et al., 2020). Examining the role of identity in veterans' acculturation outcomes provides valuable insight into the specific challenges experienced during the process of reintegration. Additionally, identity provides essential context when considering the overall framework and specific factors of this transitional period.

**Berry's Model of Acculturation.** Berry's (1980; 2005) model of acculturation provides a useful approach for conceptualizing veterans' reintegration into civilian society as a cultural transition (Tkachuck et al., 2021; see also McCaslin et al., 2021). While Berry addressed the traditional understanding of cultural transition, many of the same concepts are applicable to the shift between military and civilian life. Berry's model categorizes individual adaptation strategies according to two dimensions: retention or rejection of the native (original) culture and adoption or rejection of the host (new) culture. The model is rooted in the idea that when two cultures come into contact with one another, a process of sociocultural and psychological change is initiated within the individual. The extent and impact of these changes is dependent on many factors and, on an individual level, affects people differently depending on their attitudes and behaviors regarding participation in the dominant host culture.

According to Berry (1980;2005), acculturation manifests in four different strategies depending on the attitudes and behaviors of the minority individual or group: integration, assimilation, separation, and marginalization. These strategies may involve more positive approaches such as valuing both the dominant and non-dominant cultures and attempting to combine them (integration) or adopting the values and norms of the dominant culture (assimilation). Considering an example in the context of veteran acculturation, integration may present as effortful engagement in civilian life (e.g., finding a job in a civilian workplace and attending social outings with civilian friends), while maintaining connection and involvement with military culture through veteran support networks and mentorship programs, working at military-centered organizations (e.g., nonprofits that support veterans), and representing one's military identity through clothing, décor, etc. Comparatively, assimilation would include a greater effort to blend into civilian culture by minimizing external demonstrations of one's military identity and increased involvement with activities and settings that are not affiliated with the military. This strategy may be pursued by veterans who have negative perceptions or consequences from their time in the military and wish to distance themselves from these experiences.

Alternatively, these approaches may include rejecting the dominant culture and maintaining the norms and values of one's original culture (separation) or rejection of both the dominant and minority culture due to lack of value for relationships with both (marginalization) (Berry, 1980; 2005). In the example of veteran acculturation, separation may manifest as spending the majority of one's time and energy in the company of fellow service members and veterans while avoiding integration into civilian workplaces and social circles. Comparatively, the marginalization strategy would likely arise as an individual experiences significant

acculturation difficulties and feels as if they no longer belong in either civilian society or the military culture.

The consideration of these four acculturation strategies provides a useful framework for examining the military-to-civilian acculturation experience as it relates to veterans' efforts and outcomes (Tkachuck et al., 2021; see also McCaslin et al., 2021). Applying Berry's model to veteran acculturation, those who are better able to manage the service member–civilian identity conflict and relevant contextual factors would acculturate more successfully (i.e., integration and/or assimilation) and would be less likely to experience significant negative psychological effects. Those who are unable to resolve the identity conflict sufficiently will struggle to successfully acculturate (i.e., separation and/or marginalization) and are at greater risk for negative psychological outcomes (Berry, 2005). The pursuit of any specific acculturation outcome is driven by weighing one's preference for either maintaining one's culture and identity, or establishing relationships with and pursuing participation in the larger, dominant society and culture; in other words, acculturation strategies consist of attitudes and behaviors toward home and host cultures (Berry, 1980; Sam & Berry, 2006). As veterans navigate this process of acculturation, they must also manage associated identity disruptions that typically arise with such a life-altering event as leaving the military. The strategies and successes of addressing this identity conflict plays a significant role in determining the individual's acculturation outcome. Those who are willing and better able to acculturate and resolve the identity conflict can achieve integration or assimilation, while those who resist or struggle with reintegration to a greater extent may ultimately experience separation or marginalization.

In the case of veteran acculturation to civilian life, influential factors include family and social support, education, employment opportunities, physical and mental health, community

engagement, and sense of purpose, among others (Angel et al., 2018). These factors play a key role in the veteran's experience of relating to and actively participating in civilian culture. Using the example of social support within Berry's model, veterans who do not have a network of social support—either civilian or military—following their departure from the military may become isolated and socially withdrawn (Russell & Russell, 2018). This places greater distance between the veteran and the society to which they are acculturating, and increases the likelihood of separation or marginalization outcomes. Many of these factors are interconnected as the fallout from one impacts the potential for improvement in another. Veterans who have become more isolated or marginalized during this transition are less likely to seek help for their mental or physical health needs (Graziano & Elbogen, 2017; Tkachuck et al., 2021). This, in turn, contributes to a worsening of mental health struggles and compounded declining physical health over time.

Berry's model of acculturation provides a useful framework for examining veteran acculturation outcomes and the relevant factors for effective reintegration into civilian life. Each veteran has a different series of experiences reintegrating with civilian life depending on various biopsychosocial factors. Accordingly, the model addresses the heterogeneity of experiences seen across various adaptation outcomes. While acculturation involves numerous facets of an individual's life and identity, the present study places a specific focus on the psychological component of veteran acculturation.

### **Psychological Adaptation**

**Overview.** The term *acculturation* includes various domains that are impacted in the process of experiencing and adapting to a new culture; for veterans, this is a reintegration process, as they have previously experienced civilian society. As individuals acculturate, they

experience changes that can be physical, biological, health-related, political, economic, cultural, social, and psychological (Berry, 1994). The *psychological adaptation* component includes an individual's feelings and perceptions of being in the new culture (i.e., civilian culture) and addresses both positive (e.g., comfortable, happy, excited) and negative (e.g., anxious, out of place) internal experiences (Demes & Geeraert, 2014). More specifically, psychological adaptation addresses feelings and reactions related to psychological well-being, distress, and satisfaction during the acculturation process and in response to the new culture (Berry, 2005; Sam & Berry, 2006; Schmitz, 1992).

At an individual level of acculturation, as in the case of a single U.S. veteran, psychological adaptation involves affective, behavioral, and cognitive changes that are manifested in two key domains. The first factor includes *behavioral shifts*, which are changes in a person's behavioral repertoire that allow them to adjust to and engage with the dominant culture in an adaptive way (Berry, 2005; Sam & Berry, 2006). These changes are evident in veterans' efforts to reintegrate into various domains of civilian life. Behavioral shifts include more easily applied adjustments that help an individual "fit in" better within society (e.g., ways of dressing, speaking, eating, etc.). For retired service members, this may include transitions from uniform dress to civilian clothing, less formal structure in interactions with others, and greater freedom in self-expression through physical appearance and activities. While minor conflicts may be experienced during behavioral shifts, this categorization generally assumes relatively smooth acculturation for acculturating individuals (Berry, 2005).

The second factor, *acculturative stress*, is applicable when greater levels of cultural conflict and distress are experienced in the process of acculturation (Berry, 2005). The term acculturative stress was introduced by Berry (1970) as an alternative to the term "culture shock."

The change from “culture” to “acculturative” highlights the central impact of intercultural contact on individuals’ responses, while the change from “shock” to “stress” addresses the theoretical process of how individuals respond to negative events (i.e., coping strategies are utilized in response to stress, eventually leading to some form of adaptation) (Sam & Berry, 2006). Acculturative stress occurs with more complex acculturation experiences, such as integrating one’s identity, values, skills, and experiences into the larger society. For veterans, this may include the pursuit of educational and employment opportunities, adjusting to the demands and rhythms of family and home life, finding meaning and purpose in life outside the military, and the overall process of transitioning from service member to civilian. The experience of such acculturative stress is linked to negative mental health outcomes and adjustment difficulties, including depression, anxiety, and alienation (Berry et al., 1987; Falavarjani et al., 2019; Kartal & Kiropoulos, 2016; Sam & Berry, 2006). The struggles veterans face when acculturating to civilian life can have a severe and lasting impact on well-being and overall functioning. Accordingly, those who are better able to acculturate effectively tend to exhibit better mental health and better adaptive functioning overall (Elnitsky et al., 2017).

The experience of acculturative stress is complex and individualized, as the moderating variables that arise prior to and during acculturation impact the context and the individual’s ability to effectively navigate acculturative difficulties. The relevant factors present prior to acculturation include demographic and personal variables of the individual (e.g., age, gender, education, religion), functional qualities (e.g., health, language, social status), migration motivation and expectations, and cultural distance (i.e., the extent of dissimilarity between the home and host cultures). Additionally, factors such as social support (both appraisal and use), societal attitudes (appraisal and reaction), coping, and acculturation strategies impact the process

of acculturation (Berry et al., 1987; Sam & Berry, 2006; Yu et al., 2014). Despite the impact of these moderating variables, the process is always initiated when a causal agent (i.e., the experience of dealing with and participating in the intercultural contact of two cultures simultaneously, such as military and civilian culture) introduces a significant—and potentially threatening—event in the individual’s life. Second, the individual considers the meaning of experiences associated with acculturation, evaluating and appraising them as potential stressors. If they are judged to be relatively easy to navigate, changes and behavioral shifts occur with minimal to no difficulty, resulting in assimilation or adjustment outcomes (Berry, 2005; Sam & Berry, 2006). For example, the differences in expected dress between military and civilian life would prompt a veteran to shift attire from a service uniform to more standard civilian clothing. This shift would likely occur with minimal difficulty or distress. However, if acculturative experiences are judged to be problematic or difficult, acculturative stress develops.

The individual then engages in strategies to deal with problematic experiences and attempts to reduce corresponding distress. These efforts typically manifest as coping strategies that can be conceptualized as problem-focused (i.e., attempting to solve the problem or change the situation), emotion-focused (i.e., regulating the emotional response to the problem), and/or avoidance-oriented (i.e., efforts to escape or minimize contact with the stressor) (Sam & Berry, 2006). For example, such coping efforts may include engagement in meaningful activities, developing and maintaining strong social support networks, and focusing on positive emotional experiences (Kim et al., 2012). These strategies can be considered in the context of veteran acculturation in the example of a veteran who experiences distress in large crowds. A problem-focused coping approach might involve wearing noise-minimizing headphones to alter how the veteran experiences the situation. An emotion-focused approach might involve utilizing deep

breathing and mindfulness techniques while in a crowd to manage feelings of anxiety. An avoidance-oriented approach may involve refusal to enter situations where large crowds might be present.

The outcomes of efforts to manage acculturative stress vary according to the level of difficulty involved and how effectively the individual is able to cope with the stressor. In situations when behavioral shifts occur without difficulty or when acculturative stressors are successfully managed, outcomes typically include minimal stress and generally positive effects. When acculturative stressors are not coped with effectively, individuals may experience higher levels of stress and some negative effects. However, when acculturative difficulties are experienced as overwhelming and efforts to manage them are ineffective, individuals likely experience immediate negative effects and debilitating levels of stress. This outcome increases the likelihood of psychopathology development (e.g., depression, anxiety). The final feature of this process addresses the level of long-term psychological adaptation that occurs as the individual navigates the process of acculturative stress over time (Sam & Berry, 2006). As an individual experiences acculturation-related events and stressors, their attitudes and behaviors toward the host culture continue to evolve.

**Measurement.** Demes and Geeraert (2014) developed the Brief Psychological Adaptation Scale (BPAS) to assess psychological responses of individuals acculturating to a new culture. Scale development involved three areas of study to gain a clear and comprehensive understanding of the core concepts underlying psychological adaptation. First, the Culture Shock Questionnaire by Mumford (1998) was reviewed as it provided a two-factor measure of ill-being related to relocating abroad (i.e., culture shock and interpersonal stress). This measure addressed areas related to feelings of strain in adaptation efforts, anxiety regarding interactions with people

in the new culture, and missing loved ones from the home culture. Then, researchers reviewed the 10th revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10) classification of mental and behavioral disorders to assess key factors of stress and adjustment difficulties. This review resulted in the extraction of 13 symptoms as descriptors of adjustment difficulties, including anxiety, worry, and withdrawal (World Health Organization, 1992). Following this review, the researchers conducted a pilot study in which they interviewed individuals who had relocated abroad and asked them to describe the thoughts and feelings they often experienced living in the new (host) country. Participants offered positive and negative responses related to both their home and host countries. For example, when respondents were asked about the thoughts and emotions they experienced living in a new country, they often provided responses related to homesickness, excitement, and not knowing how to act, among others. Finally, the most prominent, frequently occurring concepts that appeared across these three efforts were used to develop the items of the BPAS. These items addressed feelings of excitement, belonging, nervousness, loneliness, homesickness, frustration, and happiness related to the home and host cultures (Demes & Geeraert, 2014). The Brief Psychological Adaptation Scale–Military Version (BPAS–MV; see Appendix A), an adapted form of the BPAS, was utilized in the present study for the examination of veterans’ psychological adaptation to civilian life. The BPAS–MV was developed by Tkachuck (2019; see also Tkachuck et al., 2021) to assess psychological acculturation factors specific to military experiences. The psychometric properties of the BPAS–MV were explored in the original developmental study upon which the present study builds (Tkachuck, 2019; Tkachuck et al., 2021).

## **Veteran Mental Health**

**Overview.** Numerous studies have demonstrated that veterans are at a significant and elevated risk of experiencing an array of mental health problems, including elevated rates of serious mental illness (SMI; Pemberton et al., 2016). Approximately one in four veterans live with a mental health disorder, compared to one in five people in the general population (e.g., Ramsey et al., 2017; Trivedi et al., 2015; U.S. Department of Health and Human Services, 2021). One area of particular vulnerability is evident in the rates of post-traumatic stress disorder (PTSD) among former service members. Research suggests that the current prevalence of PTSD among veterans is approximately 15%, with some estimates ranging as high as 30%, compared to 3-7% in the general population (Boscarino et al., 2015; National Alliance on Mental Health, 2014; National Center for PTSD, 2020). Another prominent concern among U.S. military veterans is substance use. Substance use among veterans and military personnel is common, with elevated rates of alcohol use and heavy use (i.e., consuming 5 or more drinks per occasion on 5 or more days in the past month) or binge drinking (i.e., consuming 5 or more drinks on a single occasion within the past month) found compared to the general population (Wagner et al., 2007). A study examining data from the National Survey on Drug Use and Health found that in the month prior, veterans were more likely to use alcohol (56.6% vs 50.8%) and to engage in heavy drinking (7.5% vs 6.5%) (Wagner et al., 2007) than civilian counterparts. While studies have shown that veterans do not exhibit increased rates of illicit substance use compared to the general population (Pemberton et al., 2016; Wagner et al., 2007), reported rates of illicit drug use among service members tend to increase following departure from service (National Institute on Drug Abuse, 2019). This finding highlights the specific impact the military to civilian transition can have on veteran behavior and coping strategies.

To place these findings in context, it is necessary to consider the influence of military culture and mental health stigma on reporting and treatment-seeking behavior among veterans. Studies have shown that as much as 60% of military personnel and veterans who experience mental health problems do not seek help or perceive significant barriers to seeking help (Kehle et al., 2010; Rosen et al., 2011; Sharp et al., 2015; Tkachuck et al., 2021). There are several common barriers to treatment seeking in military and veteran populations. First, negative perceptions and attitudes about mental health struggles may hinder current and former service members from asking for help. Another potential barrier is the fear of stigma and judgment from other service members and loved ones (Cheney et al., 2018; Hom et al., 2017). Since psychological assessment and intervention began with U.S. soldiers in World War I, there has been a perceived association between mental health struggles and weakness, cowardice, and abnormality (Pols & Oak, 2007). Although progress has been made and the perception has shifted more toward an understanding that mental health concerns are a difficult yet understandable part of life, the stigma persists for many and occurs across a range of contexts.

A third barrier to the seeking of mental health treatment involves practical and logistical concerns. Many veterans lack the necessary time, funds, and transportation necessary to access services (Cheney et al., 2018). In addition, it is a common belief that VA services will not be able to accommodate veteran needs due to issues of supply and demand (Cheney et al., 2018; Hom et al., 2017). Considering such barriers and low rates of treatment seeking, many veterans are neglected with respect to military mental health rates, as well as efforts to understand the impact of mental health problems on individual service members and their families.

**Acculturation and Mental Health.** The existing body of literature has demonstrated that difficult experiences during service, such as watching fellow soldiers being injured or killed, can

negatively and significantly impact psychological functioning, both in the short- and long-term. Some veterans will go on to develop mental health conditions such as PTSD, depression, anxiety, and/or a substance use disorder(s). In addition to formal mental health disorders and diagnoses, struggles with subclinical symptoms and sociocultural factors, including social connectedness, isolation, and loneliness, play a significant role in veterans' functioning during the transitional period of acculturation. Factors such as social connectedness and community engagement serve as protective factors for veterans facing mental health struggles (e.g., PTSD, depressive symptoms, suicidality). Alternatively, feelings of isolation or loneliness are associated with increased symptoms of psychopathology (Kintzle et al., 2018; Kuwert et al., 2014; Teo et al., 2018).

Community and social reengagement are critical components of the military-to-civilian transition. For veterans who struggle to connect with family and friends, there is a risk of loneliness and social disconnection. Loneliness is an important marker of deficits in social connectedness, and is associated with increased symptoms of depression and suicidal ideation, as well as decreased help-seeking intentions (Teo et al., 2018). Efforts to cope with distressing feelings and experiences associated with acculturation often include maladaptive strategies, such as increased substance use and avoidance behaviors (i.e., avoiding things, people, or situations that give rise to difficult thoughts, emotions, or memories) (Derefinko et al., 2018; McCaslin et al., 2021). These strategies may contribute to greater degrees of social isolation and feelings of loneliness, which may further exacerbate existing mental health difficulties. Despite the intended goal of adaptive coping, these behaviors typically facilitate a continued pattern of avoidance that negatively impacts psychological and social functioning.

The compounded effects of acculturation efforts, mental health difficulties, and barriers to care have striking and dire consequences for the veteran population (Nichter et al., 2020; Norman et al., 2018). On average, between 18 and 22 U.S. veterans die by suicide each day, numbers that have been steadily increasing since 2016 (Office of Mental Health and Suicide Prevention, 2020; Thomas & Taylor, 2020). Notably, separation from military service is linked to increased risk and rates of suicide, regardless of combat or deployment experience; those who have separated from service demonstrate a suicide hazard ratio of 1.63 compared to those who remain in the military (Brenner & Barnes, 2012; Reger et al., 2015). Ravindran et al. (2020) found that veteran suicide rates after separation peak between 6 and 12 months following discharge, with a modest decline occurring over the following 6 years. Additional factors associated with increased suicide risk included younger age (17-19 years compared to 40 years and older), active status (i.e., non-reserve status) at time of separation, service branch, and shorter length of service (Ravindran et al., 2020). These findings highlight the need to look beyond military service itself to understand the scope of the veteran mental health crisis, as well as facilitate the development of effective methods of prevention and intervention. Accordingly, in order to gain a better understanding of vulnerabilities and factors that elevate suicidality in veterans, it is important to examine the relevant needs and struggles experienced by veterans following their separation from service.

When considering the acculturation experience and potential negative outcomes for veterans adjusting to civilian life, it is important to examine the protective factors that contribute to successful adaptation and functioning following separation from service. One protective factor that plays a vital role in veterans' post-service outcomes is social support. Social support is a significant protective factor against suicidality (Pietrzak, 2010), post-service aggression towards

others (Elbogen et al., 2012), and symptoms of post-traumatic stress and depression (James et al., 2013; Nichter et al., 2020). Social support also facilitates successful readjustment to civilian life (Hachey et al., 2016). Additional protective factors that support positive psychological functioning in veterans include feelings of belongingness (Bryan et al., 2013), stability in financial and living conditions (Elbogen et al., 2012), psychological resilience (Vogt et al., 2021), and a perceived sense of purpose and control (Pietrzak, 2010). Indeed, the promising concepts of meaning and purpose in life are particularly salient during the military-to-civilian transition. Therefore, they are examined subsequently in greater depth.

### **Meaning in Life**

**Definition and Overview.** Viktor Frankl was a prominent psychiatrist and neurologist in Vienna, a prolific author, speaker, and philosopher who highlighted the importance of meaning in life as an essential and influential variable in 20<sup>th</sup> century psychology. He posited that the primary motivational force for humanity is the drive to discover meaning in one's life, otherwise known as the *will to meaning* (Frankl, 1946). Meaning in life—the primary focus of the more than 30 books and over 700 articles Frankl produced throughout his life—is the central aspect of human existence (Melton & Schulenberg, 2008; Schulenberg et al., 2008). It is a basic tenet of logotherapy (i.e., logos = meaning, or logotherapy = healing through meaning), the broader theory and practice Frankl developed based on the idea that having a purpose or meaning in life provides a reason to live, and is in fact necessary to living a life that is “worth” living.

According to Frankl, meaning can be discovered through three types of values: creative, experiential, and attitudinal. Creative values, or purposeful work, involves pursuits we undertake, tasks we complete, and what we give to our surroundings (e.g., writing, painting, cooking, gardening, etc.). Experiential values are what we receive from our surroundings (e.g., the

experience of nature, a sun rising or setting, the love of someone). Finally, attitudinal values involve the perspectives one adopts when encountering unavoidable suffering experiences (Frankl, 1946). Seminal aspects of logotherapy include the idea that suffering is a part of the human condition, that meaning may be found under all circumstances, even those that involve unchangeable and painful events, and that suffering ceases to be suffering when a meaning in the suffering is discovered (Frankl, 1959/2006; Melton & Schulenberg, 2008; Schulenberg et al., 2008). Even if a person cannot change their circumstances, such as having the experience of a terminal illness, a natural or technological disaster, a car accident, the death of a loved one, or circumstances related to combat, Frankl asserted that they continue to have the capacity to choose how they respond to these experiences (Frankl, 1959/2006; Schulenberg et al., 2008). We cannot change the past or many present circumstances, but we can change how we approach and conceptualize these circumstances. Frankl's thinking, and the subsequent research it inspired over the decades, are precursors to the cognitive therapies in psychology, as well as modern concepts of resilience, meaning making, values-congruent living, and posttraumatic growth (Schulenberg, 2020; Schulenberg et al., 2008). Through these methods of meaning making, people have the ability to thrive under even the most aversive circumstances and retain the capacity to transcend beyond merely existing (Frankl 1959/2006; Schulenberg, 2020; Schulenberg et al., 2008).

There are various approaches to modern conceptualizations of meaning and purpose. Meaning and purpose, though highly correlated, are theoretically and empirically different. They differ in some of their respective predictors and correlates, as well as which theoretical components of human existence they encompass (George & Park, 2013). While some use these terms interchangeably, the present study addresses them as distinct yet inextricably linked

concepts, with purpose operating as a component of meaning. Accordingly, the term *meaning* is used to refer to meaning *and* purpose in the present study due to the measurement tools chosen. While *meaning* can be considered the overarching concept of a sense of value and significance in one's life, *purpose* is understood to be one of the core elements of a meaningful life. Meaning in life can be conceptualized in terms of three central components: coherence, purpose, and significance (Heintzelman & King, 2014; Martela & Steger, 2016). At the core, these three components describe what makes people perceive the experience of meaningfulness in their lives. *Coherence* addresses the idea that a meaningful life includes a feeling that one's life makes sense. *Purpose* includes the sense of core goals, aims, and direction that contributes to a sense of meaning. *Significance* involves whether one perceives having a life worth living, as well as a sense of life's inherent value (Heintzelman & King, 2014; Martela & Steger, 2016).

The three-component model of meaning highlights key aspects that are ripe for exploration (and potential crises) during the military-to-civilian transition (Verkamp, 2021). As is the case with any significant life event, the transition to civilian life includes a significant amount of uncertainty and change. Accordingly, the ability to predict and make sense of one's life experiences during this period is likely to be impacted. As the coherence of one's life is put into question, the overall sense of meaning may be challenged. Purpose in life may be similarly impacted as one transitions out of a role in which purpose is clear and central (e.g., service of country, duty to fellow service members, protection of freedom) to a life where purpose must be forged outside the structured, guided environment of the military. Finally, as a veteran is attempting to find their place in civilian life, they are essentially exploring the significance of their existence outside their role in the military. Through these meaning-making considerations, veterans are essentially exploring how their identity and worldview as a service member

translates to the context of civilian culture. Veterans are attempting to integrate their military values with their developing civilian identity in ways that are meaningful and fulfilling.

**Correlates.** There is a wealth of research exploring the concepts of meaning and purpose and demonstrating the roles they play in human flourishing. In terms of physical health, increased purpose in life is associated with improved sleep (Kim et al., 2015; Turner et al., 2017), increased physical activity (Hooker & Masters, 2016), higher health literacy (i.e., the ability to obtain, understand, and utilize health information to make appropriate health decisions), and good health status (Musich et al., 2018). These findings highlight the role purpose in life plays in goal-directed behavior as it influences positive physical functioning. Similarly, a 2017 meta-analysis by Czekierda and colleagues reported moderate, positive associations between meaning in life and indices of health.

Meaning and purpose in life are also associated with various factors of positive psychological and social functioning. Greater purpose in life is associated with life satisfaction (Bronk, 2009; Steger, 2018), healthy identity formation (Bronk, 2011), resilience (Aiena et al., 2016; Schaefer, 2013), well-being (Garcia-Alandete, 2015; Reker et al., 1987), and increased gratitude, compassion, and grit (Hill et al., 2016; Malin et al., 2017). Furthermore, meaning in life is positively associated with self-acceptance, positive interpersonal relationships, and environmental mastery (Garcia-Alandete, 2015), as well as self-esteem, hope, and positive emotionality (Steger, 2018). Meaning in life is also predictive of resilience and posttraumatic growth (Schulenberg, 2020; Weber et al., 2020). One study examining combat-exposed student veterans found that greater perceptions of meaning in life were associated with greater degrees of meaningful activity and coping ability, as well as fewer depressive and somatic symptoms (Kinney et al., 2020). Such findings highlight meaning and purpose as essential aspects of human

health and well-being, as well as valuable targets for interventions geared toward boosting resilience and positive outcomes (Melton & Schulenberg 2008; Schulenberg, 2020; Schulenberg et al., 2008).

Accordingly, meaning and purpose in life are significantly and negatively associated with various aspects of psychopathology and impaired mental health functioning. Purpose in life is negatively correlated with substance use (Abramoski, 2017) and depression (Hedberg et al., 2010), while meaninglessness (the lack of perceived meaning) is a significant risk factor for suicidality, independent of depression (Schnell et al., 2018). Additional research on meaning and suicidality has found that grit and gratitude confer resilience to suicidal ideation by increasing meaning in life (Kleiman et al., 2013). One study that utilized an active duty military sample also found that greater perceived meaning in life was significantly associated with less severe emotional distress and decreased suicidal ideation, and better functioning at work, in intimate relationships, nonfamily relationships, and recreational activities (Bryan et al., 2013). In the disaster mental health literature, meaning, in conjunction with resilience, has been shown to be predictive of fewer posttraumatic stress symptoms following an ecological event, namely the Deepwater Horizon oil spill (Aiena et al., 2016). Overall, these findings highlight the integral role meaning and purpose in life play in various domains of physical and psychological well-being. This area of focus is particularly salient when discussing veteran mental health and post-service functioning as meaningful, purposeful work is a core component of military life and culture. As previously discussed, the transition from having a clear sense of meaning and purpose to a less certain path as a civilian can be daunting for many veterans. The perspective that one can choose one's attitude in the face of suffering and pursue purposeful life and work

tasks—regardless of the circumstances—is valuable in the context of veteran transition to civilian life.

**Significance for veterans.** Meaning and purpose in life are important protective psychosocial factors for various veteran outcomes. Studies examining older U.S. veterans found that purpose in life is associated with greater resilience (Isaacs et al., 2017; Pietrzak & Cook, 2013) and reduced risk of incident physical disability in activities of daily living over time (Mota et al., 2016). Purpose in life is also a significant protective factor against suicidality in veteran samples (Kachadourian et al., 2019; Straus et al., 2019). More specifically, meaning in life appears to mediate the relationship between mental health disorders associated with increased risk of psychopathology (PTSD and depression) and suicide ideation and attempts. Accordingly, meaning in life was an important protective factor for decreasing the risk of suicidality associated with these disorders in a sample of service members and veterans (Sinclair et al., 2016). Increased perceptions of meaning are also predictive of increased hope and recovery in veterans with depression (Braden et al., 2017). These findings demonstrate that meaning and purpose in life are powerful factors for the promotion of mental health and well-being among veterans. Furthermore, this research highlights these areas as a potential focus of interventions for veterans experiencing various mental health concerns after discharge from service.

Purposeful work is also a demonstrated positive factor in veteran well-being and in the enhancement of intervention outcomes. Studies have shown that veterans who participate in service-related work, such as civic service and disaster response, experience improved physical and mental health outcomes, as well as a greater sense of purpose and meaning in their lives (Lawrence et al., 2017; McCaslin et al., 2020). Furthermore, a sense of purpose among veterans is significantly linked to greater perceptions of well-being and the reduced presence of various

forms of psychopathology, including symptoms of depression, stress, PTSD, and negative affect (Lynn, 2014). These findings provide every indication that meaning and purpose play a significant role in facilitating the successful acculturation of veterans, particularly as relates to social and societal involvement. While empirical support for the direct impact of purpose and meaning in acculturation outcomes for veterans is lacking, the significant impact of these concepts in promoting well-being and ameliorating psychopathology in general is well-supported (e.g., Byron & Miller-Perrin, 2009; Debats, 1996; Harlow et al., 1986; Moomal, 1999). Overall, the findings highlighted above open the door for further exploration of how meaning and purpose in life can be utilized with the goal of improving veteran acculturation outcomes.

**Clinical Interventions.** As the body of empirical literature illustrating the centrality of meaning and purpose in life to human health and well-being has grown extensively since the mid-1960s (Melton & Schulenberg, 2008; Schulenberg, 2003; Schulenberg et al., 2008), meaning-enhanced and purpose-focused interventions have received growing attention in clinical practice. In many respects, Viktor Frankl's meaning-focused approach set the stage, not only for applications of meaning in clinical practice, but in the development of meaning making as a science as well. In practice, a logotherapeutic approach places meaning and purpose at the center of intervention by appealing to human strengths and innate capacities (e.g., intentionality, responsibility, freedom of choice) to help individuals discover and actualize meaning in their lives (Ameli, 2016; Corey, 2012; Schulenberg et al., 2008). This approach involves addressing issues related to a lack of perceived meaning or purpose in an individual's life and promoting a greater pursuit of meaningful living (i.e., values-congruent living; Pavlacic et al., 2021), whatever that may look like for the individual (Frankl, 1988).

Similar to numerous other psychotherapeutic approaches, logotherapy is active, collaborative, and action-oriented, with clients taking on the responsibility for progress through their attitudes, actions, decisions, and behaviors (Ameli, 2016; Schulenberg et al., 2008). Accordingly, since its emergence, Frankl espoused the intention of logotherapy to be complementary and enhancing for other therapeutic techniques, as the approach broadens the scope of treatment to include the “meaning dimension” of human existence (e.g., Frankl, 1959/2006, 1986, 1988; Schulenberg et al., 2008). Since the emergence of logotherapy, the integration of meaning and purpose with clinical interventions has been increasingly observed. This has occurred to such an extent that meaning and associated concepts (e.g., purpose, values, valued-action) are ever-present across many psychotherapeutic orientations, approaches, or schools of thought, including positive psychology, Acceptance and Commitment Therapy (ACT), Motivational Interviewing, and various cognitive-behavioral therapies (e.g., Rational Emotive Behavior Therapy) (Frankl, 1978/2011; Schulenberg et al., 2008; Sharp et al., 2004). Accordingly, many of these approaches lend themselves to benefitting from the integration of meaning-focused strategies and perspectives, logotherapy being a prime example.

Meaning and purpose-enhanced approaches, like logotherapy, have demonstrated effective clinical applications for treating a range of mental health issues, with depression, anxiety, and spiritual distress serving as examples (Breitbart et al., 2018; Kashdan & McNight, 2013; Koulaee et al., 2018; Sun et al., 2021). Such meaning and purpose-enhanced approaches appear to reduce the physical manifestations of stress and anxiety (i.e., decreased cortisol levels) (Soetrisno et al., 2017). For example, one study found that commitment to purpose played an important role for individuals receiving treatment for Social Anxiety Disorder, as it was associated with increased perceptions of well-being (Kashdan & McNight, 2013). Meaning-

enhanced therapies in general have shown significant results with respect to increasing perceptions of meaning in life, enhancing perceptions of self-efficacy, and decreasing symptoms of psychopathology (Vos et al., 2015). When such findings are considered in the context of the important role meaning and purpose can play for veterans in terms of their health and well-being, it is evident that there is greater potential for application of these approaches in veteran assistance and intervention efforts, with particular utility and application during the transitional period following the separation from military service.

### **The Present Study**

The present study examined the relationship between meaning in life and veteran psychological adaptation to civilian life following separation from the military. Because purpose in life has been conceptualized as a component of meaning, the term *meaning* will be used in the subsequent discussion to represent both meaning and purpose, as the measurement tool utilized (i.e., Purpose in Life test–Short Form; Schulenberg et al., 2011) measures both constructs. While the concept of meaning has been examined independently in veteran samples, there is a gap in the literature regarding the relationship meaning in life has with veteran acculturation specifically. This study aimed to fill that gap. The role of psychological distress (i.e., symptoms of depression, anxiety, and stress) in this relationship was also examined as it is highly, negatively correlated with meaning in life (e.g., Li et al., 2019; Lynn, 2014; Psarra & Kleftaras, 2013). Additionally, the following two potential covariates were controlled for: weekly time spent with other service members and time since discharge from active duty. These variables were examined as potential covariates given the established role of social support in veteran reintegration outcomes (Keeling et al., 2018; Pietrzak & Southwick, 2011; Renshaw, 2011; Tsai & Rosenhack, 2015), as well as to control for veteran participants' different stages of

acculturation. This study examined relationship between meaning and veteran psychological adaptation in order to better understand how meaning may relate to better acculturation among veterans. Accordingly, the findings from the present study may inform the development and implementation of meaning-enhanced interventions and services for veterans, as well as new directions for continued research in the role of meaning in veteran acculturation.

## **Hypotheses**

*Study Goal 1: To examine the relationship between meaning in life and psychological adaptation to civilian life in a veteran sample.*

- Hypothesis 1a: Greater meaning in life will be associated with better psychological adaptation to civilian life.
- Hypothesis 1b: The relationship between meaning in life and psychological adaptation will remain significant after controlling for weekly time spent with other service members and time since discharge from active duty.

*Study Goal 2: To examine the potential role of psychological distress as a mediator in the relationship between meaning in life and psychological adaptation to civilian life in a veteran sample.*

- Hypothesis 2a: Psychological distress will mediate the positive relationship between meaning in life and psychological adaptation to civilian life, such that greater meaning in life will be associated with lower psychological distress and greater psychological adaptation.
- Hypothesis 2b: The aforementioned proposed mediation relationship will remain significant after controlling for weekly time spent with other service members and time since discharge.

## II. METHOD

### Participants

The current study methodology and analyses are based on secondary data obtained from a veteran sample that were collected for a previous study, which addressed the development and psychometric validation of adapted, military-focused acculturation measures for use with veteran populations (Tkachuck, 2019; Tkachuck et al., 2021). In this program of research, a “veteran” is defined as an individual who, at the time of the study, was no longer an active-duty service member and had no current military affiliation, or an individual who was serving in the National Guard or Reserves after completing their active-duty service. Individuals who did not meet the aforementioned criteria were excluded from participating. Participants were recruited through social media platforms and various institutions of higher education across the United States, including universities and community and technical colleges. Administrators of social media platforms and educational institutions distributed the Qualtrics survey link and a description of the study via email and social media posts. After providing written consent by agreeing to participate through the link, participants were prompted to complete a battery of measures examining acculturation and various psychological variables (e.g., purpose in life, satisfaction with life, clinical symptoms of distress) if they met the aforementioned inclusion criteria. For the present study, participants with less than 5% of missing data across the measures of interest were included in the subsequent analyses, with missing values entered via mean substitution. At the conclusion of the measures, participants were given the opportunity to enter a raffle for a \$50 Visa gift card (Tkachuck, 2019; Tkachuck et al., 2021).

The original study examined the factor-analytic structure and psychometric properties of four revised veteran acculturation measures adapted based on Demes and Geeraert's (2014) acculturation scales. The original scales assessed acculturation outcomes in four domains (i.e., perceived cultural distance, acculturation orientation, sociocultural adaptation, and psychological adaptation) and were adapted by Tkachuck (2019) to assess military-related acculturation experiences and outcomes. The study concluded with proposed revisions made on the basis of statistical analyses for continued development of measures designed to be of enhanced utility for working with veterans in future research and potential practice (see Appendices A and B of Tkachuck et al., 2021). The present study expands on the original research by proposing new hypotheses to systematically investigate meaning in life and symptoms related to mental health distress (i.e., depression, anxiety, and stress symptoms) as they relate to a specific acculturation outcome (i.e., psychological adaptation to civilian life). Thus, this study asks new questions of previously collected data, examining and analyzing the data in such a way as to build upon the foundation of Tkachuck's (2019) original research. Accordingly, the current sample demographics may vary depending on the availability and validity of data for the variables of interest. Data screening and sample characteristics for the present study are reported in greater detail in subsequent sections.

A power analysis was conducted for the present study using G\*Power 3.1 (Faul et al., 2009), focusing on the proposed hierarchical linear regression presented in hypothesis 1b. Results of the power analysis indicated that a minimum of 128 participants would be necessary for the present study to have adequate power, assuming a medium effect size of  $f^2 = .0625$ , power of .80, and statistical significance of  $p < .05$ .

## **Measures**

**Demographics Questionnaire.** In the original study, participants completed a questionnaire to provide researchers with demographic information related to age, gender, race/ethnicity, marital status, and parental status. The questionnaire also included items regarding current military and educational status, military service information (i.e., branch, dates of active duty status, type of service, rank, family military history), and post-deployment information (i.e., time since discharge, time spent weekly with other service members or veterans).

**Brief Psychological Adaptation Scale–Military Version.** The Brief Psychological Adaptation Scale–Military Version (BPAS–MV) is an 8-item self-report measure that was adapted by Tkachuck and colleagues (Tkachuck, 2019; Tkachuck et al., 2021) from the acculturation measures originally developed by Demes and Geeraert (2014). Specifically, the scale was revised to be a more appropriate assessment of psychological factors related to veteran adaptation to civilian life. The BPAS–MV addresses respondents’ perceptions of civilian life and prompts them to rate the frequency with which they experience particular psychological reactions on a 7-point Likert-type rating scale. The response options range from “1” (“Never”) to “7” (“Always”). Examples of items include the following: “excited about being a civilian,” “sad to be away from military culture,” and “happy with your day to day life as a civilian.” A mean score for the BPAS–MV is calculated by averaging ratings across items, with items 2 through 7 being reverse scored. Higher scores are indicative of better psychological adaptation to civilian life (Tkachuck, 2019; Tkachuck et al., 2021).

The original BPAS demonstrated good reliability ( $\alpha = .85$ ) in a student sample and acceptable reliability ( $\alpha = .78$ ) with a migrant sample. The scale has also demonstrated very good factor loading correlations ( $r = .93$ ) and concurrent validity through significant ( $p < .001$ ) correlations with theoretically related scales, including measures of stress ( $r = -.64$ ), anxiety ( $r =$

-.71), self-esteem ( $r = .44$ ), and satisfaction with life ( $r = .40$ ) (Demes & Geeraert, 2014; see also Tkachuck, 2019 and Tkachuck et al., 2021). Furthermore, findings from Tkachuck and colleagues (Tkachuck, 2019; Tkachuck et al., 2021) demonstrated that the adapted BPAS–MV was found to have good reliability ( $\alpha = .88$ ) and acceptable interitem correlations ranging from .19 to .74.

**Depression Anxiety and Stress Scale–21.** The Depression Anxiety and Stress Scale-21 (DASS–21; Lovibond & Lovibond, 1995) is a 21-item quantitative measure of distress as indexed via depression, anxiety, and stress symptoms, with seven items per subscale. The DASS–21 includes a 4-point Likert-type rating scale with responses ranging from 0 (“never”) to 3 (“almost always”). Item examples from each subscale include the following: “I couldn’t seem to experience any positive feeling at all” (Depression), “I felt I was close to panic” (Anxiety), and “I tended to over-react to situations” (Stress). In addition to three symptom-specific scales, the DASS–21 yields a total sum score that indicates overall psychological and emotional distress. Scores are computed by doubling the raw score for the subscale score or overall score, with subscale scores ranging from 0 to 42 and total scores ranging from 0 to 126. The DASS–21 has been widely used since its development and is considered a gold-standard screening measure of psychological dysfunction. The total score provides a global measure of overall distress, with demonstrated utility in research and clinical settings (Evans et al., 2020; Zanon et al., 2020). The current study utilized the total scores of the DASS–21 in the primary analyses, interpreting them as an indication of overall psychological distress, with higher scores indicate greater psychological distress. Subscale total scores were also computed and utilized in supplemental analyses.

DASS–21 subscale scores have demonstrated excellent internal consistency reliability with Cronbach’s alphas of .94 for Depression, .87 for Anxiety, and .91 for Stress (Anthony et al., 1998). These subscales have also demonstrated concurrent validity through strong correlations with theoretically-related measures. For instance, DASS–21 Depression subscale scores significantly and positively correlate with Beck Depression Inventory scores ( $r = .79$ ). Moreover, DASS–21 Anxiety subscale scores and Beck Anxiety Inventory scores are also significantly and positively correlated ( $r = .85$ ). Additionally, DASS–21 Stress subscale scores are significantly and positively associated with State-Trait Anxiety Inventory–Trait version scores ( $r = .68$ ; Anthony et al., 1998). More recent studies further demonstrate the strong psychometric properties of the DASS–21. With respect to reliability coefficients, the Depression ( $\alpha$ s ranging from .81 to .94), Anxiety ( $\alpha$ s ranging from .80 to .89), and Stress ( $\alpha$ s ranging from .78 to .91) subscales show moderate to excellent internal consistency across populations (Anthony et al., 1998; Coker et al., 2018; Lee, 2019; Osman et al., 2012; Sinclair et al., 2012). The subscale scores also demonstrate discriminant validity with each other ( $r$ s  $< .85$ ) and good convergent validity with a measure of psychological distress ( $r = .87$ ) (Lee, 2019). While the present study examines the DASS–21 total score in the primary analyses, the subscale scores are also analyzed to examine the role of depression, anxiety, and stress symptoms individually in the relationships of interest.

**Purpose in Life test–Short Form.** The Purpose in Life test – Short Form (PIL–SF; Schulenberg et al., 2011) is a brief, revised form of the original Purpose in Life test (PIL; Crumbaugh & Maholick, 1964, 1969). Compared to the original 20-item PIL, the four-item PIL–SF consists of two items assessing perceived meaning in life and two items assessing perceived purpose in life. According to Viktor Frankl’s logotherapy—the theory in which the measure is

rooted— meaning and purpose are distinct, yet inextricably-linked concepts. Accordingly, purpose can be understood as the goal-oriented component of the larger construct of meaning in life (Frankl, 1992). The PIL–SF uses a 7-point Likert-type rating scale for each item. For example, the item that states “In life I have:” includes rating scale options ranging from 1 (“No goals or aims at all”) to 7 (“Very clear goals and aims”), with a rating of 4 indicating “neutral.” A total score for the PIL–SF is computed by creating a sum score of the four ratings, with higher scores indicating greater perceived meaning and purpose in life. Scores range from 4 to 28. In the original sample with which the PIL–SF was developed, the mean score among a non-clinical group of undergraduate students was 22.54 (Schulenberg et al., 2011).

PIL–SF scores have good internal consistency reliability, with reliability coefficients ranging from .84 to .89 (Schulenberg et al., 2011; Schulenberg et al., 2016). The measure has demonstrated convergent validity support, as demonstrated by significant correlations with the original PIL scale ( $r = .75$ ) (Schulenberg et al., 2011) and a measure of meaningful activity participation ( $r = .60$ ) (Cheraghifard et al., 2020). The PIL–SF has also demonstrated predictive validity with measures of life satisfaction, self-efficacy, and resilience ( $r$ s ranging from .45 to .63) (Schulenberg et al., 2016).

## **Procedure**

The current study examined archival data originally collected between January and April of 2018. The procedures of the original study—as outlined in the “Participants” section above—were approved by the Institutional Review Board of the University of Mississippi and are consistent with Helsinki standards (Tkachuck, 2019). The measures described above were included as part of a larger online battery upon which the current analyses are based. The relationships examined in the present study have not been analyzed previously.

### III. RESULTS

#### Data Screening

Prior to conducting statistical analyses, data were assessed for homoscedasticity/homogeneity, additivity, and linearity. Data were normally distributed. The distress (i.e., DASS–21) and psychological adaptation (BPAS–MV) variables were examined for multicollinearity using the Variance Inflation Factor (VIF; Aljandali, 2017), as these measures share conceptual similarities in their measurement of psychological experiences. Both the DASS-21 and BPAS-MV assess recent emotional experiences (e.g., sadness and nervousness), as well as overall psychological well-being. VIF analyses revealed that multicollinearity was not indicated. Regarding participant screening, 490 participants initiated the survey, 96 of whom were excluded for various reasons (i.e., did not serve in the military, were active duty or National Guard with no prior active-duty service, did not disclose military status; Tkachuck et al., 2021). Additionally, 19 participants were excluded for not completing items beyond the consent form, and 11 participants were identified as multivariate outliers and excluded. Individual surveys were then screened to determine the percentage of missing data for the variables of interest (PIL–SF and BPAS–MV). Individuals with more than 5% of their data missing for the relevant variables were excluded from subsequent analyses, resulting in a final sample size of 297 participants for the primary regression analyses and 285 participants for the mediation analyses.

#### Statistical Analyses

Statistical analyses for the present study were conducted using IBM SPSS Statistics (Version 26). The criterion for statistical significance was  $p < .05$ . Descriptive statistics were

generated. Bivariate correlations between variables of interest were calculated using Pearson correlations. The primary analyses of this study were then conducted in four phases. A linear regression was conducted to assess the relationship between meaning in life and psychological adaptation to civilian life. Then, a hierarchical linear regression was conducted to assess the relationship between meaning in life and psychological adaptation to civilian life, controlling for 1) weekly time spent with other service members and 2) time since discharge. Next, psychological distress was tested as a potential mediating variable in the relationship between meaning in life and psychological adaptation to civilian life using Hayes' PROCESS macro (Model 4; Hayes & Little, 2018). Finally, the mediation was examined while controlling for weekly time spent with other service members and time since discharge. Mediation analyses noted in hypotheses 2a and 2b were bootstrapped 5000 times to estimate 95% confidence intervals (Hayes & Little, 2018). Additionally, exploratory mediation analyses were conducted to examine the roles of specific domains of distress (i.e., depression, anxiety, and stress) as mediators in the relationship between meaning in life and psychological adaptation to civilian life.

### **Participant Demographics**

The current sample of 297 participants was predominantly male ( $n = 232$ ; 78.1%), White ( $n = 219$ ; 73.7%), and married ( $n = 167$ ; 56.2%), with a mean age of 36.96 years ( $SD = 10.61$ ; low/high = 21/72 years), according to all reported cases. Most participants were veterans with no current military affiliation ( $n = 273$ ; 91.9%), while the remaining participants endorsed ongoing National Guard or Reserve service ( $n = 24$ ; 8.1%). Nearly half of the participants were students ( $n = 139$ ; 46.8%). Regarding disclosure of branch of service and rank, the majority of participants had enlisted ( $n = 253$ ; 85.2%), with 22 (7.4%) reporting officer status and 10 (3.4%)

reporting both enlisted and officer status. The following branch divisions were reported: Army ( $n = 127$ ), Marines ( $n = 63$ ), Air Force ( $n = 47$ ), Navy ( $n = 43$ ), National Guard or Reserves ( $n = 20$ ), and Coast Guard ( $n = 3$ ). See Tables 1 and 2 for complete demographic characteristics of the study sample, including data on military and post-military experiences.

### **Variables of Interest**

Descriptive statistics for the total sample were calculated and are reviewed below. Results of these analyses, including means, standard deviations, high and low scores, and coefficient alphas for each of the variables examined, can be found in Table 3. The sample reported comparable levels of meaning in life ( $M = 20.81$ ,  $SD = 5.12$ ) compared to scores among the non-clinical group of undergraduate students in the original PIL–SF sample ( $M = 22.54$ ,  $SD = 3.61$ ; Schulenberg et al., 2011) and adolescents receiving post-disaster clinical services ( $M = 21.34$ ,  $SD = 5.41$ ; Schulenberg et al., 2016). A mean psychological adaptation score of 4.25 ( $SD = 1.16$ ) was found, with 8 being the highest possible score (Tkachuck et al., 2021). Because the BPAS–MV is a relatively new measure, additional research is needed to establish a normative average score for veteran psychological adaptation. Additionally, the overall sample was found to be in the “Mild” range for depression, anxiety, and stress symptomatology when mean scores were examined for each of the three subscales. This conclusion was made based on the scoring ranges and interpretive guidelines provided by Lovibond and Lovibond (1995).

Significant correlations were found between each of the variables of interest. Consistent with hypothesis 1a, the variable of meaning in life was found to have a significant positive correlation with psychological adaptation to civilian life ( $r = .50$ ). Additionally, consistent with hypothesis 2a, all psychological distress variables (i.e., depression, anxiety, and stress) were found to have significant, negative correlations with meaning in life ( $r$ s ranging from  $-.44$  to  $-$

.73) and psychological adaptation to civilian life (*rs* ranging from -.58 and -.68). See Table 4 for correlational data for the following variables: meaning in life, psychological adaptation to civilian life, and psychological distress (including symptoms of depression, anxiety, and stress).

### **Meaning in Life**

A simple linear regression was performed to predict psychological adaptation to civilian life based on meaning in life scores reported among veterans. In accordance with hypothesis 1a, a significant, positive relationship emerged between meaning in life and psychological adaptation to civilian life,  $F(1, 295) = 97.92, p < .001, \beta = 0.50, t(296) = 9.90, 95\% \text{ CI } [.09, .14], R^2 = .25$ . Then, a hierarchical multiple regression was conducted to examine this relationship between meaning in life and psychological adaptation to civilian life while controlling for weekly time spent with other service members and time since discharge. This analysis utilized a slightly smaller (though still adequately powered) sample size ( $n = 281$ ) due to missing covariate variable data for 18 of the participants included in the overall study. In this analysis, weekly time spent with other service members and time since discharge were entered in step one of the hierarchical regression model; PIL-SF scores were entered in the second step. Also in accordance with the proposed hypotheses, results from step one demonstrated that weekly time spent with other service members and time since discharge did not predict psychological adaptation,  $F(2, 279) = 1.54, p = .22, R^2 = .01$ . The overall model remained significant in step 2 with meaning remaining a significant predictor,  $F(3, 278) = 34.87, p < .001, R^2 = .27$ . In other words, the significant, positive relationship between meaning in life and psychological adaptation to civilian life was not explained by the role of weekly time spent with other service members or time since discharge, and was an independent predictor of psychological adaptation.

## Psychological Distress

To explore hypotheses 2a and 2b, the direct and indirect effects of meaning in life on psychological adaptation to civilian life through psychological distress were analyzed (Hayes & Little, 2018). Additionally, this analysis utilized a slightly smaller (though still adequately powered) sample size ( $N = 285$ ) due to missing data for the DASS–21 total score variable. In line with the proposed hypotheses, meaning in life (i.e., PIL–SF scores) was found to be a significant individual predictor of psychological adaptation to civilian life (BPAS–MV),  $\beta = 0.12$ ,  $SE = 0.01$ ,  $p < .0001$ , 95% CI [.09, .14], and psychological distress (DASS–21),  $\beta = -3.01$ ,  $SE = 0.24$ ,  $p < .0001$ , 95% CI [-3.49, -2.54]. When psychological distress was entered as a mediator of the relationship between meaning in life and psychological adaptation to civilian life, psychological distress emerged as a significant predictor of psychological adaptation to civilian life,  $\beta = -.03$ ,  $SE = .002$ ,  $p < .0001$ , 95% CI [-.03, -.02]; Model:  $F(2, 282) = 129.28$ ,  $p < .0001$ ,  $R^2 = .48$ . The indirect path from meaning in life to psychological adaptation through psychological distress was also significant, indicating that psychological distress is a significant mediator of the relationship between meaning in life and psychological adaptation to civilian life among veterans,  $\beta = .08$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.05, .10]. See Figure 1 for mediation results. To address the potential covariates outlined in hypothesis 2b, the mediation model was examined while controlling for weekly time spent with other service members and time since discharge. Results demonstrated that these two variables were not significant covariates and the aforementioned direct and indirect mediation relationships remained significant, in accordance with the proposed hypotheses. See Figure 2 for results of the mediation analysis with covariates.

## Supplemental Analyses

Supplemental exploratory analyses were performed to further examine the significant mediation effects of psychological distress in the relationship between meaning in life and psychological adaptation. The initial analyses of psychological distress utilized the DASS–21 total score as a global measure of psychological distress, while supplemental analyses examined the subscales of depression, anxiety, and stress to explore the individual mediational effects of these symptom categories in the relationship between meaning in life and psychological adaptation. Accordingly, the supplemental mediation analyses were conducted in three stages.

First, depression was examined as a potential mediator. In this analysis, meaning in life emerged as a significant predictor of depression,  $\beta = -1.50$ ,  $SE = .08$ ,  $p < .0001$ , 95% CI [-1.65, -1.32], and was not a significant, direct predictor of psychological adaptation in this model,  $\beta = .03$ ,  $SE = .02$ ,  $p = .07$ , 95% CI [-.00, .06]. When depression was entered as a mediator of the relationship between meaning and psychological adaptation, depression was a significant predictor of psychological adaptation,  $\beta = -.06$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [-.08, -.05]; Model:  $F(2, 283) = 97.41$ ,  $p < .0001$ ,  $R^2 = .41$ . While the direct relationship between meaning and psychological adaptation was not significant, the indirect path from meaning to psychological adaptation through depression was significant, indicating that depression is a significant mediator of this relationship,  $\beta = .09$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.07, .12]. The total effects of the overall model were also found to be significant,  $\beta = .12$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.10, .14]. See Figure 3 for results of the supplemental depression mediation analysis.

Second, anxiety was entered as a potential mediator variable. In this analysis, meaning in life emerged as a significant predictor of anxiety,  $\beta = -0.68$ ,  $SE = .09$ ,  $p < .0001$ , 95% CI [-0.85, -0.51], and psychological adaptation,  $\beta = .08$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.05, .10]. When anxiety was entered as a mediator of the relationship between meaning and psychological

adaptation, anxiety was a significant predictor of psychological adaptation,  $\beta = -.06$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [-.07, -.05]; Model:  $F(2, 282) = 105.58$ ,  $p < .0001$ ,  $R^2 = .43$ . The indirect path from meaning to psychological adaptation through anxiety was also significant, indicating that anxiety is a significant mediator of this relationship,  $\beta = .04$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.03, .06]. See Figure 4 for results of the supplemental anxiety mediation analysis.

Finally, the stress variable was examined as a mediator. Meaning in life emerged as a significant predictor of stress,  $\beta = -.85$ ,  $SE = .10$ ,  $p < .0001$ , 95% CI [-1.05, -0.64], and psychological adaptation,  $\beta = .07$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.05, .09]. When stress was entered as a mediator of the relationship between meaning and psychological adaptation, stress emerged as a significant predictor of psychological adaptation,  $\beta = -.06$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [-.07, -.04]; Model:  $F(2, 282) = 114.99$ ,  $p < .0001$ ,  $R^2 = .45$ . The indirect path from meaning to psychological adaptation through stress was also significant, indicating that stress is a significant mediator of this relationship,  $\beta = .05$ ,  $SE = .01$ ,  $p < .0001$ , 95% CI [.03, .06]. See Figure 5 for supplemental stress mediation analysis.

#### **IV. DISCUSSION**

Veteran acculturation has been explored in various ways throughout the literature, with much of the research examining risk and protective factors for post-service functioning, as well as pathways for adverse outcomes following separation from service. The present research builds upon this foundation by demonstrating a relationship between meaning in life and veteran psychological adaptation to civilian life—a distinct component of acculturation—through the pathway of psychological distress.

##### **Relationship Between Meaning in Life and Psychological Adaptation**

Consistent with Hypothesis 1a, meaning in life demonstrated a large positive relationship with psychological adaptation. This relationship remained significant after controlling for weekly time spent with other service members and time since discharge. Given that increased levels of meaning are related to better psychological adaptation among veterans, it is worthwhile to examine the potential mechanisms that could explain this relationship. These findings are consistent with previous literature that has demonstrated that meaning in life is important for a range of positive emotional and psychological outcomes (e.g., Bronk, 2009; Kinney et al., 2020; Schulenberg, 2020; Steger, 2018; Weber et al., 2020). The present research extends this literature to the specific outcome of psychological adaptation in a veteran sample. Accordingly, the established relationship between meaning in life and psychological adaptation indicates that factors related to increased meaning in life may play an important role in promoting better psychological adaptation among veterans.

The psychological adaptation domain of acculturation encompasses complex individual experiences related to identity, life satisfaction, and emotional affect (Berry, 2005; Demes & Geeraert, 2014; Sam & Berry, 2006; Tkachuck et al., 2021). Examining these factors in the context of psychological adaptation enables a closer examination of how meaning relates to psychological adaptation, which provides valuable insight into the mechanisms and pathways operating within this relationship. Identity crisis and the loss of purpose are significant problems for many veterans following the separation from service, and contribute to acculturation difficulties (Mitchell et al., 2020; Romaniuk et al., 2020), which helps to explain the strong correlation. The Military Transition Theory developed by Castro and Kintzle (2014) asserts that veterans' personal and social identities are challenged in the post-service civilian transition. To adapt more effectively and reduce the risk of psychological distress, veterans face the challenge of integrating new personal and social identities into their sense of self, which includes learning to merge their veteran identity with their new civilian identity (Amiot et al., 2007; Castro et al., 2014; Meca et al., 2021).

Purpose in life—a distinct component of meaning in life—has been identified as an important aspect of identity formation and development (Erikson, 1968; Bronk, 2011; Bronk et al., 2018). Having a greater sense of purpose in life contributes to the development of both one's social identity (i.e., finding one's place in the broader social context) and ego identity (i.e., personal, stable sense of self) (Bronk, 2011). These findings indicate that purpose in life may play an important role in the identity transition and development that is necessary for veterans to psychologically adapt to their new lives outside the military. Efforts to support veterans in the acculturation process may benefit from interventions and programming that promote increased purpose and meaning with a targeted goal of helping veterans navigate their evolving identities.

Research has also demonstrated that greater meaning in life has been associated with increased life satisfaction (Bronk, 2009; Pan et al., 2008b; Steger, 2018), well-being (Arslan & Allen, 2021; Garcia-Alandete, 2015; Reker et al., 1987), and positive emotional affect (Park et al., 2020; Steger, 2018). These relationships offer some potential explanation of the relationship between meaning and psychological adaptation, as satisfaction with life and well-being are central to psychological adaptation. When examining psychological adaptation, one is exploring how satisfied and comfortable the veteran is with civilian life and the extent to which they experience positive emotionality toward civilian life (Demes & Geeraert, 2014; Sam & Berry, 2006; Tkachuck et al., 2021). Given that meaning in life is associated with increased positive affectivity (e.g., Miao et al., 2017; Park et al., 2020; Steger, 2018) and decreased negative affectivity (Mohammadi et al., 2018), this relationship was expected. Factors strengthening positive emotionality and life satisfaction, such as meaning in life, suggest that a sense of meaning in life is a protective factor that may be implicated within the context of psychological adaptation. Taken together, these findings highlight the role meaning in life could play in promoting factors that are vital for better psychological adaptation following separation from military service.

### **Mediation Analyses**

Consistent with Hypothesis 2a, psychological distress was found to be a significant mediator in the relationship between meaning in life and psychological adaptation to civilian life. Both direct and indirect effects were found to be significant in the model and the effect size for the total effects model was large. Additionally, these relationships remained significant after controlling for weekly time spent with other service members and time since discharge from active duty. These results suggest that the effect of meaning in life on veterans' mental health—

and, more specifically, their overall psychological distress—is a meaningful factor in predicting their psychological adaptation to civilian life. Veterans who reported greater meaning in life tended to report lower levels of psychological distress, as well as better psychological adaptation. These findings suggest that increased psychological distress may serve as a risk factor for poor psychological adaptation and are consistent with literature demonstrating a link between meaning in life and better psychological functioning. Compared to the general population, veterans are at an elevated risk for experiencing psychopathology (National Center for PTSD, 2020; Trivedi et al., 2015; U.S. Department of Health and Human Services, 2021). This is an important consideration in the context of the present research as psychological distress (measured based on symptoms of depression, anxiety, and stress) was found to be a significant predictor of veteran psychological adaptation outcomes.

Existing research has demonstrated negative relationships between meaning and purpose in life and symptoms of psychological distress. For example, meaning in life is negatively related to perceived stress and symptoms of depression and anxiety (Li et al., 2019; Psarra & Kleftras, 2013). Within the veteran population specifically, Lynn (2014) found that sense of purpose was linked to reduced psychopathology (i.e., depression, stress, PTSD, negative affect) among veterans. Furthermore, studies have shown that efforts to develop meaning and purpose outside of the military offers significant psychological protection to veterans through the promotion of positive affect (Pan et al., 2008a), and identity development (Mitchell et al., 2020; Park, 2010) during the acculturation process. These findings demonstrate the established relationship between meaning in life and psychological functioning, which is further supported by the present research, and provide context for understanding how psychological distress may further explain the relationship between meaning and veteran outcomes.

Psychological distress has been demonstrated in the present findings as a pathway through which meaning in life relates to psychological adaptation outcomes. In order to better understand this pathway, the role of emotional affect should be considered. The construct of psychological adaptation is rooted in affective experiences and assesses positive and negative perceptions and emotions regarding participation in the host culture (e.g., civilian life) and separation from the home culture (e.g., military life). For veterans, this includes positive affective experiences such as happiness and excitement about life as a civilian, as well as negative affective experiences including sadness, nervousness, loneliness, and frustration (Tkachuck, 2019; Tkachuck et al., 2021). Similarly, the DASS-21, utilized as a measure of psychological distress in the present study, also serves as a measure of negative affect (Lovibond & Lovibond, 1995). Therefore, it is not surprising that psychological distress was found to have a significant relationship with psychological adaptation outcomes in the current research.

The established relationship between meaning in life and emotional affect (i.e., increased positive affect and decreased negative affect) (Miao et al., 2017; Mohammadi et al., 2018; Park et al., 2020; Steger, 2018) further supports the role of affect in the demonstrated mediational relationship between meaning, psychological distress, and psychological adaptation. One 2018 study demonstrated that affect serves as a significant mediator variable in the relationship between meaning in life and mental health, such that greater meaning in life leads to increased positive affect, which in turn contributes to decreased expression of negative affect and psychological distress (Mohammadi et al., 2018). Additionally, Gruszczyńska and Knoll (2015) found that meaning-focused coping strategies were associated with increased positive affect among chronic pain patients, demonstrating the value of promoting meaning in life as a protective factor in the context of distress and affect. Considering the established relationships

between meaning and distress, as well as the extant relationships between distress and adaptation, it is appropriate to conclude that distress plays an important mechanistic role in the protection meaning in life may afford to psychological adaptation outcomes. Examining both the direct and indirect pathways through which meaning relates to psychological adaptation to civilian life offers a better understanding of the relevant risk and protective factors for acculturating veterans. With this knowledge, veteran interventions and support services can be more specifically tailored to target meaningful factors affecting the acculturation process.

### **Supplementary Analyses**

Supplementary analyses were conducted to examine the independent mediational roles of depression, anxiety, and stress symptoms. Each of these three symptom domains were found to be significant, independent mediators in the relationship between meaning in life and psychological adaptation to civilian life. An unexpected finding emerged when meaning in life was not found to be a significant direct predictor of psychological adaptation in the depression mediation model. However, because the indirect effects and overall model were found to be significant, it was concluded that depression symptoms do serve as a significant mediator in the relationship. The examination of each of the three distress domains offers additional clarity regarding specific risk factors that may impact the acculturation process and that can be targeted by veteran support services. Given that experiences of depression, anxiety, and stress are affective in nature, it follows that these symptoms would be associated with psychological adaptation, which is understood in terms of positive and negative affective experiences. The present findings thus extend the literature by demonstrating how symptoms of psychological distress (i.e., depression, anxiety, and stress) facilitate the relationship between meaning and psychological adaptation. Furthermore, the present findings support the use of meaning- and

purpose-enhanced clinical interventions to address veteran psychopathology, as this can in turn promote better acculturation outcomes. Approaches such as meaning-enhanced CBT approaches, logotherapy, ACT, and strengths-based interventions integrate evidence-based principles of CBT designed to treat psychopathology with humanistic and existential concepts such as freedom of choice, responsibility, meaning, and purpose to further promote positive psychological functioning (Ameli & Dattilio, 2013; Breitbart et al., 2018; Breitbart et al., 2022). The significant predictive roles of meaning and psychological distress for psychological adaptation demonstrated in the present findings support the use of such approaches when working toward adaptive veteran acculturation and post-service functioning.

### **Limitations and Considerations**

Several limitations should be considered when interpreting the present findings and their implications. First, the sample examined in the current study was predominantly male and White, which limits generalizability to marginalized gender and racial/ethnic groups. However, strengths of the present sample include its large size and racial/ethnic representativeness compared to the general veteran population (Amaral et al., 2018). Additionally, demographic information about housing, income, and employment was not collected in the original study, which limited the opportunity to examine additional covariates and factors that may impact veteran acculturation. For example, many veterans struggle with issues related to gaining and maintaining employment (Keeling et al., 2018; Schult et al., 2019; Stone et al., 2018; Zogas, 2017), as well as difficulties with financial instability and homelessness (NCHV, 2021). Because complicating life factors such as employment, financial stability, and social support may impact psychological functioning, life satisfaction, and veterans' psychological adaptation following separation from military service, it is beneficial to assess the roles they play in future studies.

There are also limitations to consider regarding the measurement instruments and overall methodology used in the present study. First, the Brief Psychological Adaptation Scale–Military Version (BPAS–MV) used to measure acculturation has not yet been psychometrically validated across multiple samples (see Tkachuck et al., 2021 for an initial validation study). However, the BPAS–MV and the original BPAS, from which the BPAS–MV was adapted, have been found to yield reliable and valid scores (Demes & Geeraert, 2014; Tkachuck et al., 2021). Additionally, although the PIL–SF was found to be a significant predictor variable in the present study, it is important to consider the domain coverage offered with this four-item measure. The PIL-SF contains items that tap meaning-related concepts such as significance and purpose, but does not assess other meaning-related concepts such as self-transcendence, search for meaning, coherence, etc. The present research provides a valuable primary analysis of meaning and veteran acculturation using a well-validated meaning measure. Future research would benefit from the utilization of measures with broader coverage of dimensions of meaning (i.e., significance, coherence, purpose, search for meaning, self-transcendence).

One final limitation to consider when interpreting the present findings is due to the data collection and analytic methods utilized. The present analyses are correlational in nature and thus no causal interpretations are warranted at this time. The current findings have demonstrated a significant relationship between meaning in life and veteran psychological adaptation, as well as revealed that symptoms of psychological distress (i.e., depression, anxiety, and stress) play a meaningful role in explaining this relationship. While the present results provide a valuable initial examination of these relationships, further research is needed to better understand causality and directionality.

## **Future Directions and Conclusions**

The current study builds upon Tkachuck's (2019) acculturation research and expands this growing program of research into the examination of meaning in life among veterans. Future research studies and clinical efforts can build upon the present work in several ways. First, research exploring the relationship between meaning and veteran acculturation would benefit from the utilization of measurement tools with greater content breadth and depth coverage. For example, measures such as the Meaning in Life Questionnaire (Steger et al., 2006) and the Claremont Purpose Scale (Bronk et al., 2018) offer opportunities to examine various dimensions of meaning and purpose. Utilizing additional measurement tools would allow for examinations of the coherence and significance domains of meaning, as well as the roles of presence versus search for meaning in psychological adaptation. Additionally, using more comprehensive measures will promote a better understanding of the role meaning and purpose play in veteran acculturation, as well as identify potential targets of intervention and support related to these constructs.

Continued research into various risk and protective factors that impact psychological adaptation will also offer significant contributions to the veteran acculturation literature. More specifically, further examination of the roles of identity, specific symptoms of psychopathology, service-related factors (e.g., type of service, combat experience, length of service) and emotional affect in veteran psychological adaptation to civilian life may address key mechanisms in the acculturative process. Additionally, the veteran acculturation literature may be strengthened by continued empirical applications of the military–civilian adapted acculturation measures utilized in the present study (Tkachuck, 2019; Tkachuck et al., 2021), as this would foster increased utilization of acculturation frameworks for conceptualizing and addressing the military-to-

civilian transition and reintegration process. Such efforts would also further develop knowledge regarding the psychometric properties and applicability of these new and promising measures.

There are also several clinical applications that may utilize and build upon the present findings. The current work highlights the role played by meaning and purpose in veteran acculturation. Accordingly, it is recommended that providers consider utilizing meaning and purpose-focused programming and interventions (e.g., meaning-enhanced CBT, ACT, and logotherapy) when working with veterans (Lawrence et al., 2017; McCaslin et al., 2020). This may occur both in medical and mental health contexts. There is a large body of literature demonstrating the effectiveness and adaptability of meaning and purpose-enhanced approaches when treating a wide range of mental health problems (Breitbart et al., 2018; Kashdan & McKnight, 2013; Koulaee et al., 2018; Sun et al., 2021). Approaches such as logotherapy, ACT, and meaning-enhanced CBT offer targeted interventions that empower individuals to address meaninglessness and deficits in valued living in their lives, in addition to addressing symptoms of psychopathology (Corey, 2012; Hayes et al., 2009; Koulaee et al., 2018; Schulenberg et al., 2008; Sun et al., 2021). The present findings may also inform general medical care for veterans as assessment of meaning and purpose deficits in conjunction with screening for psychopathology and physical ailments during medical visits promotes earlier identification of veterans at elevated risk for poorer mental health and psychological adaptation outcomes. In addition to clinical contexts, meaning and purpose may also be utilized and promoted in the context of veteran social, occupational, and recreational programming. Research has shown that veterans who participate in service-related work, such as civic service and disaster response, have demonstrated a greater sense of purpose and meaning in their lives (Lawrence et al., 2017; McCaslin et al., 2020). Furthermore, the factors of sense of purpose and altruism have been

associated with resilience in U.S. military veterans (Isaacs et al., 2017). Post-service programming and transition services for veterans may benefit from exploring opportunities for discovering meaning and purpose outside the military with veterans following their separation from service.

Overall, the current study demonstrated that meaning plays a consequential role in veteran psychological functioning and acculturation outcomes. Furthermore, psychological distress and symptoms of psychopathology (i.e., depression, anxiety, stress) emerged as significant mechanisms in the relationship between meaning and psychological adaptation. Taken together, the present findings highlight the potential for meaning and psychological distress to serve as protective and risk factors, respectively, in veteran psychological adaptation to civilian life. In order to facilitate meaningful application of these findings within the veteran population, additional clinical and research efforts are needed.

## LIST OF REFERENCES

## References

- Abramoski, K., Pierce, J., Hauck, C., & Stoddard, S. (2017). Variations in adolescent purpose in life and their association with lifetime substance use. *The Journal of School Nursing, 34*(2), 114-120. <https://doi.org/10.1177/1059840517696964>
- Ahern, J., Worthen, M., Masters, J., Lippman, S. A., Ozer, E. J., & Moos, R. (2015). The challenges of Afghanistan and Iraq veterans' transition from military to civilian life and approaches to reconnection. *PLOS ONE, 10*(7), e0128599. <https://doi.org/10.1371/journal.pone.0128599>
- Aiena, B. J., Buchanan, E. M., Smith, C. V., & Schulenberg, S. E. (2016). Meaning, resilience, and traumatic stress after the Deepwater Horizon oil spill: A study of Mississippi coastal residents seeking mental health services. *Journal of Clinical Psychology, 72*(12), 1264-1278. <https://doi.org/10.1002/jclp.22232>
- Amaral, E. F. L., Pollard, M. S., Mendelsohn, J., & Cefalu, M. (2018). Current and future demographics of the veteran population, 2014–2024. *Population Review, 57*(1), 31-56. <https://doi.org/10.1353/prv.2018.0002>
- Ameli, M. (2016). Integrating logotherapy with cognitive behavior therapy: A worthy challenge. In A. Bethany (Ed.), *Logotherapy and Existential Analysis* (pp. 197-217). Springer International.
- Ameli, M., & Dattilio, F. M. (2013). Enhancing cognitive behavior therapy with logotherapy: Techniques for clinical practice. *Psychotherapy (Chicago, Ill.), 50*(3), 387-391. <https://doi.org/10.1037/a0033394>

- Amiot, C. E., de la Sablonnière, R., Terry, D. J., & Smith, J. R. (2007). Integration of social identities in the self: Toward a cognitive-developmental model. *Personality and Social Psychology Review, 11*(4), 364-388. <https://doi.org/10.1177/1088868307304091>
- Angel, C. M., Smith, B. P., Pinter, J. M., Young, B. B., Armstrong, N. J., Quinn, J. P., Brostek, D. F., Goodrich, D. E., Hoerster, K. D., & Erwin, M. S. (2018). Team red, white & blue: A community-based model for harnessing positive social networks to enhance enrichment outcomes in military veterans reintegrating to civilian life. *Translational Behavioral Medicine, 8*(4), 554-564.
- Arminio, J., Yamanaka, A., Hubbard, C., Athanasiou, J., Ford, M., & Bradshaw, R. (2018). Educators acculturating to serve student veterans and service members. *Journal of Student Affairs Research and Practice, 55*(3), 243-254. <https://doi.org/10.1080/19496591.2018.1399895>
- Arslan, G., & Allen, K. A. (2021). Exploring the association between coronavirus stress, meaning in life, psychological flexibility, and subjective well-being. *Psychology, Health & Medicine, 27*(4), 803-814. <https://doi.org/10.1080/13548506.2021.1876892>
- Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry, 9*, 69-96. <https://doi.org/10.1075/ni.9.1.05bae>
- Berry, J. W. (1976). *Human ecology and cognitive style: Comparative studies in cultural and psychological adaptation*. Sage.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and findings* (pp. 9-25). Westview.

- Berry, J. W. (1994). Acculturation and psychological adaptation: An overview. In A. Bouvy, R. R. Van de Vijver, P. Boski, & P. Schmitz (Eds.), *Journeys into cross-cultural psychology: Selected papers from the eleventh international conference of the International Association for Cross-Cultural Psychology held in Liège, Belgium* (pp. 222-249).
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*(1), 5-34. <https://doi.org/10.1111/j.1464-0597.1997.tb01087.x>
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations, 29*(6), 697-712. <https://doi.org/10.1016/j.ijintrel.2005.07.013>
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review, 21*(3), 491-511.
- Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist, 48*(6), 629-637. <https://doi.org/10.1037/0003-066X.48.6.629>
- Boscarino, J. A., Hoffman, S. N., Pitcavage, J. M., & Urosevich, T. G. (2015). Mental health disorders and treatment seeking among veterans in non-VA facilities: Results and implications from the veterans' health study. *Military Behavioral Health, 3*(4), 244-254. <https://doi.org/10.1080/21635781.2015.1077179>
- Braden, A., Overholser, J., Fisher, L., & Ridley, J. (2017). Life meaning is predictive of improved hopelessness and depression recovery in depressed veterans. *Journal of Social and Clinical Psychology, 36*(8), 629-650. <https://doi.org/10.1521/jscp.2017.36.8.629>

- Breitbart, W., Pessin, H., Rosenfeld, B., Applebaum, A. J., Lichtenthal, W. G., Li, Y., Saracino, R. M., Marziliano, A. M., Masterson, M., Tobias, K., & Fenn, N. (2018). Individual meaning-centered psychotherapy for the treatment of psychological and existential distress: A randomized controlled trial in patients with advanced cancer. *Cancer, 124*(15), 3231-3239. <https://doi.org/10.1002/cncr.31539>
- Breitbart, W. S., Lichtenthal, W. G., & Applebaum, A. J. (2022). Meaning-Centered Psychotherapy. In *Psychological Aspects of Cancer* (pp. 399-409). Springer, Cham.
- Brenner, L. A., & Barnes, S. M. (2012). Facilitating treatment engagement during high-risk transition periods: A potential suicide prevention strategy. *American Journal of Public Health, 102*(Suppl. 1), S12-S14. <https://doi.org/10.2105/AJPH.2011.300581>
- Bronk, K. C. (2011). The role of purpose in life in healthy identity formation: A grounded model. *New Directions for Youth Development, 2011*(132), 31-44. <https://doi.org/10.1002/yd.426>
- Bronk, K. C., Hill, P. L., Lapsley, D. K., Talib, T. L., & Finch, H. (2009). Purpose, hope, and life satisfaction in three age groups. *The Journal of Positive Psychology, 4*(6), 500-510. <https://doi.org/10.1080/17439760903271439>
- Bronk, K. C., Riches, B. R., & Mangan, S. A. (2018). Claremont Purpose Scale: A measure that assesses the three dimensions of purpose among adolescents. *Research in Human Development, 15*(2), 101-117. <https://doi.org/10.1080/15427609.2018.1441577>
- Bryan, C. J., Elder, W. B., McNaughton-Cassill, M., Osman, A., Hernandez, A. M., & Allison, S. (2013). Meaning in life, emotional distress, suicidal ideation, and life functioning in an active duty military sample. *The Journal of Positive Psychology, 8*(5), 444-452. <https://doi.org/10.1080/17439760.2013.823557>

- Bryan, C. J., McNaughton-Cassill, M., & Osman, A. (2013). Age and belongingness moderate the effects of combat exposure on suicidal ideation among active duty Air Force personnel. *Journal of Affective Disorders, 150*(3), 1226-1229.  
<https://doi.org/10.1016/j.jad.2013.05.087>
- Byron, K., & Miller-Perrin, C. (2009). The value of life purpose: Purpose as a mediator of faith and well-being. *The Journal of Positive Psychology, 4*(1), 64-70.  
<https://doi.org/10.1080/17439760802357867>
- Castro, C. A., & Kintzle, S. (2014). Suicides in the military: The post-modern combat veteran and the Hemingway effect. *Current Psychiatry Reports, 16*(8), 1-9.  
<https://doi.org/10.1007/s11920-014-0460-1>
- Chandler, M. J., Lalonde, C. E., Sokol, B. W., & Hallett, D. (2003). Personal persistence, identity development, and suicide: A study of native and non-native North American adolescents. *Monographs of the Society for Research in Child Development, 68*(2), vii-viii.
- Cheney, A. M., Koenig, C. J., Miller, C. J., Zamora, K., Wright, P., Stanley, R., Fortney, J., Burgess, J. F., & Pyne, J. M. (2018). Veteran-centered barriers to VA mental healthcare services use. *BMC Health Services Research, 18*(1), 1-14.  
<https://doi.org/10.1186/s12913-018-3346-9>
- Cheraghifard, M., Taghizadeh, G., Akbarfahimi, M., Eakman, A. M., Hosseini, S. H., & Azad, A. (2020). Psychometric properties of Meaningful Activity Participation Assessment (MAPA) in chronic stroke survivors. *Topics in Stroke Rehabilitation, 1*-10.  
<https://doi.org/10.1080/10749357.2020.1834275>

- Coker, A. O., Coker, O. O., & Sanni, D. (2018). Psychometric properties of the 21-item Depression Anxiety Stress Scale (DASS–21). *African Research Review*, *12*(2), 135-142.  
<https://dx.doi.org/10.4314/afrrrev.v12i2.13>
- Corey, G. (2012). *Theory and practice of counseling and psychotherapy*. Nelson Education.
- Czekierda, K., Banik, A., Park, C. L., & Luszczynska, A. (2017). Meaning in life and physical health: Systematic review and meta-analysis. *Health Psychology Review*, *11*(4), 387-418.  
<https://doi.org/10.1080/17437199.2017.1327325>
- Danish, S. J., & Antonides, B. J. (2013). The challenges of reintegration for service members and their families. *American Journal of Orthopsychiatry*, *83*, 550-558.  
<https://doi.org/10.1111/ajop.12054>
- Debats, D. L. (1996). Meaning in life: Clinical relevance and predictive power. *British Journal of Clinical Psychology*, *35*, 503-516. <https://doi.org/10.1111/j.2044-8260.1996.tb01207.x>
- Demes, K. A., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *Journal of Cross-Cultural Psychology*, *45*(1), 91-109. <https://doi:10.1177/0022022113487590>
- Derefinko, K. J., Hallsell, T. A., Isaacs, M. B., Salgado Garcia, F. I., Colvin, L. W., Bursac, Z., McDevitt-Murphy, M. E., Murphy, J. G., Little, M. A., Talcott, G. W., & Klesges, R. C. (2018). Substance use and psychological distress before and after the military to civilian transition. *Military Medicine*, *183*(5-6), e258-e265.  
<https://doi.org/10.1093/milmed/usx082>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*(1), 71-75.  
[https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)

- Elbogen, E. B., Johnson, S. C., Wagner, H. R., Newton, V. M., Timko, C., Vasterling, J. J., & Beckham, J. C. (2012). Protective factors and risk modification of violence in Iraq and Afghanistan war veterans. *The Journal of Clinical Psychiatry, 73*(6), 767-773.  
<https://doi.org/10.4088/JCP.11m07593>
- Elnitsky, C. A., Blevins, C. L., Fisher, M. P., & Magruder, K. (2017). Military service member and veteran reintegration: A critical review and adapted ecological model. *American Journal of Orthopsychiatry, 87*, 114-128. <https://doi.org/10.1037/ort0000244>
- Elnitsky, C. A., Fisher, M. P., & Blevins, C. L. (2017). Military service member and veteran reintegration: A conceptual analysis, unified definition, and key domains. *Frontiers in Psychology, 8*, 1-14. <https://doi.org/10.3389/fpsyg.2017.00369>
- Erikson, E. H. (1968). *Identity, youth, and crisis* (1st ed.). W. W. Norton.
- Evans, L., Haeberlein, K., Chang, A., & Handal, P. (2020). An evaluation of the convergent validity of and preliminary cutoff scores for the DASS–21 total score as a measure of distress in adolescents. *Current Psychology, 1-8*.  
<https://doi.org/10.1007/s12144-020-00937-4>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using GPower 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Falavarjani, M. F., Yeh, C. J., & Brouwers, S. A. (2020). Exploring the effects of acculturative stress and social support on the acculturation–depression relationship in two countries of similar social status. *Journal of International Migration and Integration, 21*, 509-528.  
<https://doi.org/10.1007/s12134-019-00662-3>
- Frankl, V. E., (1959/2006). *Man's search for meaning*. Beacon Press.

- Frankl, V. E. (1986). *The doctor and the soul: From psychotherapy to logotherapy* (rev. ed.).  
Vintage Books.
- Frankl, V. E. (1978/2011). *The unheard cry for meaning: Psychotherapy and humanism*. Simon  
and Schuster.
- Frankl, V. E. (1988). *The will to meaning: Foundations and applications of logotherapy*.  
Penguin.
- García-Alandete, J. (2015). Does meaning in life predict psychological well-being? *European  
Journal of Counselling Psychology*, 3(2), 89-98. <https://doi.org/10.5964/ejcop.v3i2.27>
- George, L. S., & Park, C. L. (2013). Are meaning and purpose distinct? An examination of  
correlates and predictors. *The Journal of Positive Psychology*, 8(5), 365-375.  
<https://doi.org/10.1080/17439760.2013.805801>
- Graziano, R., & Elbogen, E. B. (2017). Improving mental health treatment utilization in  
military veterans: Examining the effects of perceived need for care and social  
support. *Military Psychology*, 29(5), 359-369. <https://doi.org/10.1037/mil0000169>
- Gruszczyńska, E., & Knoll, N. (2015). Meaning-focused coping, pain, and affect: A diary study  
of hospitalized women with rheumatoid arthritis. *Quality of Life Research*, 24(12), 2873-  
2883. <https://doi.org/10.1007/s11136-015-1031-6>
- Hachey, K. K., Sudom, K., Sweet, J., MacLean, M. B., & VanTil, L. D. (2016). Transitioning  
from military to civilian life: The role of mastery and social support. *Journal of Military,  
Veteran and Family Health*, 2(1), 9-18. <https://doi.org/10.3138/jmvfh.3379>
- Harris, T., Kintzle, S., Wenzel, S., & Castro, C. A. (2017). Expanding the understanding of risk  
behavior associated with homelessness among veterans. *Military Medicine*, 182(9),  
e1900-e1907. <https://doi.org/10.7205/MILMED-D-16-00337>

- Hayes, A. F., & Little, T. D. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2009). *Acceptance and commitment therapy*. Washington, DC: American Psychological Association.
- Hays, R. D., Merz, J. F., & Nicholas, R. (1995). Response burden, reliability, and validity of the CAGE, Short MAST, and AUDIT alcohol screening measures. *Behavior Research Methods, Instruments, & Computers*, *27*(2), 277-280.  
<https://doi.org/10.3758/BF03204745>
- Hedberg, P., Gustafson, Y., Alèx, L., & Brulin, C. (2010). Depression in relation to purpose in life among a very old population: A five-year follow-up study. *Aging & Mental Health*, *14*(6), 757-763. <https://doi.org/10.1080/13607861003713216>
- Heintzelman, S. J., & King, L. A. (2014). Life is pretty meaningful. *The American Psychologist*, *69*(6), 561-574. <https://doi.org/10.1037/a0035049>
- Hill, P. L., Burrow, A. L., & Bronk, K. C. (2016). Persevering with positivity and purpose: An examination of purpose commitment and positive affect as predictors of grit. *Journal of Happiness Studies*, *17*(1), 257-269. <https://doi.org/10.1007/s10902-014-9593-5>
- Hom, M. A., Stanley, I. H., Schneider, M. E., & Joiner Jr, T. E. (2017). A systematic review of help-seeking and mental health service utilization among military service members. *Clinical Psychology Review*, *53*, 59-78. <https://doi.org/10.1016/j.cpr.2017.01.008>
- Hooker, S. A., & Masters, K. S. (2016). Purpose in life is associated with physical activity measured by accelerometer. *Journal of Health Psychology*, *21*(6), 962-971.  
<https://doi.org/10.1177/1359105314542822>

- Isaacs, K., Mota, N. P., Tsai, J., Harpaz-Rotem, I., Cook, J. M., Kirwin, P. D., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2017). Psychological resilience in U.S. military veterans: A 2-year, nationally representative prospective cohort study. *Journal of Psychiatric Research, 84*, 301-309. <https://doi.org/10.1016/j.jpsychires.2016.10.017>
- James, L. M., Van Kampen, E., Miller, R. D., & Engdahl, B. E. (2013). Risk and protective factors associated with symptoms of post-traumatic stress, depression, and alcohol misuse in OEF/OIF veterans. *Military Medicine, 178*(2), 159-165. <https://doi.org/10.7205/MILMED-D-12-00282>
- Kartal, D., & Kiropoulos, L. (2016). Effects of acculturative stress on PTSD, depressive, and anxiety symptoms among refugees resettled in Australia and Austria. *European Journal of Psychotraumatology, 7*, 28711-28723. <https://doi.org/10.3402/ejpt.v7.28711>
- Kashdan, T. B., & McKnight, P. E. (2013). Commitment to a purpose in life: An antidote to the suffering by individuals with social anxiety disorder. *Emotion, 13*(6), 1150-1159. <https://doi.org/10.1037/a0033278>
- Keeling, M., Kintzle, S., & Castro, C. A. (2018). Exploring U.S. veterans' post-service employment experiences. *Military Psychology, 30*(1), 63-69. <https://doi.org/10.1080/08995605.2017.1420976>
- Kehle, S. M., Polusny, M. A., Murdoch, M., Erbes, C. R., Arbisi, P. A., Thuras, P., & Meis, L. A. (2010). Early mental health treatment-seeking among U.S. National Guard soldiers deployed to Iraq. *Journal of Traumatic Stress, 23*(1), 33-40. <https://doi.org/10.1002/jts.20480>

- Kim, E. S., Hershner, S. D., & Strecher, V. J. (2015). Purpose in life and incidence of sleep disturbances. *Journal of Behavioral Medicine*, 38(3), 590-597.  
<https://doi.org/10.1007/s10865-015-9635-4>
- Kim, J., Suh, W., Kim, S., & Gopalan, H. (2012). Coping strategies to manage acculturative stress: Meaningful activity participation, social support, and positive emotion among Korean immigrant adolescents in the USA. *International Journal of Qualitative Studies on Health and Well-being*, 7(1), 1-10. <https://doi.org/10.3402/qhw.v7i0.18870>
- Kinney, A. R., Schmid, A. A., Henry, K. L., Coatsworth, J. D., & Eakman, A. M. (2020). Protective and health-related factors contributing to resilience among student veterans: A classification approach. *The American Journal of Occupational Therapy*, 74(4), 7404205040p1–7404205040p11. <https://doi.org/10.5014/ajot.2020.038331>
- Kintzle, S., Barr, N., Corletto, G., & Castro, C. A. (2018). PTSD in U.S. veterans: The role of social connectedness, combat experience and discharge. *Healthcare (Basel)*, 6(3), 102-109. <https://doi.org/10.3390/healthcare6030102>
- Kintzle, S., Keeling, M., Xintarianos, E., Taylor-Diggs, K., Munch, C., Hassan, A. M., & Castro, C. A. (2015). Exploring the economic & employment challenges facing U.S. veterans. *USC School of Social Work Center for Innovation and Research on Veterans & Military Families*. [https://voa-production.s3.amazonaws.com/uploads/pdf\\_file/file/762/A\\_Study\\_of\\_Volunteers\\_of\\_America\\_Service\\_Providers\\_and\\_Veteran\\_Clients.pdf](https://voa-production.s3.amazonaws.com/uploads/pdf_file/file/762/A_Study_of_Volunteers_of_America_Service_Providers_and_Veteran_Clients.pdf)

- Kleiman, E. M., Adams, L. M., Kashdan, T. B., & Riskind, J. H. (2013). Gratitude and grit indirectly reduce risk of suicidal ideations by enhancing meaning in life: Evidence for a mediated moderation model. *Journal of Research in Personality, 47*(5), 539-546.  
<https://doi.org/10.1016/j.jrp.2013.04.007>
- Koulaee, A. J., Khenarinezhad, F., Abutalebi, M., & Bagheri-Nesami, M. (2018). The effect of logotherapy on depression in cancer patients: A systematic review study. *World Cancer Research Journal, 5*(3), 1-6.
- 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. *The American Journal of Geriatric Psychiatry, 22*(6), 564-569.  
<https://doi.org/10.1016/j.jagp.2013.02.013>
- Lawrence, K. A., Matthieu, M. M., & Robertson-Blackmore, E. (2017). Completion of a veteran-focused civic service program improves health and psychosocial outcomes in Iraq and Afghanistan veterans with a history of traumatic brain injury. *Military Medicine, 182*(7), e1763-e1770. <https://doi.org/10.7205/MILMED-D-16-00150>
- Lee, D. (2019). The convergent, discriminant, and nomological validity of the Depression Anxiety Stress Scales-21 (DASS-21). *Journal of Affective Disorders, 259*, 136-142.  
<https://doi.org/10.1016/j.jad.2019.06.036>
- Li, P. F. J., Wong, Y. J., & Chao, R. C. (2019). Happiness and meaning in life: Unique, differential, and indirect associations with mental health. *Counselling Psychology Quarterly, 32*(3-4), 396-414. <https://doi.org/10.1080/09515070.2019.1604493>

- Lilgendahl, J. P. (2015). The dynamic role of identity processes in personality development: Theories, patterns, and new directions. In K. C. McLean & M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 490-507). Oxford University Press.
- Lopes, A. R., & Nihei, O. K. (2021). Depression, anxiety and stress symptoms in Brazilian university students during the COVID-19 pandemic: Predictors and association with life satisfaction, psychological well-being and coping strategies. *PloS One*, *16*(10), e0258493-e0258493. <https://doi.org/10.1371/journal.pone.0258493>
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed). Psychology Foundation of Australia: Sydney, N.S.W.
- Lynn, B. M. (2014). *Shared sense of purpose and well-being among veterans and non-veterans* (Unpublished doctoral dissertation). North Carolina State University.
- Malin, H., Liauw, I., & Damon, W. (2017). Purpose and character development in early adolescence. *Journal of Youth and Adolescence*, *46*(6), 1200-1215. <https://doi.org/10.1007/s10964-017-0642-3>
- Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *Journal of Happiness Studies*, *11*(5), 531-545. <https://doi.org/doi:10.1080/17439760.2015.1137623>
- McCaslin, S. E., Becket-Davenport, C., Dinh, J. V., Lasher, B., Kim, M., Choucroun, G., & Herbst, E. (2021). Military acculturation and readjustment to the civilian context. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. <https://doi.org/10.1037/tra0000999>

- McCaslin, S. E., Bramlett, D., Juhasz, K., Mackintosh, M., & Springer, S. (2020). Veterans and disaster response work: The role of continued service in meaning making and recovery. In S. E. Schulenberg (Ed.), *Positive psychological approaches to disaster: Meaning, resilience, and posttraumatic growth* (pp. 61-79). Springer International.
- McCormick, W. H., Currier, J. M., Isaak, S. L., Sims, B. M., Slagel, B. A., Carroll, T. D., Hamner, K., & Albright, D. L. (2019). Military culture and post-military transitioning among veterans: A qualitative analysis. *Journal of Veterans Studies*, 4(2), 288-298. <https://doi.org/10.21061/jvs.v4i2.121>
- Meca, A., Allison, K. K., Ayers, K. L., Carr, K., Cox, S., Bravo, A. J., Davies, R., & Kelley, M. L. (2021). Understanding the unique effects of identity in adjustment among veterans. *Military Behavioral Health*, 9(4), 1-424. <https://doi.org/10.1080/21635781.2021.1927918>
- Melton, A. M. A., & Schulenberg, S. E. (2008). On the measurement of meaning: Logotherapy's empirical contributions to humanistic psychology. *The Humanistic Psychologist*, 36(1), 31-44. <https://doi.org/10.1080/08873260701828870>
- Miao, M., Zheng, L., & Gan, Y. (2017). Meaning in life promotes proactive coping via positive affect: A daily diary study. *Journal of Happiness Studies*, 18(6), 1683-1696. <https://doi.org/10.1007/s10902-016-9791-4>
- Mitchell, L. L., Frazier, P. A., & Sayer, N. A. (2020). Identity disruption and its association with mental health among veterans with reintegration difficulty. *Developmental Psychology*, 56(11), 2152-2166. <https://doi.org/10.1037/dev0001106>

- Mohammadi, L., Besharat, M. A., Rezazade, M. R., & Lavasani, M. G. (2018). The mediating role of positive and negative affect in the relationship between meaning in life and mental health. *Journal of Psychology, 22*(2), 157–171.
- Moomal, Z. (1999). The relationship between meaning in life and mental well-being. *South African Journal of Psychology, 29*, 36-41. <https://doi.org/10.1177/008124639902900106>
- Mota, N. P., Tsai, J., Kirwin, P. D., Sareen, J., Southwick, S. M., & Pietrzak, R. H. (2016). Purpose in life is associated with a reduced risk of incident physical disability in aging U.S. military veterans. *The American Journal of Geriatric Psychiatry, 24*(9), 706-714. <https://doi.org/10.1016/j.jagp.2016.03.004>
- Mumford, D. B. (1998). The measurement of culture shock. *Social Psychiatry and Psychiatric Epidemiology, 33*, 149-154. <https://doi.org/10.1007/s001270050037>
- Musich, S., Wang, S. S., Kraemer, S., Hawkins, K., & Wicker, E. (2018). Purpose in life and positive health outcomes among older adults. *Population Health Management, 21*(2), 139-147. <https://doi.org/10.1089/pop.2017.0063>
- National Alliance on Mental Health (NAMI). (2014). *Veterans and active duty*. <https://www.nami.org/Find-Support/veterans-and-Active-Duty>
- National Center for PTSD (NCPTSD). (2020). *Epidemiology of PTSD*. <https://www.ptsd.va.gov/professional/treat/essentials/epidemiology.asp#two>.
- NCHV. (2021). *National coalition for homeless veterans*. [https://nchv.org/index.php/news/media/background\\_and\\_statistics](https://nchv.org/index.php/news/media/background_and_statistics).

- Nichter, B., Haller, M., Norman, S., & Pietrzak, R. H. (2020). Risk and protective factors associated with comorbid PTSD and depression in US military veterans: Results from the National Health and Resilience in Veterans Study. *Journal of Psychiatric Research, 121*, 56-61. <https://doi.org/10.1016/j.jpsychires.2019.11.008>
- National Institute on Drug Abuse (NIDA). (2019). Substance Use and Military Life DrugFacts. Retrieved from <https://www.drugabuse.gov/publications/drugfacts/substance-use-military-life>
- Norman, S. B., Haller, M., Hamblen, J. L., Southwick, S. M., & Pietrzak, R. H. (2018). The burden of co-occurring alcohol use disorder and PTSD in U.S. military veterans: Comorbidities, functioning, and suicidality. *Psychology of Addictive Behaviors, 32*(2), 224-229. <https://doi.org/10.1037/adb0000348>
- Office of Mental Health and Suicide Prevention. (2020). *2020 National Veteran Suicide Prevention Annual Report*. <https://www.mentalhealth.va.gov/docs/data-sheets/2020/2020-National-veteran-Suicide-Prevention-Annual-Report-11-2020-508.pdf>.
- Orazem, R. J., Frazier, P. A., Schnurr, P. P., Oleson, H. E., Carlson, K. F., Litz, B. T., & Sayer, N. A. (2017). Identity adjustment among Afghanistan and Iraq war veterans with reintegration difficulty. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(Suppl 1), 4-11. <https://doi.org/10.1037/tra0000225>
- Osman, A., Wong, J. L., Bagge, C. L., Freedenthal, S., Gutierrez, P. M., & Lozano, G. (2012). The Depression Anxiety Stress Scales-21 (DASS-21): Further examination of dimensions, scale reliability, and correlates. *Journal of Clinical Psychology, 68*(12), 1322-1338. <https://doi.org/10.1002/jclp.21908>

- Pan, J.-Y., Wong, D. F. K., Chan, C. L. W., & Joubert, L. (2008a). Meaning of life as a protective factor of positive affect in acculturation: A resilience framework and a cross-cultural comparison. *International Journal of Intercultural Relations*, *32*(6), 505-514. <https://doi.org/10.1016/j.ijintrel.2008.08.002>
- Pan, J., Wong, D. F. K., Joubert, L., & Chan, C. L. W. (2008b). The protective function of meaning of life on life satisfaction among Chinese students in Australia and Hong Kong: A cross-cultural comparative study. *Journal of American College Health*, *57*(2), 221-232. <https://doi.org/10.3200/JACH.57.2.221-232>
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, *136*(2), 257-301. <https://doi.org/10.1037/a0018301>
- Park, C. L., Knott, C. L., Williams, R. M., Clark, E. M., Williams, B. R., & Schulz, E. (2020). Meaning in life predicts decreased depressive symptoms and increased positive affect over time but does not buffer stress effects in a national sample of African-Americans. *Journal of Happiness Studies*, *21*(8), 3037-3049. <https://doi.org/10.1007/s10902-019-00212-9>
- Pavlicic, J. M., Schulenberg, S. E., & Buchanan, E. M. (2021). Experiential avoidance and meaning in life as predictors of valued living: A daily diary study. *Journal of Prevention and Health Promotion*, *2*(1), 135-159. <https://doi.org/10.1177/2632077021998261>
- Pease, J. L., Billera, M., & Gerard, G. (2015). Military culture and the transition to civilian life: Suicide risk and other considerations. *Social work*, *61*(1), 83-86.

- Pemberton, M. R., Forman-Hoffman, V. L., Lipari, R. N., Ashley, O. S., Heller, D. C., & Williams, M. R. (2016). Prevalence of past year substance use and mental illness by veteran status in a nationally representative sample. *SAMHSA Center for Behavioral Health Statistics and Quality Data Review*. November. 1-59.
- Pietrzak, R. H., & Cook, J. M. (2013). Psychological resilience in older U.S. veterans: Results from the National Health and Resilience in Veterans Study. *Depression and Anxiety*, 30(5), 432-443. <https://doi.org/doi:10.1002/da.22083>
- Pietrzak, R. H., Goldstein, M. B., Malley, J. C., Rivers, A. J., Johnson, D. C., & Southwick, S. M. (2010). Risk and protective factors associated with suicidal ideation in veterans of Operations Enduring Freedom and Iraqi Freedom. *Journal of Affective Disorders*, 123(1-3), 102-107. <https://doi.org/10.1016/j.jad.2009.08.001>
- Pietrzak, R. H., & Southwick, S. M. (2011). Psychological resilience in OEF-OIF veterans: Application of a novel classification approach and examination of demographic and psychosocial correlates. *Journal of Affective Disorders*, 133(3), 560-568. <https://doi.org/10.1016/j.jad.2011.04.028>
- Pols, H., & Oak, S. (2007). War & military mental health: The US psychiatric response in the 20th century. *American Journal of Public Health*, 97(12), 2132-2142. <https://doi.org/10.2105/AJPH.2006.090910>
- Psarra, E., & Kleftras, G. (2013). Adaptation to physical disabilities: The role of meaning in life and depression. *European Journal of Counselling Psychology (Trier)*, 2(1), 79-99. <https://doi.org/10.5964/ejcop.v2i1.7>

- Ramsey, C., Dziura, J., Justice, A. C., Altalib, H. H., Bathulapalli, H., Burg, M., Decker, S., Driscoll, M., Goulet, J., Haskell, S., Kulas, J., Wang, K. H., Mattocks, K., & Brandt, C. (2017). Incidence of mental health diagnoses in veterans of Operations Iraqi Freedom, Enduring Freedom, and New Dawn, 2001-2014. *American Journal of Public Health, 107*(2), 329-335. <https://doi.org/10.2105/AJPH.2016.303574>
- Ravindran, C., Morley, S. W., Stephens, B. M., Stanley, I. H., & Reger, M. A. (2020). Association of suicide risk with transition to civilian life among US military service members. *JAMA Network Open, 3*(9), e2016261-e2016271. <https://doi.org/10.1001/jamanetworkopen.2020.16261>
- Redmond, S. A., Wilcox, S. L., Campbell, S., Kim, A., Finney, K., Barr, K., & Hassan, A. M. (2015). A brief introduction to the military workplace culture. *Work, 50*(1), 9-20. <https://doi.org/10.3233/WOR-141987>
- Reger, M. A., Smolenski, D. J., Skopp, N. A., Metzger-Abamukang, M. J., Kang, H. K., Bullman, T. A., Perdue, S., & Gahm, G. A. (2015). Risk of suicide among US military service members following Operation Enduring Freedom or Operation Iraqi Freedom deployment and separation from the US military. *JAMA Psychiatry, 72*(6), 561-569. <https://doi.org/10.1001/jamapsychiatry.2014.3195>
- Reker, G. T. (2000). Theoretical perspective, dimensions, and measurement of existential meaning. In G. T. Reker & K. Chamberlain (Eds.), *Exploring existential meaning: Optimizing human development across the life span* (pp. 39-55). Sage.
- Reker, G., Peacock, E., & Wong, P. (1987). Meaning and purpose in life and well-being: A life-span perspective. *Journal of Gerontology, 42*, 44-49. <https://doi.org/10.1093/geronj/42.1.44>

- Renshaw, K. D. (2011). An integrated model of risk and protective factors for post-deployment PTSD symptoms in OEF/OIF era combat veterans. *Journal of Affective Disorders*, *128*(3), 321-326. <https://doi.org/10.1016/j.jad.2010.07.022>
- Romaniuk, M., Fisher, G., Kidd, C., & Batterham, P. J. (2020). Assessing psychological adjustment and cultural reintegration after military service: Development and psychometric evaluation of the post-separation military-civilian adjustment and reintegration measure (M-CARM). *BMC Psychiatry*, *20*(1), 531-531. <https://doi.org/10.1186/s12888-020-02936-y>
- Rosen, C. S., Greenbaum, M. A., Fitt, J. E., Laffaye, C., Norris, V. A., & Kimerling, R. (2011). Stigma, help-seeking attitudes, and use of psychotherapy in veterans with diagnoses of posttraumatic stress disorder. *The Journal of Nervous and Mental Disease*, *199*(11), 879-885. <https://doi.org/10.1097/NMD.0b013e3182349ea5>
- Russell, C. A., & Russell, D. W. (2018). It's not just showing up: How social identification with a veterans service organization relates to benefit-finding and social isolation among veterans. *Psychological Services*, *15*(2), 154-162. <https://doi.org/10.1037/ser0000176>
- Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, *65*, 14-23. <https://doi.org/10.1159/000289026>
- Sam, D. L., & Berry, J. W. (Eds.). (2006). *The Cambridge handbook of acculturation psychology*. Cambridge University Press.
- Schaefer, S. M., Boylan, J. M., Van Reekum, C. M., Lapate, R. C., Norris, C. J., Ryff, C. D., & Davidson, R. J. (2013). Purpose in life predicts better emotional recovery from negative stimuli. *PLOS ONE*, *8*(11), e80329. <https://doi.org/10.1371/journal.pone.0080329>

- Schmitz, P. (1992). Acculturation styles and health. In S. Iwawaki, Y. Kashima, & K. Leung (Eds.), *Innovations in cross-cultural psychology* (pp. 360-370). Lisse: Swets & Zeitlinger.
- Schnell, T., Gerstner, R., & Krampe, H. (2018). Crisis of meaning predicts suicidality in youth independently of depression. *Crisis*, 39(4), 294-303. <https://doi.org/10.1027/0227-5910/a000503>
- Schulenberg, S. E. (2003). Empirical research and logotherapy. *Psychological Reports*, 93, 307-319. <https://doi.org/10.2466/PR0.93.5.307-319>
- Schulenberg, S. E. (Ed.). (2020). *Positive psychological approaches to disaster: Meaning, resilience, and posttraumatic growth*. Springer.
- Schulenberg, S. E., Hutzell, R. R., Nassif, C., & Rogina, J. M. (2008). Logotherapy for clinical practice. *Psychotherapy*, 45(4), 447-463. <https://doi.org/10.1037/a0014331>
- Schulenberg, S. E., Schnetzer, L. W., & Buchanan, E. M. (2011). The Purpose in Life test—Short Form: Development and psychometric support. *Journal of Happiness Studies*, 12(5), 861-876. <https://doi.org/10.1007/s10902-010-9231-9>
- Schulenberg, S. E., Smith, C. V., Drescher, C. F., & Buchanan, E. M. (2016). Assessment of meaning in adolescents receiving clinical services in Mississippi following the Deepwater Horizon oil spill: An application of the Purpose in Life test—Short Form (PIL-SF). *Journal of Clinical Psychology*, 72(12), 1279-1286. <https://doi.org/10.1002/jclp.22240>
- Schult, T. M., Schmunk, S. K., Marzolf, J. R., & Mohr, D. C. (2019). The health status of veteran employees compared to civilian employees in veterans' health administration. *Military Medicine*, 184(7-8), e218-e224. <https://doi.org/10.1093/milmed/usy410>

- Sharp, M. L., Fear, N. T., Rona, R. J., Wessely, S., Greenberg, N., Jones, N., & Goodwin, L. (2015). Stigma as a barrier to seeking health care among military personnel with mental health problems. *Epidemiologic Reviews*, 37(1), 144-162.  
<https://doi.org/10.1093/epirev/mxu012>
- Sharp, W., Schulenberg, S. E., Wilson, K. G., & Murrell, A. R. (2004). Logotherapy and Acceptance and Commitment Therapy (ACT): An initial comparison of values-centered approaches. *The International Forum for Logotherapy*, 27, 98-105.  
<https://doi.org/10.2466/pr0.95.3.946-948>
- Sinclair, S., Bryan, C. J., & Bryan, A. O. (2016). Meaning in life as a protective factor for the emergence of suicide ideation that leads to suicide attempts among military personnel and veterans with elevated PTSD and depression. *International Journal of Cognitive Therapy*, 9(1), 87-98. <https://doi.org/10.1521/ijct.2016.9.1.87>
- Sinclair, S. J., Siefert, C. J., Slavin-Mulford, J. M., Stein, M. B., Renna, M., & Blais, M. A. (2012). Psychometric evaluation and normative data for the Depression, Anxiety, and Stress Scales-21 (DASS-21) in a nonclinical sample of US adults. *Evaluation and the Health Professions*, 35(3), 259-279. <https://doi.org/10.1177/0163278711424282>
- Smith, R. T., & True, G. (2014). Warring identities: Identity conflict and the mental distress of American veterans of the wars in Iraq and Afghanistan. *Society and Mental Health*, 4(2), 147-161. <https://doi.org/10.1177/2156869313512212>
- Soetrisno, Sulistyowati, S., Ardianto, A., & Hadi, S. (2017). The effect of logotherapy on the expressions of cortisol, HSP70, Beck Depression Inventory (BDI), and pain scales in advanced cervical cancer patients. *Health Care for Women International*, 38(2), 91-99.  
<https://doi-org.umiss.idm.oclc.org/10.1080/07399332.2016.1237952>

- Sokol, Y., & Eisenheim, E. (2016). The relationship between continuous identity disturbances, negative mood, and suicidal ideation. *The Primary Care Companion for CNS Disorders*, *18*(1), 1-19. <https://doi.org/10.4088/PCC.15m01824>
- Sokol, Y., & Serper, M. (2017). Temporal self-appraisal and continuous identity: Associations with depression and hopelessness. *Journal of Affective Disorders*, *208*, 503-511. <https://doi.org/10.1016/j.jad.2016.10.033>
- Steger, M. F. (2018). Meaning and well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (pp. 1-10). DEF Publishers.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, *53*(1), 80-93. <https://doi.org/10.1037/0022-0167.53.1.80>
- Stone, C. B., Lengnick-Hall, M., & Muldoon, J. (2018). Do stereotypes of veterans affect chances of employment? *The Psychologist-Manager Journal*, *21*(1), 1-33. <https://doi.org/10.1037/mgr0000068>
- Straus, E., Norman, S. B., Tripp, J. C., Pitts, M., & Pietrzak, R. H. (2019). Purpose in life and conscientiousness protect against the development of suicidal ideation in U.S. military veterans with PTSD and MDD: Results from the National Health and Resilience in Veterans Study. *Chronic Stress*, *3*, 1-10. <https://doi.org/10.1177/2470547019872172>
- Sun, F., Hung, C., Yao, Y., Fu, C., Tsai, P., & Chiang, C. (2021). The effects of logotherapy on distress, depression, and demoralization in breast cancer and gynecological cancer patients: A preliminary study. *Cancer Nursing*, *44*(1), 53-61. <https://doi.org/10.1097/NCC.0000000000000740>

- Teo, A. R., Marsh, H. E., Forsberg, C. W., Nicolaidis, C., Chen, J. I., Newsom, J., Saha, S., & Dobscha, S. K. (2018). Loneliness is closely associated with depression outcomes and suicidal ideation among military veterans in primary care. *Journal of Affective Disorders*, 230, 42-49. <https://doi.org/10.1016/j.jad.2018.01.003>
- Thomas, K. H., & Taylor, S. P. (2020). *Stopping military suicides: Veteran voices to help prevent deaths*. ABC-CLIO, LLC.
- Tkachuck, M. A. (2019). *Validating military culture: The factor analysis of a military-related adaptation of acculturation* [Unpublished doctoral dissertation]. University of Mississippi.
- Tkachuck, M. A., Pavlacic, J. M., Raley, M. J., McCaslin, S. E., & Schulenberg, S. E. (2021). Validating military culture: The factor analysis of a military-related adaptation of acculturation in veterans. *Psychological Services*. <https://doi.org/10.1037/ser0000558>
- Trivedi, R. B., Post, E. P., Sun, H., Pomerantz, A., Saxon, A. J., Piette, J. D., Maynard, C., Arnow, B., Curtis, I., Fihn, S. D., & Nelson, K. (2015). Prevalence, comorbidity, and prognosis of mental health among US veterans. *American Journal of Public Health*, 105(12), 2564-2569. <https://doi.org/10.2105/AJPH.2015.302836>
- Tsai, J., & Rosenheck, R. A. (2015). Risk factors for homelessness among US veterans. *Epidemiologic Reviews*, 37, 177-195. <https://doi.org/10.1093/epirev/mxu004>
- Tsai, J., Trevisan, L., Huang, M., & Pietrzak, R. H. (2018). Addressing veteran homelessness to prevent veteran suicides. *Psychiatric Services*, 69(8), 935-937. <https://doi.org/10.1176/appi.ps.201700482>

- Turner, A. D., Smith, C. E., & Ong, J. C. (2017). Is purpose in life associated with less sleep disturbance in older adults? *Sleep Science and Practice*, 1(1), 1-10.  
<https://doi.org/10.1186/s41606-017-0015-6>
- U.S. Congress. (1964) *United States Code: General*, 38 U.S.C. §§ 101-111. [Periodical]  
<https://www.loc.gov/item/uscode1964-008038001/>.
- U.S. Department of Health and Human Services. (2021, January). *Mental Illness*.  
<https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>.
- Verkamp, K. M. (2021). From warrior ethos to obscurity: Veteran reintegration literature review. *Journal for Nurse Practitioners*, 17(5), 556-569.  
<https://doi.org/10.1016/j.nurpra.2020.12.016>
- Vespa, J. E. (2020). *Those who served: America's veterans from World War II to the War on Terror*. The United States Census Bureau.  
<https://www.census.gov/library/publications/2020/demo/acs-43.html>.
- Vogt, D., King, M. W., Borowski, S., Finley, E. P., Perkins, D. F., & Copeland, L. A. (2021). Identifying factors that contribute to military veterans' post-military well-being. *Applied Psychology: Health and Well-Being*, 13(2), 341-356. <https://doi.org/10.1111/aphw.12252>
- Vos, J., Craig, M., & Cooper, M. (2015). Existential therapies: A meta-analysis of their effects on psychological outcomes. *Journal of Consulting and Clinical Psychology*, 83(1), 115-128. <https://doi.org/10.1037/a0037167>
- Wagner, T. H., Harris, K. M., Federman, B., Dai, L., Luna, Y., & Humphreys, K. (2007). Prevalence of substance use disorders among veterans and comparable nonveterans from the national survey on drug use and health. *Psychological Services*, 4(3), 149-157. <https://doi.org/10.1037/1541-1559.4.3.149>

Weber, M. C., Pavlacic, J. M., Gawlik, E. A., Schulenberg, S. E., & Buchanan, E. M. (2020).

Modeling resilience, meaning in life, posttraumatic growth, and disaster preparedness with two samples of tornado survivors. *Traumatology*, 26(3), 266-277.

<https://doi.org/10.1037/trm0000210>

World Health Organization. (1992). *The ICD-10 Classification of Mental and Behavioral*

*Disorders: Clinical descriptions and diagnostic guidelines*. World Health Organization.

Yu, B., Chen, X., Li, S., Liu, Y., Jacques-Tiura, A. J., & Yan, H. (2014). Acculturative stress and

influential factors among international students in China: A structural dynamic

perspective. *PloS One*, 9(4), 1-8. <https://doi.org/10.1371/journal.pone.0096322>

Zanon, C., Brenner, R. E., Baptista, M. N., Vogel, D. L., Rubin, M., Al-Darmaki, F. R.,

Gonçalves, M., Heath, P. J., Liao, H., Mackenzie, C. S., Topkaya, N., Wade, N. G., &

Zlati, A. (2020). Examining the dimensionality, reliability, and invariance of the

Depression, Anxiety, and Stress Scale–21 (DASS–21) across eight countries. *Assessment*,

28(6), 1-14. <https://doi.org/10.1177/1073191119887449>

Zogas, A. (2017). US military veterans' difficult transitions back to civilian life and the VA's

response. [https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Zogas\\_Vetera](https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Zogas_Veterans%27%20Transitions_CoW_2.1.17.pdf)

[ns%27%20Transitions\\_CoW\\_2.1.17.pdf](https://watson.brown.edu/costsofwar/files/cow/imce/papers/2017/Zogas_Veterans%27%20Transitions_CoW_2.1.17.pdf)

## LIST OF APPENDICES

## Appendix A

### Brief Psychological Adaptation Scale – Military Version<sup>1</sup>

**Instructions:** Think about being a civilian. In the last 2 weeks, how often have you felt:

1	2	3	4	5	6	7
Never	Very Rarely	Rarely	Sometimes	Frequently	Usually	Always

**Please circle one answer for the following questions:**

- 1 2 3 4 5 6 7 Excited about being a civilian
- 1 2 3 4 5 6 7 Out of place, like you don't fit into the civilian culture
- 1 2 3 4 5 6 7 Sad to be away from the military culture
- 1 2 3 4 5 6 7 Nervous about how to behave in certain situations
- 1 2 3 4 5 6 7 Lonely without your military family and friends around you
- 1 2 3 4 5 6 7 Homesick when you think of being in the military
- 1 2 3 4 5 6 7 Frustrated by difficulties adapting to being a civilian
- 1 2 3 4 5 6 7 Happy with your day to day life as a civilian

---

<sup>1</sup> Tkachuck, M. A. (2019). *Validating military culture: The factor analysis of a military-related adaptation of acculturation* [Unpublished doctoral dissertation]. University of Mississippi.

**Table 1.**  
*Sample Demographics*

	<i>n</i>	%
Mean age ( <i>SD</i> )	36.96 (10.61)	
Gender		
Female	52	17.5
Male	232	78.1
NA/Not Disclosed	13	4.4
Student		
Yes	139	46.8
No	158	53.2
Ethnicity		
White	219	73.7
Hispanic/Latino(a)	19	6.4
Black	14	4.7
Asian/Asian-American	7	2.4
Native American/Hawaiian	4	1.3
Pacific Islander	1	0.3
NA/Not Disclosed	18	6.1
Children		
Yes	155	52.2
No	131	44.1
NA/Not Disclosed	11	3.7
Marital Status		
Married	167	56.2
Single	69	23.2
Divorced	38	12.8
Separated	8	2.7
Civil Union	2	0.7
Widowed	2	0.7
NA	11	3.7

*Note.* *N* = 297

**Table 2.**  
*Sample Military Characteristics*

	<i>n</i>	%
<b>Current Military Affiliation</b>		
Veteran (no current affiliation)	273	91.9
NG/Reserve (Active Duty Veteran)	24	8.1
<b>Military Branch</b>		
Army	127	42.8
Navy	43	14.5
Air Force	47	15.8
U.S. Marine Corps	63	21.2
National Guard	20	6.7
Coast Guard	3	1.0
<b>Officer Status</b>		
Enlisted	253	85.2
Officer	22	7.4
Both	10	3.4
NA	12	4.0
Mean length of active duty status ( <i>SD</i> )	6.04 (2.61)	
<b>Deployed to war zone</b>		
Yes	177	59.6
No	107	36.0
NA	13	4.4
Mean time since move off base ( <i>SD</i> )	6.72 (3.36)	
Mean time since discharge ( <i>SD</i> ) <sup>a</sup>	6.16 (3.46)	
Mean weekly time spent with service members <sup>b</sup>	4.52 (3.97)	
<b>Parent served in military</b>		
Yes	135	45.5
No	148	49.8
NA	14	4.7
<b>Childhood home: strong military values</b>		
Yes	121	40.7
No	158	53.2
NA	18	6.1

Note. *N* = 297

<sup>a</sup>The *mean time since discharge base* variable was measured according to the following four response options: 0-3 hours, 4-6 hours, 7-9 hours, 10+ hours.

<sup>b</sup>The *mean weekly time spent with service members* variable was measured according to the following four response options: 0-3 hours, 4-6 hours, 7-9 hours, 10+ hours.

**Table 3.***Descriptive statistics and reliability coefficients for variables of interest*

		<i>n</i>	Low	High	<i>M</i>	<i>SD</i>	<i>α</i>
PIL-SF	Total meaning sum score	297	4	28	20.81	5.12	.88
BPAS-MV	Total psychological adaptation mean score	297	1	7	4.25	1.16	.87
	Total psychological distress sum score	285	0	114	37.46	26.02	.95
DASS-21	Depression subscale sum score	285	0	42	12.23	10.47	.93
	Anxiety subscale sum score	285	0	38	9.41	8.39	.85
	Stress subscale sum score	285	0	42	15.78	9.90	.89

*Note.* PIL-SF = Purpose in Life Test-Short Form. BPAS-MV = Brief Psychological Adaptation Scale-Military Version. DASS-21 = Depression Anxiety and Stress Scale-21.

**Table 4.**

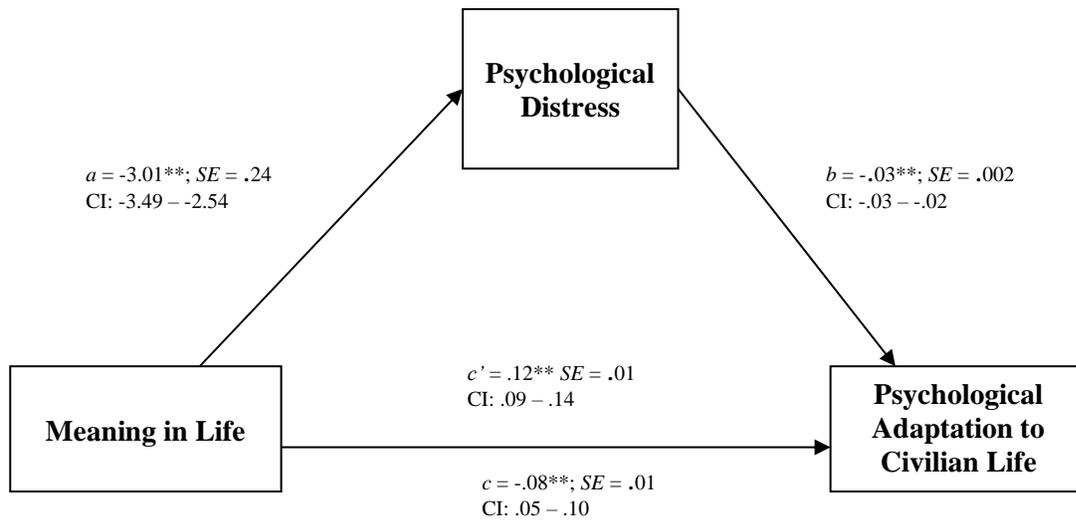
*Pearson correlations among variables of interest*

Measure	<i>n</i>	1	2	3	4	5	6
1. PIL-SF	297	—					
2. BPAS-MV	297	.50*	—				
3. DASS-21	285	-.60*	-.68*	—			
4. Depression (DASS-21)	286	-.73*	-.63*	.90*	—		
5. Anxiety (DASS-21)	285	-.42*	-.58*	.89*	.69*	—	
6. Stress (DASS-21)	285	-.44*	-.61*	.92*	.74*	.76*	—

*Note.* \* =  $p < .01$ . PIL-SF = Purpose in Life Test-Short Form. BPAS-MV = Brief Psychological Adaptation Scale-Military Version. DASS-21 = Depression Anxiety and Stress Scale-21. Depression = DASS-21 Depression subscale. Anxiety = DASS-21 Anxiety subscale. Stress = DASS-21 Stress subscale.

**Figure 1.**

*Path coefficients for simple mediation analysis*



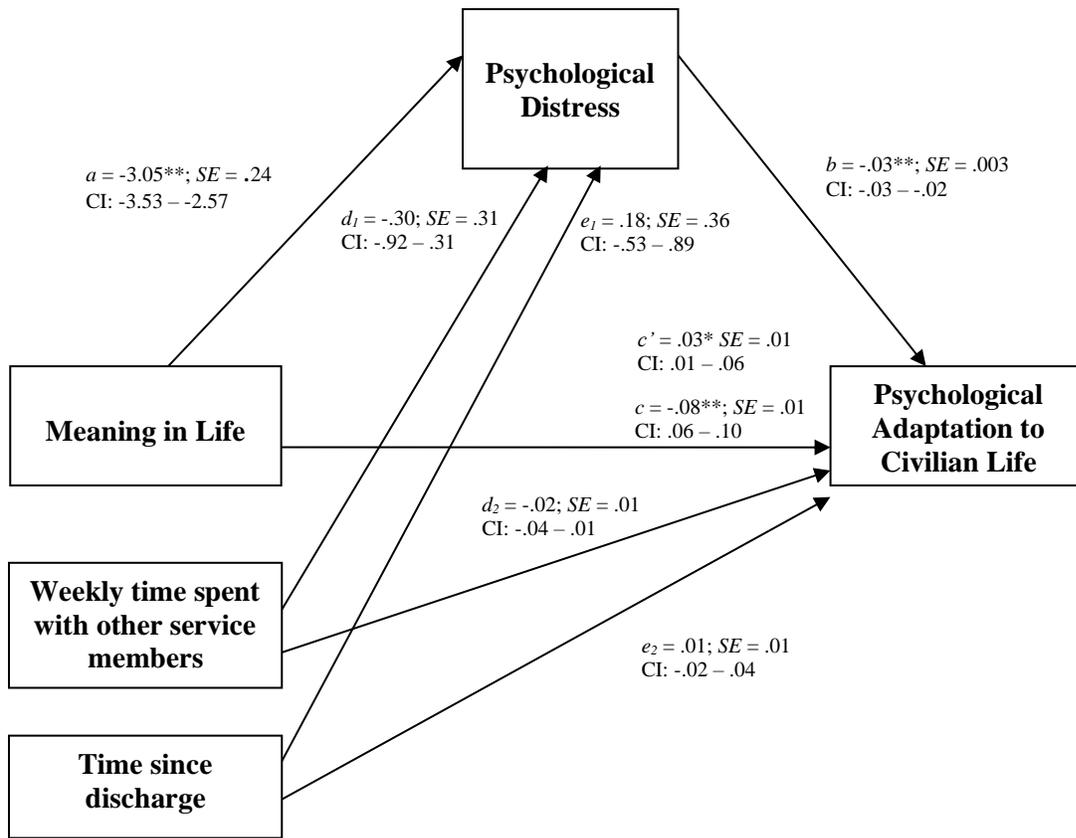
*Note.* *c* denotes the total effect while *c'* denotes the effect of meaning on psychological adaptation when psychological distress is not included as a mediator.

\*  $p < 0.05$

\*\*  $p < .0001$

**Figure 2.**

*Path coefficients for simple mediation analysis with covariates*



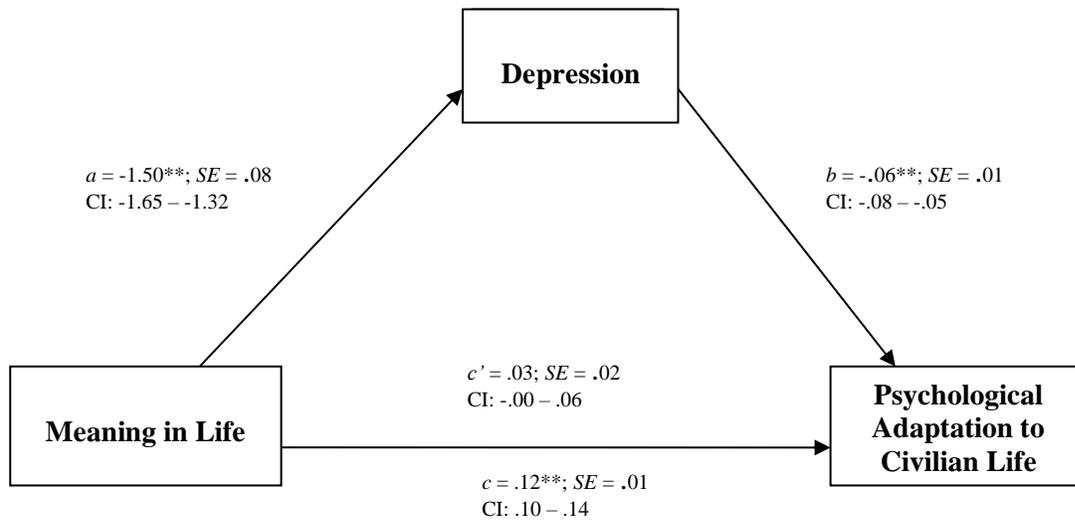
*Note.*  $c$  denotes the total effect while  $c'$  denotes the effect of meaning on psychological adaptation when psychological distress is not included as a mediator.  $d$  denotes a path involving the weekly time covariate.  $e$  denotes a path involving the time since discharge covariate.

\*  $p < 0.05$

\*\*  $p < .0001$

**Figure 3.**

*Path coefficients for supplemental depression mediation analysis*



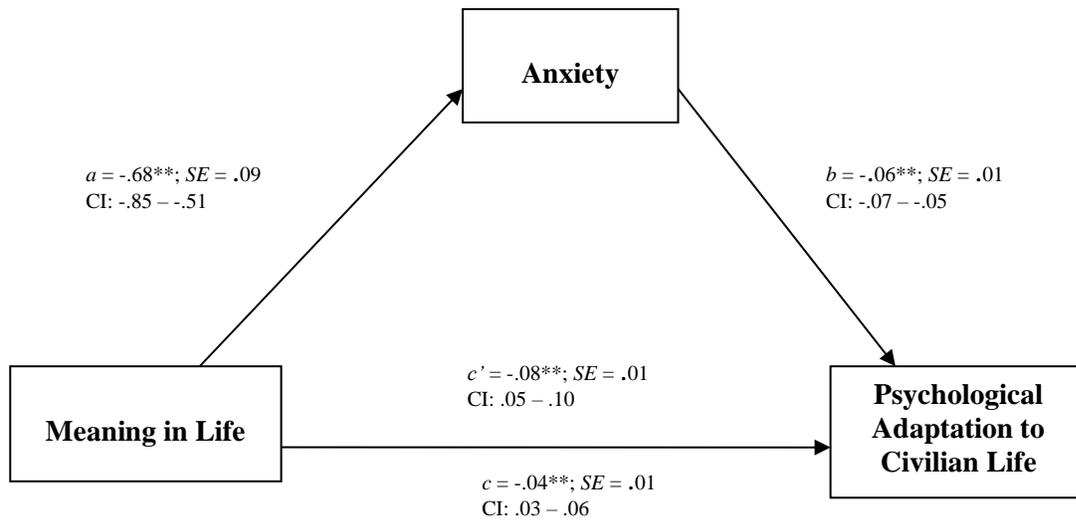
*Note.*  $c$  denotes the total effect while  $c'$  denotes the effect of meaning on psychological adaptation when depression is not included as a mediator.

\*  $p < 0.05$

\*\*  $p < .0001$

**Figure 4.**

*Path coefficients for supplemental anxiety mediation analysis*

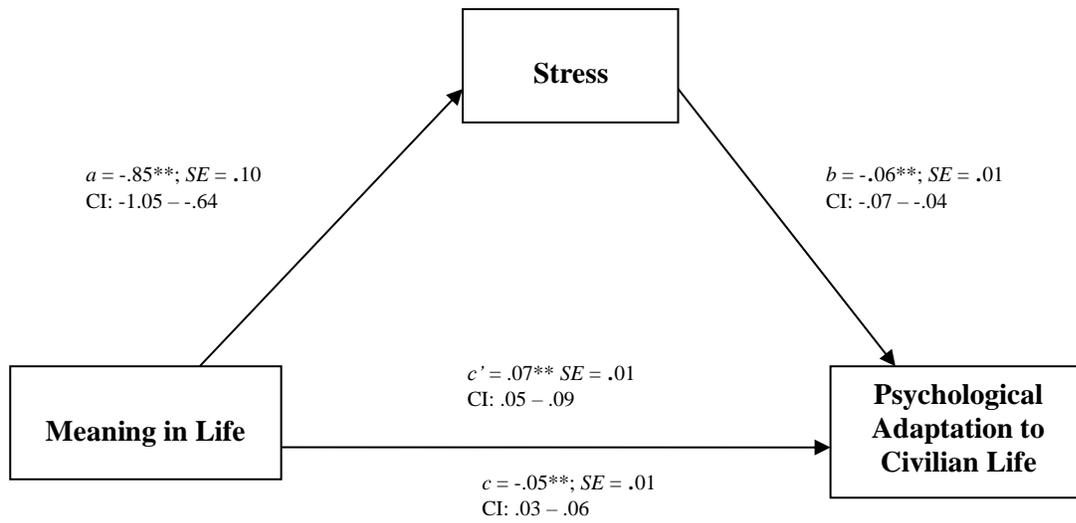


*Note.*  $c$  denotes the total effect while  $c'$  denotes the effect of meaning on psychological adaptation when anxiety is not included as a mediator.

\*  $p < 0.05$

\*\*  $p < .0001$

**Figure 5.**  
*Path coefficients for supplemental stress mediation analysis*



*Note.*  $c$  denotes the total effect while  $c'$  denotes the effect of meaning on psychological adaptation when stress is not included as a mediator.

\*  $p < 0.05$

\*\*  $p < .0001$

## VITA

### EDUCATION

---

**Ph.D., Clinical Psychology**

Anticipated: May 2025

*University of Mississippi (APA-Accredited) | Oxford, MS*

**M.A., Clinical Psychology**

Anticipated: May 2022

*University of Mississippi (APA-Accredited) | Oxford, MS*

Overall GPA: 3.94

**B.A., Psychology**

May 2018

*Providence College | Providence, RI*

Overall GPA: 3.88, Summa cum laude

Major GPA: 3.96

### PROFESSIONAL & CLINICAL EXPERIENCE

---

**Graduate Therapist**

August 2020–Present

*Psychological Services Center, University of Mississippi*

*Supervisors: Stefan E. Schulenberg, Ph.D. & Kristin Austin, Ph.D.*

**Responsibilities:**

- Conduct intake assessments and develop case conceptualizations to inform intervention approaches and diagnostic recommendations
- Utilize various evidence-based approaches (e.g., cognitive-behavioral therapy (CBT), acceptance and commitment therapy (ACT), motivational interviewing (MI), positive psychology) to provide individual and couples psychotherapy to children and adults with a range of presentations and backgrounds
- Client record keeping and note writing
- Participation in weekly group and individual supervision meetings

**Graduate Mental Health Counselor**

August 2021–May 2022

*University Counseling Center, University of Mississippi*

*Supervisor: Juawice McCormick, Ph.D., LPC-S*

**Responsibilities:**

- Conduct intake interviews and develop case conceptualizations to inform intervention approaches and diagnostic recommendations
- Utilize evidence-based approaches to provide individual counseling to college students and graduate students
- Client record keeping and note writing
- Participation in weekly group and individual supervision meetings

**Psychological & Behavioral Services Intern****June 2020–June 2021***North Mississippi Regional Center (NMRC)**Supervisor: Melinda Redding, Ph.D.***Responsibilities:**

- Conduct various full-battery assessments (e.g., intellectual and achievement testing, adaptive functioning interviewing, dementia screening, functional behavior assessments) with individuals who have been diagnosed with intellectual disability/developmental disability and behavioral disorders
- Review and develop individualized behavior plans for residential clients exhibiting a wide range of behavioral needs
- Provide individual counseling to residential clients with intellectual disability/developmental disabilities, including Autism Spectrum Disorder, Prader-Willi Syndrome, and Lesch-Nyhan Syndrome

**RESEARCH EXPERIENCE**

---

**Graduate Research Assistant****August 2019–Present***Clinical-Disaster Research Center (CDRC)*

Department of Psychology, University of Mississippi

**Responsibilities:**

- Assist with data collection for various lab projects
- Review and collaborate on book chapters and articles prior to submission to publishers and professional journals
- Update and develop CDRC website, including information about lab projects and resources for university students and the community
- Areas of involvement:
  - COVID-19 disaster response
  - Disaster preparedness and response
  - Positive psychology
  - Meaning and purpose in life
  - Veteran adaptation to civilian life
  - Community-based psychological first aid

**Clinical Research Assistant****January–May 2018***Providence VA Medical Center*

Providence, RI

**Responsibilities:**

- Treatment of Trauma-Related Anger Study
- Assisted with data entry and collection through assessment administration
- Clinical intervention exposure through review of session tapes and notes
- Researched experimental and traditional treatment plans/materials within the program through manuals and recorded sessions

**Undergraduate Research Assistant****August 2016–May 2018***Family & Development Lab*

Mentor: Kelly Warmuth, Ph.D.

Department of Psychology, Providence College

**Responsibilities:**

- Participant recruitment and scheduling (participant visits/recruiting events)
- Training in two researcher roles which involve facilitating participant sessions and data collection with adults and children through various assessment techniques and activities
- Preliminary training in data analyses and coding experimental sessions according to instructional manual

**TEACHING EXPERIENCE**

---

**Graduate Teaching Assistant****August–December 2020***Course: General Psychology**Professor: Melinda Redding, Ph.D.*

University of Mississippi

**Responsibilities:**

- Provide clarification and assistance with course material to undergraduate students in a weekly office hour setting
- Assist with reviewing student assignment submissions

**Teaching Assistant****August–December 2016/2018***Course: Personality Psychology**Professor: Michael D. Spiegler, Ph.D.*

Providence College

**Responsibilities:**

- Interteaching Coach: Interteaching is a group-based approach to learning developed from behavioral principles that promotes peer-discussion, self-directed learning, and active student engagement during the class period.
- Facilitate class discussion and offer commentary/clarification on course material in a group learning setting
- Assist professor in preparing class materials; lead review sessions prior to exams

**Teaching Assistant****August–December 2017***Course: Contemporary Behavior Therapy**Professor: Michael D. Spiegler, Ph.D.*

Providence College

**Responsibilities:**

- Interteaching Coach
- Facilitate class discussion and offer commentary/clarification on course material in a group learning setting

- Assist professor in preparing class materials; lead review sessions prior to exams

### **Professor's Assistant**

**August 2015–May 2018**

*Mentor: Michael D. Spiegler, Ph.D.*

Providence College

#### **Responsibilities:**

- Assist professor with course workload by grading exams, organizing paperwork, preparing class documents, etc.
- Aid professional endeavors by proofreading documents and proposals, and providing edits/suggestions for consideration

## **PUBLICATIONS**

---

**McCutcheon, V. E.,** Grant, J. B., & Schulenberg, S. E. (2020). Answering the call of covid-19: an integrated mental health response considering education, training, research, and service. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. <http://dx.doi.org/10.1037/tra0000896>

## **POSTERS & PRESENTATIONS**

---

**McCutcheon, V. E.,** Grant, J. B., & Schulenberg, S. E. (January, 2021). *Answering the call of Covid-19: An integrated mental health response considering education, training, research, and service*. Poster presented at the Annual Mid-Winter Meeting of the Council of University Directors of Clinical Psychology.

Alois, R. L., **McCutcheon, V. E.,** & Warmuth, K. A. (May, 2018). *Mothers' and fathers' non-supportive reactions and children's responses to marital conflict*. Poster presented at the 30<sup>th</sup> Annual Convention of the American Psychological Society, San Francisco, California.

Spiegler, M. D., McCarthy, K., **McCutcheon, V. E.,** & Shea, K. (August, 2016). *Interteaching psychology: The epitome of active learning*. Poster presented at the American Psychological Association Annual Convention, Denver, Colorado.

## **PROFESSIONAL DEVELOPMENT**

---

### **APA Telepsychology Best Practices 101 Continuing Education Program**

Completion Date: March 2020

CE Credits: 8.0 (2.0 per segment)

#### **Program Included Four Segments:**

1: Clinical Evaluation and Care: Cultural Competencies

- 2: About the Tech... Video, Email, Text Messaging and Apps
- 3: Legal, Regulatory and Ethical Rules of the Road
- 4: Getting Paid: Reimbursement Strategies & Marketing Your Professional Services Online

### **RELIAS RBT Training**

Completion Date: August 2020

Hours: 40.75

## **PROFESSIONAL TRAINING**

---

### **2020**

- American Red Cross Disaster Cycle Services
- Psychological First Aid
- ALLIES (LGBTQ+) Training

## **SERVICE**

---

### **Mentored Ad Hoc Reviewer**

- *Journal of Clinical Psychology*
- *Journal of Contemporary Psychotherapy*
- *Professional Psychology: Research and Practice*
- *Psychological Trauma: Theory, Research, Practice, and Policy*
- *American Journal of Orthopsychiatry*
- *Journal of Happiness Studies*
- *Journal of Positive Psychology*

## **RELEVANT GRADUATE COURSE WORK**

---

- Ethics and Interviewing
- Evidence-Based Practice
- Cognitive Assessment
- Personality Assessment
- Abnormal Psychology
- Conditioning and Learning
- Research Design
- Quantitative Methods I & II
- History and Systems in Psychology
- Social Cognition
- Advanced Multicultural Psychology

## GRANTS, HONORS, & SCHOLARSHIPS

---

2019	Honors fellowship (4 year award; University of Mississippi)
2018	Summa cum laude graduation honors
2018	Commencement award for highest GPA in Psychology concentration
2016	Inducted into Psi Chi International Honors Society for Psychology
2014–2018	Dean’s List, Providence College
2014–2018	St. Thomas Aquinas Merit Scholarship
2014–2018	Liberal Arts Honors Program

---