2019

Burnout and Self-stigma of Seeking Psychological Help in Military Healthcare Providers

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BURNOUT AND SELF-STIGMA OF SEEKING PSYCHOLOGICAL HELP IN

MILITARY HEALTHCARE PROVIDERS

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Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Psychology

December 2018

PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE
DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the thesis presented to us by _Odelia McFadden_

on the _20_ day of _Dec_ , 20_18_, in partial fulfillment of the

requirements for the degree of Doctor of Psychology, has been examined and is

acceptable in both scholarship and literary quality.

Committee Members' Signatures:

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Acknowledgments

The road to completing this dissertation has been nothing short of challenging, but with the support of my committee members, and family and friends I was able to achieve this goal. Thank you to my committee members, Dr. Brad Rosenfield, Dr. Robert DiTomasso, and Dr. Aza Gorgalian for your unwavering support throughout this process. You all have been instrumental in sharing your knowledge and expertise. Thank you.

Second, thank you to my loving family for your understanding and encouragement. You all have seen me at my highs and lows, but with your love and support I have persisted. I appreciate everything you all have done for me throughout this journey. A special thank you to my heavenly brother, who without your inspiration and guidance early on in my educational journey I may not have achieved this goal. Your words of wisdom and encouragement have always kept me grounded and humble. I love you.

Finally, thank you to my civilian and military friends and colleagues who have been my sounding board, providing unconditional support and reality checks. You all have been at the right place, at the right time, and with the right words to push me forward. Thank you.

Abstract

Military healthcare providers (HCPs) are tasked with maintaining the military's mission readiness while balancing the roles of being providers and military members themselves. As such, military HCPs serve in various settings, including hospitals, clinics, ships, and austere environments. Military HCPs may experience a host of occupational stressors, such as long deployments, being in the line of fire, seeing dead or injured comrades, responding to mass casualty events, having excessive caseloads, and working prolonged hours. These factors make military HCPs susceptible to burnout. Unfortunately, stigma of seeking psychological help is prevalent in the military and may deter individuals from seeking the psychological help they need. The purpose of this study was to examine the relationship between burnout and self-stigma of seeking psychological help in military HCPs to include behavioral health and medical providers, as influenced by, but not limited to, military status (e.g., civilian or military), gender, and profession. Findings from this study revealed a significantly positive relationship between burnout and self-stigma of seeking psychological help and a significantly negative relationship between being a behavioral-health provider and burnout. All other hypotheses were not supported. Results from this study can offer guidance to inform policy and improve wellness and self-care programs for providers. Explanations of the results, limitations of the study, and future implications are also discussed.

Keywords: burnout, self-stigma, military healthcare provider, provider stress

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Chapter 1: Introduction

Statement of the Problem

As the United States' mission in the Middle East evolves, slowly drawing down military operations in Afghanistan and continuing combat missions against the Islamic State in Operation Inherent Resolve (OIR), the number of military personnel (i.e., individuals appointed, enlisted, or inducted for military service) returning from deployment with behavioral-health concerns has surged (Castro, 2014; Fischer, 2014). Military service is replete with occupational hazards that can precipitate severe psychological distress. When deployed, military personnel are likely to encounter a host of traumatic experiences (Schreiber & McEnany, 2015) that include being in the line of fire, seeing dead bodies, knowing friends and comrades who are injured or killed, receiving incoming fire, and being otherwise attacked (Hoge et al., 2004). Military healthcare providers (HCPs) are not immune from such experiences, and yet, they play an integral role in maintaining the military's mission readiness and, specifically, the health and wellness of military personnel and their families. Military HCPs may be active duty, reservist, or National Guard professionals who provide healthcare treatment services to veterans, military personnel, and their dependents. In caring for the men and women of the armed forces, military HCPs may encounter additional occupational stressors, including the stress of aiding the wounded, attempting to save lives (Elnitsky et al., 2013), responding to mass casualty events, having patients who die by suicide (Adler et al., 2017), receiving personal threats (Jones et al., 2008), and experiencing secondary traumatic stress (Kintzle, Yarvis, & Bride, 2013).

Research indicates that occupational stressors can precipitate burnout (Ballenger-Browning et al., 2011; Dreison et al., 2016), which is defined as "a syndrome of emotional exhaustion and cynicism" (Maslach & Jackson, 1981, p. 99). Burnout can affect individuals from different professional fields of work, gender, and military status. Burnout has been found to affect medical physicians from various disciplines (Shanafelt et al., 2015), nurses (McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011), and behavioral health providers (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). Approximately 21 to 67% of behavioral health providers experience burnout (Morse et al., 2012), compared to 34% of nurses (McHugh et al., 2011) and 54.4% of physicians (Shanafelt et al., 2015). Behavioral health providers are believed to experience the greatest levels of burnout typically resulting from extensive work with individuals with significant trauma, personality disorders (Ballenger-Browning et al., 2011; Linnerooth, Moore, & Mrdjenovich, 2011), and not having a sense of control (Garcia, McGeary, McGeary, Finley, & Peterson, 2014). The distinction between the role of gender and experienced burnout is not clear (Ballenger-Browning et al., 2011; Purvanova & Muros, 2010). Some studies have found that female individuals are at greater risk than male individuals of experiencing emotional exhaustion while male individuals appear to be more likely than female individuals to experience depersonalization (Ballenger-Browning et al., 2011; Purvanova & Muros, 2010). Unlike the lack of clarity regarding the role of gender and burnout, research does exist regarding military status and burnout. Research has found that military HCPs experience burnout at greater rates than their civilian counterparts, particularly as the result of military responsibilities in addition to patient care. In a study of 344 military HCPs, 33.3% of the sample scored high on feelings of

depersonalization and emotional exhaustion (Adler et al., 2017). Symptoms of burnout

can negatively impact HCPs and their ability to provide effective patient care.

Unfortunately, burnout negatively impacts not only the providers but also patient

care. Previous research has revealed that burnout can lead to decreased efficiency,

diminished empathy (Maslach & Jackson, 1981), increased medical errors, and marital

dysfunction (Kumar, 2016). Additionally, burnout has been found to be associated with

the onset of psychological distress, including depression, anxiety, sleep disturbances,

substance abuse, somatic complaints, and suicidality (Kumar 2016; Peterson et al., 2008).

Unfortunately, psychological distress is not uncommon in the military. In fact, an

astounding 378,993 military personnel have been diagnosed with posttraumatic stress

disorder (PTSD; *Diagnostic and Statistical Manual of Mental Disorders* [5th ed.; *DSM-5*;

American Psychiatric Association, 2013]; Hoge et al., 2004) and another 308,336 with a

depressive disorder during the Global War on Terror (GWOT) from 2001 through the

second quarter of fiscal year 2015 (U.S. Department of Veterans Affairs [VA]

Epidemiology Program, 2015). Unfortunately, many barriers interfere with use of

treatment services by military HCPs and other military personnel. These barriers may be

both actual and perceived.

The most frequently reported barrier to seeking psychological help is stigma

(Hoge et al., 2004; Vogt, 2011; Warner, Appenzeller, Mullen, Warner, & Grieger, 2008).

According to Corrigan and Penn (1999), stigma is a negative and erroneous attitude about

a person, a prejudice, or a negative stereotype. In terms of mental illness, stigma

represents invalidating and poorly justified cognitions that can lead to stereotyping and

discrimination (Corrigan & Penn, 1999). Negative cognitions can influence one's

perceptions of self, the future, and the world, as well as increase severity of depressive and PTSD symptoms (Beck, 1979; Holliday, Link-Malcom, Morris, & Suris, 2014; Marton & Kutcher, 1995). Hence, internalizing negative beliefs about people with mental illness, including oneself (self-stigma), negatively affects one's own mood, self-esteem, and motivation to seek help (Greene-Shortridge, Britt, & Castro, 2007). With regard to military personnel, female individuals and officers are at greater risk of having stigmatizing attitudes toward seeking care from behavioral-health professionals, in comparison to male individuals and enlisted personnel (Yamawaki, Kelly, Dresden, Busath, & Riley, 2016). In a study on stigma and barriers to care for Air Force nursing officers, 20 to 46% endorsed stigmatizing attitudes as concerns that might affect their decision to seek behavioral-health treatment (Hernandez, Bedrick, & Parshall, 2014).

Stigma regarding one's personal negative beliefs about mental illness and behavioral-health treatment (Vogt, 2011) and the fear of being negatively perceived by unit members and leaders contribute significantly to the underutilization of behavioral-health treatment services (Hoge et al., 2004; Tanielian et al., 2008; Warner et al., 2008). The fear of being negatively perceived by unit members is a more salient barrier to treatment for military personnel because they believe they will be perceived as weak, which subsequently may reduce unit cohesion (Hoge et al., 2004). Equally important is a perceived fear that revealing that one is in distress and seeking help may result in negative career consequences (Vogt, 2011). While negative career consequences are a definite possibility for military personnel depending on the severity of symptoms, their careers are less likely to be negatively affected if treatment is self-initiated rather than mandated (Rowan, Varga, Clayton, & Martin Zona, 2014).

Providers who experience burnout and do not seek help can incur significant

expenses for their organizations. A recent study estimated that the U.S. spends $3.4

billion per year attributable to provider burnout, with roughly 79% of that amount being

attributed to the cost of provider turnover (Goh et al., 2017). Furthermore, the loss of one

primary-care physician can cost an organization $300,000 to $400,000 in lost gross

billing and between $300,000 and $500,000 in potential inpatient revenue (Scott, 1998).

In sum, burnout not only impacts HCPs on a personal and professional level, but also can

fiscally impact organizations.

Literature Review

Military Culture and Experience

Military personnel share common beliefs and customs that are primarily focused

on traditional practices and routines regarding mannerisms and behaviors, dress attire,

with whom they may socialize, and how to address others (Reger, Etherage, Reger, &

Gahm, 2008). One of the most emphasized attitudes within the military is the idea of

embodying a warrior mindset, which accentuates the fact that one must be physically

tenacious and mentally tough (Riccio, Sullivan, Klein, Salter, & Kinnison, 2004). This

attitude is reinforced in the Army's *Soldier's Creed,* which states, "I am disciplined,

physically and mentally tough, trained and proficient in my warrior tasks and drills"

(Riccio et al., 2004, p. 2). This mindset is valued because it strengthens the confidence

that military personnel have in each other to protect and serve their country and each

other, while also being able to depend on each other to accomplish the mission. However,

some factors that may be perceived to put others at risk, such as mental illness, are

devalued in such a high-stakes, life-and-death occupation that is comprised of a

significant number of work-related stressors for all personnel, including military HCPs

(Linnerooth et al., 2011; Reger et al., 2008).

Military Occupational Stressors

        The World Health Organization (WHO) defines work-related stress as "the

response people may have when presented with work demands and pressures that are not

matched to their knowledge and abilities and which challenge their ability to cope"

(Leka, Griffiths, & Cox, 2004, p. 3). This stress is believed to relate to work content (e.g.,

job content, workload, work pace, work hours, and participation and control) and work

context (e.g., career development, status, pay, role in the organization, and work-home

interface; Leka et al., 2004). For military personnel, typical work stressors may include

frequent relocations, separation from family, and being on duty (Adler & Castro, 2013).

Additional stressors include the unpredictability of when and for how long one may be

deployed (Adler, McGurk, Stetz, & Bliese, 2003) and inconsistencies in the roles of a

mission and the training received.

Military HCP Occupational Stressors

        Military HCPs have extremely difficult positions, as they often serve in two roles:

that of a healthcare provider and that of a military member. Military HCPs work in a

variety of settings, including hospitals in the states and abroad, clinics, prisons, aircraft

carriers, and deployed settings, such as on the front lines with combat personnel and

special operation forces in Iraq, Afghanistan, and Africa. Given the varying roles and

work settings in which military HCPs serve, they are likely to experience environmental,

mental, physical, psychosocial, and emotional stressors (Linnerooth et al., 2011). As

military personnel return from deployment and other operational evolutions, their

physical and psychological well-being remains an area of focus for military HCPs, as

HCPs are entrusted with maintaining the military's mission readiness (Military Health

System, n.d.). The demands placed upon military HCPs include increased caseloads,

exposure to secondary traumatic stress, and long deployments, making maintaining an

adequate work-life balance difficult, if not impossible (Kintzle et al., 2013). Additionally,

military HCPs may experience lack of autonomy, ethical dilemmas, lack of sleep, and

changing work demands (Kok, Herrell, Grossman, West, & Wilk, 2016; McCauley,

Hughes, & Liebling-Kalifani, 2010). Consequently, these work-related stressors

experienced by military HCPs can contribute to burnout (Adler et al., 2017; Sargent et al.,

2016).

Burnout

Burnout is defined as "a syndrome of emotional exhaustion and cynicism that

occurs frequently among individuals who do 'people work' of some kind" (Maslach &

Jackson, 1981, p. 99). The three dimensions of burnout are emotional exhaustion,

cynicism, and negative evaluation of personal accomplishment. Emotional exhaustion

pertains to the depletions of one's emotional energy and fatigue in carrying out work

demands (Maslach &Jackson, 1981). Cynicism refers to the depersonalization of other

people's troubles or perception that they are somewhat deserving of their troubles. The

other component of burnout is personal accomplishment, in which individuals negatively

evaluate themselves in relation to the work they do with their patients (Maslach &

Jackson, 1981). Burnout affects nearly 60% of civilian emergency medicine physicians

(Parks, 2017), 70% of civilian nurses (Zimmerman, 2017), and more than 40% of civilian

behavioral-health providers (Parks, 2017). The rates of experienced burnout vary across

the military branches of service and professional disciplines. In a sample of U.S. Army

physicians, medics, and physician assistants, 69.8% scored high on emotional exhaustion

and 67.9% scored high on depersonalization, both of which were associated positively

with the number of accrued leave days (Walters, Matthews, & Dailey, 2014). In other

words, the more leave days accrued, the more likely a provider was to score high on a

burnout dimension.

Predictive Factors of Burnout

Stressors in professional and personal life domains are factors that contribute to

burnout in healthcare providers. On a professional level, work process inefficiencies,

excessive workloads, organizational climate, lack of autonomy, and poor work-life

balance contribute to burnout (Dyrbye et al., 2017). In one study, 27.2% of providers who

reported difficulties with work-life balance were likely to experience emotional

exhaustion, while 23.7% who experienced frustrations with administrative support

reported emotional exhaustion and 40% depersonalization (Sargent et al., 2016). Personal

factors that have been found to predict burnout include a lack of self-care (Adler et al.,

2017), decreased self-compassion (Atkinson, Rodman, Thuras, Shiroma, & Lim, 2017),

and poor job satisfaction (Shanafelt et al., 2015; Tarcan, Hikmet, Schooley, Top, &

Tarcan, 2017). As cited in Drybye et al. (2017), emotional dissonance, the incongruence

of emotions felt and emotions displayed, is also associated with burnout (Van Dijk &

Kirk, 2006). A study examining the relationship between emotional dissonance, job

stress, and burnout in 445 nurses and healthcare assistants found that the presence of

emotional dissonance creates internal tension and strongly predicts burnout (Andela,

Truchot, & Van der Doef, 2016). Additional predictive factors of burnout particularly for

military HCPs include severity of patients' complaints, disruption of work flow as a result of duty station changes, feeling overburdened with reduced staff, inexperience, and deployments (Ballenger-Browning et al., 2011; Sargent et al., 2016). Unfortunately, if providers do not engage in healthy coping behaviors or obtain organizational/leadership support, they are likely to succumb to the consequences of burnout.

Consequences of Burnout

Burnout in military HCPs can precipitate various problems at both the organizational and professional levels. Organizationally, burnout can lead to decreased efficiency and diminished empathy (Maslach & Jackson, 1981); increased hostility toward patients, increased medical errors, and marital discord (Kumar, 2016); and staff turnover and absenteeism (Garcia, McGeary, et al., 2014). Factors contributing to HCP absenteeism included lack of manpower concerns, not feeling part of a coherent team, and having an excessive workload (Garcia, McGeary et al., 2014). A cross-sectional study evaluating the effects of burnout on referral rates found that diagnostic referral rates and referrals to specialty clinics increased 18.1% for board-certified specialists with high levels of burnout (Kushnir et al., 2013). The findings of the study supported the authors' assertion that referral rates are associated with negative outcomes of burnout. Unfortunately, burnout and provider staff turnover create gaps in patient care, deficiencies in ability to provide quality care for those seeking help, and organizational problems (Paris & Hoge, 2010).

The inability to provide adequate patient care because of burnout can result in many errors that affect not only the patient, but also the provider. At a minimum, provider burnout can result in poor patient satisfaction with care (Halbesleben & Rathert,

2008) to the extent of mortality (Welp, Meier, & Manser, 2015). More specifically, emotional exhaustion has been found to predict mortality (Welp et al., 2015). Approximately 210,000 to 400,000 people who are hospitalized die each year from "preventable harm" caused by physicians who made identifiable errors (James, 2013). Cross-sectional studies have found positive correlations between physicians who score high on depersonalization and poor patient safety, as well as longer post discharge recovery time (Halbesleben & Rathert, 2008). In another study, nurses experiencing burnout were found to be associated with high patient-healthcare-associated infections, particularly urinary tract and surgical-site infections (Cimiotti, Aiken, Sloane, & Wu, 2012). In the same study, hospitals that reduced burnout by 30% experienced significant hospital cost savings -- upwards of a total of $68 million. Regardless, burnout can cause significant organizational and professional challenges, including in deployed settings.

Burnout in Deployed Settings

Deployment can be a stressful and traumatic event that may significantly affect one's overall functioning. Occupational stressors that military personnel may experience during deployment fall into one or more of the following domains: physical, cognitive, emotional, social, and spiritual (Castro & McGurk, 2007; Figley, 2007). Combat during deployment exponentially increases the risk and severity of trauma (Grieger, Kolkow, Spira, & Morse, 2007; Khaylis, Polusny, Erbes, Gewirtz, & Rath, 2011; Tanielian et al., 2008). Physical stressors during combat deployment may consist of dehydration, sleep deprivation, noise, blast exposure, long work hours, inadequate nutrition (Farina et al., 2017), illness, injury, and potential or actual death (Mattocks et al., 2012; Street, Vogt, & Dutra, 2009). Another category of deployment stressor that one may experience is

cognitive stressors. Cognitive stressors may include boredom, changing missions, too

little or too much information, loyalty conflict (Figley, 2007; Street et al., 2009), and fear

of failure (Castro & McGurk, 2007). In addition, military personnel supporting the

GWOT have been subjected to the threat of encountering improvised explosive devices

(IEDs) and terrorist actions from civilian insurgents and from suicide bombers (Institute

of Medicine [IOM], 2008). Feelings of helplessness, shame, and guilt associated with

killing are some of the emotional difficulties military personnel may experience during

deployment (Castro & McGurk, 2007; Figley et al., 2007). In the social domain,

separation from loved ones, a lack of privacy, or public stigma can be enormously

stressful (Adler & Castro, 2013). Finally, deployment can challenge one spiritually,

causing changes in faith, inability to forgive, loss of trust, and moral injury (Figley, 2007;

Romano, 2010).

Even though both men and women may experience significant stressors during

deployment, some stressors are specific to, or more pronounced, in women, including

poorly fitted body armor, feelings of isolation within the unit because of fraternization

policies, pregnancy, and separation from their families and children (Street et al., 2009).

A significant stressor that continues to be a major problem in the military is sexual

assault and harassment of both men and women, but more frequently of women. In the

2015 Government Accountability Office (GAO; Farrell, 2015), 4,104 female military

personnel reported being sexually assaulted, compared to the 1,180 reports by male

military personnel. Being sexually assaulted increases the risk for PTSD (APA, 2013)

and other health problems, such as endometriosis and HIV (Hyun, Pavao, & Kimerling,

2009).

Deployed military HCPs can experience burnout from the environment in which they work, as they may have demands related to mass casualty events, injured children, patient suicides (Alder et al., 2017), and assist units who have members die during the deployment (Linnerooth et al., 2011). Information regarding the impact of deployment on burnout is conflicting. One article examining challenges experienced by military behavioral health providers in deployed settings, particularly clinical military psychologists, found psychologists to be more likely to experience burnout if they experienced perceived lack of control, not knowing the mission, and having their patients' care questioned or terminated (Linnerooth et al., 2011). Conversely, another study of 105 military HCPs found no relationship between burnout and deployments in support of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF; Cragun, April, & Thaxton, 2016). Nevertheless, evidence shows that military personnel may experience different stressors throughout the deployment cycle (e.g., predeployment, deployment, and postdeployment) and through the reintegration process (Adler & Castro, 2001).

Demographics and Burnout

Demographic factors, such as age and gender, contribute to burnout (Ballenger-Browning et al., 2011). Healthcare providers who are younger (i.e., younger than 30 years old) are more likely than their older counterparts to experience burnout (Erickson & Grove, 2007), as individuals who are older and have been working in their fields longer are believed to have more experience with lessons learned from their training and practice, including adaptive coping strategies (Peisah, Latif, Wilhelm, & Williams, 2009). In a meta-analysis, younger HCPs were found to have greater rates of emotional exhaustion and depersonalization than their older counterparts (Gomez-Urquiza, Vargas,

De la Fuente, Fernandez-Castillo, & Canadas-De La Fuente, 2017). Similar to younger

aged HCPs, female HCPs have also been found to be at increased risk for emotional

exhaustion (Ballenger-Browning et al., 2011; Pu et al., 2017; Purvanova & Muros, 2010).

Female military personnel have been found to report stress levels higher than

those of their male counterparts (Hopkins-Chadwick, 2006; Street et al., 2009). Even

though female military personnel have been approved to serve on the front lines in

combat only recently (Pellerin, 2015), research has shown some interesting gender

disparities in level of combat-type exposure. For instance, 38% of female military

personnel reported handling human remains, compared to 29% of their male counterparts

(Street et al., 2009). While serving in combat zones, female military personnel are also

likely to experience gender-specific challenges, such as gynecological concerns and

feelings of inferiority (Street et al., 2009). Given these experiences, female military

personnel tend to experience burnout at a greater rate than male military personnel. More

specifically, female military personnel have been found to experience greater levels of

emotional exhaustion in comparison to male military personnel at 54% versus 46%,

respectively (Purvanova & Muros, 2010).

Burnout in nurses. Approximately 34% of nurses working in a hospital setting

report experiencing burnout (McHugh et al., 2011). Burnout in military nurses has been

studied extensively, as most nurses engage in direct patient care of high-acuity patients,

such as those who have acquired injuries while in combat (Lang, Pfister, & Siemens,

2010). A study by Lang et al. (2010) that examined burnout in civilian and Army nurses

found that both groups of nurses experienced similar levels of burnout, but Army nurses

were found to have higher levels of emotional exhaustion and depersonalization. In the

sample, Army nurses were found to have been more likely than civilian nurses to have worked longer than 8 hours per shift, with individuals injured in Iraq and Afghanistan, and shifts other than day shift. In another study, patients were more satisfied with their care if the nurse on their case worked 11 hours or fewer (Stimpfel, Sloane, & Aiken, 2012). Other factors contributing to nurse burnout are poor relationships between physicians and nurses, insufficient staff, and lack of administrative support (Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). Nurses who experience burnout are susceptible to turnover, needle sticks, and musculoskeletal injuries (Cho et al., 2013; Lang, Ochsmann, Kraus, & Lang, 2012).

Burnout in physicians. Medical services are essential to any medical organization, and physicians have demanding and stressful jobs. As such, physicians are susceptible to experiencing burnout. Physicians working in outpatient specialties are more susceptible to experiencing emotional exhaustion when organizational constraints, such as lack of flexibility in work arrangements and supervision, are present (Lee, Seo, Hladkyl, Lovell, & Schwartzmann, 2013). On the other hand, physicians working in inpatient specialties report greater job and professional satisfaction (Lee et al., 2013). A 2014 study examining the prevalence of burnout in physicians found the greatest prevalence of burnout in urologists (63.6%), physical medicine and rehabilitation physicians (63.3%), family medicine physicians (63%), and radiologists (61.4%; Shanafelt et al., 2015). Physicians with children younger than 21 years of age are susceptible to burnout, and physicians younger than 55 years of age are at a 200% increased risk of burnout in comparison to physicians older than 55 years of age. Also, surgeons with partners who are also physicians have been found to have greater

challenges with work-life balance, thus contributing to burnout (Dyrbye, Shanafelt, Balch, Satele, & Freischlag, 2010). Physicians who experience burnout have an increased risk of medical errors, poor quality of patient care, and poor patient health outcomes (Kumar, 2016). Additionally, physicians experiencing burnout are prone to poor decision making, having hostile attitudes toward patients, and poor working relationships (Feteh et al., 2017). Rates of burnout among military HCPs have been found to be comparable to the rates in civilian healthcare settings (Sargent et al., 2016).

Burnout in behavioral health providers. Burnout is believed to exist in 21 to 67% of civilian behavioral health providers (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012) and approximately 21% of behavioral health providers working with military populations (Kok et al., 2016). The primary goals of military behavioral-health providers are to provide services as close to the units as possible, conduct time-limited care, and facilitate recovery (Moore & Reger, 2006). Military behavioral health providers experience various unique stressors that increase their risk of burnout, such as working independently in previously mentioned deployed settings (Ballenger-Browning et al., 2011). In a study of 488 behavioral health clinicians working with military populations, strong predictors of burnout were found to be associated with low job satisfaction, working more than 44 hours per week, and maintaining a caseload of 20 or more patients (Kok et al., 2016). These stress-inducing conditions are the rule rather than the exception in today's military. Owing to these experiences, military psychologists may also be at risk of compassion fatigue and secondary traumatic stress (Linnerooth et al., 2011), thus leading to a significant negative impact on one's psychological well-being.

Burnout and Behavioral Health among Providers

Providers who experience burnout generally suffer from significant emotional and psychological exhaustion, which have been found to be associated with the onset of depression, anxiety, sleep disturbances, substance abuse, somatic complaints, suicidality (Kumar 2016; Peterson et al., 2008), and PTSD (MacGregor, Dougherty, Mayo, Han, & Galarneau, 2015). Findings from a study examining the prevalence of burnout and PTSD in 332 civilian nurses found that 98% of nurses who met the diagnostic criteria for PTSD also experienced burnout (Mealer, Burnham, Goode, Rothbaum, & Moss, 2009). The PTSD symptoms were most prevalent in nurses who worked in the intensive-care unit and were involved in end-of-life care. However, self-compassion has been found to be a buffer for burnout and behavioral health concerns, such as depression (Atkinson et al., 2017).

Military Behavioral Health

During the last 14 years, the U.S. has deployed more than 2.7 million military personnel, including military HCPs to Iraq and Afghanistan for combat operations (Department of Veterans Affairs [VA], 2015) in support of the GWOT. Consequently, the U.S. has seen an unparalleled number of military personnel returning home with various behavioral health challenges. While the reported percentages of total personnel diagnosed with behavioral health disorders in returning military personnel vary from 9 to 17% (Psychological Health Center of Excellence, 2017), the most prevalent diagnoses are PTSD, Major Depressive Disorder (MDD), and substance abuse (Hepner et al., 2015; Mustillo et al., 2015; Ramchand, Rudavsky, Grant, Tanielian, & Jaycox, 2015; Tanielian et al., 2008).

Prevalence of Behavioral Health Diagnoses

 PTSD. PTSD is reported to have affected between 4 and 20% of military

personnel deployed to Iraq and Afghanistan (IOM, 2013). From 2001 to 2015, 378,993

military personnel were diagnosed with PTSD (VA, 2015). Historically, PTSD has been

more prevalent in Army soldiers and Marines than among the other branches (Baker et

al., 2009; Tanielian et al., 2008). However, in a more recent study of 41,351 active duty

Army, Navy, Air Force, and Marine Corps military personnel, 18.2% of Navy sailors

screened positive for PTSD, followed by Marines at 12.9% and then soldiers at 11.9%, on

the Post-Deployment Health Assessment (PDHA; Mustillo et al., 2015), which is

completed by military personnel within 30 days of returning from deployment. These

results were unexpected, as only 396 sailors were in the study, compared to the 1,265

Marines, 11,264 Air Force Airmen, and 28,426 soldiers (Mustillo et al., 2015). In

addition, the authors hypothesized that the results occurred because Navy personnel had

more combat exposure and served in different roles with Army personnel; received less

training than their Army or Marine peers; and had only 3 weeks of training to learn the

Army's combat procedures, weaponry, survival skills, and communication before

deploying, as opposed to deploying with their unit and actually working alongside Navy

personnel (Mustillo et al., 2015). Nevertheless, the discrepancies in the literature on the

reported number of current and former military personnel diagnosed with PTSD are

significant. The specific military occupations found to be at greater risk of developing

PTSD are Navy healthcare specialists (82.9%), Marine combat specialists (67.6%; Mayo,

MacGregor, Dougherty, & Galameau, 2013), enlisted personnel, active-duty personnel

younger than the age of 40 years, and National Guard and Reservists older than the age of

30 years (Seal et al., 2009). Military HCPs with multiple deployments have been found

to have greater rates of combat-related PTSD in comparison to other military personnel

who also have repeated deployments (MacGregor et al., 2015).

The risk of being diagnosed with PTSD increases with the number and length of

deployments (e.g., 12 to 15 months) because military personnel will experience prolong

exposure to combat stressors (Tanielian et al., 2008), such as killing combatants, handling

human remains, being under attack, and seeing unit members injured or killed (Hoge et

al., 2004). If military personnel do not have positive, stable familial relationships

throughout the deployment cycle, including while being away from home on deployment,

they are likely to experience severe psychological distress, such as PTSD (Jakupak et al.,

2010). Specifically, military HCPs are at greater risk of developing PTSD when they

have experienced direct or perceived threats of personal harm while in deployed settings

(Grieger et al., 2007). Although combat exposure is a strong predictor of PTSD,

premilitary and predeployment factors, such as relationship problems, also increase the

susceptibility to developing PTSD (Khaylis et al., 2011). The risk of experiencing PTSD

may be more pronounced for military personnel who are single, divorced, separated, or

widowed (Pietrzak et al., 2009). Unfortunately, PTSD is also positively associated with

poor physical health, suicidal behaviors, homelessness, unemployment, lower economic

well-being, aggression, and history of violent behaviors (Ramchand et al., 2015).

Research regarding the prevalence of PTSD across healthcare disciplines is

inconsistent. In psychiatric nurse practitioners, the prevalence of PTSD is believed to be

at 9 to 10% (Jacobowitz, 2013), with 10% of physicians (Ben-Ezra, Palgi, & Essar, 2007)

and 18% of nurses meeting PTSD criteria (Mealer et al., 2009). A search of the literature

revealed little to no evidence regarding the prevalence of PTSD in behavioral health providers.

On the other hand, secondary traumatic stress (STS) in behavioral health providers has received extensive attention. STS is defined as "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1999, p. 10). Approximately 19.2% of behavioral health providers working with the military experience STS (Cieslak et al., 2013).

MDD. An estimated 308,336 military personnel were diagnosed with depression from 2001 to 2015 (VA, 2015). Depression seems to be most prevalent in female military personnel, enlisted personnel, and Army soldiers (Maguen, Ren, Bosch, Marmar, & Seal, 2010; Seal et al., 2009), and in Navy healthcare specialists, combat specialists, and married Marines (Mayo, MacGregor, Dougherty, & Galameau, 2013). In fact, Maguen et al. (2010) found that female military personnel seeking treatment at a VA healthcare center between 2002 and 2008 were significantly more likely to be diagnosed with depression in comparison to male military personnel if they were never married (Risk ratio [RR] = 0.97 vs. RR = 0.87), served in either the Navy (RR = 0.45 vs. RR = 0.33) or the Air Force (RR = 0.45 vs. RR = 0.26), or were officers (RR = 0.69 vs. RR = 0.51).

The Millennium Cohort Study is one of the largest studies ever conducted by the Department of Defense (DoD), with more than 200,000 military personnel enrolled. This longitudinal study was launched in 2001 to examine the behavioral and occupational risks associated with poor health in military personnel (Ryan et al., 2007). Based on a sample

of 40,219 participants from this study, researchers found that both men and women were at significantly greater risk of a new onset of depression following deployment with combat exposure at 5.7 and 15.7%, respectively, in comparison to men and women who deployed with no combat exposure, at 2.3 and 5.1%, respectively (Wells et al., 2010). In the same study, 7.1% of enlisted military personnel who deployed and had combat exposure experienced a new onset of depression, in comparison to 2.2% of officers (Wells et al., 2010). Healthcare specialists with combat deployment experience had a significantly greater prevalence of new-onset depression, at 5.8% in comparison to healthcare specialists with noncombat deployment experience at 3.3% (Wells et al., 2010). Military medics 12 months post deployment have been found to be 2.61 times more likely to screen positive for depression in comparison to medics who had never deployed (Chapman et al., 2014).

Substance abuse. Alcohol misuse and substance use disorders are major concerns in military personnel who have deployed to Iraq and Afghanistan (Kline et al., 2014). Alcohol is suspected to be a significant problem because heavy drinking is not seen as a problem or uncommon among many military personnel (IOM, 2013) and is viewed as an acceptable coping mechanism to relieve stress and PTSD symptoms (Kline et al., 2014; Schafer & Najavits, 2007). Nearly 85,256 military personnel who sought treatment at a VA facility received a diagnosis of alcohol use dependence, and more than 49,560 received a possible diagnosis of substance use dependence (VA, 2015). In a study of 598 active duty, reserve and National Guard personnel deployed to Iraq and Afghanistan, Eisen et al. (2012) found that military personnel who deployed to Iraq self-reported more alcohol and drug use than that reported by those who deployed to Afghanistan. In fact,

41.7% of military personnel deployed to Iraq had positive screenings for probable alcohol

abuse and 5.3% for probable drug abuse (Eisen et al., 2012) compared to military

personnel who deployed to Afghanistan, with 35.1% for probable alcohol abuse and 3%

for probable drug abuse. However, one study illustrated that some military personnel who

screened positive for probable alcohol abuse on the Post-Deployment Health Re-

Assessment (PDHRA) were not given a substance use diagnosis, even when appropriate

(Mustillo et al., 2015). The PDHRA is a survey completed online by military personnel

within 90 to 180 days after returning from deployment, followed by a structured

assessment with a healthcare provider.

Discrepancies in the reporting of alcohol misuse in the military may be attributed

to the underreporting by military personnel when a healthcare provider assesses them

face to face, lack of perception regarding their drinking as a problem, and failure on the

part of the healthcare provider to properly assess for the consumption of alcohol

(Mustillo et al., 2015). Unfortunately, the rate of alcohol misuse becomes even more

complicated, as prevalence rates tend to shift from the time the initial Post Deployment

Health Assessment (PDHA; completed within 30 days of returning from deployment) is

completed to the completion of the PDHRA. For instance, in a study of 1,265 Marines

screened for alcohol misuse on the PDHA, 10% screened positive for alcohol misuse, but

that number jumped to 17.2% on the PDHRA; however, only 0.3% received a diagnosis

of alcohol use disorder by a healthcare provider (Mustillo et al., 2015).

Unfortunately, alcohol and substance abuse among healthcare providers

themselves is not uncommon. Approximately 15.4% of American physicians (Oreskovich

et al., 2012) and 20% of registered nurses (Monroe & Kenaga, 2011) meet the diagnostic

criteria for alcohol abuse or dependence. Surgeons who have had a reported major medical error in the previous 3 months are likely to experience alcohol abuse and dependence. Additionally, having depression and scoring high on depersonalization and emotional-exhaustion components of burnouts were also predictors of alcohol abuse and dependence among surgeons (Oreskovich et al., 2012). The prevalence of substance abuse in nurses is believed to be comparable to the general public (Dunn, 2005). Nurses who work for organizations with inadequate staffing, increased workloads, rotating shifts (Mustard, 2002), and have a family history of alcoholism are susceptible to alcohol and drug abuse (Monahan, 2003).

Alcohol is not the only commonly abused substance among providers. Researchers have found physicians with prescribing privileges are more likely than other professional specialties to abuse opioids as they have greater access to prescription medications (Milner, Maheen, Bismark, & Spittal, 2016; Oreskovich et al., 2012; Rose, Campbell, & Skipper, 2014). In one study, anesthesiologists were found to experience disproportionate rates of opioid dependence and to use these and other intravenous drugs (Skipper, Campbell, & DuPont, 2009). Fortunately, physician health programs are available in each state to manage and monitor providers who become impaired, and several 5-year outcome studies have found that providers who successfully complete the program are able to return to clinical practice within 5 years and have lower rates of relapse than providers who are not monitored in physician health programs (Rose et al., 2014; Skipper et al., 2009).

Suicide

Suicide among healthcare providers. Suicide is an unfortunate event that occurs

across populations. Many are surprised to learn that HCPs complete suicide at rates

greater than those of the general public (Gold, Sen, & Schwenk, 2013; Schernhammer &

Colditz, 2004). Suicide among HCPs occurs for several reasons, with the most notable

being attributed to occupational stress (71.4%), psychiatric disorders (62.9%), failed

relationships (40%), financial problems (28.6%; Hawton, Malmberg, & Simkin, 2004),

and not receiving adequate treatment (e.g., lack of pharmacological medication for

comorbid disorders; Gold et al., 2013). Furthermore, HCPs are believed to have greater

knowledge of the most effective suicide methods, as well as access to the means; thus,

they are more likely to complete suicide (Hawton, Clements, Simkin, & Malmberg, 2000;

Milner et al., 2016). The most commonly reported methods of suicide among HCPs are

self-poisoning (51%) with medications from work, such as barbiturates; hanging (24%;

Milner et al., 2016); and other self-directed violence (28.9%), such as cutting (Hawton et

al., 2004). Findings regarding the demographics of providers who are at greatest risk of

suicide are contradictory, but the Schernhammer and Colditz (2004) meta-analysis on

suicide rates among physicians found men to be modestly elevated for suicide, while

women were more highly elevated, as compared to the general population. From 2001 to

2012, suicide risk for female HCPs (6.4%) was greater than for women in any other

occupation (2.8%; Milner et al., 2016).

Suicide in the military. Only recently has a tool been created to record suicides

of military personnel. Approximately 500 enlisted and commissioned officers from all

components of the military die by suicide each year. More than 266 active duty military

personnel and 213 reserve and National Guard personnel died by suicide during calendar

year 2015 (Pruitt et al., 2016). Unfortunately, despite the preventative and supportive

intervention programs that have been made available to military personnel, suicide

continues to be a significant problem in the military. Many of those suicides completed in

2015 were among Army personnel, with 120 occurring in the active duty component, 55

in the reserves, and 102 in the National Guard. According to the available data from the

Department of Defense Suicide Event Report (Pruitt et al., 2016), 19 enlisted healthcare

specialists and four healthcare officers died by suicide during calendar year 2015. During

that same period, another 154 healthcare specialists and 10 healthcare officers attempted

suicide. The branch of service with the greatest number of suicides in 2015 was the

Army, with 9 healthcare specialists and 3 healthcare officers dying by suicide (Pruitt et

al., 2016). Consequently, research efforts have focused substantially on identifying risk

and protective factors to research the predictability of suicide risks and resilience, such as

the Army Study to Assess Risk and Resilience in Service members (Army STARRS;

Ursano et al., 2014). Risk and resilience factors may vary depending on the severity of

suicidal behaviors, including suicidal ideation, suicide plan, suicide attempt, and suicide

death (Nock et al., 2013). A surprising 73.3 to 81.5% of military personnel have been

found to have made suicide plans and attempts within the first year of the onset of

suicidal ideations (Ursano et al., 2014). Reducing suicide in the military has been a

pivotal goal of the DoD, with various prevention programs being implemented based on

risk factors.

Suicide risk factors. The factors that can increase the risk of suicide in military

personnel include psychological vulnerabilities, military-related stressors, and stressful

life events. Psychological vulnerabilities associated with suicide include losing one's

sense of identity, cognitive impairments, and emotional and psychiatric concerns

(Brenner, Homaifar, Alder, Wolfman, & Kemp, 2009). In their qualitative study, Brenner

et al. (2009) found that male military personnel who separated from the military reported

feeling helpless and angry, and had a decreased sense of masculinity, particularly after

sustaining an injury. Many of the military personnel discussed feeling like they lost their

sense of self when they shifted from being the protector and caregiver to depending on

others for assistance. Furthermore, military personnel experiencing cognitive deficits,

such as diminished memory and poor executive functioning, from sustaining a traumatic

brain injury often reported feeling depressed and believed they were a burden on and to

others, a belief that can be extremely depressogenic (Brenner et al., 2009). The research

illustrating the correlation between mental illness and suicide risk is extensive (Nock et

al., 2014; Ramchand et al., 2015). Thus, mental health disorders that are categorized by

aggression or agitation, such as PTSD, or impulsivity, such as substance abuse, can

increase the severity of suicidal behaviors from ideation to actual attempt (Nock et al.,

2014; Nock, Hwang, Sampson, & Kessler, 2010).

As outlined previously, military service is replete with occupational stressors that

can exacerbate the risk of psychological concerns. Among those concerns is the risk of

suicide. Military-related stressors found to be associated with the risk of suicide include

traumatic experiences endured during deployment (e.g., military sexual trauma; Farrell,

2015), killing in combat (Maguen et al., 2012), feelings of guilt and shame (Bryan,

Morrow, et al., 2013), and being injured (Nock et al., 2013). However, recent studies

have found a negative relationship between deployment and the rate of suicide (Kang et

al., 2015; Reger et al., 2015). Regardless, certain experiences that one encounters either during deployment or stateside increase the risk of suicide (Maguen et al., 2012). Additionally, military personnel who separate from the military with fewer than 4 years of service and with a less-than-honorable discharge are more susceptible than other military personnel to engage in suicidal behaviors (Reger et al., 2015). In fact, the rate of suicide actually increases when associated with military separation, as military personnel may feel they have lost their sense of identity/purpose (Brenner et al., 2009), may have difficulty finding employment, or may have difficulty establishing new support networks (Reger et al., 2015).

Finally, stressful life situations increase the risk of suicide, particularly if interpersonal conflicts exist with family and/or spouses, along with military sexual trauma, legal problems, chronic pain, and physical illness (Bryan, Clemans, Leeson, & Rudd, 2015; Nock et al., 2014). In a study by Bryan, Clemans, et al. (2015), 54 actively suicidal Army soldiers were found to have more severe and longer lasting suicidal ideations when experiencing chronic stressors (i.e., duration of more than 7 days). Furthermore, soldiers who have a greater number of chronic stressors have reported attempting suicide multiple times. Approximately 41.2% of the military personnel who died by suicide in 2015 had experienced a failed relationship, 31.5% had legal problems, and 22.1% experienced occupational stressors (DoD, 2015). Fortunately, some factors may prevent military personnel from killing themselves.

Protective factors. Research supports the claims that protective factors buffer the onset of mental health disorders and suicidal behaviors and increase treatment-seeking behaviors (Helmus & Glenn, 2005; Tanielian et al., 2008). Protective factors are defined

as "anything that prevents or reduces vulnerability for the development of a disorder" (Tull, 2014, Definition, para 1). One of the most researched protective factors against suicide and mental illness in the military is social support from family and friends, but particularly from unit support (DeBeer, Kimbrel, Meyer, Gulliver, & Morissette, 2014; Jakupcak et al., 2010; Nock et al., 2013; Pietrzak et al., 2010). *Unit support* is the assistance and encouragement obtained specifically from military unit leadership and fellow unit members (King, King, Vogt, Knight, & Samper, 2006). Unit support is instrumental in the prevention of suicide, as it improves psychological resilience and morale and encourages motivation to get through challenging times (Nock et al., 2013; Tanielian et al., 2008).

Research has also illustrated that having meaning in life (Sinclair, Bryan, & Bryan, 2016) and self-forgiveness help to relieve resentment toward oneself (Bryan, Theriault, & Bryan, 2015) and reduces the risk of suicidal behaviors. Military personnel who use constructs of positive psychology, such as resilience, stoicism, autonomy, hope, and strength of character, are better able to adapt to stressful events (Nock et al., 2013). In a study of 97 Air Force personnel, findings suggested that having greater optimism was associated with less severe suicidal ideations and protected against hopelessness (Bryan, Ray-Sannerud, Morrow, & Etienne, 2013). Thus, having a meaningful life experience and a positive outlook can protect against suicide.

Another protective factor against suicidal behaviors is resilience (Youssef, Green, Beckham, & Elbogen, 2013). In a 3-year longitudinal study of 176 OEF/OIF veterans that examined resilience and suicidality, the authors found an inverse relationship between secured relationships and positive acceptance of change, and suicidality suggesting that

veterans with secured relationships were not likely to experience suicidality (Youssef et

al., 2013). Additional factors of resilience, such as gratitude and grit, have also been

found to mitigate suicidal behavior (Kleiman, Adams, Kashdan, & Riskind, 2013).

Gratitude and grit are believed to contribute to meaning in life, which in turn increases

resilience (Van Orden, Bamonti, King, & Duberstein, 2012). In a study of 209 college

students, those who were high in gratitude and grit had minimal suicidal ideation over the

course of 4 weeks (Van Orden et al., 2012). However, scoring high in gratitude and not in

grit did not predict the absence of suicidal ideations, as meaning in life was not enhanced

(Van Orden et al., 2012).

Psychotherapeutic interventions, particularly dialectical behavioral therapy (DBT;

Linehan, Suarez, & Allmon, 1991), cognitive therapy (Ghahramanlou-Holloway, Bahr,

Brown, Olsen, & Beck, 2012), and the Collaborative Assessment and Management of

Suicidality (CAMS; Jobes, 2000), have also been found to be effective measures to

combat suicidal ideation and death by suicide DBT is a manualized, structured treatment

that incorporates strategies from problem-solving, cognitive, behavioral, and supportive

therapies with an aim of teaching individuals how to manage emotional lability and

increase adaptive behaviors (Linehan et al., 1991). In a meta-analysis examining the

efficacy of cognitive-behavioral interventions for the reduction of suicidal behaviors,

researchers found both cognitive behavioral therapy and DBT to be effective in the short

term for reducing suicidal behaviors regardless of the populations being treated (Tarrier,

Taylor, & Gooding, 2008). In another study following 60 individuals who had recently

attempted suicide, cognitive therapy reduced subsequent suicide attempts by increasing

problem-solving appraisal and reducing depression and hopelessness (Ghahramanlou-

Holloway et al., 2012). The CAMS has been found to be effective in reducing the risk of

suicide, as it is conducted collaboratively between the provider and patient, thereby

empowering the patient and strengthening the therapeutic alliance (Jobes, 2000). Overall,

psychotherapeutic interventions, resilience, positive psychology, and meaning in life

protect against suicidality.

Coping Style and Behavioral Health

Coping is a multidimensional concept categorized by cognitive and behavioral

strategies used to manage internal or external stimuli (Lazarus & Folkman, 1984). Coping

style plays an integral role in the increase in or deterioration of psychological functioning

after exposure to such stressors as traumatic experiences (Schmied et al., 2015). Adaptive

coping skills, such as problem-focused strategies, can be used to reduce external stressors

(Lazarus & Folkman, 1984) through positive reappraisal (Boden et al., 2014), positive

reframing (Schmied et al., 2015), increased self-efficacy, seeking treatment (Nock et al.,

2013), and adaptive personal and environmental management. Coping strategies that have

been found to be effective in deployed settings include decompression, debriefing,

normalizing of symptoms, and reintegration plans post deployment (McCauley et al.,

2010). Adaptive coping skills maintain and/or increase psychological functioning. On the

other hand, maladaptive coping strategies have been found to be associated with

increased psychological symptoms, such as depression, PTSD, and substance abuse

(Boden et al., 2014; Karstoft, Armour, Elklit, & Solomon, 2015; Schmied et al., 2015).

Maladaptive coping styles consist of emotion-focused and avoidance-based

strategies (e.g., self-blame, denial, and rumination; Schmied et al., 2015). Emotion-

focused strategies are used to decrease internal distress through maladaptive reappraisal,

selective attention, and avoidance (Lazarus & Folkman., 1984). Maladaptive avoidance-based strategies, on the other hand, are used to direct thoughts, feelings, and behaviors away from unpleasant experiences (Boden et al., 2014). For instance, Schmied et al. (2015) studied coping styles of male and female military personnel after a mock captivity training and found that both men and women are more likely to utilize self-blame and denial as coping strategies after experiencing a stressful life event. However, women were significantly more likely than men to endorse self-blame and denial as coping strategies (Schmeid et al., 2015). The reason women were more likely to utilize such strategies than men is unknown, but the researchers hypothesized that the men in the study may have underreported coping strategies related to emotional expression (Schmied et al., 2015). Female veterans who have experienced military sexual trauma or have a diagnosisof PTSD have also been found to engage in behavioral avoidance strategies and other maladaptive coping strategies, such as binging and purging, compulsive spending, overeating, and misusing prescription medications (Mattocks et al., 2012). When maladaptive coping strategies are used, individuals are more likely to experience increased distress and even suicidal ideation (Pietrzak, Russo, Ling, & Southwick, 2011).

For healthcare providers, coping and treatment may come in the form of physician health programs (PHPs). A PHP is a "program of prevention, detection, intervention, rehabilitation and monitoring of licensees with potentially impairing illnesses, approved and/or recognized by the state medical board" (Federation of State Medical Boards [FSMB], 2011, p. 8). PHPs aim to help providers with stress management, burnout, management of impairing behaviors, and connections to treatment and educational programs targeting psychiatric disorders and disruptive behaviors (FSMB, 2011). Eligible

HCPs who may participate are physicians, residents, and medical students. Individual

treatment plans are developed for the HCPs referred for enrollment. PHPs are governed

by the Federation of State Physician Health Programs, which includes membership

programs from 46 states and the District of Columbia (FMSB, 2011).

Social Support and Behavioral Health

Cobb (1976) defines social support as:

Information leading the subject to believe that he is cared for and loved;

information leading the subject to believe that he is esteemed and valued; and

information leading the subject to believe that he belongs to a network of

communication and mutual obligation. (p. 300)

In several studies, military personnel reported being more likely to seek treatment

if encouraged by friends and family (Ben-Zeev et al., 2012; Sharp et al., 2015; Warner et

al., 2008). In a sample of 1,446 Army soldiers who had deployment experience, 61.4%

reported that they would seek treatment if friends and family encouraged them to get help

as a strategy to overcome barriers to care (Warner et al., 2008). Social support has been

found to be protective against suicide (Nock et al., 2014; Ursano et al., 2014), the severity

of PTSD symptoms, and postdeployment adjustments (Pietrzak et al., 2009) and is vital

for treatment-seeking behaviors (Warner et al., 2008), particularly when family and unit

members show support. Conversely, poor social support for individuals with PTSD and

depressive symptoms has been found to be positively associated with suicidal ideation

(DeBeer et al., 2014). In fact, the majority (86.4%) of the completed suicides in 2014 by

military personnel were associated with failed intimate relationships (Smolenski et al.,

2014). Intimate relationships are thought to help military personnel develop adaptive

coping skills for times when they are separated from their spouses (Orthner & Rose, 2009) or when they have greater levels of perceived stress at work (Hourani, Williams, & Kress, 2006).

Family and caregiver support are essential to the health and well-being of individuals who currently serve or have previously served in the military. A 2014 RAND study found that there were nearly 5.5 million military caregivers in the U.S., of whom 19.6% were caregivers to post-9/11 military personnel (Ramchand et al., 2014). Nearly 64% of the military personnel with caregivers were struggling with mental-health and/or substance abuse challenges, and approximately 75% of caregivers reported that they helped the person they were caring for to cope with stressful situations. Furthermore, 39% of caregivers reported that they were responsible for administering medication or injections and coordinating medical care or rehabilitation services, while another 36% reported being responsible for administering physical and medical therapies or treatments (Ramchand et al., 2014). The results of the RAND study encapsulate the extent to which family and caregiver support is essential to the well-being of military personnel, and other research indicates that such support predicts help-seeking behavior.

Group integration and personal bonding among military personnel is referred to as unit cohesion (Martin, Rosen, Durand, Knudson, & Stretch, 2000) Military personnel who report higher levels of perceived unit cohesion also report better psychological functioning and greater coping skills (VA, 2014). Unit support during deployment can positively affect military personnel reactions while in combat, prevent perceptions of stressful events as being unmanageable and overwhelming, and offer a sense of social identity and emotional support (Han et al., 2014). Furthermore, unit support during

deployment and social support during postdeployment reintegration are associated with

less severe postdeployment PTSD symptoms in active duty Army and National Guard

personnel (Han et al., 2014). Similarly, military personnel with post-active duty social

support from military friends have been found to have better physical health and require

less need to use veteran health services (Lehavot, Der-Martirosian, Simpson, Shipherd, &

Washington, 2013).

Instilling a strong sense of trust in unit members and leaders is essential to

accomplishing the mission, whether during the predeployment (e.g., relying on each other

for support and encouragement), deployment (e.g., living and fighting together), or

postdeployment (e.g., emotional support) phase of the process. Military personnel report

being more likely to seek treatment if they are guaranteed by leadership that they will get

time off without negative consequences and if their direct supervisor reminds them that

seeking help is important (Warner et al., 2008). Along the same lines, positive influential

behaviors from leadership (e.g., treating all unit members fairly) may also foster

treatment-seeking behaviors (Britt, Wright, & Moore, 2012). Thus, the stigma that

military personnel and their leadership may have regarding mental illness and treatment

can influence treatment-seeking behaviors in a positive or negative way, particularly if

unit leaders and members are not educated about behavioral health concerns and

available treatment resources.

Treatment-Seeking Behaviors

Despite the prevalence of military personnel returning from deployment with

diagnosable behavioral health disorders, a significant number have not received or sought

treatment. Among the 1,866,128 military personnel returning from the current wars

(GWOT) who are eligible for treatment at a VA healthcare center, only 60% have

obtained care. Of that 60%, 92% were treated at an outpatient clinic and 8% in a hospital

setting (VA, 2015). From 2002 to 2014, the vast majority of military personnel seen in

the VA were male (87.8%), between the ages of 25 and 35 years (48.5%), enlisted (91%),

had served in the active duty component (60.9%), and had served in the Army (58.5%;

VA, 2015). In approximately 56.9% of military personnel who presented with a probable

behavioral health disorder, the most prevalent diagnoses were PTSD, depression, neurotic

disorders, and affective psychoses (VA, 2015). Research has shown that despite

experiencing a behavioral health disorder, many military personnel do not seek treatment

because of perceived barriers regarding mental illness or behavioral health treatment

within the military (Hoge et al., 2004; Tanielian et al., 2008). Thus, negative beliefs about

treatment seeking lower the likelihood of actually seeking treatment (Vogt, Fox, & Di

Leone, 2014).

Stigma as a Perceived Barrier to Seeking Treatment

Military personnel are trained to be mentally "tough," to withstand the adverse

effects of combat, to maintain a sense of resilience (Riccio et al., 2004), and to

accomplish the mission (Sharp et al., 2015). Despite the positive effects from being

trained to be mentally tough, such training can negatively affect the way in which

military personnel perceive situations. For instance, some military personnel might not

seek help when experiencing psychological distress because they believe that they should

be equipped with the necessary skills to handle their own distress, or they fear that others

may believe that they are too weak to manage their distress. Hence, one of the greatest

barriers to treatment utilization is stigma (Hoge et al., 2004; Vogt, 2011; Warner et al.,

2008). Military personnel are less likely to seek treatment if they fear being treated

differently by leaders and being perceived as weak, and if they believe unit members may

lose confidence in them (Ben-Zeev, Corrigan, Britt, & Langford, 2012; Gould et al.,

2010; Greene-Shortridge et al., 2007; Hoge et al., 2004; Kim, Britt, Klocko, Riviere, &

Adler, 2011; Sharp et al., 2015). Results from a meta-analysis examining stigma and

help-seeking behaviors from 2001 to 2014 showed that approximately 25 to 40% of

military personnel endorsed anticipated stigma from other military personnel as a factor

that would negatively affect their decision to seek treatment (Sharp et al., 2015). The

results from the meta-analysis illustrates the effect perceptions of comrades and the

public have on help-seeking behaviors for military personnel.

      Perceived stigma is a significant factor in one's decision to seek help for mental

health concerns; however, logistical barriers may also influence help-seeking behaviors.

Major logistical barriers referenced in the literature relate to the difficulty of scheduling

an appointment and getting time off from work (Garcia et al., 2014; Hoge et al., 2004;

Warner et al., 2008). Similarly, active duty military personnel also report difficulties in

scheduling an appointment as a significant logistical barrier to care (Garcia et al., 2014).

Military personnel primarily receive treatment at military treatment facilities (MTFs),

which tend to have available hours that coincide only with the work day. Hence, military

personnel must request approval to miss work from their leadership, thus possibly

making their superior aware of possible mental health concerns and subsequently

interfering with possible treatment seeking (Sharp et al., 2015). Consequently, if unit

leaders are not supportive of their subordinates and do not acknowledge their mental

health concerns, treatment may be hindered. For these reasons, leadership must offer

support to military personnel regarding treatment-seeking behaviors (Warner et al.,

2008). Stigma has been conceptualized from three different perspectives: public stigma,

label avoidance, and self-stigma.

Public stigma. Public stigma in mental health is defined as "the phenomenon of

the social groups endorsing of stereotypes about, and subsequently acting against,

individuals who report mental distress and seek treatment" (Ben Zeev et al., 2012, p.

266). Examples of public stigma that are highly endorsed by military personnel are "I

would be seen as weak" and "My unit leadership might treat me differently" (Hoge et al.,

2004). Military personnel also fear seeking treatment owing to a lack of confidentiality of

their mental health records, as commanding officers may have access to those records

(Vogt, 2011), making treatment seeking that much more unpalatable. In some cases,

when military personnel are referred for mental-health evaluations by their command,

they may be escorted to their appointment by other military members (Tanielian et al.,

2008). Thus, being escorted by a peer ensures that other unit members will become aware

of the treatment or engagement with mental health.

Label avoidance. Label avoidance is defined as the intentional act of not

acknowledging symptoms or seeking treatment to avoid stigma or consequences that may

arise from receiving a formal diagnostic label (Ben-Zeev et al., 2012). For instance,

military personnel will not seek treatment for fear of negative career consequences as

result of such labeling (Rowan et al., 2014), including being considered not fit for duty,

losing their security clearance, not getting promotions, and not being able to carry

weapons (Tanielian et al., 2008). Not being able to carry a weapon increases a sense of

vulnerability, both cognitively and practically, especially when in combat zones. All

these consequences are extremely aversive and limiting to individuals serving in the

military.

Self-stigma. Self-stigma is defined as internalizing actual or perceived public

stigma (Ben-Zeev et al., 2012; Sharp et al., 2015). Self-stigma occurs only when a person

is aware of the stereotypes that describe a stigmatized group, agree with the stigma, and

apply the stigma to themselves (Corrigan, Larson, & Rusch, 2009). In a study on the

association between self-stigma, anticipated stigma, and help seeking in National Guard

and reserve personnel, self-stigma was found to have a significant correlation to help-

seeking intentions (Blais & Renshaw, 2014). However, stigma regarding seeking

treatment is reduced when the recognition of a behavioral health disorder is linked with

specific actions that are likely to aid in recovery, such as not using labels like *mental*

illness (Jorm, 2012). In fact, having knowledge of recovery-oriented care has been found

to be associated with less stigma (Harris, Leskela, & Hoffman-Konn, 2016).

Self-stigma is believed to threaten one's sense of self-esteem, self-regard, and

self-confidence (Vogel & Wade, 2009). Thus, for the self-stigmatized, seeking

psychological help is believed to pose a threat to these fundamental domains.

Additionally, negative portrayals of behavioral health concerns in the media, as well as

negative encounters, can negatively impact one's self-esteem and sense of self-efficacy

(Corrigan, 2004). Self-stigma predicts attitudes toward seeking psychological help and

willingness to seek help (Vogel, Wade, & Haake, 2006). In a study examining public

stigma and self-stigma toward seeking formal psychological help, results suggested that

individuals with higher levels of anticipated self-stigma had negative attitudes toward

general practitioners and psychiatrists, but surprisingly not toward psychologists (Pattyn,

Verhaeghe, Sercu, & Bracke, 2014). Help seeking was also reduced when participants

feared devaluation and social discrimination. Civilians who have a greater sense of

empathy toward others and who have sought psychological treatment are less likely to

endorse self-stigma of seeking psychological help themselves (Bathje & Pryor, 2011).

      Stigma in military HCPs. Surprisingly, military HCPs maintain many of the

same stigmatizing beliefs about seeking treatment as military personnel who are not in

the healthcare profession. One would think that behavioral health providers would have

fewer stigmatizing beliefs toward individuals seeking behavioral health treatment, but

that belief is not true. In fact, research supports the claim that behavioral health providers

have greater stigma toward seeking help than do laypeople (Harris et al., 2016). A factor

contributing to stigma among behavioral health professionals is the ethical principle to

disclose provider impairments (Harris et al., 2016). In addition, psychologists fear that

their professional competence may be questioned; that they will be seen in a waiting

room; that they may be subject to possible violations of privacy; that they will suffer

career implications, such as Board or malpractice actions; and that there is a risk of an

ethical violation regarding dual relationships (Bearse, McMinn, Seegobin, & Free, 2013).

In a study conducted by Chapman et al. (2014), U.S. Army enlisted medics who screened

positive for a mental health diagnosis endorsed concerns about seeking treatment out of

fear that they would be treated differently by leadership, they would be seen as weak,

their unit members would lose confidence in them, and they may experience negative

career consequences. Stigmatizing beliefs were an even greater deterrent to seeking care

than actual barriers to care, such as getting time off from work or scheduling an

appointment (Chapman et al., 2014). For example, United States Air Force nursing

officers maintain that seeking behavioral health treatment would be embarrassing, would

harm their careers, or would cause leadership to blame them for the difficulties they

experience (Hernandez et al., 2014). The results of these studies illustrate that stigma is

endorsed by both enlisted and officer HCPs, as well as by those who work in behavioral

health.

Burnout and Stigma of Seeking Help

Symptoms of burnout in HCPs typically go undetected (Sargent et al., 2016) until

a situation triggers a reaction on the part of others (Putnik, de Jong, & Verdonk, 2011), at

which point a decision must be made regarding whether to pursue treatment for oneself.

HCPs are believed to have several barriers to pursuing treatment, the primary being

stigma for the reasons previously outlined. In addition to stigma, physicians experiencing

burnout do not seek help because of personality factors, such as perfectionism and denial

of personal vulnerability (Wallace, Lemaire, & Ghali, 2009). In other cases, HCPs who

experience burnout may not seek help because they believe that doing so would be

shameful and unprofessional (Putnik et al., 2010). Additionally, HCPs believe that

occupational stressors are not significantly concerning to seek help, particularly for

problems related to sleep and poor concentration (Putnik et al., 2010). Consequently,

HCPs who experience burnout are likely to seek help only if they experience physical

symptoms or are encouraged by persons of authority or power (Putnik et al., 2010).

Unfortunately, research on the relationship between burnout and stigma, particularly self-

stigma of seeking help in military HCPs, is limited.

Literature Review Summary

Burnout is a long-standing problem that has plagued HCPs because of the extensive occupational stressors they experience, as well as stigma of seeking help. The effects of burnout and stigmatizing attitudes toward seeking help in HCPs is well documented in the literature for both civilian and military populations. However, burnout and stigma of seeking help may be more prevalent among military HCPs as a result of the inherent occupational stressors of being in the military, serving in austere environments, not being able to maintain an adequate work-life balance because of the demands of being in the military, maintaining a large case load resulting from the effects of war, and personal schemas regarding seeking help. Consequently, the manifestation of burnout will persist in military HCPs as long as the U.S. continues to be involved in military operations around the world and provider wellness programs insufficiently target areas of concern for military HCPs. To ensure the wellness of military HCPs and optimize their performance for the benefit of the thousands of military personnel they serve, an exploration of the relationship between burnout and self-stigma of seeking psychological help would be beneficial.

Purpose of Study

The primary goal of military HCPs is to keep themselves and military personnel mission ready. Thus, they have a great deal of responsibility that makes them susceptible to significant stress arising from personal military experiences, requirements, and caring for those with various medical- and behavioral-health needs. The demands placed upon military HCPs may precipitate burnout, accompanied by a host of consequences, such as mental and physical illness. However, as an extensive body of research has illustrated,

stigmatizing beliefs prevent those in the military from seeking the necessary care they need (Hoge et al., 2004; Tanielian et al., 2008). The majority of the research focuses on public stigma, defined as "the phenomenon of the social groups endorsing of stereotypes about, and subsequently acting against, individuals who report mental distress and seek treatment" (Ben-Zeev et al., 2012, p. 266); however, another aspect of stigma is self-stigma. Self-stigma is defined as the internalization of actual or perceived public stigma (Ben-Zeev et al., 2012; Sharp et al., 2015). The purpose of this study was to explore the relationship between burnout and self-stigma of seeking psychological help and demographic factors, such as profession, gender, and status in the military. The study aimed to shed light on the relationship between burnout and self-stigma of seeking psychological help across military HCPs, so that policies can be implemented to improve wellness and self-care programs for providers to sustain the military's mission readiness, reduce costs, and, hopefully, improve and save lives.

Chapter 2: Hypotheses

Hypotheses 1

It was hypothesized that there would be a significant, positive relationship between burnout (as measured by the Professional Quality of Scale [ProQOL]) and self-stigma (operationalized as scores on the Self-Stigma of Seeking Help Scale [SSOSH]).

Hypothesis 2

It was hypothesized that military HCPs would report significantly greater levels of self-stigma (operationalized as scores on the Self-Stigma of Seeking Help Scale [SSOSH]) than those reported by civilian HCPs who work in the military health system.

Hypothesis 3

It was hypothesized that the combination of being an officer in the military, being of male gender, or being a physician would predict self-stigma (operationalized as scores on the Self-Stigma of Seeking Help Scale [SSOSH]).

Hypothesis 4

It was hypothesized that the combination of being in the military, being of female gender, or being a behavioral health provider would predict burnout (as measured by the Professional Quality of Scale [ProQOL]).

Chapter 3: Method

Research Design

The study design was based on a cross-sectional, correlational/regression design.

Participants

Participants in this study included a sample of convenience recruited online via social media and e-mail. Participants included 156 HCPs who worked in the military health system as civilians or military members. Eligible participants were between 18 and 67 years of age; active-duty, National Guard, or reserve component who were HCPs serving in the U.S. military; or civilian government HCPs, including medical students, interns, residents, and fellows who were working in the military health system. Participants were excluded from the study if they were not currently serving as HCPs in the military or in the military health system and were outside the age criterion of 18 to 67 years.

Measures

Demographic questionnaire. Participants completed a self-report questionnaire, created by the investigator, which included 15 questions. Basic demographic information, including age, marital status, gender, education, ethnicity, military status, branch of service (if applicable), length of service, military experiences, occupational specialty, and prior personal history of mental-health treatment, was gathered (Appendix A).

Professional Quality of Life Scale. The Professional Quality of Life Scale (ProQOL) is a 30-item self-report measure used to screen for "positive and negative effects of working with people who have experienced extremely stressful events" (Stamm, 2010, p. 12). Items are rated on a 5-point Likert scale, ranging from 1

(*never*) to 5 (*very often*). Scale Point 3 is anchored as *sometimes* (Stamm, 2010). The

three subscales in the ProQOL are Compassion Satisfaction (CS), Burnout (BO), and

Secondary Traumatic Stress (STS). Scores below 43 on the CS scale suggest Low

Compassion and problems with work, whereas scores above 57 suggest High

Compassion Satisfaction and a "good deal of professional satisfaction" (Stamm,

2010, p. 17). Scores below 18 on the BO scale suggest Low Burnout and "reflect[s]

positive feelings about your ability to be effective in your work," whereas scores

above 57 suggest High Burnout (Stamm, 2010, p. 17). Scores below 43 on the STS

scale suggest Low Secondary Traumatic Stress, whereas scores above 57 suggest

High Secondary Traumatic Stress. This measure has been found to be reliable with

internal consistencies of CS ($\alpha = .88$; $n = 1,130$), BO ($\alpha = .75$; $n = 976$), and STS (α

$= .81$; $n = 1,135$). No published articles or data exist on the convergent, construct,

and divergent validities of the ProQOL; however, the manual states, "There is good

construct validity with over 200 published papers" (Stamm, 2010, p. 13). The

ProQOL is publicly available online (www.proqol.org; Stamm, 2010).

  Self-Stigma of Seeking Help Scale. The Self-Stigma of Seeking Help Scale

(SSOSH; Vogel et al., 2006) is a 10-item self-report measure of comfort or concern

with regard to seeking psychological help. Items are rated on a 5-point Likert scale,

ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). Scale Point 3 is anchored

by agree and disagree equally (Vogel et al., 2006). Scores range from 10 to 50, with

scores ranging from 10 to 22 indicating Low Stigma, 23 to 32 indicating Medium

Stigma, and 33 to 50 indicating High Stigma of seeking counseling. Sample items on

the scale include "I would feel worse about myself if I could not solve my own

problems" and "Seeking psychological help would make me feel less intelligent"

(Vogel et al., 2006, p. 328). The SSOSH has strong internal consistency, $\alpha = .89$, in a

sample of 1,083 active-duty soldiers (Skopp et al., 2012) and $\alpha = .91$ in a sample of

583 college students and good test-retest reliability over 2 months (.72). The

predictive and construct validity of the SSOSH has been established to predict help-

seeking attitudes regardless of biological sex, past counseling, psychological distress,

self-esteem, and public stigma (Vogel et al., 2006). Currently, no known published

articles exist on the use of this measure with HCPs. The SSOSH in this study was

used to measure participants' personal attitudes toward seeking psychological help

for themselves. The SSOSH is publicly available online for research purposes

(https://selfstigma.psych.iastate.edu/ssosh-scale/; Vogel et al., 2006).

Procedure

Participants were recruited via social media and e-mail through snowball

sampling. Training and department directors at MTFs across the U.S. were sent an e-mail

(Appendix B) containing a link to the survey that was to be forwarded to interns,

residents, fellows, faculty, and staff affiliated with the MTFs. Upon accessing the link to

the survey, participants were sent to a page that contained the information on the purpose

of the study, description of the research, potential risks, potential benefits, raffle

information, confidentiality, voluntary participation assent, contact information of the

investigators (Appendix C), and four questions to determine eligibility (Appendix D).

Informed consent was not necessary, as this study was an exempt, anonymous online

survey. If the answers determined that the subjects did not meet the inclusion criteria, the

next page indicated that they were not eligible to participate in the study, and they were

thanked for their time. Subjects who were eligible and chose to participate in the study

were allowed to proceed to complete the demographic questionnaire (Appendix A),

ProQOL questionnaire, and SSOSH questionnaire. Upon completing the questionnaires,

subjects were sent to a message thanking them for participating and inviting them to

participate in an optional raffle to receive one of two $50 gift cards.

Chapter 4: Results

Statistical analyses were computed to examine the relationship between burnout and self-stigma of seeking help among military HCPs. Additionally, the present study also aimed to determine whether associated demographic factors were predictive of burnout and self-stigma of seeking help.

Statistical Analysis

Two statistical methods were used to analyze the hypotheses: a Pearson correlation and multiple linear regression. The variables of interest were analyzed using SPSS 22.0. A power analysis for a Pearson correlation was calculated, and the effect size was set at 0.30, which is considered a medium effect size for correlation (Cohen 1988, 1992). The significance level was set at 0.05, and the power level was set at 0.95. This analysis determined a minimum of 111 participants for sufficient power was needed. The second analysis for multiple regression with three predictors determined that 119 participants were needed to measure a medium effect size of 0.15, with a significance level of 0.05 and the power level of 0.95.

Demographic Analysis

A total of 156 providers participated in the study. Demographically, the sample consisted of 129 female participants (82.7%) and 26 male participants (16.7%) who ranged in age from 19 to 65 years, with the mean age of 35.9 years. More than half of the sample were married (65.4%). Participants identified as 75.6% Caucasian, 8.9% Black/African American, 7.7% Hispanic or Latino, and 5.1% Asian. In terms of military status, 89.1% of the sample were active duty officers, 3.8% were active duty enlisted personnel, and 5.1% were civilian employees. Participants worked for the Navy (81.4%),

Army (10.3%), Air Force (5.8%), and in joint service treatment facilities (2.6%).

Professionally, 35.2% were behavioral-health providers (e.g., psychologists, social

workers, psychiatrists, & counselors), 27.6% were nurses, 18.6% were physicians, 3.8%

were dentists, and 14.7% were reported as "other" clinical professionals. The majority of

the HCPs were junior officers (e.g., O1 – O4; 68.5%) followed by senior officers (e.g.,

O5 and above; 13.4%). Approximately 30% of HCPs reported seeing 35 or more patients

per week, while the remaining HCPs reported seeing between 35 to fewer than 10

patients per week. See Table 1 for all demographic variables collected.

Table 1

Demographics Data

Variable	*N*	Freq (%)	Variable	*N*	Freq (%)
Gender	156		**Years of Service as HCP in the MHS**	156	
Female	129	83	0-5	69	44
Male	26	17	6-10	36	23
Prefer not to say	1	1	11-15	25	16
Age (Years)	156		16-20	10	6
19-29	33	21	21-25	10	6
30-39	78	50	26-30	5	3
40-49	38	24	31-32	1	1
50-65	7	5	**Military Rank/Grade**	156	
Marital Status	156		GS-12	4	3
Single	41	26	GS-13	2	1
Married	102	65	GS-14	2	1
Divorced	9	6	E-1	1	1
Living together but not married	4	3	E-2	1	1
Race/Ethnicity	156		E-3	1	1
Caucasian/White	118	76	E-4	1	1
African American/Black	14	9	E-6	2	1
American Indian or Alaska Native	1	1	O-1	4	3
Asian	8	5	O-2	10	6

Native Hawaiian or Other Pacific Islander	1	1	O-3	69	44
Latino or Hispanic	12	8	O-4	38	24
Biracial	2	1	O-5	14	9
Education	156		O-6	7	5
High school diploma or equivalent	1	1	**Deployed in Support of GWOT**		
Some college credits	3	2	Yes	67	43
Associates degree	1	1	No	89	57
Bachelor's degree	17	11	**Number of Times Deployed in Support of GWOT**		
Master's degree	39	25	0	93	60
Doctorate degree	95	61	1	37	24
Profession	156		2	11	7
Nurse	43	28	3	8	5
Physician	29	19	4	2	1
Behavioral-health provider	55	35	**Current Work Setting**		
Dentist	6	4	Military treatment facility	110	71
Other	23	15	Branch clinic	20	13
Military Status	156		Embedded	8	5
Active-duty Officer	139	89	Shipboard	3	2
Active-duty enlisted member	6	4	Deployed setting	7	5
National Guard officer	1	1	Behavioral-health consultant	4	3
Reserve officer	2	1	Aviation	4	3
Civilian contractor employee	2	1	**Number of Patients Seen Per Week**	156	
Civilian government employee	6	4	Fewer than 10	28	18
Employer Branch of Service	156		10-15	20	13
Air Force	9	6	15-20	14	9
Army	16	10	20-25	21	14
Navy	127	81	25-30	13	8
Joint treatment facility	4	3	30-35	13	8
			More than 35	47	30

Note. HCP = healthcare provider; MHS = military health system; GWOT = Global War on Terrorism; GS = general schedule; Military ranks/grades denote the positional status and authority for individuals who are in the military or work for the government; E = enlisted; O = officer

Hypothesis 1

To examine whether self-stigma of seeking help (as measured by the SSOSH) was significantly positively correlated with burnout (as measured by the ProQOL), a Pearson product-moment correlation coefficient was conducted. Results indicated a significant positive relationship between self-stigma of seeking help and burnout, $r = .224$, $p = .003$. The coefficient of determination ($r^2 = .05$) indicated that approximately 50% of the variance was shared between the variables.

Hypothesis 2

This hypothesis aimed to explore whether military HCPs would endorse greater levels of self-stigma of seeking help in comparison to civilian HCPs. Analysis could not be conducted on this hypothesis because of the insufficient number of civilian HCPs who participated in the study ($N = 8$) in comparison to military HCPs ($N = 148$).

Hypothesis 3

To identify whether being an officer in the military, of male gender, or a physician would predict self-stigma scores (as measured by the SSOSH), tests of assumptions, linearity, and a multiple linear regression were conducted. An initial test of assumption was conducted using the Durbin-Watson test for serial correlations between errors, that is, whether adjacent residuals are correlated, which is useful in assessing the assumption of independent errors (Field, 2009). The test statistic ranges between 0 and 4, with scores below 2 indicating a positive correlation and a value greater than 2 indicating a negative correlation between adjacent residuals. A conservative rule of thumb is that the test statistic with values in the range of 1.5 to 2.5 are relatively normal; any values less than 1 and greater than 3 are areas for concern (Field, 2009). The Durbin-Watson test

statistic was equal to 1.841, which indicated the residuals were uncorrelated. Thus, the

residuals in this model were independent and normally distributed.

Additional analyses of assumption for linearity and homoscedasticity were

conducted. Residual statistics using standardized residuals (ZRESID) against

standardized predicted values (ZPRED) indicated that linearity and homoscedasticity

were met (Field, 2009). To further test the normality of the residuals, a review of the

histogram and normal probability plot was conducted. The histogram and normal

probability plot both revealed that the assumption of normality was met (Field, 2009).

To examine multicollinearity, the following analyses were conducted: tolerance

statistics, variance inflation factor (VIF), and collinearity diagnostics. Tolerance statistics

and VIF both measure multicollinearity, which is a "situation where two or more

variables are very closely linearly related" (Field, 2009, p. 790). Tolerance statistics

below 0.1 indicate serious problems, whereas values below 0.2 indicate areas to interpret

with caution. Tolerance statistics for this hypothesis ranged between .964 and .987,

indicating no significant multicollinearity. VIF primarily measures whether a "predictor

has a strong linear relationship with other predictors" (Field, 2009, p. 796). Values

greater than 10 on the VIF indicate problem areas. VIF values for statistics related to this

hypothesis ranged between 1.012 and 1.037. Consequently, the collinearity diagnostics

revealed that each predictor variable (e.g., physician, military officer, and male gender)

did not load on the same dimension. Thus, these analyses confirm linearity among the

predictor variables. The overall regression analysis, as shown in Table 2, revealed no

significant regression, $F(3, 156) = 0.2$, $p = .897$, indicating that the combination of being

an officer, of the male gender, or a physician did not predict self-stigma of seeking help

(Table 3).

Table 2

*Overall Regression Analysis with Predictor Variables (Physicians, Military Officer, and
Male Gender) to the Dependent Variable (Self-Stigma of Seeking Help)*

Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	.363	3	.121	.200	.897[a]
Residual	92.042	152	.606		
Total	92.405	155			

[a] = Predictor variables

Table 3

*Coefficients of Predictor Variables (Physicians, Military Officer, and Male Gender) to
the Dependent Variable (Self-Stigma of Seeking Help)*

Model	Unstandardized coefficients		Standardized coefficients			Collinearity statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (constant)	2.297	.217		10.599	.000		
Physicians	-.109	.161	-.055	-.678	.499	.987	1.013
Military officers	.019	.222	.007	.086	.931	.964	1.037
Male gender	.071	.170	.034	.416	.678	.970	1.031

Hypothesis 4

To identify whether being in the military, of the female gender, or a behavioral-

health provider would predict burnout, a multiple regression was conducted. A multiple

linear regression analysis also was conducted, as well as tests of assumption and linearity.

Using the same analysis process as for Hypothesis 3, an initial test of assumption was

conducted using the Durbin-Watson test. The Durbin-Watson test statistic for this

hypothesis was equal to 2.002, which indicated the residuals were uncorrelated (Field, 2009). Additional analyses of assumptions for linearity and homoscedasticity were conducted and met, using ZRESID against ZPRED (Field, 2009). To further test the normality of the residuals, a review of the histogram and normal probability plot was conducted. The histogram and normal probability plot both revealed that the assumption of normality was met (Field, 2009).

To examine linearity, several analyses were conducted to include tolerance statistics, VIF, and collinearity diagnostics. Tolerance statistics for this hypothesis ranged between .965 and .991, while VIF values ranged between 1.009 and 1.037. These results indicated no multicollinearity between the predictor variables. Overall, these analyses also confirm linearity among the predictor variables.

The results of the multiple linear regression analysis, as shown in Table 4, revealed a multiple correlation of $R = .278$, with a coefficient of determination of .077 ($R^2 = .077$) indicating that approximately 7.7% of the variance observed in burnout can be attributed to the combination of the predictor variables of being in the military, of female gender, and a behavioral health provider. The adjusted coefficient of determination ($AdjR^2 = .059$) suggests that there would not be any shrinkage from sample to population if the population was evaluated. The overall regression analysis, as shown in Table 5, revealed significant regression, $F(3, 156) = 4.327$, $p = .007$, indicating that the combination of these variables predicted burnout. However, further analysis of the beta coefficients, as shown in Table 6, revealed that being a behavioral health provider was the only variable that made a significant contribution to the prediction of burnout.

Specifically, being a behavioral health provider was found to be significantly and

negatively related to burnout, $t = -3.446$, $p = .001$.

Table 4

Model 1 Summary of the Predictor Variables (Being in the Military, Female Gender, and Behavioral Health Provider) to the Dependent Variable (Burnout)

Model 1	R	R^2	Adjusted R^2	Std. error of est.	R^2 change	F change	$df1$	$df2$	Sig. F change
1	.278ª	.077	.059	0.55145	.077	4.237	3	152	.007*

ª = Predictor variables
*p < .007

Table 5

Overall Regression Analysis with Predictor Variables (Being in the Military, Female Gender, and Behavioral Health Provider) to the Dependent Variable (Burnout)

Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	3.865	3	1.288	4.237	.007ª
residual	46.223	152	.304		
total	50.088	155			

ª = Predictor variables

Table 6

Coefficients of Predictor Variables (Being in the Military, Female Gender, and Behavioral Health Provider) to the Dependent Variable (Burnout)

Model	Unstandardized coefficients		Standardized coefficients			Collinearity statistics	
	B	Std. error	Beta	t	Sig.	Tolerance	VIF
1 (constant)	2.518	.201		12.543	.000		
Female gender	-.021	.120	-.014	-.171	.865	.971	1.030
Military officers	.043	.201	.017	.212	.832	.991	1.009
Behavioral-health providers	-.330	.096	.273	-3.446	.001*	.965	1.037

*p < .001

Chapter 5: Discussion

Burnout and public stigma toward seeking help is well documented in the literature for both civilian and military personnel. Public stigma is "the phenomenon of the social groups endorsing of stereotypes about, and subsequently acting against, individuals who report mental distress and seek treatment" (Ben Zeev et al., 2012, p. 266). However, research on self-stigma of seeking help and its relationship to burnout in military HCPs is limited. Self-stigma is the internalization of anticipated public stigma, an area that has not been researched in military HCPs. For this reason, this study aimed to examine the relationship between burnout and self-stigma of seeking psychological help among military HCPs, as well as the demographic variables that may make military HCPs more susceptible to self-stigma and burnout. The results of this study supported two of the four hypotheses examined, namely the significantly positive relationship between self-stigma of seeking help and burnout, as well as a significantly negative relationship between being a behavioral-health provider and burnout. Findings from this study did not support the hypothesis that a significant difference would be found in reported levels of self-stigma between military and civilian HCPs. Findings also did not support the hypothesis that being in the military, of male gender, or a physician would predict self-stigma.

Findings

Burnout and self-stigma. This hypothesis aimed to examine whether a significantly positive relationship exist between burnout and self-stigma of seeking help. The current study found a significantly positive correlation between levels of self-stigma toward seeking help and burnout in HCPs, with greater reported levels of self-stigma

toward seeking help associated with greater reported levels of burnout. These findings suggest that HCPs who internalize the negative stereotypes toward seeking psychological help are likely to experience the negative effects of burnout, such as emotional exhaustion and depersonalization, and to have beliefs about a lack of personal accomplishment. Previous research found that some HCPs experiencing burnout do not seek help because of personality factors (Wallace et al., 2009), and organizational factors (Garcia, McGeary et al., 2014; Hoge et al., 2004; Warner et al., 2008). The current study indicates that now self-stigma is also an important factor to consider. The finding that military HCPs internalize stigmatizing stereotypes regarding seeking help is both ironic and surprising, considering they themselves are in the helping profession.

Several possible explanations exist regarding these results. First, military HCPs may believe that they can manage their stressors on their own and do not need help. Additionally, some providers, particularly physicians, have been found to have perfectionistic tendencies (Wallace et al., 2009) that may foster a belief that they are not susceptible to experiencing stressors and/or are able to manage them on their own. As such, seeking care may threaten military HCPs' perceived sense of self-efficacy. According to Bandura (1997), self-efficacy involves one's beliefs about one's ability to endure and overcome challenging situations. Although not measured in this study, the military HCPs in this study might have held high self-efficacy, which, on the positive side, has been found to sustain one's effort for optimal performance (Bandura, 1982) and to protect against burnout (Shoji et al., 2016) and self-stigma (Corrigan & Watson, 2002). A further consideration of the role of cognition in the relationship between self-stigma and not seeking help among HCPs is that military HCPs may avoid seeking help because

they hold the distorted belief that seeking help may be evidence that one is not competent as a clinician. Thus, the function of avoiding treatment serves to avoid activation of maladaptive and distressing core beliefs, or schema avoidance (Young, Klosko, & Weishaar, 2003).

Another explanation regarding the positive relationship between burnout and self-stigma of seeking help may be attributed to the possibility that the military HCPs in this study did not perceive the stressors to which they were exposed as evoking a significant level of stress, resulting in undetected burnout (Sargent et al., 2016). Some military HCPs may lack self-awareness of the effect specific responsibilities have on them and their own burnout symptoms. The majority of the military HCPs in this study worked in a MTF, which in and of itself can be a source of stress. Providers who work in MTFs work in various clinics, work various shifts, stand duty, and take on collateral duties for professional and career development. While not examined in this study, providers who work at MTFs for the most part are treated and/or treat other providers at the same facility, increasing the likelihood of providing curbside care and consultation to patients and other providers. Consequently, military HCPs who work in MTFs may find that managing all their responsibilities, managing their time, and establishing healthy boundaries are difficult, increasing their risk of burnout. Furthermore, since these providers receive their care at the facility in which they work, they may be more likely to harbor those self-stigmatizing beliefs and be less likely to seek care, particularly out of the fear that doing so may impact their careers.

Military HCPs are entrusted with caring for warfighters and maintaining the military's mission readiness; thus, a poor professional reputation can be detrimental to

one's career. Military HCPs who report high levels of self-stigma may also experience

high levels of burnout resulting from a fear of career consequences if they seek help. The

most prevalent stigmatizing beliefs documented in the literature are the fear that one will

be perceived as weak and that peers will lose confidence in them and impede career

prospects (Ben-Zeev et al., 2012; Gould et al., 2010; Hoge et al., 2004; Sharp et al.,

2015). Such high-stakes consequences may explain why many military HCPs are

reluctant to seek care. However, research continues to illustrate that self-initiated

treatment before impairment occurs is not likely to result in negative career consequences

(Rowan et al., 2014).

       Self-stigma in military and civilian HCPs. This hypothesis aimed to examine

whether military HCPs would endorse greater levels of self-stigma of seeking help in

comparison to civilian HCPs**.** An analysis of whether military HCPs would have greater

levels of self-stigma in comparison to civilian HCPs could not be conducted given the

inability to match the military HCPs and civilian HCP groups resulting from a low

number of civilian HCPs ($N = 8$) versus military HCPs ($N = 148$) who participated in the

study. The discrepancy in participation has two plausible explanations. The first

explanation may be attributed to inclusion criteria. Participants in the study were required

to currently work in the military health system. Military personnel operating as HCPs

deliver healthcare under the military health system regardless of where it is performed

(e.g., deployed settings, onboard ships, in hospitals, clinics). The same cannot be stated

for civilian HCPs working with military personnel.

       The second explanation for the lack of civilian HCPs in this study may be

attributed to recruitment bias. Recruitment was conducted via the snowballing technique

through social media and e-mail solicitation. The social-media recruitment announcement

was posted to five webpages, all of which were geared to current military and civilian

personnel who previously served in the military. The other recruitment method used was

solicitation via e-mail. The assumption was made that the e-mail announcement would be

sent to both military and civilian personnel at the identified treatment facilities. Of the 20

e-mail recruitment announcements sent to training directors and department directors at

MTFs across the country, only five responded, stating that they would forward the

announcement to their students, residents, fellows, faculty, and staff. One training

director responded stating that Internal Review Board (IRB) approval from the military

was needed for the recruitment announcement to be disseminated at that facility.

Therefore, future studies soliciting subjects from MTFs via e-mail should consider

obtaining IRB approval from a military source, as well as expanding recruitment efforts

to include HCPs working for organizations that service military populations outside of

the military health system.

      Factors predictive of self-stigma. Findings did not support the hypothesis that

being a physician, of male gender, or an officer in the military would predict self-stigma

of seeking help. The lack of significant findings may be better explained by examining

the characteristics of the predictor variables. One can speculate that the physicians in this

study had greater levels of education and training in the skills that can protect against the

internalization of stereotypes regarding seeking help in comparison to HCPs who do not

work in the military health system, although this comparison was not examined in this

study. Along the same lines, physicians may also have a strong sense of self, which has

been found to mitigate self-stigmatizing attitudes (Corrigan & Rao., 2012; Heath et al.,

2018). Another explanation for the lack of findings for this hypothesis is the limited

number of male and enlisted HCPs who participated in the study, making it impossible

for a conclusion to be drawn as to whether being a male HCP or an officer would predict

self-stigma. The study included 26 male participants compared to 129 female participants

and six enlisted HCPs compared to 142 HCPs who were officers. The groups could not

be compared for analysis; hence, results were inconclusive.

Factors predictive of burnout. This hypothesis aimed to explore whether being a

behavioral health provider, of female gender, or in the military would predict burnout.

Findings initially supported this hypothesis. Taken together, being a behavioral health

provider, of female gender, *and* in the military significantly predicted burnout. However,

in examining the breakdown, only one variable significantly predicted burnout, although

not in the hypothesized manner. In fact, being a military behavioral health provider was

significantly and *negatively* related to burnout, indicating an inverse relationship between

burnout and being a military behavioral health provider. It can be hypothesized that being

a behavioral health provider is a protective factor against burnout because these

professionals possess the knowledge and skills necessary to mitigate the negative effects

of burnout. Thus, the very skills that may be protective against self-stigma may also

protect against burnout. All the behavioral health providers in this study had at least a

master's degree from an accredited educational institution, a DoD occupational

requirement to work in the military health system.

Another explanation regarding the finding may be that behavioral health providers

are likely to practice and teach various interventions to treat burnout, such as cognitive-

behavioral therapy (CBT) and positive-psychology principles. The fundamental element

driving the underlying core components of burnout (e.g., emotional exhaustion, depersonalization, and personal achievement) is negative cognitions. As such, CBT directly addresses the maladaptive thoughts, emotions, and behaviors (Beck, 1979) associated with burnout. Similarly, positive psychology is defined as "the scientific study of positive experiences and positive individual traits, and the institutions that facilitate their development" (Duckworth, Steen, & Seligman, 2005, p. 630). Constructs of positive psychology include resilience, hope, stoicism, and strength of character (Nock et al., 2013), which not only align with the characteristics of those who serve in the military but also are the basics of maintaining one's psychological readiness and resilience (Duckworth et al., 2005). Finally, the results may be explained by the fact that behavioral health providers tend to engage in consultation and processing of emotions with colleagues; thus, behavioral health providers are likely to reach out for peer support, which in turn may mitigate the negative effects of burnout, as the behavioral health providers are likely to experience positive feedback and reassurance (Cutrona & Russell, 1987). Given these points, being a behavioral health provider seems to protect against burnout, as behavioral health providers are considered the subject matter experts on teaching and consulting with others on how to best ameliorate the negative effects of burnout.

One would expect being in the military to be predictive of burnout, considering the obligations and responsibilities of military personnel, as previously outlined, in addition to their responsibilities as providers. However, those findings were not supported in this study. There are several explanations for this finding. The first explanation may be attributed to the age of the sample. Previous research suggested that

HCPs younger than the age of 30 years are more likely than their older counterparts to experience burnout (Erickson & Grove, 2007). The mean age for the sample in this study was 35.9 years. A second explanation may be related to experience. Research supports the claims that inexperienced HCPs are susceptible to experiencing burnout (Ballenger-Browning et al., 2011). More than half of the sample (55.7%) in this study had 6 or more years of experience working as an HCP in the military health system. As such, this sample likely consisted of HCPs with higher levels of professional experience who were familiar with the military health system and the changes one may experience working in such settings, and who had a reasonable understanding of their positional responsibilities, in addition to skills that they could apply for their own coping.

Regarding gender differences, although previous research found military and civilian female individuals to be more susceptible to burnout in comparison to their male counterparts (Ballenger-Browning et al., 2011; Hopkins-Chadwick, 2006; Purvanova & Muros., 2010; Street et al., 2009), these results did not support those findings. Being a female HCP in the military does not predict burnout which in part may be due to military life engendering a sense of camaraderie and social support from family and leadership, which has been found to mitigate the effects of burnout, as well as to improve physical health and help-seeking behaviors (Britt et al., 2012; Lehavot et al., 2013). Approximately 65% of the sample reported being married; thus, another explanation for the lack of significant findings regarding gender differences in burnout may be attributed to the multiple social roles that both male and female HCPs serve, which may generate the sort of purposeful relationships, sense of fulfillment, and meaning in life that are an integral part of being in the military and protective against burnout (Sinclair et al., 2016).

Clinical Implications

To circumvent burnout in military HCPs and self-stigmatizing beliefs, health promotion programs should incorporate aspects that promote stable interpersonal relationships among colleagues (Lehavot et al., 2013), improve self-compassion and meaning in life (Heath et al., 2018; Neff et al., 2003), increase self-efficacy (Bandura, 1997), and enhance other adaptive coping skills (Lazarus & Folkman, 1984) of the evidence-based variety offered by CBT and positive psychology. HCPs who are taught positive psychology principles, such as resilience and strength of character, are likely to have an increased sense of self (Han et al., 2014; Nock et al., 2013), in turn possibly mitigating self-stigmatizing beliefs (Sharp et al., 2015). Learning about these concepts to better facilitate an environment of wellness and health promotion (Adler et al., 2017) throughout departments or units may also be beneficial for leaders. At any given time, military HCPs are expected to serve in multiple roles, including being a provider, leader, mentor, and watch stander, all in some of the most stressful environments imaginable and while attempting to maintain a work-life balance. Thus, while not examined in this study, it might be beneficial for leaders to routinely asses of staff morale, provide support and resources as appropriate, facilitate a culture of social interaction and support among staff, and give reassurance that workload is consistent with the capabilities of the providers.

The results of this study highlight a serious issue that continues to plague the military and perpetuates psychological distress among military personnel: stigma for seeking help. One way to improve help-seeking behaviors is by increasing knowledge of recovery-oriented principles and care (Harris et al., 2016), self-compassion (Heath et al., 2018; Neff et al., 2007), and self-empowerment strategies (Mittal, Sullivan, Chekuri,

Allee, & Corrigan, 2012). Each of these approaches allows individuals to reframe the way in which they perceive seeking care, as well as to develop a more stable self-concept to combat applying perceived stereotypes to oneself. Another strategy for reducing help-seeking stigma is to reframe the image of provider wellness and impairment programs to highlight them as a means of maintaining wellness and peak fitness for duty -- analogous to physical training -- rather than programs that are put into place to help those who have already become impaired. Additionally, integrating psychological concepts into these programs that are routinely disseminated throughout the entire organization can create an open environment to discuss challenges and solutions. Military personnel must maintain military bearing and respect for the hierarchical nature of the military; thus, at times military personnel may believe that they are prohibited from communicating personal concerns. Under such circumstances, organizational and departmental leadership should create a culture of open communication that will not only foster an environment of help seeking, but also ensure that providers are well enough to maintain the military's mission readiness.

Treatment interventions. Given that self-stigma is the internalization of anticipated public stigma (Sharp et al., 2015) and threatens one's sense of self-esteem and self-regard (Heath, Brenner, Lannin, & Vogel, 2018), interventions improving self-compassion (Corrigan & Rao, 2012) may be an effective strategy in reducing self-stigma and burnout (Raab, 2014). Self-compassion is believed to encompass three components:

> 1) Extending kindness and understanding to oneself rather than harsh criticism
> and judgement; 2) seeing one's experiences as part of the larger human
> experience rather than as separating and isolating; and 3) holding one's painful

thoughts, and feelings in balanced awareness rather than over-identifying with

them (Neff, 2003, p. 224).

In a study examining whether self-compassion attitudes would moderate

perceived public stigma on self-stigma of seeking help, Heath et al. (2018) found

individuals with greater levels of self-compassion reported lower levels of self-stigma.

Self-compassion has also been found to increase psychological well-being in the form of

increased social connectedness and decreased self-criticism, thought suppression, and

anxiety and depression (Neff, Kirkpatrick, & Rude, 2007). Teaching HCPs self-

compassion as a means of reducing self-stigma and burnout seems imperative given the

professional, personal, and psychological consequences of burnout.

Mindfulness-based stress reduction (MBSR) interventions have been found to

increase self-compassion, and self-compassion has been found to decrease burnout

(Shapiro, Astin, Bishop, & Cordova, 2005). MBSR was developed in 1979 by Dr. Jon

Kabat-Zinn at the University of Massachusetts to address health problems. It is an 8-week

intensive program that requires weekly meetings for 2.5 hours and is based on ancient

healing practices and taught by certified instructors (Kabat-Zinn, 1996). MBSR

encompasses being nonjudgmental and awareness of being in the moment to increase

awareness of one's thoughts, emotions, and maladaptive patterns (Shapiro et al., 2005).

In a meta-analysis examining the impact of mindfulness training on providers' well-

being, Irving, Dobkin, and Park (2009) found MBSR training improved providers'

physical and mental well-being, including improved ratings on empathy, depression,

anxiety, and spirituality. In another study, 93 civilian HCPs were found to have

significant improvements in mental well-being and reduction in burnout scores after

completing the structured 8-week course (Goodman & Schorling, 2012). Given these points, having certified MBSR instructors on staff to offer this intervention to the workforce may be beneficial in an effort to reduce military HCPs' levels of burnout.

The significantly positive findings in the relationship between burnout and self-stigma of seeking help highlight the fact that stigmatizing attitudes toward seeking behavioral healthcare continue to exist. Perhaps provider wellness and health promotion programs can incorporate self-compassion and MBSR strategies to facilitate an open environment of learning and inquiry. Taken together, measures must be put into place to diminish not only self-stigmatizing beliefs but also burnout among HCPs.

Limitations

Despite the potential positive impact that this study may have on increasing the awareness of the extent to which military HCPs experience burnout and negative attitudes toward seeking help, several limitations must be taken into consideration. The first limitation is the use of self-report measures. Self-report instruments are reactive, and measures are susceptible to participants answering with socially desirable responses, particularly with the measures used in this study, as they were likely to encourage participants to reflect on their current emotional state, as well as their attitudes towards help seeking (Kazdin, 2003). Also, the burnout and self-stigma measures consisted entirely of forced-choice responses, possibly causing difficulty for respondents to accurately rate their experiences (Demetriou, Ozer, & Essau, 2015). Additionally, because the study was conducted online, respondents did not have the opportunity to get clarification if they misunderstood some of the questions.

Another possible limitation resulting from the study being conducted online is a bias in the sample used, as military HCPs who were not experiencing significant levels of burnout may have had the time to participate in the study. Conversely, military HCPs who were experiencing greater levels of burnout or who were stationed in more austere environments may not have had the opportunity to participate because of work demands.

Although recruitment efforts were made to disseminate the study announcement to the targeted population, tracking whether all the respondents honestly answered the screening questions to enter the study was impossible, as is the case with most research. Participants needed to maintain anonymity given the perceived sensitivity of the topic and from whom the announcements were disseminated. Respondents who received the recruitment announcement from their training director or department director might have questioned the true anonymity of the study, thus causing them to answer questions in a socially desirable way.

Finally, the research design with running a cross-sectional, correlational/regression analysis on the hypotheses has limitations. Given these analyses, the relationships between the variables could be examined, but causation could not be determined.

Future Directions

The results of this study are an informative first step to understanding the role of self-stigma and burnout in military HCPs and have opened an area for additional research to better create and expand provider wellness and impairment programs in the military. The findings from this study revealed a significantly positive relationship between burnout and self-stigma. However, the impact of this result on patient outcomes was not

examined and is an area for future research. Examining and understanding the similarities and differences between provider wellness and impairment programs across civilian and military organizations is important. As the results of this study are not consistent with previous research regarding predictive factors of burnout and self-stigma, future research should consider examining self-care practices, personality factors, and involvement of organizational leadership in maintaining the health of military HCPs that may mediate the relationship. The role of self-efficacy in self-stigma and burnout is an area for additional research, as self-efficacy has been found to be a protective factor against burnout (Shoji et al., 2016) but may maintain stigmatizing beliefs. Results of the study revealed that being in the military did not predict self-stigma or burnout among HCPs. As such, some characteristics of military HCPs serve as protective factors that have not been found in civilian HCPs who do not work in the military health system; hence, further examining these characteristics could be beneficial to better inform the assessment and care of civilian HCPs.

Future research should consider examining the individual dimensions of burnout (e.g., emotional exhaustion, depersonalization, and personal accomplishment) in relation to self-stigma of seeking help. Finally, a more thorough examination of the relationship between perceived career consequences and self-stigma of seeking help in military HCPs should be conducted, as the factors maintaining self-stigmatizing beliefs toward seeking help among military HCPs remain unclear.

Summary and Conclusion

This study is the first to explore the relationship between burnout and self-stigma of seeking help in military HCPs, as well as the associated demographic factors. Overall,

the findings indicated that the more self-stigma toward seeking help in which one engages, the greater levels of burnout one may experience. Results also revealed that being a behavioral-health provider may serve as a protective factor against burnout. The results of this study are promising, as several areas have been identified which may contribute to efforts to destigmatize seeking behavioral healthcare and increase help-seeking among providers. Equally important is the lack of significant findings from the other hypotheses that do not support previous research, such as military personnel and behavioral-health providers experiencing high levels of burnout and physicians harboring stigmatizing beliefs about seeking care.

Findings from this study were inconsistent with some of the published literature. For example, being a physician was not proved to predict self-stigmatizing attitudes. Additionally, findings were inconclusive regarding the claims that being in the military or of female gender would predict burnout. However, this study did reveal that military HCPs, who have greater levels of self-stigmatizing attitudes toward seeking help, also report greater levels of burnout. Furthermore, results found that being a behavioral health provider was negatively related to burnout. Hopefully, the results of this study may inform the way organizations and leaders enact changes in the accessibility of how services are delivered and received by military HCPs and can influence leaders to periodically assess provider well-being and be proactive in providing support to reduce stigma of seeking help and burnout.

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Appendix A

Demographic Questionnaire

1. What is your age (in years)?_____

2. Marital Status: *What is your marital status?*

   o   Single

   o   Married

   o   Divorced

   o   Separated

   o   Widowed

   o   Living together but not officially married

3. What is your preferred gender identity?

   o   Male

   o   Female

   o   Transman (female-to-male)

   o   Transwoman (male-to-female)

   o   Prefer not to say

4. Education: *What is the highest degree or level of education you have completed? If*
   currently enrolled, mark the previous grade or highest degree received.

   o   High school graduate-high school diploma or the equivalent (e.g., GED)

   o   Some College Credits

   o   Associate Degree

   o   Bachelor's Degree

   o   Master's Degree

   o   Doctorate Degree

   o   Trade School (e.g., A School, C School, etc.)

   o   Other: _____

5. What is your profession?

   o   Nurse

   o   Physician (e.g., Family medicine, OB/GYN, GMO, audiologists, etc.)

   o   Behavioral Health Provider (e.g., Psychologist, Psychiatrist, Social Worker, or
       Psychiatric Nurse Practitioner)

   o   Dentist

   o   Other (please specify)

6. What is your military status?

    o   Active Duty Officer

    o   Active Duty Enlisted Member

    o   National Guard Officer

    o   National Guard Enlisted Member

    o   Reserve Officer

    o   Reserve Enlisted Member

    o   Civilian Contractor Employee

    o   Civilian Government Employee

7. Branch of Service: *What is/was your last branch of service?*

    o   Air Force

    o   Army

    o   Coast Guard

    o   Navy

    o   Public Health Service

    o   Not Applicable

8. Length of Service: *What is the total number of years you have served in the military
    as a healthcare provider and/or worked in the military health system?*

9. Rank: *What is your current rank or pay schedule (GS, etc.)?*

10. Have you participated in any operations in support of the Global War on Terror?

    o   Yes

    o   No

11. How many times have you deployed in support of the GWOT?

12. Have you witnessed distressing events while serving as a health care provider in the
    military?

    o   Yes

    o   No

13. Please select the type of setting in which you currently work.

- o Military Treatment Facility
- o Branch Clinic
- o Embedded
- o Shipboard
- o Deployed Setting
- o Behavioral Health Consultant
- o Submarine
- o Aviation
- o Other:

14. Hours Worked per Week: *How many hours do you work per week?*

- o 30-35
- o 35-40
- o 40-45
- o 45-50
- o 50-55
- o 55-60
- o 65-70
- o More than 70

15. Patients per week: *Approximately how many patients seen per week*?

- o Less than 10
- o 10 – 15
- o 15 – 20
- o 20 – 25
- o 25 – 30
- o 30 – 35
- o More than 35

Appendix B

Recruitment Email

For training directors and department directors in MTFs:

My name is Odelia McFadden and I am a Lieutenant in the United States Navy and currently a doctoral student in the APA-accredited Doctor of Clinical Psychology Program at Philadelphia College of Osteopathic Medicine (PCOM). I am currently collecting data for my dissertation on a study that hopes to improve provider wellness in the military health system. The study will examine work-related stress and thoughts about seeking help.

I would be grateful if you would please consider helping me recruit participants by passing this message to your interns, medical students, residents, fellows, and staff. This is a **COMPLETELY ANONYMOUS** web-based survey and takes approximately **6 - 12 minutes** to complete. There is an optional raffle which will give participants the opportunity to win one of two **$50 GIFT CARDS**!! Your help is greatly appreciated. Below is the link:

(Eligible participants are Active Duty, Reserve, National Guard, contractors, and civilian government healthcare providers working in the military health system between the ages of 18 to 67 years.)

Survey Link:

For potential participants solicited via Facebook, listservs, and Division 19:

My name is Odelia McFadden and I am a Lieutenant in the United States Navy and currently a doctoral student in the APA-accredited Doctor of Clinical Psychology Program at Philadelphia College of Osteopathic Medicine (PCOM). I am currently collecting data for my dissertation on a study that hopes to improve provider wellness in the military health system. The study will examine work-related stress and thoughts about seeking help.

You may find the study to be interesting and I would like to invite you to participate!! This is a COMPLETELY ANONYMOUS web-based survey and only takes about **6 - 12 minutes** to complete. There is an optional raffle which will give participants the opportunity to win one of two **$50 GIFT CARDS**!! Your help is greatly appreciated. Below is the link:

Survey Link:

Thank you so much for helping to facilitate this project, which we hope will improve programs and policies in the military healthcare system for military personnel, our veterans and those of us who proudly serve with them!

Appendix C

Study Information

SURVEY:
Attitudes Towards Seeking Help in Military Healthcare Providers

RESEARCH PURPOSE:
My name is Odelia McFadden and I am a Lieutenant in the United States Navy and currently a doctoral student in the APA-accredited Doctor of Clinical Psychology Program at Philadelphia College of Osteopathic Medicine (PCOM). Under the supervision of Dr. Brad Rosenfield, Professor and Principal Investigator, I am collecting information for my dissertation for which I am surveying military healthcare providers regarding stress and thoughts about seeking help.

ELIGIBILITY TO PARTICIPATE:
1. You must be 18 years to 67 years of age
2. You must be currently on active duty, in the National Guard, or a reservist
3. You must currently be a healthcare provider
4. You must be a government or contract healthcare provider working in the military health system

DESCRIPTION OF THE RESEARCH:
You will be asked to complete two surveys and a demographic questionnaire that will take approximately **6 - 12 minutes** in total.

VOLUNTARY PARTICIPATION:
Your participation in this study is completely voluntary. If you decide you would like to participate, you can withdraw from the study at any time without explanation or consequence.

POTENTIAL RISKS:
There are no known risks to participating in this study, however, there is the possibility that
answering some questions may be uncomfortable. You may choose not to participate or to stop the survey at any time should you feel uncomfortable answering any of the questions or for any reason whatsoever.

POTENTIAL BENEFITS:
Although there are no known direct benefits to you, you might find answering these questions to be both interesting and enlightening, as it may provide insight into your own thoughts about work-related stress. Your participation will help to provide information on the need for provider wellness programs in the military, as well as initiatives needed to combat work-related stress for military healthcare providers and improve the military healthcare system.

COMPENSATION:
To show my appreciation for your participation, I have included an optional raffle that will give you the opportunity to win one of two $50 gift cards. Once you complete and submit the survey, you will be given the opportunity to click a link, where you will be asked to give your name and e-mail address. Your contact information will not be linked to your survey answers. Your survey answers will remain completely anonymous. The winner of the raffle will be randomly selected. The name will be drawn after all data has been collected. You will be sent a gift card code to your provided contact information if you win the raffle.

CONTACT PERSONS: This study has been approved by the Philadelphia College of Osteopathic Medicine Institutional Review Board (#H18-036X). If you have any questions, at any time, about this research, please contact principal investigator Dr. Rosenfield at bradr@pcom.edu or the Research Compliance Specialist, Theresa Stem at 215-871-6782.

Appendix D

Screening Questions

1. Are you interested in participating in the study?
   - ☐ Yes
   - ☐ No
2. Are you a healthcare provider (nurse, physician, psychologist, psychiatrist, medical student/resident/intern/fellow, corpsman, medic, etc.) working in the military health system?
   - ☐ Yes
   - ☐ No
3. Are you between the ages of 18 and 67?
   - ☐ Yes
   - ☐ No
4. What is your military status?
   - ☐ Active Duty
   - ☐ National Guard Member
   - ☐ Reserve Member
   - ☐ Civilian or contractor
   - ☐ None of the above