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Statutory inclusion: An evaluation of mental health among lesbian, gay, and bisexual
military personnel following the repeal of “Don’t Ask, Don’t Tell”

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Abstract

Statutory inclusion: An evaluation of mental health among lesbian, gay, and bisexual military personnel following the repeal of “Don’t Ask, Don’t Tell”

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Lesbian, gay, and bisexual men and women have served in the U.S. military since this nation’s founding despite multiple forms of marginalization denying their existence. Formal sanctions have ranged from imprisonment to dishonorable discharge while the hetero-masculine mandate of military culture has consistently targeted and maligned homosexual behavior and identity. The minority stress perspective explains how these multiple layers of discrimination are likely to harm the mental health of lesbian, gay, and bisexual service members (LGB SMs). The 1993 law, commonly known as “Don’t Ask, Don’t Tell,” was meant to lessen the deleterious effects of anti-gay sentiment in the military. Unfortunately, it did the opposite, increasing tensions and incidence of harassment. The law also prevented the military from collecting data on LGB SMs. Until 2011, when the law was repealed and LGB SMs gained the statutory right to serve, it was

not possible to study the well-being of this long-silenced population that is likely to be at high risk of adverse mental health outcomes. However, few studies have yet to explore the needs and experiences of LGB SMs.

This three-paper dissertation is one of the first studies using a large representative sample of the active-duty force to investigate mental health, social support, and barriers to treatment among LGB SMs.

METHODS: A secondary analysis is conducted using data from the *2015 Department of Defense Health Related Behaviors Survey* – the first wave of this longitudinal study to collect data on sexual identity. The first two studies of this dissertation use the full sample of 14,405 active-personnel who completed the survey item on sexuality, of which 863 (6.0%) self-identified as lesbian, gay or bisexual. In the first study, a series of logistic regressions describe the prevalence of adverse mental health outcomes, exposures to physical and sexual abuse, and suicidality among subgroups based on gender and sexual orientation. The second paper uses a structural equation model to assess the indirect effects of LGB identity on mental health as mediated by social support. The final paper takes a subsample of only those respondents who were identified as having an unmet need for mental health treatment ($n = 1,237$; LGB $n = 95$, 7.7%) and compares barriers to treatment experienced by LGB SMs to those of their straight peers.

RESULTS: The first paper revealed that bisexual men and women serving in the military have significantly greater prevalence of adverse mental health outcomes compared to their same-sex straight peers, with disparities most notable among bisexual women. Lesbian women did not significantly differ from straight women on measures of

mental health or trauma exposures while on active duty, while gay male service members were found to have significantly lower prevalence of some mental health measures compared to straight males despite being significantly more likely to experience unwanted sexual contact. Results of the second paper are consistent with other studies showing the importance of social support as a mental health buffer. Lesbian identity did not affect social support, however gay male identity did have a moderate negative impact on social support with indirect effects on adverse mental health. The final paper found prevalence of concern about confidentiality and mental health treatment harming one's career to be greater barriers to care among LGB SMs compared to their straight peers, yet prevalence of stigma-related concerns were significantly lower among LGB SMs.

CONCLUSION: Together, these studies are a first step toward what should be a growing body of literature on the health, well-being, and welfare of LGB SMs. The most immediate implications are to support those found to be in greatest distress – bisexual female service members. Military clinicians should discuss LGB identity and adjust treatments accordingly, while military health leaders should develop campaigns to clarify and reaffirm the right to confidential treatment. Additional interventive implications and the possibility that changing cultural norms may be benefitting gay male service members are discussed. LGB SMs will benefit from ongoing attention from both military and civilian investigators who will also need access to data on transgender and nonbinary service members if the military's mission of inclusion is to be achieved.

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DEDICATION

I dedicate this dissertation to all the sexual minority Soldiers, Sailors, Marines, and Airmen who, for centuries, have made the brave choice of military service.

And, to Hooper who was at my side through almost this entire journey – I wish you could've been here with me to the end, Dear Buddy. Rest well.

INTRODUCTION

Americans who exist outside the heterosexual paradigm have always been a part of the U.S. military, whether through enlistment, commission, or conscription. Throughout that history, military laws, policies, and discourses have nevertheless sought to exclude them. Sanctions against homosexual behavior and gay, lesbian, and bisexual troops themselves have ranged from public shaming to imprisonment to discharge (Shilts, 1994). Military training and culture have relied on tropes of hyper-heteromascularity to define a warrior ethos and to construct fighters out of boys and men (Belkin, 2001; Fox & Pease, 2012). While it is reasonable to assume such an environment may be harmful to lesbian, gay, and bisexual service members (LGB SMs), very little is actually known about their lives.

LGB SMs have now enjoyed the statutory right to serve for a decade (Borch, 2010), but research has yet to fill the substantial gap in our knowledge about their experiences, well-being, and needs (McDonald et al., 2020). With the present dissertation, I begin to close this gap in knowledge. Using data from the first military-sponsored study in the U.S. to measure sexual orientation, the *2015 Department of Defense Health Related Behaviors Survey* (Meadows et al., 2018), I take a quantitative approach to explore the mental health of LGB SMs with a focus on various subgroups of the population.

In this introductory chapter, I first review the history of LGB military exclusion to contextualize the motivation for my research. Next, I discuss the theoretical frameworks that informed my studies, as well as my positionality as a researcher. I then provide a description of the data before briefly introducing my set of three papers.

A History of LGB Exclusion

From 1776, when the thirteen colonies formed the Continental Army to fight the Revolutionary War, until a policy change in 2011, the U.S. military has consistently forbidden homosexuality within its corps. The ways in which homosexuality has been defined and its exclusion enforced have been far more capricious (Berube, 2010; Borch, 2010; Evans, 2001; Goodhart & Taylor, 2020; Shilts, 1994). Prior to 1920, the US military had no official policy regarding homosexuality, however individual commanders had authority to imprison and expel service members for homosexual conduct (Evans, 2001). In his exhaustive history of LGB military personnel, *Conduct Unbecoming*, Randy Shilts (1994) highlights the contradictory outcomes that such discretion produced by juxtaposing the careers of two men named Frederick who served contemporaneously at Valley Forge. Seeking a leader to enforce order and discipline in the Continental Army, Benjamin Franklin recruited Baron Frederick von Steuben – a military strategist who, before his exile from Europe for pederasty, was credited with transforming the Prussian military into the strongest force on the continent. Concerned only with his military acumen, rather than his widely rumored abuse of young men, General Washington moved Congress to enact von Steuben’s “Regulations for the Order and Discipline of the Troops of the United States” and commissioned him as the first Inspector General of the Army. Within months of his arrival, another member of the encampment, Lieutenant Frederic Enslin, was accused of sexual relations with a fellow soldier. Court-martialed and found guilty of sodomy, Lt. Enslin was ordered by Gen. Washington to be “drummed out of the Camp...by all the Drummers and Fifers in the Army never to return” (Shilts, 1994, p. 12). Using sexuality as a tool to shape its force,

the U.S. military would continue to enact contradictory sanctions on LGB SMs for centuries to come.

The first official policy addressing homosexual behavior, the Articles of War of 1916, narrowly focused on criminal behavior, assault with the intent to commit sodomy (Evans, 2001). In just five years, after the end of the first World War, the consensual act was reclassified as an imprisonable offense. Around the same time, the inchoate discipline of psychiatry redefined homosexuality as something a person *is*, rather than something a person *does*. The newly constructed *homosexual person* was no longer conceived of as a criminal, but one who is mentally ill, “deviant,” and a “psychopath.” Following the prevailing science of the time, the military thus banned homosexual persons, in 1923 (Borch, 2010). Then, as young men and women were called to serve in World War II, psychiatric guidelines, influenced by a eugenicist zeitgeist, sought to identify homosexual degeneracy via physical indicators such as poor muscle tone, sloping shoulders, and pubic fat deposits (Berube, 2010). Nevertheless, as the war continued and more soldiers were needed, these guidelines for exclusion were employed with less frequency. Then, at the war’s end, when fewer soldiers were needed, discharge of homosexuals was quickly made mandatory (Evans, 2001). As historian Berube (2011) explains, “The military, in spite of its contempt for homosexuals, was not above using lesbian and gay GIs when it needed them to win a war” (p. 86).

Exclusion of LGB service members ebbed and flowed for the next several decades in concert with the military’s need for fighters. For example, civilians drafted to fight in Vietnam were required to submit proof of homosexuality if they wished to be excluded, yet once drafted into service homosexual behavior was cause for investigation and punishment (Shilts, 1994). However, once the draft ended and the more troops were

needed, expulsions for homosexuality decreased significantly (Evans, 2001). Then, following the declassification of homosexuality as a mental disorder in the 1970's, the 1980's saw a decline in discharges for homosexuality and an increase in informal acceptance of sexual minority service members (Barber, 2012; National Defense Research Institute, 2010). Indeed, contemporary accounts of LGB SMs illustrate a vibrant and relatively accepted, LGB military community in the 1980's. (Zeeland, 1993, 1995). Later in that decade, as HIV/AIDS simultaneously devastated and stigmatized the LGB community, the downward trend of expulsions plateaued (National Defense Research Institute, 2010). In short time, expulsions again declined as the troop build-up began for the Persian Gulf war (Evans, 2001). Ever-changing policy implementation doubtlessly created a morass of uncertainty for LGB SMs for whom the ability navigate regulatory restrictions and criminal prohibitions varied substantially (Alexander, 2004).

“Don't Ask, Don't Tell”

By 1993, President Clinton sought to end the exclusionary policies endured by LGB SMs, advocating for full inclusion of sexual minorities in the military. Intense public debate ensued about the place of “gays in the military.” Ultimately, strong opposition from the Senate majority resulted in a compromise policy with ambiguous provisions that came to be known as “Don't Ask, Don't Tell” (DADT; Alexander, 2004; National Defense Research Institute, 2010). Generally, DADT allowed sexual minorities to serve in the military if they effectively hid their sexual identity and refrained from sexual contact. It also prohibited leadership from asking service members about their sexuality, though if suspicion of homosexual conduct somehow came to their attention they were allowed to investigate (Evans, 2002). DADT, however, is widely viewed as

having failed at the goal of improving conditions for LGB SMs. Discussing the policy after ten years of its implementation, legal scholar Sharon Alexander (2004) explains:

The public understood this to be a “live-and-let-live” rule, and in the minds of many involved in the development of this compromise position between those who would lift the ban and those who would retain it, that was indeed the intent of the law. However, in practice the new policy turned out to be anything but a *laissez-faire* approach to sexual orientation in the military. “Don't Ask, Don't Tell” was insidious; like a wolf in sheep's clothing, “Don't Ask, Don't Tell” turned out to be a ban on gays in the military disguised as a liberalization of the government's stance on gays in the military. (p. 411)

Indeed, the downward trend of expulsions for homosexuality that began in the early 1980's reversed course following the signing of DADT. The rate of discharge continued to grow until September 11th, 2001 when a new need for personnel emerged (National Defense Research Institute, 2010).

Written in parts by a multitude of political actors who each wanted to influence the legislation, rather than by a single set of policymakers with a decided vision, the final DADT bill was riddled with ambiguity (Borch, 2010; Evans, 2001). Effectively, it armed individual commanders with a fresh set of vague policies they could use at their discretion to investigate and punish LGB SMs. With a large portion of leadership opposed to the law, its first several years of implementation saw a notable backlash with a dramatic increase in discharges for homosexuality, investigations, anti-gay harassment, and loud disapproval of the policy throughout the military (Alexander, 2004). In the following years, guidance was issued for enforcement of DADT, yet “inappropriate investigations and tolerance of anti-gay harassment at all levels remained rampant” (Alexander, 2004, p. 417), and the rate of discharge continued to rise. By the military's own admission, recipients of this harassment were not likely to come forward because doing so could result in an investigation of their sexuality

(National Defense Research Institute, 2010). In 1999, the military implemented a study following the beating death of a queer infantryman, PFC Barry Winchell, by his fellow soldiers. It found harassment to be widespread, yet little corrective action was taken (Alexander, 2004), as the military and the public turned their attention to the 9/11 terrorist attack and the wars that followed.

Focus on the wars in Iraq and Afghanistan supplanted any priority the military or legislature may have had on addressing flaws of DADT. To mollify ongoing tensions, leadership developed anti-harassment guidelines and trainings, though fidelity to them varied greatly. Leaning on the fact that DADT was an act of Congress, the Bush administration bunted any criticism of the bill to the legislative branch (National Defense Research Institute, 2010). Nevertheless, spurred by advocacy from LGB SMs who had fought overseas, significant cultural shifts toward LGB inclusion grew. In the following administration, President Obama began to roll back enforcement of DADT by, for example, prohibiting the military from initiating investigations based only on anonymous tips about homosexual conduct (Borch, 2010) – a practice that exemplifies the contradictory and insidious nature of DADT. Finally, Congress fully repealed the law in late 2010. Nevertheless, marginalization of LGB SMs continued, with consensual homosexual acts remaining illegal under military law until 2014 and spousal benefits denied to same-sex couples until 2013 (Goodhart & Taylor, 2020). Moreover, repeal of the law could not simultaneously end ant-LGB sentiment among military leadership, as Major Sherilyn Bunn (2010), US Army Judge Advocate, argued that “allowing the practice of open homosexuality [may] detrimentally impact the privacy interests of other service members or result in a hostile work environment for heterosexuals” (p. 228). She goes on to warn that if the military allows LGB SMs to openly serve without

providing segregated housing facilities, shared accommodations would likely increase the incidence of “same-sex forcible sodomy” (p. 229). This plainly homophobic rhetoric is stark evidence that heterosexism was well represented within military leadership at the time of DADT repeal and begs the question of whether an end to statutory exclusion is the same as inclusion.

Research on Lesbian, Gay, and Bisexual Service Members

“Don’t Ask, Don’t Tell” effectively prohibited research on LGB SMs. The “Don’t Ask” component prevented the military from including questions about sexuality in studies. The “Don’t Tell” component meant that disclosures of sexual behavior to military medical personnel could be used as prosecutorial evidence in court martial proceedings, so no clinical data could be systematically evaluated, either. Consequently, very little is known about the contemporary experiences of active duty LGB SMs, despite many calls for such research (Biddix et al., 2013; Burks, 2011; Campbell et al., 2017; McDonald et al., 2020; Ramirez et al., 2013; Schuyler et al., 2020; Wilder & Wilder, 2012). Studies within LGB recipients of Veterans Administration (VA) care (e.g., J. R. Blosnich et al., 2013; J. R. Blosnich, Mays, et al., 2014; Cochran et al., 2013; Lehavot & Simpson, 2014; Lucas et al., 2018; McNamara et al., 2019). are our best approximation of the needs of active duty LGB SMs. However, the experiences of those seeking support in the VA, where the mission is to provide care, is likely to be markedly different from those seeking support within the active military, where the mission is to maintain a fighting force.

A recent narrative review of research on the health and well-being of current and former LGB SMs (Mark et al., 2019) identified 30 relevant studies. Of those, only one

included an active duty LGB sample, but it was only able to recruit a convenience sample of 11 service members who presented at a gay men's health clinic (Smith, 2008). In my own review of the literature, I have only found four other studies that use an active duty LGB SM sample. McDonald and colleagues (2020) surveyed 640 active-duty soldiers at an academic training academy and found that a higher proportion of the 67 respondents who identified as LGB screened positive for anxiety, PTSD, and suicidality. Using a respondent-driven approach, Schuyler and colleagues (2020) recruited a more robust sample ($n = 227$ LGB, $n = 56$ transgender, $n = 276$ non-LGBT) and found LGB identity to be a significant ($ps < .05$) predictor of sexual harassment ($OR = 4.14$), stalking ($OR = 1.98$), and assault ($OR = 2.07$). Similar results were found in a large DoD sponsored study, *The 2016 Workplace and Gender Relations Survey of Active Duty Members* (Van Winkle et al., 2017), that included sexual orientation in its analysis. Compared to heterosexual service members LGBT-identified service members were found to be at significantly ($ps < .01$) greater risk of both sexual harassment ($OR = 3.9$), and sexual assault ($OR = 5.0$).

The 2015 HRBS (Meadows et al., 2018) is the only other published study, to my knowledge, that reports specifically on active duty LGB SMs. Despite having the largest sample to-date of LGB SMs ($n = 863$ of total sample $n = 16,699$), the study's final report uses only 10 of its 435 pages to discuss this notably understudied population. Other than descriptive analyses (e.g., there are significantly more gay men in the Navy than other branches), the only inferential analyses reported compare the full subsample of LGB SMs to their heterosexual counterparts finding higher prevalence of binge drinking, smoking, depression, suicidality, multiple sex partners, and inconsistent use of birth control among LGB SMs. This dissertation uses the rich data collected as part of the

2015 HRBS to expand these analyses and more fully describe the experiences and well-being of active duty LGB SMs.

Theoretical Perspectives

Ecological Framing

An ecological perspective informs how I contextualize the potential problems experienced by LGB SMs. More a conceptual framework than a specific theory, the “ecological approach suggests that the primary premise explaining human problems is derived from the complex interplay of psychological, social, economic, political and physical forces” (Pardeck, 1988, p. 134). Further, these forces comprise nested levels of social influence that interact with one another and shape individual human development (Besthorn, 2013). Bronfenbrenner’s (1979) Ecological Systems Theory is an often-used framework in social work theory, practice, and research. Table 1 defines the various levels of social influence described in the theory, with the third column providing examples of how each level may apply in the military context.

A more robust application of ecological theory to the military environment is beyond the scope of this chapter. However, it is important for understanding the overall framing and goal of my dissertation research. Because there is little extant research on the population, I am left to make assumptions about the well-being of LGB SMs based on my understanding of the military and other psychosocial processes. In short, my dissertation research is premised on the assumption that the long tradition of anti-LGB policies within the military (exosystem) and the hyper-heteromasculine social norms of military culture (macrosystem; see, Braswell & Kushner, 2012; Burns & Mahalik, 2011;

Table 1*Ecological systems definitions and application to a military context*

	Definition (from Bronfenbrenner, 1979)	Military Context
Micro-system	<p>“a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics.” (p. 22)</p> <p>Importantly, it relates to what is <i>experienced</i>.</p>	<ul style="list-style-type: none"> • Family • Military unit • Daily coworkers • Civilian friends • Military friends • Religious groups • Clinical support/treatment settings
Meso-system	<p>“ the interrelations among two or more settings in which the developing person actively participates (such as ... among family, work, and social life).” (p. 25)</p>	<ul style="list-style-type: none"> • Competing demands of family and military role • Tension between civilian and military friends • Dialog between military friends and coworkers and systems of care (i.e., interpersonal stigma)
Exo-system	<p>“...one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person.” (p. 25)</p>	<ul style="list-style-type: none"> • Upper levels of the command structure • Clinical care structures or agencies
Macro-system	<p>“...refers to consistencies, in the form and content of lower-order systems (micro-, meso-, and exo-) that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies.” (p. 26)</p>	<ul style="list-style-type: none"> • Military culture • Military traditions • Local civilian culture surrounding duty station • Hetero-masculine social norms • Homophobia • Civilian beliefs about the military and its personnel

Caddick et al., 2015; Fox & Pease, 2012; Hinojosa, 2010; O'Brien et al., 2015; Shields et al., 2017; Van Gilder, 2019; Whitworth, 2008) create multiple hostile environments that LGB SMs endure within micro- and meso-systems. Given the high degree of anti-LGB policies and discourses at all levels of the military system, I make the broad assumption that there is likely to be a poor “level of fit” – to use Gitterman’s language (2017, p. 289) – between LGB individuals and the military environment.

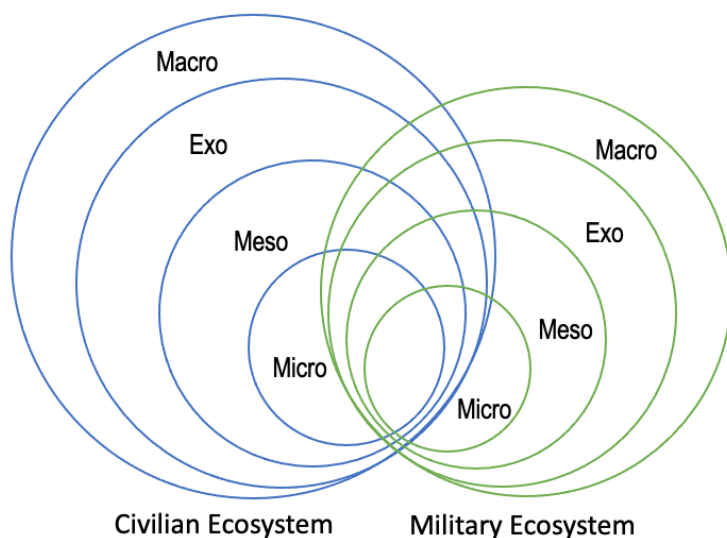
To test this assumption, I analyze data collected at the individual level; however, my ultimate site of intervention is the exosystem level of the military, in other words military commanders who have the structural power to positively influence provision of services at the microsystems level, shape larger discourses around LGB inclusion at the macro-level, as well as influence how various groups within the military interact in the meso-level.

These levels of the military constitute a unique ecological system that cannot be subsumed into the civilian ecosystem. Instead, these dual systems interact with and influence one another. If levels of the social environment, posited in Ecological Systems Theory may be visualized as a nested set of circles, I see the military and civilian systems as two sets of nested circles that overlap, as if a Venn diagram (see Figure 1).

Moreover, the hierarchical

Figure 1

Visual representation of overlapping civilian and military ecological systems



structure of the military introduces a very formalized set of nested structures that have direct influence over individual lives, and unlike the dynamic interactions posited in Ecological Systems Theory, lower levels of the military are structurally limited to the degree that they can affect the upper levels. At the same time, I conceptualize the two systems as overlapping because I do believe that all levels of both systems do ultimately have power to influence one another. This is how changing beliefs about homosexuality in the civilian sector have influenced military policies about homosexuality over time; how individual LGB SMs were effective in their pushed for the repeal of DADT; and, why I believe research such as this dissertation has a chance to affect conditions for LGB SMs.

In the following sections, I review more of the theoretical basis that informs the assumptions discussed above.

Minority Stress Model

The minority stress model (Meyer, 1995, 2003, 2007) is fundamental to my dissertation research. As such, it is described in each of the following stand-alone manuscripts, so I limit my discussion here to ways the model has informed my conceptual framework and which I was not able to include in the manuscripts.

Ecologically framed, the Minority Stress Model asks us to consider the effects of sexual prejudice within the wider social context on individual-level outcomes (Meyer, 2003, 2007). The model suggests that societal norms against homosexuality manifest as prejudice events, such as discrimination and violence. These events alone are significant acute stressors, but they also cause more chronic stressors. For example, the expectation that prejudice events will occur and the need to conceal one's sexual identity to prevent

them from occurring requires a heightened level of vigilance – a chronic stressor – for LGB individuals who exist in homophobic or intolerant environments. A substantial body of research has empirically supported the model, showing experiences of discrimination and the cognitive processes they elicit (e.g., expectation of discrimination, internalized heterosexism) significantly harm the mental health of sexual minorities (Bergfeld & Chiu, 2017; Feinstein et al., 2012; Liao et al., 2015; Newcomb & Mustanski, 2010; Puckett et al., 2015; Roberts et al., 2010; Rosser et al., 2008; Szymanski & Mikorski, 2016; Wong et al., 2014). Even anti-LGB discourses and policies in the exosystem have been found to harm the mental health of sexual minorities irrespective of direct, interpersonal experiences of discrimination (Hatzenbuehler, 2010; Hatzenbuehler et al., 2009, 2010).

The minority stress perspective also explains that “minority stress is additive to the general stressors that are experienced by all people” (Meyer, 2007, p. 243). If levels of the ecosystem can be visualized as nesting circles, I suggest the Minority Stress Model may be visualized as a layer cake – the stressors of existing in a homophobic society are layered on top of the life stressors common to all people, regardless of sexual orientation. I extend this logic to include military service as a thick, middle layer of the cake, for LGB SMs. Military service confers a unique and substantial set of stressors for all personnel that is added to the set of stressors common to civilians. LGB identity is yet another surplus of stressors on top of both military and civilian stressors. If this logic holds, with both military service and sexual minority status each individually associated with increased risk for anxiety, depression, PTSD, and suicidal behavior (Kang et al., 2015; King et al., 2008; Lovering et al., 2013; Richardson et al., 2010; Roberts et al.,

2010; Shen et al., 2012), LGB SMs are likely to have uniquely elevated risk for these adverse mental health outcomes.

Social Welfare and the Camouflaged Safety Net

I view military personnel as both a “vulnerable population” deserving the attention of social welfare scholarship as well as beneficiaries of a unique component of the U.S. welfare state – the U.S. military. Though the argument was regrettably used to successfully quell a drive to unionize enlisted men in the 1970’s, I agree with the contention that military service isn’t “just another occupation” (Mittelstadt, 2011, p. 37). Because of the myriad sacrifices military service requires, including potential disability and death, service members are owed a great deal more than mere salaries. Meaningful compensation for military service has long been a tenet of U.S. policy. As social welfare historian Theda Skocpol (1992) convincingly chronicles, the first federal welfare program was the provision of post-Civil War pensions to Union veterans and their survivors – a program constituting 40% of the federal budget by the 1890s. While civilian welfare benefits followed with the New Deal, benefits enjoyed by military personnel consistently grew into a robust set of provisions, including universal healthcare and childcare, housing supports, retirement savings, tax deductions, educational benefits, and more (Gifford, 2006).

In 1973, the Nixon administration ended the draft and implemented an “all-volunteer” military. No longer able to conscript a fighting force, the military would be required to entice one by offering a generous compensation package. Adopting the slogan of the “the Army takes care of its own” (Mittelstadt, 2015a, p. 70), the military extended benefits once reserved for officers to all members of the force. The next two

decades saw tremendous growth in military welfare benefits, primarily under President Reagan who sought to portray service members as patriotic and deserving of government benefits in order to contrast them with the civilian population of recipients whom he sought to portray as freeloading. Similar to the civilian sector, welfare reforms of the 1990's outsourced some military benefits to the private sector and rolled back some entitlements to means-tested and block-grant programs, while employing a rhetoric of supporting beneficiary's "resilience" (Mittelstadt, 2015a). Nevertheless, the welfare benefits provided to military service members remain far more expansive and robust than what is available to civilians (Kleykamp & Hipes, 2013).

Calling it the "camouflaged safety net," Gifford (2006) argues that military benefits comprise a unique and substantial portion of the US welfare state that is too often ignored in social welfare scholarship. Similarly, characterizing more recent movements in the Pentagon to privatize services and replace guaranteed supports with voucher programs, Mittlestadt (2015b) warns that military welfare should be studied as a cautionary bellwether of the civilian welfare state. She asks, "If even troops, whose symbolic status in US politics as a sacrosanct class can have their benefits outsourced and privatized, what chance do social programs protecting civilians have?" (para. 30).

Opportunity and Enlistment. Despite retrenchment of social welfare benefits in all sectors, the camouflaged safety net remains far stronger than what is currently available to civilians, and it continues to be an effective recruitment tool. The potential harms of military service are well understood, but it is also important to recognize that the group of young adults who choose military service have disproportionately high prevalence of socio-economic and psycho-social disadvantage. Compared to those who enter college or the workforce after high school, military recruits are, on average, from

lower income families (Kleykamp, 2006; Lutz, 2008; Wang et al., 2012), more likely to be persons of color or from an immigrant family (Bachman et al., 2000; Lutz, 2008), to have lower educational attainment and expectations, and to have fewer career opportunities (Bachman et al., 2000; Kleykamp, 2006; Wang et al., 2012). Adolescent adversity among recruits is not limited to economic disadvantage, however.

Adverse experiences during childhood and adolescence increase the likelihood that a young adult will enlist in the military. Several studies have found that prevalence of adverse childhood events (ACEs) to be higher among military service members than among civilians (J. R. Blosnich, Dichter, et al., 2014; Katon et al., 2015; Lamson et al., 2020). Growing up in a single parent household has been found to increase the odds of enlistment by 35% -- an effect that was mediated by socioeconomic status and feelings of isolation. Living with a non-relative caregiver was found to more than double the odds of enlistment regardless of socioeconomic status or feelings of isolation (Spence et al., 2013). These findings are particularly relevant for LGB young adults who too often experience family rejection (Katz-Wise et al., 2016; Parra et al., 2018; Robinson, 2018), homelessness (McCann & Brown, 2019), and social isolation (Garcia et al., 2020). Epidemiological studies have also consistently found LGB individuals to be more likely than heterosexuals to have experienced ACEs (Andersen & Blosnich, 2013; Austin et al., 2016; J. R. Blosnich & Andersen, 2015; Merrick et al., 2018; Zou & Andersen, 2015). Several of these studies have shown that greater exposure to ACEs accounts for the excess risk of mental illness among LGB individuals (Austin et al., 2016; J. R. Blosnich & Andersen, 2015; Schneeberger et al., 2014). “The military may be viewed, by these young people [who experienced ACEs], as a route to independent adult living as it provides regular income, housing, and other benefits that promote self-sufficiency more

than college enrollment or low-skilled jobs in the contemporary labor market” (Spence et al., 2013, p. 1210).

Beyond the promise of opportunities and protections, many young adults are also attracted to the curated ideals that the military is portrayed to represent. Analyzing multiple years of DoD Youth Polls – studies aimed at maximizing efficiency of military recruitment marketing materials – Eighmey (2006) shows that intangible benefits are a key motivation for military service. Valuing “working conditions that show respect for individuals” (p. 315), responding youth endorsed items indicating a desire for working environments that are free of racial and sexual discrimination, as well as mentally challenging. Other responses showed commitment to goals and values, such as “develop[ing] self-discipline,” “be[ing] a member of an elite team,” and “mak[ing] a positive difference in the community” (Eighmey, 2006, p. 318). Dean Sinclair (2009), an Army social worker and researcher, explains that homosexual men and women join the military for all the same reasons heterosexuals do: benefits, mobility, and patriotism. But, he also explains that the intangible rewards of military service are particularly appealing to some LGB young adults, writing “Many homosexual men and women have chosen such a profession in order to justify their existence and demonstrate that they are worthy of the same rights as others” (pg. 701). Again, extant research provides evidence that LGB SMs may be a particularly vulnerable population.

In summary, the U.S. military is an important topic in social welfare scholarship as its relatively robust social safety net is a unique component of, and contrast to, the civilian welfare state. Moreover, its recipients are often members of the communities and populations with which social workers regularly engage. Disproportionately, those who enter the military have already endured multiple marginalizations in their young

lives and are bound to face considerable stress, adversity, and likely trauma during their military careers. LGB SMs face yet an additional set of challenges. It is unjust that vulnerable and marginalized young adults are afforded so few options that they are systematically routed into careers that literally may require them to sacrifice their very bodies and lives. Much work must be done “upstream” to right this social wrong. In the meantime, and as the first principle of the social work code of ethics is to “help people in need and address social problems” (National Association of Social Workers, 2017), we must simultaneously attend to the present needs of military service members.

In the following section, I discuss the theory of social justice that motivates my work, as it applies to military personnel.

Social Justice

As discussed, the military provides a compelling set of benefits to its personnel. At the same time, it is a restrictive, hierarchical, and dangerous institution that degrades its personnel’s fulfillment of their core human capabilities. Martha Nussbaum (2007) articulates an analytical perspective for assessing the degree to which governments manifest the innate human rights and dignities of their citizens, or as she names them, “human capabilities.” These capabilities are “functions that are particularly central to human life, in the sense that their presence or absence is typically understood to be a mark of the presence or absence of human life” (Nussbaum, 2002, p. 130). Further, she requires that we must be able to “do these functions in a truly human way, not a merely animal way” (Nussbaum, 2002, p. 130). Social justice is present to the degree we are *all* able to fulfil our human capabilities.

Originally designed to assess developing countries, the questions posed by the capabilities approach can be asked of any system or institution, including the military. Describing her theory, Nussbaum (2002) explains: “The central question asked by the capabilities approach is not, ‘How satisfied is this woman?’ or even ‘How much in the way of resources is she able to command?’ It is, instead, ‘What is she actually able to do and to be?’” (p. 129). Despite the long-running slogan of “Be All You Can Be...in the Army,” there is little doubt that, while serving, the military fully controls what one is able to be and to do. An ordered list of ten core human capabilities, enumerated by Nussbaum (2007), allows for a sharper critique.

The first five of Nussbaum’s (2007) “central human capabilities” (p. 23) are listed in Table 2. When a new recruit enlists in the military, she contractually surrenders control of the first three core capabilities – life, bodily health, and bodily integrity – as she agrees to place her body wherever her commanders tell her regardless of imminent violent threat. She does not, however, surrender her fourth and fifth primary rights of free thought and emotional well-being, yet it is clear that military service negatively affects the fulfillment of these latter core capabilities. With bodily rights so restricted, it is ever more important to attend to the mental and emotional rights of service members.

LGB SMs vacillate between inclusion in the force when there is a need for bodies to sacrifice and promptly excluded when that need subsides, further depriving them of material support and benefits. They are likely to be especially limited in their fulfillment of core capabilities, yet very little is known about their well-being. Since the start of our nation’s longest war, the military has given increased attention to the well-being of service members. The effects of military service and trauma have motivated significant bodies of research on posttraumatic stress (e.g., Barnes et al., 2013; Kitchiner et al.,

2019; Reisman, 2016; Rizzo & Shilling, 2017), telemedicine (e.g., Choi et al., 2015; Girard, 2007; Poropatich et al., 2013; Walker et al., 2017), traumatic brain injury (e.g., Cooper et al., 2015; Helmick et al., 2015; McCrea et al., 2008), and prosthetics (e.g., Ferguson et al., 2010; Kotchetkov et al., 2010; Wolf et al., 2020), to name a few. The effects of service on LGB SMs, however, have seen significantly less attention from the research community. Given our commitment to relief of human suffering and our orientation to both individual health and systems-level change, social welfare scientists are ideally situated to correct this omission.

Table 2

*First five items in Nussbaum's list of "Central Human Capabilities"**

-
1. **Life.** Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.
 2. **Bodily Health.** Being able to have good health, ...; to be adequately nourished; to have adequate shelter.
 3. **Bodily Integrity.** Being able to move freely from place to place; to be secure against violent assault, including sexual assault ...; having opportunities for sexual satisfaction and for choice in matters of reproduction.
 4. **Senses, Imagination, and Thought.** Being able to use the senses, to imagine, think, and to reason.... Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice.... Being able to use one's mind in ways protected by guarantees of freedom of expression... Being able to have pleasurable experiences and to avoid non-beneficial pain.
 5. **Emotions.** Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; ...to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety...
-

*All text is directly quoted from (Nussbaum, 2007, p. 23), edited for length, with omissions indicated by ellipses

Positionality

Finally, before moving on to an overview of this dissertation's three manuscripts, I am moved to reflexively engage in a brief discussion of my own positionality in relation to my work on these projects.

To start, I identify as a white, Queer, cis-gender man who is staunchly opposed to war and all forms of state-sanctioned violence. This social position has undoubtedly informed my choice of topic and the theoretical lens that supports the hypotheses I make. Generally, my research is premised on the idea that military service would be harmful to LGB SMs. Though I believe the preceding pages have included a cogent set of arguments to support that premise, I recognize it is my own set of beliefs that led me to those arguments.

First, for some, to be "anti-war" is to be antagonistic to all aspects of the military. In my perspective, service members are not culpable for the actions of the military writ-large, rather the harm that comes to many of them is an additional casualty of those actions. Since a young age, I have joined protests against war and militarism. I was arrested for engaging in civil disobedience on the eve of the 2003 U.S. invasion of Iraq. The multiple harms our own troops suffer are among the most salient reasons for my opposition to military actions. I state this to make clear to anyone who reads this dissertation that I do not do this work for the military – I do it for those who serve.

Second, it is important to me to address the tension between the mainstream lesbian, gay, bisexual, trans, and queer (LGBTQ) movement that is focused on inclusion and the Queer Liberation movement. As Dean Spade, a legal scholar and queer activist, explains it,

There is a significant divide between a set of strategies and demands focused on accessing key institutions that have defined white citizenship in the US: marriage, military participation, and protection by law enforcement [mainstream LGBTQ movement], and a set of strategies and demands aimed at dismantling the role of those institutions in determining life chances [Queer Liberation]. (Spade & Belkin, 2021, p. 283)

Personally, I am more in line with the latter perspective. I also find important Spade's term "pinkwashing," articulated in an interview with Sanders (2021), as the problem of LGBTQ inclusion being used as a form of "pro-military propaganda" (para. 9). They contend that "when military inclusion advocacy casts the U.S. military as a site of gender inclusion and liberation, it ignores well-documented facts about U.S. militarism and sexual and gender violence" including "harassment and sexual violence towards people perceived as weak or as gay or as trans" (para. 12).

To be blunt, repeal of DADT was never high on my list of social justice priorities. My position best aligns with Queer Liberation activist Cecilia Lucus (2014) who writes, "[DADT] is bad policy. It encourages deceit and specifically, staying in the closet, which contributes to internalized as well as public homophobia, thus perpetuating discrimination and violence against LGBT people" (p. 109). She goes on to explain that, nevertheless, she did not advocate for the repeal of DADT and the right of LGBTQ individuals to serve in the military because she is opposed to anyone serving in the military. I diverge from her staunchness on this final point, however. I take what I see as a more realistic perspective in recognizing that my making a hardline stance against LGBTQ military inclusion will do nothing to end U.S. militarism. Additionally, I acknowledge the extreme injustice of marginalized young adults "be[ing] economically coerced into one of the most dangerous and violent jobs possible" (Spade, quoted in Sanders, 2021, para. 16). As such, I will continue to advocate and fight for economic

justice and an end to U.S. militarism. Until these goals are achieved, however, LGB SMs will continue to be a part of the military, and seeking to protect their well-being is indeed high on my list of social justice priorities.

These personal positions that motivate my research and its hypotheses are strongly held. Clearly, if unacknowledged and unmanaged, they may bias my interpretation of findings. As such, I have sought to remain thoughtful about how these perspectives may affect my research and to stay open to any findings that may contradict my personal opinions. I now turn to a description of the data used in my analyses and an introduction to the three papers.

Dissertation Data: Department Defense Health-Related Behaviors Survey 2015

Beginning in 1982, the military has regularly commissioned a general study to assess the health and well-being of the full active-duty force (i.e., not including National Guard or Reservists). Conducted every three years, the Health-Related Behaviors Survey (HRBS), is an anonymous, self-report survey that is designed to provide a representative sample of each service branch. The collected data is intended for use by direct care providers and in the planning of care-related policies (Meadows et al., 2018). The RAND Corporation conducted the most recently completed wave of the study – the 2015 Department of Defense Health Related Behaviors Survey (2015 HRBS). Its summary report was released in 2018 (see Meadows et al., 2018). With the permission of the study's primary author, Sarah Meadows, and through the support of its second author, Charles Engel, I was able to obtain a public use data file containing the study's raw data. I use these data to conduct my dissertation research.

Sampling and Weights

The sampling frame included all active duty personnel who were not deployed on August 31, 2015. The full sampling frame (N = 1,374,590) was then divided into three strata of known population parameters: service branch, pay grade, and gender. Introduction letters cosigned by RAND and relevant service branch leaders invited a random selection of service members to complete the online survey. Those who did not complete received weekly reminder emails and reminder postcards every two weeks. Initially, 118,656 service members were invited to participate. Then, to fill specific strata, a secondary sampling invited 83,334 additional participants. In total, 201,990 service members were invited to participate; though 3.4% (n = 6,770) were classified as “unable to contact” due to incorrect contact information, meaning 195,220 were successfully contacted and invited. Of those, 23,357 service members responded, though 6,658 were excluded due to incomplete responses. The final usable sample includes 16,699 active duty service members. Using a denominator of contactable SMs, the response rate was 8.6%. The final dataset includes 424 SMs who self-identified as gay or lesbian and 439 as bisexual, providing a LGB sub-sample of 863 respondents (5.17%). See Meadows et al. (2018) for a complete description of sampling.

Figure 2

Calculation of poststratification weight

$$w_{bpg} = \frac{N_{bpg}}{r_{bpg}}$$

A poststratification weight was calculated for each respondent, using the population parameters of branch, paygrade, and gender. Figure 2 shows the calculation,

where N_{bpg} represents the number of SMs in service branch (b), paygrade (p), and of gender (g), and r_{bpg} represents the number of respondents from service branch (b), paygrade (p), and of gender (g). This weight (w_{bpg}) adjusts for both sampling design and nonresponse that is related to variance explained by the strata – branch, paygrade, and gender. This technique cannot, however, account for nonresponse explained by other factors such as age, marital status, race, or education. See Meadows et al. (2018) for a complete description of poststratification logic and calculations.

Omission of Data on Transgender Service Members

One critical limitation of the available data is important to me to explain before I present my research, as it results in what to many, including myself, would be a glaring omission. The 2015 HRBS was the first military-wide and DoD-sponsored study to ask about transgender identity. Over the past several decades, transgender SMs have acutely experienced the capricious changes in policies and implementation thereof that LGB SMs have historically endured. Because of this, and because transgender individuals are a particularly vulnerable component of my larger Queer community, I was excited to include them in my studies. Unfortunately, however, survey items asking about transgender identity were not included in the provided dataset. Despite requests, I was never able to obtain that data. I also never received an explanation for its exclusion; however, at the time this dataset was released to me, the then-current presidential administration was in the process of rolling back transgender military protections that had been promised only a year prior by the previous administration (Embser-Herbert, 2020). I suspect the political sensitivity of the topic may account for this data omission. The topic of transgender SMs is discussed further in the conclusion chapter of this

dissertation, but its absence from analyses an unfortunate limitation of my research, that it is important to me to explain up-front.

Overview of Papers

Again, the purpose of this dissertation is to help fill a significant gap in the literature on the well-being of LGB SM, primarily with respect to mental health outcomes. Given the paucity of extant research on this topic, as well as the cross-sectional nature of the available data, analyses are exploratory and descriptive. Lastly, I structured my analyses with an eye toward results that could have implications for interventions.

In my first paper, *An Initial Investigation of Mental Health, Suicidality, and Victimization Among Active-Duty Lesbian, Gay, and Bisexual Service Members*, I begin by deepening the level of analyses conducted in the 2015 HRBS to describe the prevalence of depression, anxiety, PTSD, and suicidality among subgroups of the LGB SM community (i.e., men & women; homosexual & bisexual) to better understand which of these groups account for the excess levels of mental health risk identified in the larger LGB community by the 2015 HRBS. These findings may help target any outreach the military conducts, seeking to improve conditions for LGB SMs, as well as alert clinicians to risk prevalence for certain LGB clients. In this paper, I also report predicted prevalence of exposure to traumatic harassment events among these subgroups. Prevalence prior to service may, again, support clinicians in client assessment and intervention planning, while prevalence during military service is critical information for military leadership seeking to protect LGB SMs.

With the second paper, *The Role of Social Support in Mental Health Outcomes for Lesbian, Gay, & Bisexual Members of the US Armed Services*, I explore social support as a potential buffer against adverse mental health among LGB SMs. Given the military's heavy emphasis on social integration, social support, and the potential lack thereof among LGB SMs, may be especially important in this context. Through a series of structural equation models, I examine the direct and indirect effects of social support on mental health among subsets of the LGB SM population, based on gender and service branch. Again, this level of specificity is intended to inform the targeting of interventions, if indicated.

In the final paper, *Barriers to Mental Health Care Among Often-Marginalized Members of the US Military*, I contribute to the ample body of literature on military-specific barriers to mental health care. Reviewing that literature, I found that few studies described the prevalence of these barriers among any subgroups of the military population. Since sociocultural factors substantially affect barriers, such as access, stigma, and treatment beliefs, I thought it would be important to expand my analyses beyond only LGB SMs to include other often-marginalized communities – female, people of color, and Latino/a SMs. The sample for this final paper is also limited to those SMs who are identified as having an unmet need for mental health treatment, as these are the individuals most negatively affected by barriers to care.

Works Cited

- Alexander, S. E. (2004). A ban by any other name: Ten years of “Don’t Ask, Don’t Tell.” *Hofstra Labor & Employment Law Journal*, 21(2), 403–436.
- Andersen, J. P., & Blossnich, J. R. (2013). Disparities in Adverse Childhood Experiences among Sexual Minority and Heterosexual Adults: Results from a Multi-State Probability-Based Sample. *PLoS ONE*, 8(1), e54691.
<https://doi.org/10.1371/journal.pone.0054691>
- Austin, A., Herrick, H., & Proescholdbell, S. (2016). Adverse Childhood Experiences Related to Poor Adult Health Among Lesbian, Gay, and Bisexual Individuals. *American Journal of Public Health*, 106(2), 314–320.
<https://doi.org/10.2105/AJPH.2015.302904>
- Bachman, J. G., Segal, D. R., Freedman-Doan, P., & O’Malley, P. M. (2000). Who Chooses Military Service? Correlates of Propensity and Enlistment in the U.S. Armed Forces. *Military Psychology*, 12(1), 1–30.
https://doi.org/10.1207/S15327876MP1201_1
- Barber, M. E. (2012). Mental Health Effects of Don’t Ask Don’t Tell. *Journal of Gay & Lesbian Mental Health*, 16(4), 346–352.
<https://doi.org/10.1080/19359705.2012.705143>
- Barnes, V. A., Rigg, J. L., & Williams, J. J. (2013). Clinical Case Series: Treatment of PTSD With Transcendental Meditation in Active Duty Military Personnel. *Military Medicine*, 178(7), e836–e840. <https://doi.org/10.7205/MILMED-D-12-00426>
- Belkin, A. (2001). Breaking Rank: Military Homophobia and the Production of Queer Practices and Identities. *Georgetown Journal of Gender and the Law*, 3(1), 83–106.
- Bergfeld, J. R., & Chiu, E. Y. (2017). Mediators in the relationship between minority stress and depression among young same-sex attracted women. *Professional Psychology: Research and Practice*, 48(5), 294–300.
<https://doi.org/10.1037/pro0000155>
- Berube, A. (2010). *Coming out under fire: The history of gay men and women in World War II*. University of North Carolina Press.
- Bérubé, A. (2011). Marching to a Different Drummer Lesbian and Gay GIs in World War II. In J. D’Emilio & E. B. Freedman (Eds.), *My Desire for History* (pp. 85–99). University of North Carolina Press.
https://doi.org/10.5149/9780807877982_berube.8

- Besthorn, F. H. (2013). Ecological Approach. In M. Gray & S. A. Webb (Eds.), *Social Work: Theories and Methods* (2nd Edition, pp. 173–182). SAGE.
- Biddix, J. M., Fogel, C. I., & Perry Black, B. (2013). Comfort Levels of Active Duty Gay/Bisexual Male Service Members in the Military Healthcare System. *Military Medicine*, 178(12), 1335–1340. <https://doi.org/10.7205/MILMED-D-13-00044>
- Blosnich, J. R., Foynes, M. M., & Shipherd, J. C. (2013). Health Disparities Among Sexual Minority Women Veterans. *Journal of Women's Health*, 22(7), 631–636. <https://doi.org/10.1089/jwh.2012.4214>
- Blosnich, J. R., & Andersen, J. P. (2015). Thursday's child: The role of adverse childhood experiences in explaining mental health disparities among lesbian, gay, and bisexual US adults. *Social Psychiatry and Psychiatric Epidemiology*, 50(2), 335–338. <https://doi.org/10.1007/s00127-014-0955-4>
- Blosnich, J. R., Dichter, M. E., Cerulli, C., Batten, S. V., & Bossarte, R. M. (2014). Disparities in Adverse Childhood Experiences Among Individuals With a History of Military Service. *JAMA Psychiatry*, 71(9), 1041. <https://doi.org/10.1001/jamapsychiatry.2014.724>
- Blosnich, J. R., Mays, V. M., & Cochran, S. D. (2014). Suicidality Among Veterans: Implications of Sexual Minority Status. *American Journal of Public Health*, 104(S4), S535–S537. <https://doi.org/10.2105/AJPH.2014.302100>
- Borch, F. (2010). The History of “Don’t Ask, Don’t Tell” in the Army: How We Got to it and Why It Is What It Is. *Military Law Review*, 203, 189–206.
- Braswell, H., & Kushner, H. I. (2012). Suicide, social integration, and masculinity in the U.S. military. *Social Science & Medicine*, 74(4), 530–536. <https://doi.org/10.1016/j.socscimed.2010.07.031>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bunn, S. (2010). Straight Talk: Implications of Repealing Don’t Ask, Don’t Tell and the Rationale for Preserving Aspects of the Current Policy. *Military Law Review*, 203(1), 207–283.
- Burks, D. J. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of “Don’t Ask, Don’t Tell”? *American Psychologist*, 66(7), 604–613. <https://doi.org/10.1037/a0024609>
- Burns, S. M., & Mahalik, J. R. (2011). Suicide and dominant masculinity norms among current and former United States military servicemen. *Professional Psychology: Research and Practice*, 42(5), 347–353. <https://doi.org/10.1037/a0025163>

- Caddick, N., Smith, B., & Phoenix, C. (2015). Male combat veterans' narratives of PTSD, masculinity, and health. *Sociology of Health & Illness*, *37*(1), 97–111. <https://doi.org/10.1111/1467-9566.12183>
- Campbell, W. R., Jahan, M., Bavaro, M. F., & Carpenter, R. J. (2017). Primary Care of Men Who Have Sex With Men in the U.S. Military in the Post-Don't Ask, Don't Tell Era: A Review of Recent Progress, Health Needs, and Challenges. *Military Medicine*, *182*(3), e1603–e1611. <https://doi.org/10.7205/MILMED-D-16-00255>
- Choi, Y. S., Cucura, J., Jain, R., & Berry-Caban, C. (2015). Telemedicine in US Army soldiers with type 1 diabetes. *Journal of Telemedicine and Telecare*, *21*(7), 392–395. <https://doi.org/10.1177/1357633X15583425>
- Cochran, B. N., Balsam, K., Flentje, A., Malte, C. A., & Simpson, T. (2013). Mental Health Characteristics of Sexual Minority Veterans. *Journal of Homosexuality*, *60*(2–3), 419–435. <https://doi.org/10.1080/00918369.2013.744932>
- Cooper, D. B., Bunner, A. E., Kennedy, J. E., Balldin, V., Tate, D. F., Eapen, B. C., & Jaramillo, C. A. (2015). Treatment of persistent post-concussive symptoms after mild traumatic brain injury: A systematic review of cognitive rehabilitation and behavioral health interventions in military service members and veterans. *Brain Imaging and Behavior*, *9*(3), 403–420. <https://doi.org/10.1007/s11682-015-9440-2>
- Eighmey, J. (2006). Why Do Youth Enlist?: Identification of Underlying Themes. *Armed Forces & Society*, *32*(2), 307–328. <https://doi.org/10.1177/0095327X05281017>
- Embser-Herbert, M. (2020). “Welcome! Oh, wait...” Transgender Military Service in a Time of Uncertainty. *Sociological Inquiry*, *90*(2), 405–429. <https://doi.org/10.1111/soin.12329>
- Evans, R. (2001). *US Military Policy Concerning Homosexuals: Development, Implementation, and Outcomes*. Center for the Study of Sexual Minorities in the Military, University of California at Santa Barbara. <https://www.palmcenter.org/u-s-military-policies-concerning-homosexuals/>
- Evans, R. (2002). *U.S MILITARY POLICIES CONCERNING HOMOSEXUALS: DEVELOPMENT, IMPLEMENTATION AND OUTCOMES*. 84.
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology*, *80*(5), 917–927. <https://doi.org/10.1037/a0029425>

- Ferguson, J., Keeling, J. J., & Bluman, E. M. (2010). Recent Advances in Lower Extremity Amputations and Prosthetics for the Combat Injured Patient. *Foot and Ankle Clinics*, 15(1), 151–174. <https://doi.org/10.1016/j.fcl.2009.10.001>
- Fox, J., & Pease, B. (2012). Military Deployment, Masculinity and Trauma: Reviewing the Connections. *The Journal of Men's Studies*, 20(1), 16–31. <https://doi.org/10.3149/jms.2001.16>
- Garcia, J., Vargas, N., Clark, J. L., Magaña Álvarez, M., Nelons, D. A., & Parker, R. G. (2020). Social isolation and connectedness as determinants of well-being: Global evidence mapping focused on LGBTQ youth. *Global Public Health*, 15(4), 497–519. <https://doi.org/10.1080/17441692.2019.1682028>
- Gifford, B. (2006). The Camouflaged Safety Net: The U.S. Armed Forces as Welfare State Institution. *Social Politics: International Studies in Gender, State & Society*, 13(3), 372–399. <https://doi.org/10.1093/sp/jxl003>
- Girard, P. (2007). Military and VA telemedicine systems for patients with traumatic brain injury. *The Journal of Rehabilitation Research and Development*, 44(7), 1017–1026. <https://doi.org/10.1682/JRRD.2006.12.0174>
- Gitterman, A. (2017). Life Model of Social Work Practice. In F. J. Turner (Ed.), *Social Work Treatment: Interlocking Theoretical Approaches* (6th ed., pp. 287–301). Oxford University Press.
- Goodhart, A., & Taylor, J. K. (2020). LGBT Military Service Policies in the United States. In A. Goodhart & J. K. Taylor, *Oxford Research Encyclopedia of Politics*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228637.013.1289>
- Hatzenbuehler, M. L. (2010). Social Factors as Determinants of Mental Health Disparities in LGB Populations: Implications for Public Policy: Social Factors as Determinants of Mental Health. *Social Issues and Policy Review*, 4(1), 31–62. <https://doi.org/10.1111/j.1751-2409.2010.01017.x>
- Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). State-Level Policies and Psychiatric Morbidity In Lesbian, Gay, and Bisexual Populations. *American Journal of Public Health*, 99(12), 7.
- Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, K. M., & Hasin, D. S. (2010). The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study. *American Journal of Public Health*, 100(3), 452–459. <https://doi.org/10.2105/AJPH.2009.168815>
- Helmick, K. M., Spells, C. A., Malik, S. Z., Davies, C. A., Marion, D. W., & Hinds, S. R. (2015). Traumatic brain injury in the US military: Epidemiology and key clinical and research programs. *Brain Imaging and Behavior*, 9(3), 358–366. <https://doi.org/10.1007/s11682-015-9399-z>

- Hinojosa, R. (2010). Doing Hegemony: Military, Men, and Constructing a Hegemonic Masculinity. *The Journal of Men's Studies*, 18(2), 179–194. <https://doi.org/10.3149/jms.1802.179>
- Kang, H. K., Bullman, T. A., Smolenski, D. J., Skopp, N. A., Gahm, G. A., & Reger, M. A. (2015). Suicide risk among 1.3 million veterans who were on active duty during the Iraq and Afghanistan wars. *Annals of Epidemiology*, 25(2), 96–100. <https://doi.org/10.1016/j.annepidem.2014.11.020>
- Katon, J. G., Lehavot, K., Simpson, T. L., Williams, E. C., Barnett, S. B., Grossbard, J. R., Schure, M. B., Gray, K. E., & Reiber, G. E. (2015). Adverse Childhood Experiences, Military Service, and Adult Health. *American Journal of Preventive Medicine*, 49(4), 573–582. <https://doi.org/10.1016/j.amepre.2015.03.020>
- Katz-Wise, S. L., Rosario, M., & Tsappis, M. (2016). Lesbian, Gay, Bisexual, and Transgender Youth and Family Acceptance. *Pediatric Clinics of North America*, 63(6), 1011–1025. <https://doi.org/10.1016/j.pcl.2016.07.005>
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8(1). <https://doi.org/10.1186/1471-244X-8-70>
- Kitchiner, N. J., Lewis, C., Roberts, N. P., & Bisson, J. I. (2019). Active duty and ex-serving military personnel with post-traumatic stress disorder treated with psychological therapies: Systematic review and meta-analysis. *European Journal of Psychotraumatology*, 10(1), 1684226. <https://doi.org/10.1080/20008198.2019.1684226>
- Kleykamp, M. A. (2006). College, Jobs, or the Military? Enlistment During a Time of War. *Social Science Quarterly*, 87(2), 272–290. JSTOR.
- Kleykamp, M. A., & Hipes, C. (2013). *Social Programs for Soldiers and Veterans* (D. Béland, K. J. Morgan, & C. Howard, Eds.; Vol. 1). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199838509.013.003>
- Kotchetkov, I. S., Hwang, B. Y., Appelboom, G., Kellner, C. P., & Connolly, E. S. (2010). Brain-computer interfaces: Military, neurosurgical, and ethical perspective. *Neurosurgical Focus*, 28(5), E25. <https://doi.org/10.3171/2010.2.FOCUS1027>
- Lamson, A., Richardson, N., & Cobb, E. (2020). The Health and Readiness of Service Members: ACEs to PACEs. *Military Medicine*, 185(Supplement_1), 348–354. <https://doi.org/10.1093/milmed/usz197>
- Lehavot, K., & Simpson, T. L. (2014). Trauma, posttraumatic stress disorder, and depression among sexual minority and heterosexual women veterans. *Journal of Counseling Psychology*, 61(3), 392–403. <https://doi.org/10.1037/cou0000019>

- Liao, K. Y.-H., Kashubeck-West, S., Weng, C.-Y., & Deitz, C. (2015). Testing a mediation framework for the link between perceived discrimination and psychological distress among sexual minority individuals. *Journal of Counseling Psychology, 62*(2), 226–241. <https://doi.org/10.1037/cou0000064>
- Lovering, M. E., Proctor, S. P., & Heaton, K. J. (2013). A retrospective study of anxiety disorder diagnoses in the military from 2000 to 2009. *Journal of Anxiety Disorders, 27*(1), 25–32. <https://doi.org/10.1016/j.janxdis.2012.10.003>
- Lucas, C. L., Goldbach, J. T., Mamey, M. R., Kintzle, S., & Castro, C. A. (2018). Military Sexual Assault as a Mediator of the Association Between Posttraumatic Stress Disorder and Depression Among Lesbian, Gay, and Bisexual Veterans: Military Sexual Assault, PTSD, and Depression. *Journal of Traumatic Stress, 31*(4), 613–619. <https://doi.org/10.1002/jts.22308>
- Lucus, C. C. (2014). Don't Ask, Don't Tell, Don't Serve. In R. Conrad (Ed.), *Against equality: Queer revolution, not mere inclusion* (pp. 109–112). AK Press.
- Lutz, A. (2008). Who Joins the Military?: A Look at Race, Class, and Immigration Status. *Journal of Political and Military Sociology, 36*(2), 167–188.
- Mark, K. M., McNamara, K. A., Gribble, R., Rhead, R., Sharp, M.-L., Stevelink, S. A. M., Schwartz, A., Castro, C., & Fear, N. T. (2019). The health and well-being of LGBTQ serving and ex-serving personnel: A narrative review. *International Review of Psychiatry, 31*(1), 75–94. <https://doi.org/10.1080/09540261.2019.1575190>
- McCann, E., & Brown, M. (2019). Homelessness among youth who identify as LGBTQ+: A systematic review. *Journal of Clinical Nursing, 28*(11–12), 2061–2072. <https://doi.org/10.1111/jocn.14818>
- McCrea, M., Pliskin, N., Barth, J., Cox, D., Fink, J., French, L., Hammeke, T., Hess, D., Hopewell, A., Orme, D., Powell, M., Ruff, R., Schrock, B., Terryberry-Spohr, L., Vanderploeg, R., & Yoash-Gantz, R. (2008). Official Position of the Military TBI Task Force on the Role of Neuropsychology and Rehabilitation Psychology in the Evaluation, Management, and Research of Military Veterans with Traumatic Brain Injury. *The Clinical Neuropsychologist, 22*(1), 10–26. <https://doi.org/10.1080/13854040701760981>
- McDonald, J. L., Ganulin, M. L., Dretsch, M. N., Taylor, M. R., & Cabrera, O. A. (2020). Assessing the Well-being of Sexual Minority Soldiers at a Military Academic Institution. *Military Medicine, 185*(Supplement_1), 342–347. <https://doi.org/10.1093/milmed/usz198>
- McNamara, K. A., Lucas, C. L., Goldbach, J. T., Kintzle, S., & Castro, C. A. (2019). Mental health of the bisexual Veteran. *Military Psychology, 31*(2), 91–99. <https://doi.org/10.1080/08995605.2018.1541393>

- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). *2015 Department of Defense Health Related Behaviors Survey (HRBS)*. RAND Corporation. <https://doi.org/10.7249/RR1695>
- Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States. *JAMA Pediatrics*, *172*(11), 1038. <https://doi.org/10.1001/jamapediatrics.2018.2537>
- Meyer, I. H. (1995). Minority Stress and Mental Health in Gay Men. *Journal of Health and Social Behavior*, *36*(1), 38–56. JSTOR. <https://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H. (2007). Prejudice and Discrimination as Social Stressors. In I. H. Meyer & M. E. Northridge (Eds.), *The Health of Sexual Minorities* (pp. 242–267). Springer US. https://doi.org/10.1007/978-0-387-31334-4_10
- Mittelstadt, J. (2011). “The Army is a Service, Not a Job”: Unionization, Employment, and the Meaning of Military Service in the Late-Twentieth Century United States. *International Labor and Working-Class History*, *80*(1), 29–52. <https://doi.org/10.1017/S0147547911000068>
- Mittelstadt, J. (2015a). *The rise of the military welfare state* (First edition). Harvard University Press.
- Mittelstadt, J. (2015b). *Welfare’s last stand*. Aeon. <https://aeon.co/essays/how-the-us-military-became-a-welfare-state>
- National Association of Social Workers. (2017). *Code of Ethics*. <https://www.socialworkers.org/About/Ethics/Code-of-Ethics>
- National Defense Research Institute (Ed.). (2010). *Sexual orientation and U.S. military personnel policy: An update of RAND’s 1993 study*. Rand Corporation.
- Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical Psychology Review*, *30*(8), 1019–1029. <https://doi.org/10.1016/j.cpr.2010.07.003>
- Nussbaum, M. (2002). Capabilities and Social Justice. *International Studies Review*, *4*(2), 123–135. <https://doi.org/10.1111/1521-9488.00258>
- Nussbaum, M. (2007). Human Rights and Human Capabilities. *Harvard Human Rights Journal*, *20*, 4.

- O'Brien, C., Keith, J., & Shoemaker, L. (2015). Don't tell: Military culture and male rape. *Psychological Services, 12*(4), 357–365. <https://doi.org/10.1037/ser0000049>
- Pardeck, J. T. (1988). An Ecological Approach for Social Work Practice. *Journal of Sociology and Social Welfare, 15*(2), 133–142.
- Parra, L. A., Bell, T. S., Benibgui, M., Helm, J. L., & Hastings, P. D. (2018). The buffering effect of peer support on the links between family rejection and psychosocial adjustment in LGB emerging adults. *Journal of Social and Personal Relationships, 35*(6), 854–871. <https://doi.org/10.1177/0265407517699713>
- Poropatich, R., Lai, E., McVeigh, F., & Bashshur, R. (2013). The U.S. Army Telemedicine and m-Health Program: Making a Difference at Home and Abroad. *Telemedicine and E-Health, 19*(5), 380–386. <https://doi.org/10.1089/tmj.2012.0297>
- Puckett, J. A., Levitt, H. M., Horne, S. G., & Hayes-Skelton, S. A. (2015). Internalized heterosexism and psychological distress: The mediating roles of self-criticism and community connectedness. *Psychology of Sexual Orientation and Gender Diversity, 2*(4), 426–435. <https://doi.org/10.1037/sgd0000123>
- Ramirez, M. H., Rogers, S. J., Johnson, H. L., Banks, J., Seay, W. P., Tinsley, B. L., & Grant, A. W. (2013). If We Ask, What They Might Tell: Clinical Assessment Lessons from LGBT Military Personnel Post-DADT. *Journal of Homosexuality, 60*(2–3), 401–418. <https://doi.org/10.1080/00918369.2013.744931>
- Reisman, M. (2016). PTSD Treatment for Veterans: What's Working, What's New, and What's Next. *Pharmacy and Therapeutics, 41*(10), 623–634.
- Richardson, L. K., Frueh, B. C., & Acierno, R. (2010). Prevalence Estimates of Combat-Related Post-Traumatic Stress Disorder: Critical Review. *Australian & New Zealand Journal of Psychiatry, 44*(1), 4–19. <https://doi.org/10.3109/00048670903393597>
- Rizzo, A. 'Skip,' & Shilling, R. (2017). Clinical Virtual Reality tools to advance the prevention, assessment, and treatment of PTSD. *European Journal of Psychotraumatology, 8*(sup5), 1414560. <https://doi.org/10.1080/20008198.2017.1414560>
- Roberts, A. L., Austin, S. B., Corliss, H. L., Vander Morris, A. K., & Koenen, K. C. (2010). Pervasive Trauma Exposure Among US Sexual Orientation Minority Adults and Risk of Posttraumatic Stress Disorder. *American Journal of Public Health, 100*(12), 2433–2441. <https://doi.org/10.2105/AJPH.2009.168971>
- Robinson, B. A. (2018). Conditional Families and Lesbian, Gay, Bisexual, Transgender, and Queer Youth Homelessness: Gender, Sexuality, Family Instability, and Rejection. *Journal of Marriage and Family, 80*(2), 383–396. <https://doi.org/10.1111/jomf.12466>

- Rosser, B. R. S., Bockting, W. O., Ross, M. W., Miner, M. H., & Coleman, E. (2008). The Relationship Between Homosexuality, Internalized Homo-Negativity, and Mental Health in Men Who Have Sex with Men. *Journal of Homosexuality*, *55*(2), 185–203. <https://doi.org/10.1080/00918360802129394>
- Sanders, W. (2021, February 22). “It’s Pinkwashing:” *The Case Against LGBTQ+ Military Inclusion, Explained*. Them. <https://www.them.us/story/case-against-lgbtq-military-inclusion-explained>
- Schneeberger, A. R., Dietl, M. F., Muenzenmaier, K. H., Huber, C. G., & Lang, U. E. (2014). Stressful childhood experiences and health outcomes in sexual minority populations: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, *49*(9), 1427–1445. <https://doi.org/10.1007/s00127-014-0854-8>
- Schuyler, A. C., Klemmer, C., Mamey, M. R., Schrage, S. M., Goldbach, J. T., Holloway, I. W., & Castro, C. A. (2020). Experiences of Sexual Harassment, Stalking, and Sexual Assault During Military Service Among LGBT and Non-LGBT Service Members. *Journal of Traumatic Stress*, *33*(3), 257–266. <https://doi.org/10.1002/jts.22506>
- Shen, Y.-C., Arkes, J., & Williams, T. V. (2012). Effects of Iraq/Afghanistan Deployments on Major Depression and Substance Use Disorder: Analysis of Active Duty Personnel in the US Military. *American Journal of Public Health*, *102*(Suppl 1), S80–S87. <https://doi.org/10.2105/AJPH.2011.300425>
- Shields, D. M., Kuhl, D., & Westwood, M. J. (2017). Abject masculinity and the military: Articulating a fulcrum of struggle and change. *Psychology of Men & Masculinity*, *18*(3), 215–225. <https://doi.org/10.1037/men0000114>
- Shilts, R. (1994). *Conduct unbecoming: Gays and lesbians in the U.S. military*. St. Martins.
- Sinclair, D. (2009). Homosexuality and the Military: A Review of the Literature. *Journal of Homosexuality*, *56*(6), 701–718. <https://doi.org/10.1080/00918360903054137>
- Skocpol, T. (1992). *Protecting soldiers and mothers: The political origins of social policy in the United States*. Belknap Press of Harvard University Press.
- Smith, D. M. (2008). Active Duty Military Personnel Presenting for Care at a Gay Men’s Health Clinic. *Journal of Homosexuality*, *54*(3), 277–279. <https://doi.org/10.1080/00918360801982173>
- Spade, D., & Belkin, A. (2021). Queer Militarism?! *GLQ: A Journal of Lesbian and Gay Studies*, *27*(2), 281–307. <https://doi.org/10.1215/10642684-8871705>

- Spence, N. J., Henderson, K. A., & Elder, G. H. (2013). Does Adolescent Family Structure Predict Military Enlistment? A Comparison of Post-High School Activities. *Journal of Family Issues*, *34*(9), 1194–1216. <https://doi.org/10.1177/0192513X12457347>
- Szymanski, D. M., & Mikorski, R. (2016). External and internalized heterosexism, meaning in life, and psychological distress. *Psychology of Sexual Orientation and Gender Diversity*, *3*(3), 265–274. <https://doi.org/10.1037/sgd0000182>
- Van Gilder, B. J. (2019). Femininity as Perceived Threat to Military Effectiveness: How Military Service Members Reinforce Hegemonic Masculinity in Talk. *Western Journal of Communication*, *83*(2), 151–171. <https://doi.org/10.1080/10570314.2018.1502892>
- Van Winkle, E., Williams, K., Hurley, M., Davis, L., Grifka, A., Severance, L., Klahr, A., Debus, J., Vega, R., Luchman, J., Khun, J., & Daniel, S. (2017). *2016 Workplace and Gender Relations Survey of Active Duty Members: Overview Report* (OPA Report No. 2016–050). Department of Defense: Office of People Analytics.
- Walker, D. D., Walton, T. O., Neighbors, C., Kaysen, D., Mbilinyi, L., Darnell, J., Rodriguez, L., & Roffman, R. A. (2017). Randomized trial of motivational interviewing plus feedback for soldiers with untreated alcohol abuse. *Journal of Consulting and Clinical Psychology*, *85*(2), 99–110. <https://doi.org/10.1037/ccp0000148>
- Wang, L., Elder, G. H., & Spence, N. J. (2012). Status Configurations, Military Service and Higher Education. *Social Forces*, *91*(2), 397–422. <https://doi.org/10.1093/sf/sos174>
- Whitworth, S. (2008). Militarized Masculinity and Post Traumatic Stress Disorder. In I. J. Parpart & M. Zalewski (Eds.), *Rethinking the Wo/man Question in International Relations* (pp. 109–126). Zed Books.
- Wilder, H., & Wilder, J. (2012). In the Wake of Don't Ask Don't Tell: Suicide Prevention and Outreach for LGB Service Members. *Military Psychology*, *24*(6), 624–642. <https://doi.org/10.1080/08995605.2012.737725>
- Wolf, E. J., Cruz, T. H., Emondi, A. A., Langhals, N. B., Naufel, S., Peng, G. C. Y., Schulz, B. W., & Wolfson, M. (2020). Advanced technologies for intuitive control and sensation of prosthetics. *Biomedical Engineering Letters*, *10*(1), 119–128. <https://doi.org/10.1007/s13534-019-00127-7>
- Wong, C. F., Schrage, S. M., Holloway, I. W., Meyer, I. H., & Kipke, M. D. (2014). Minority Stress Experiences and Psychological Well-Being: The Impact of Support from and Connection to Social Networks Within the Los Angeles House and Ball Communities. *Prevention Science*, *15*(1), 44–55. <https://doi.org/10.1007/s11121-012-0348-4>

- Zeeland, S. (1993). *Barrack buddies and soldier lovers: Dialogues with gay young men in the U.S. military*. Harrington Park Press.
- Zeeland, S. (1995). *Sailors and sexual identity: Crossing the line between "straight" and "gay" in the U.S. Navy*. Haworth Press.
- Zou, C., & Andersen, J. P. (2015). Comparing the Rates of Early Childhood Victimization across Sexual Orientations: Heterosexual, Lesbian, Gay, Bisexual, and Mostly Heterosexual. *PLoS ONE*, *10*(10). <https://doi.org/10.1371/journal.pone.0139198>

AN INITIAL INVESTIGATION OF MENTAL HEALTH, SUICIDALITY,
AND VICTIMIZATION AMONG ACTIVE-DUTY LESBIAN, GAY, AND BISEXUAL
SERVICE MEMBERS

Sexual minorities and active-duty military personnel are two populations that face elevated risks for adverse mental health outcomes, suicide, and trauma exposure. Lesbian, gay, and bisexual service members (LGB SMs) may therefore be at particularly high risk. However, the actual level of risk disparity is not known due to military policies that, until recently, prevented research into this community's needs. These policies, themselves, are likely to have contributed to adverse outcomes for LGB SMs (Hatzenbuehler, 2010).

For over two centuries, the US military denied sexual minorities the right to serve based on a variety of justifications such as same-sex behavior being criminalized as a deviant act, pathologized as an illness, classified as a threat to national security, and derided as a threat to heterosexuals' safety and unit cohesion (Berube, 2010; Shilts, 1994). Nevertheless, LGB SMs have always been a part of the US military force despite their statutory erasure. With this reality gaining public salience in the early 1990's, the divided federal government responded with legislation that came to be known as "Don't Ask, Don't Tell" (DADT), which allowed LGB SMs to serve but forbade them from openly disclosing their sexuality. The law also prohibited the military from directly inquiring about service members' sexual identities or behaviors (Borch, 2010; Goodhart & Taylor, 2020).

The provision of DADT that barred the military from asking about sexual orientation effectively prevented research into the health and well-being of LGB SMs. Consequently, for two decades following the policy's adoption, no empirical data were available to describe the experiences of LGB SMs. The repeal of DADT ended the

prohibition against data collection on sexuality, but little research has yet to be conducted. Given increased interest in the mental health needs of active-duty service members during the current period of protracted military conflict, the lack of attention to LGB SMs is notable.

A substantial body of research has identified critical mental health vulnerabilities within the larger active-duty population. Since 2009, mental health disorders have consistently ranked as the top cause of hospitalizations among active duty personnel, across all diagnostic categories (Armed Forces Health Surveillance Branch, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019). In a robust study of active-duty soldiers ($n = 5,428$), Kessler and colleagues (2014) found that 15% of their sample met diagnostic criteria for an internalizing disorder within the past 30 days. Compared to a calibrated civilian sample, soldiers showed a significantly greater prevalence of major depressive disorder (MDD; 4.8% vs. 0.9%), generalized anxiety disorder (GAD; 5.7% vs. 2.0%), and posttraumatic stress disorder (PTSD; 8.6% vs. 0.6%). Further, mental health disorders (Guerra & Calhoun, 2011; Jakupcak & Varra, 2011; LeardMann et al., 2013), as well as stressors associated with the deployment cycle (Black et al., 2011; Hyman et al., 2012; Lemaire & Graham, 2011; Reger et al., 2018) and specific combat exposures (Bryan et al., 2013; LeardMann et al., 2021; Mitchell et al., 2012; Selby et al., 2010) have been linked to suicidal ideation and behavior among service members, among whom suicide deaths have more than doubled since 2002 (Black et al., 2011; Tucker et al., 2019).

Exposure to traumatic events outside the war zone also contribute to adverse mental health outcomes. Military sexual trauma (MST) is another significant problem for Service members that is linked to PTSD, depression (Gilmore et al., 2016), and suicide (Kimerling et al., 2016). Estimated rates of MST are varied, often mirroring the

civilian population; however, certain aspects of military culture contribute to the prevalence of MST, such as a hyper-masculine social climate, high mobility, and historical positions of women in warfare (Castro et al., 2015). Exposure to such traumas and stigma against seeking support for managing their effects (Gibbons et al., 2014; Ramchand et al., 2015; Stahlman & Oetting, 2018) leave all service members at increased risk of adverse mental health outcomes.

As military personnel are at elevated risk compared to civilians, so too are LGB individuals compared to their heterosexual peers. Studies have consistently shown sexual minorities to have a higher prevalence of depression, GAD, PTSD, and suicidal behavior when compared to heterosexuals (Cochran et al., 2003; Institute of Medicine, 2011; Plöderl & Tremblay, 2015; Roberts et al., 2010, 2012). While the etiology of mental illness and suicide is complex for this population, the minority stress model (Meyer, 2003, 2007) provides a useful framework for understanding the effects of homophobic social-environmental factors on the mental and emotional well-being of sexual minorities. The model suggests that societal norms against homosexuality manifest as prejudice events, such as discrimination and violence. These events alone are significant stressors, but they also cause more chronic stressors, such as the expectation that prejudice events will occur and the need to conceal one's sexual identity to prevent their occurrence. These acute and chronic sources of stress, which result from anti-LGB social climates, negatively affect the mental health of LGB individuals.

The minority stress perspective also posits that “minority stress is additive to the general stressors that are experienced by all people” (Meyer, 2007, p. 243). In other words, the negative psychological effects of heterosexism on LGB SMs are layered on top of the mental health risks faced by all service members. With limited data on LGB SMs

due to DADT, we must rely on studies of LGB veterans to understand the unique effects of military service for sexual minorities. In a recent narrative review of studies on sexual minority individuals with military experience, Mark and colleagues (2019) concluded that this body of research provides evidence of poorer mental health and well-being among LGB veterans in comparison to both heterosexuals with military experience and sexual minorities without military experience. For example, Blosnich and colleagues (2015) found LGB veterans to have twice the likelihood of a psychiatric diagnosis compared to straight veterans (46.7% vs. 23.6%) as well as a significantly higher likelihood in comparison to LGB individuals without military experience (30.3%). Significant differences were also observed for suicidal behavior, with 12.5% of LGB veterans having made an attempt, compared to only 1.3% of straight veterans and 3.3% of LGB civilians.

There is strong empirical evidence and theoretical support to assume that many LGB SMs are struggling with mental health problems, yet there is a critical lack of research identifying the severity or scope of these likely problems. Only one study to date has obtained a representative sample sufficient to describe the LGB SM population. Administered shortly after the repeal of DADT, the 2015 wave of the triennial Department of Defense Health Related Behaviors Survey was the first of its kind to ask its respondents about their sexual orientation. The study's summary report compares the collective population of LGBT SMs to non-LGBT SMs, finding significantly worse outcomes on nearly all measures of mental and behavioral health, suicidality, and trauma exposure. Despite estimating that more than one in every 20 service members identifies as LGBT, the report concludes that "[a]lthough [LGBT] individuals are a small portion of the force, the disparities in their experiences, behaviors, and outcomes

warrant close attention and tracking by DoD so that their specific needs can be addressed” (Meadows et al., 2018, p. 220).

This report is an important first step toward answering the call for more research into the welfare of LGB SMs (Blosnich et al., 2015; Burks, 2011; Campbell et al., 2017; Ramirez et al., 2013), though more research is certainly needed. The present study conducts additional analyses with these data (2015 Department of Defense Health Related Behaviors Survey), to provide a more nuanced description of mental health and trauma exposure among subgroups of LGB SMs. By dividing the LGB SM population into subgroups based on gender and sexuality, the present study responds to the scholars who have recognized that these factors differentially affect exposure to, and experience of, sexual minority stress (Mark et al., 2019; McNamara et al., 2019). Through subgroup analyses, the present study describes the heterogeneous LGB SM population with respect to mental health, suicidality, and traumatic exposures. In so doing, it identifies the members of the population that have the highest levels of distress and the most urgent need for intervention.

Methods

Sample

The RAND National Defense Research Institute conducted the 2015 HRBS on behalf of DoD and provided a public use data file (PUDF) for the present study. The PUDF includes responses from 16,699 active-duty Service members from all service branches who completed an anonymous, web-based survey. The present study is restricted to the subset of respondents who answered the question pertaining to sexual

identity (n=14,405). To ensure statistical power for the subgroup analysis, original study investigators implemented a stratified sampling procedure based on service branch, pay grade, and gender. Having these known population parameters allowed investigators to assign a post-stratification weight to each case, enabling better inference of population parameters from sample statistics. A complete description of survey methods can be found in the 2015 HRBS final report (Meadows et al., 2018).

Measures

Gender and Sexuality. At the start of the survey, respondents were asked to self-identify as either male or female. At the end of the survey, sexual orientation was assessed with an item prompting, “Do you consider yourself to be...?” with response options of “Heterosexual or straight”, “Gay or lesbian”, or “Bisexual”. These two items were used to create a set of dummy variables representing *homosexual women*, *homosexual men*, *bisexual women*, *bisexual men*, *heterosexual women*, and *heterosexual men*. The survey did ask about transgender identity, however these data was excluded from the PUDF.

Mental Health. Standard, self-report measures of depression, anxiety, and PTSD were included in the 2015 HRBS, and study authors identified cut-scores for each to indicate probable diagnosis. The PHQ-9 (Kroenke et al., 2001) with a cut score of 15 indicates probable depression. The GAD-7 (Spitzer et al., 2006) with a cut score of 10 indicates probable generalized anxiety disorder, and the PCL (Bliese et al., 2008) with a cut score of 50 indicates probable PTSD.

Suicidality. The present study focuses on suicidal ideation and suicide attempts over one’s lifetime and since joining the military. The survey asked, “In your LIFETIME,

did you ever think about trying to kill yourself?” with response options of “Yes” or “No.” An affirmative response routed to a question asking, “Did you seriously think about trying to kill yourself during any of the following periods?”. “Since joining the military” was included in a list of relative timeframes, again with “Yes” or “No” response options. The next set of questions repeated this pattern replacing “...seriously think about trying to kill yourself?” with “...tried to kill yourself?”. These items were recoded to represent four binary outcomes representing *lifetime suicidal ideation* and *suicide attempt*, as well as *suicidal ideation* and *attempt while serving in the military*.

Unwanted Sexual Contact. *Lifetime experience of unwanted sexual contact* was assessed with the question: “In your lifetime, have you EVER experienced any sexual contact that was unwanted, against your will, or occurred when you did not or could not consent (for example, unwanted sexual touching or oral, anal, or vaginal penetration)?”. An affirmative response routed to the question, “When did the event(s) in the previous question occur? (That is, the unwanted sexual contact—for example, unwanted sexual touching or oral, anal, or vaginal penetration.)”. Responses included “While I was on Active military duty” and “While I was NOT on Active military duty”. The first item represents *lifetime exposure to unwanted sexual contact* and its follow-up was used to identify *unwanted sexual contact since joining the military*.

Physical Assault. The survey asked respondents, “Have you EVER been physically abused, punished, or beaten by a person in authority or having some power over you such that you received bruises, cuts, welts, lumps, or other injuries?” with three response options (1) “Yes, while I was on Active military duty”, (2) “Yes, while I was NOT on Active military duty”, or (3) “No, this has never happened to me”. Selection of either of the first two responses was recoded to represent *lifetime*

experience of physical assault outcome, while only the second response was used for the outcome of *physical assault since joining the military*.

Data Analysis

First, the sample was divided by gender. Then, logistic regressions predicting primary outcomes were run separately for the two groups with dummy-coded variables representing gay/lesbian service members and bisexual service members as predictors. Straight men and straight women were therefore the reference categories for the two separate sets of regression. As such, the resulting odds ratios (exponentiated regression coefficients) compared odds of each outcome for gay men in relation to that of straight men, for example. Logistic regressions were estimated using the ‘stats’ package from R version 4.0.2 (R Core Team, 2020), which allowed for the incorporation of poststratification case weights provided in the 2015 HRBS dataset (see, Meadows et al., 2018). Statistical significance was set at the 95% level of confidence. Finally, weighted prevalences of each outcome for the six gender/sexuality categories were also calculated by the ‘stats’ package (version 4.0.2; R Core Team, 2020)

Results

Sample

A description of the sample with respect to gender and sexuality is shown in Table 1. As the sample was stratified by gender, the unweighted sample includes a higher proportion of female service members, whereas the weighted sample is proportionate to the population parameter. Within the weighted sample, the percentage

for each LGB sub-group is relatively small, between one and two percent; however, the number of individuals is substantial thanks to the total sample size.

Unwanted Sexual Contact

Figures 1 and 2 show the weighted prevalence of all outcome variables for women and men, respectively. Prior to active-duty service, lesbian and straight women were found to have roughly the same prevalence of unwanted sexual contact (29.1% v. 30.5%, respectively), while the logistic regression estimates presented in Table 2 show that bisexual women had nearly twice the odds of exposure to unwanted sexual contact prior to service ($p < .001$). A similar pattern persists while serving on active duty, with one in three bisexual women experiencing unwanted sexual contact – double the odds of exposure compared to straight women ($p < .001$). Both gay and bisexual men were found to have significantly greater odds of unwanted sexual contact prior to military service compared to straight men (ORs = 2.85 & 2.30, respectively; $ps < .001$). Once serving in the military, the odds are 6-fold higher for gay men ($p < .001$) and 5-fold for bisexual men ($p < .001$), compared to straight men.

Physical Assault

With regard to physical assault prior to, and during, military service were largely similar for women, regardless of sexual orientation. Prevalence for lesbian women was

Table 1

Sample composition by gender and sexuality

	n (%)	
	Weighted	Unweighted
Women		
Straight	1,776 (12.80)	4,786 (33.22)
Bisexual	193 (1.39)	312 (2.17)
Lesbian	148 (1.07)	312 (2.17)
Men		
Straight	11,292 (81.41)	8,756 (60.78)
Bisexual	237 (1.71)	127 (0.88)
Gay	225 (1.62)	112 (0.78)

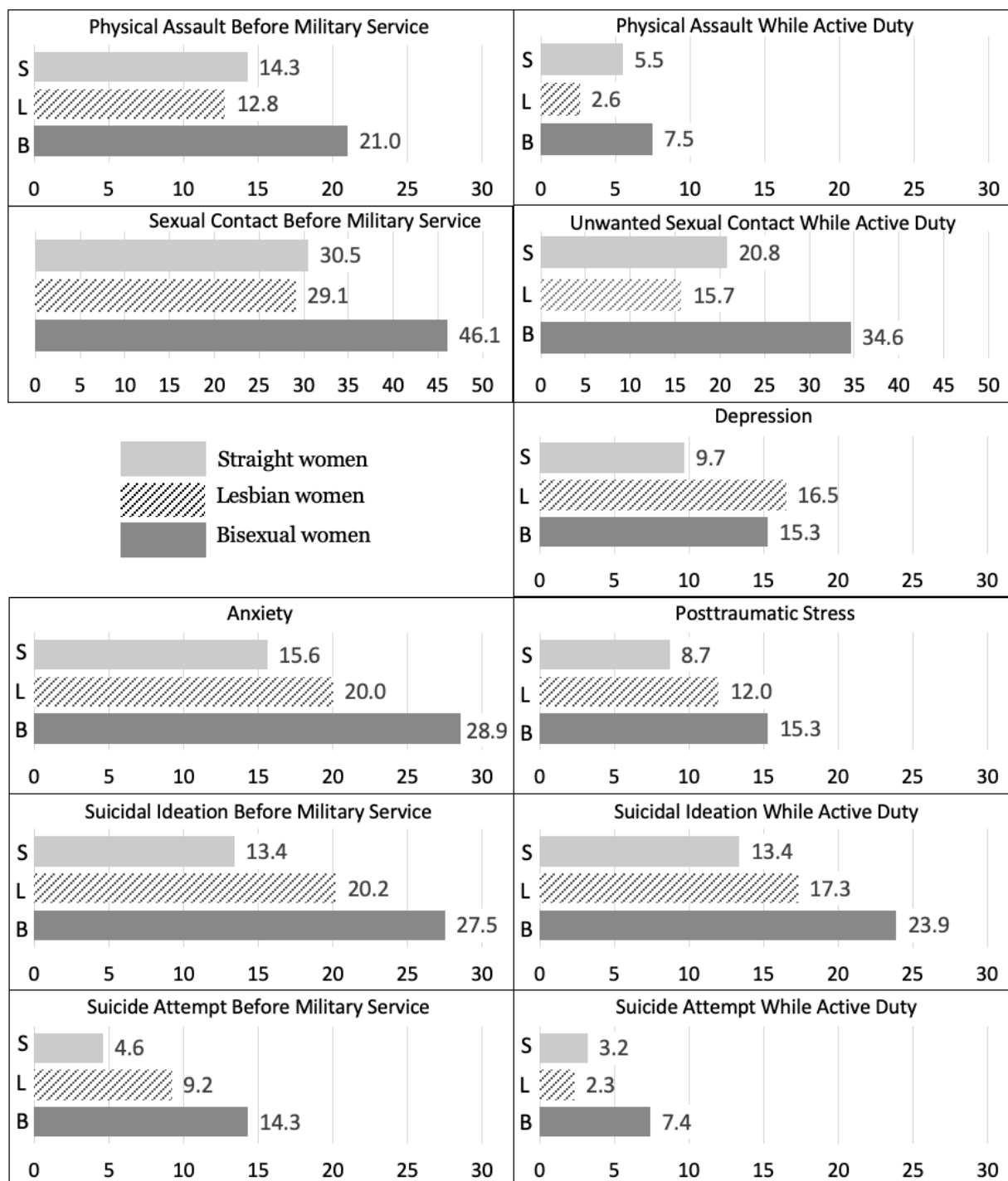
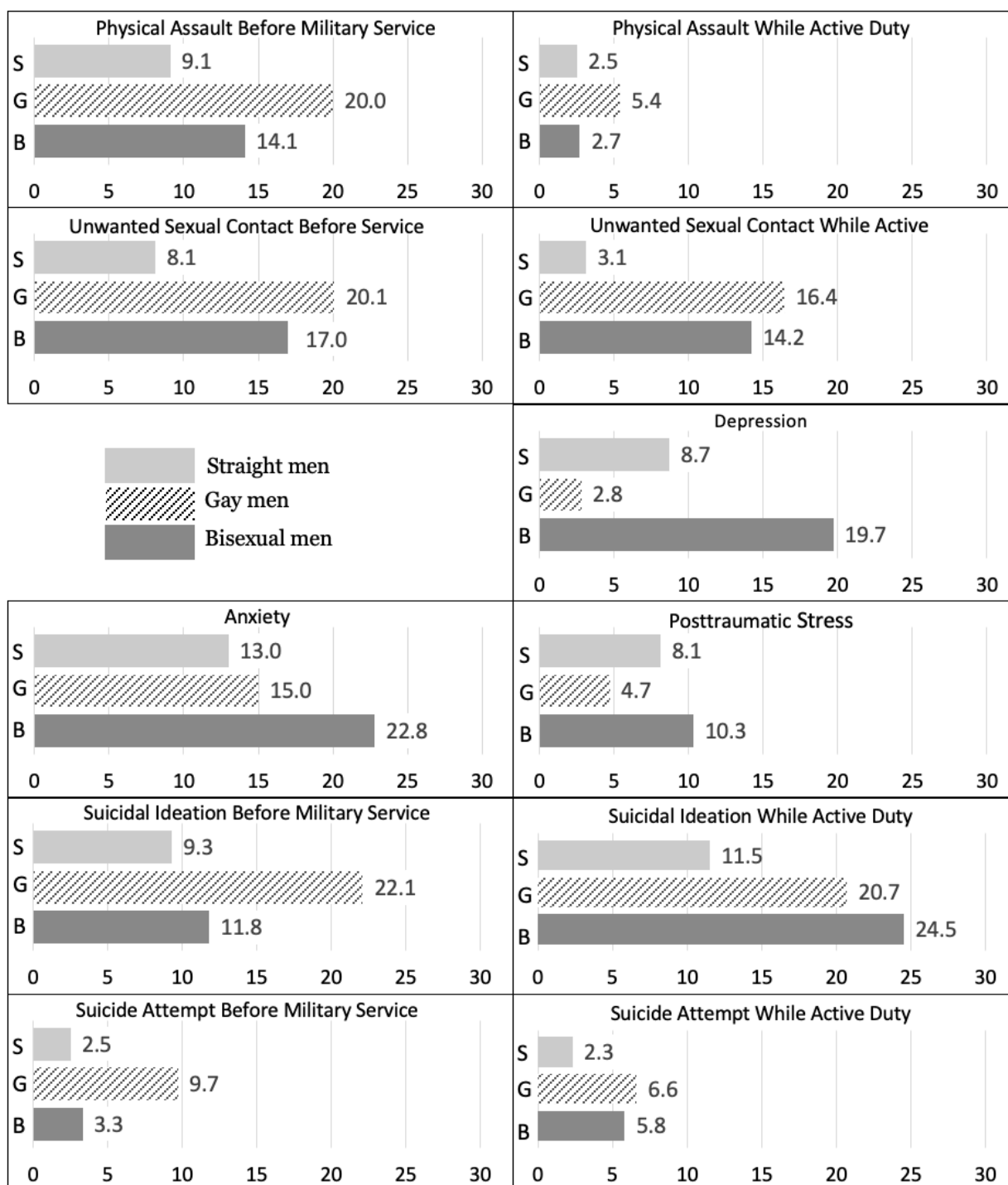
Figure 1*Weighted prevalence of outcomes among female service members by sexual identity*

Figure 2

Weighted prevalence of outcomes among male service members by sexual identity



lower than that of straight women, though not statistically significant. However, for bisexual women, the odds of exposure to physical assault prior to military service were estimated to be 1.6 ($p = .014$) times greater than odds of exposure for straight women. Conversely, gay and bisexual men generally experienced physical assault more prevalently. For gay men, prevalence of exposure was double that of straight men, both before and during active-duty service – a statistically significant increase in odds ($p < .001$ & $p = .006$, respectively). Before and during service, prevalence was lower among bisexual men compared to gay men, yet higher than that of straight men, though the difference was only statistically significant for odds of exposure prior to service ($p = .009$). Overall, prevalence during service was substantially lower than prior to service for all gender and sexuality groups.

Table 2

Odds ratios comparing prevalences among sexual minority men and women to prevalences among straight men and women, respectively

	Men				Women			
	Gay		Bisexual		Lesbian		Bisexual	
	OR	[95% CI]	OR	[95% CI]	OR	[95% CI]	OR	[95% CI]
Unwanted Sexual Contact								
Before Service	2.85	[2.02-3.93]	2.30	[1.61-3.22]	0.94	[0.64-1.35]	1.95	[1.44-2.63]
While Serving	6.10	[4.16-8.71]	5.14	[3.46-7.41]	0.71	[0.44-1.10]	2.01	[1.46-2.75]
Before Service								
While Serving	2.49	[1.77-3.45]	1.64	[1.11-2.34]	0.88	[0.52-1.42]	1.59	[1.09-2.29]
Before Service	2.27	[1.19-3.92]	1.10	[0.45-2.24]	0.45	[0.13-1.12]	1.39	[0.75-2.40]
Mental Health								
Depression	0.30	[0.12-0.62]	2.58	[1.84-3.54]	1.84	[1.37-2.88]	1.69	[1.09-2.54]
Anxiety	1.18	[0.80-1.68]	1.97	[1.43-2.66]	1.35	[0.87-2.04]	2.20	[1.56-3.06]
PTSD	0.56	[0.28-0.99]	1.30	[0.83-1.95]	1.43	[0.83-2.36]	1.89	[1.21-2.85]
Suicidal Ideation								
Before Service	2.76	[1.98-3.77]	1.30	[0.85-1.90]	1.64	[1.06-2.48]	2.46	[1.73-3.46]
While Serving	2.01	[1.43-2.76]	2.51	[1.84-3.37]	1.35	[0.84-2.07]	2.03	[1.41-2.88]
Suicide Attempt								
Before Service	4.20	[2.59-6.49]	1.34	[0.60-2.57]	2.13	[1.12-3.77]	3.50	[2.18-5.48]
While Serving	2.97	[1.66-4.92]	2.60	[1.42-4.37]	0.70	[0.18-1.83]	2.39	[1.27-4.24]

Bold indicates significant difference from referent group ($p < .05$).

Referent group for men is straight men. Referent group for women is straight women.

Mental Health

Women. On all measures of mental health, lesbian and bisexual women were found to have greater prevalence than their straight female peers. For lesbian women, the odds of screening positive for depressions were 1.8 times higher ($p = .010$) compared to straight women, but no significant difference was detected for anxiety or PTSD. Bisexual women, on the other hand, had significantly greater odds of screening positive for all three disorders – depression (OR = 1.69, $p = .015$), anxiety (OR = 2.20, $p < .001$), and PTSD (OR = 1.89, $p = .003$) – compared to straight women.

Men. Bisexual male service members were found to have prevalences of mental health disorders similar to their sexual minority female colleagues. Prevalence of depression was the greatest disparity, when compared to straight men (19.7% vs. 8.7%, OR = 2.58, $p < .001$). For bisexual men, odds of screening positive for anxiety were nearly double that of straight men ($p < .001$), while no significant difference was detected for PTSD screens.

Mental health among gay men was the only instance in which outcomes were more favorable for a sexual minority group compared to their heterosexual counterparts. With half the prevalence of PTSD compared to bisexual men, gay men were also found to have lower prevalence than straight men (4.7% vs. 8.1%, OR = 0.56, $p = .050$). The greatest difference was observed in prevalence of depression, with only 2.8% of gay men screening positive compared to 8.7% of straight men (OR = 0.30, $p = .003$). While anxiety was found to be slightly more prevalent among gay, compared to straight men, no statistical difference was found.

Suicidality

Women. Suicidal ideation and attempt were more prevalent for lesbian, compared to straight women, prior to military service, but not during. Before joining the military, prevalence of suicidal ideation was roughly 50% higher for lesbian women (13.4% vs. 20.2%, OR = 1.64, $p = .022$), and prevalence of a suicide attempt was double (4.6% vs. 9.2%, OR = 2.13, $p = .013$). Once serving on active-duty prevalence of suicidal ideation remained slightly higher for lesbian women but was no longer statistically significant, while their prevalence of suicide attempts was found to be slightly than that of straight women, though no statistical difference was detected.

Suicidality among bisexual women was, in contrast, substantially elevated before and during military service. One in four bisexual women had thoughts of suicide prior to military service – double the prevalence among straight women (OR = 2.46, $p < .001$). One in seven had made a suicide attempt during that time, which three times the prevalence among straight women (OR = 3.50, $p < .001$). Prevalence of suicidal ideation and attempt is lower for bisexual women during their military service, as it is for all women, yet they remain significantly greater than the prevalence among straight women. Suicidal ideation while serving was experienced by 23.9% of bisexual women and 13.4% of straight women (OR = 2.46, $p < .001$), whereas 7.4% of bisexual women and only 3.2% of straight women attempted suicide while serving (OR = 2.39, $p = .004$).

Men. Prior to military service, the proportion of gay men who had considered suicide (22.1%) was double that of both bisexual (11.8%) and straight men (9.3%), the latter of which regression analyses showed to be a significant difference (OR = 2.76, $p < .001$). Suicide attempts prior to service were found to be approximately three times higher for gay men (9.7%), compared to bisexual (3.3%) and straight men (2.5%, OR =

4.20, $p < .001$). While serving on active duty, prevalence of suicidal ideation remained roughly the same as they were before service for gay and straight men – a difference that was again statistically significant (OR = 2.01, $p < .001$). For bisexual men, however, suicidal ideation became much more prevalent during active-duty service (24.5%), higher than prevalence among gay and straight men (OR = 2.51, $p < .001$). Suicide attempt prevalence during active-duty service remained low for straight men (2.3%) and decreased slightly for gay men (6.6%), though still significantly higher than among straight men (OR = 2.97, $p < .001$). Conversely, prevalence of suicide attempt increased from before to during military service for bisexual men whose odds are 2.60 times higher than those of straight men ($p = .008$).

Discussion

Since the repeal of “Don’t Ask, Don’t Tell,” which allowed LGB individuals to openly serve in the military and permitted research into their well-being, few studies have examined this heretofore silenced population. The present study builds on the little research that does exist showing LGB SMs to have a significantly more adverse mental and behavioral health outcomes than their straight peers (Meadows et al., 2018) by examining specifically which members of the population are experiencing the most distress. Results showed that bisexual service members have the highest overall prevalence of mental health disorders, suicidal ideation, and suicidal behavior while serving in the military. More specifically, bisexual women have the highest likelihood of these adverse outcomes compared to any other groups. Conversely, lesbian women were not found to be significantly different from their straight female peers on most

outcomes, at least while serving on active duty. Most surprisingly, gay male service members were found to have the lowest overall prevalence of adverse mental health, yet their prevalence of suicidality was high, as were their exposures to physical assault and unwanted sexual contact.

Bisexual Service Members

The observed disparity in adverse mental health outcomes for bisexual service members is consistent with findings from studies of civilian LGB subgroups (Plöderl & Tremblay, 2015; Ross et al., 2018; Taylor, 2018). As the minority stress model explains (Meyer, 2003), discrimination against homosexuality imposes a unique set of stressors on lesbian and gay men and women that is added to the everyday stressors experienced by everyone. This surplus stress then harms mental health. Bisexual individuals experience yet an additional level of stress as a particularly stigmatized component of the LGB population. At times, characterized as hypersexual (Callis, 2013) and, at other times, erased based on the too common assumption that bisexuality is only a phase or a state of confusion (Flanders et al., 2016; Gonzalez et al., 2017; Ross et al., 2018). These stigmatizing discourses are not only perpetuated by heterosexuals, but lesbian and gay men, as well (Erickson-Schroth & Mitchell, 2009; T. Roberts et al., 2015). As such, bisexual men and women must endure both homophobia as well as biphobia, and bisexual service members must do so in a heteronormative social context that demands conformity. As Brewster and colleagues wrote, bisexual individuals are often “navigating the borderlands” between both heteronormative and homonormative social pressures, finding it difficult to be understood and form community within either straight or

gay/lesbian social groups, limiting access to the buffering effects of social support (Balsam & Mohr, 2007; Callis, 2013).

The disparity of poor mental health and suicidality among bisexual women, in particular, is an important finding of this study. Exposure to physical assault and unwanted sexual contact may partially account for some of this excess distress. Prevalence of both physical assault and unwanted sexual contact prior to military service were 50% greater for bisexual, compared to straight, women. Fortunately, exposure to physical assault is substantially less prevalent for all groups while on active duty, yet prevalence remained highest among bisexual women. Findings also highlight the fact that bisexual women are much more likely to be targets of unwanted sexual contact than all other groups. These results clearly identify bisexual female service members as the most vulnerable subgroup of the LGB SM population and the most in need of supportive interventions.

Gay and Lesbian Service Members

In contrast to bisexual women who were found to have significantly higher prevalence of all but one adverse outcome, lesbian women were significantly different from straight women on only one outcome relevant to military service. While statistically similar to straight women on suicidality and traumatic exposure outcomes (before and during military service), reductions in prevalences of these outcomes from before to during service were most dramatic for lesbian women. For example, prevalence of suicide attempts dropped from 4.6% to 3.2% for straight women and from 9.2% to just 2.3% for lesbian women. Prevalence of exposure to unwanted sexual contact dropped by a third for straight women and by half for lesbian women from before to

during military service. Certainly, the topic requires additional research, but this study suggests the military may have some protective benefits for lesbian women. Whereas bisexual women may find it difficult to obtain social support, it may be the case that lesbian service members have been more successful at building community. Women comprised a small proportion of the active-duty population – 15.5% the year these data were collected (Department of Defense, 2016) – and lesbian women comprised a relatively large proportion of the female active-duty population – 7.0% (Meadows et al., 2018). With one in fifteen members of the small population of military women identifying as lesbian, it may simply be easier for them to find one another and build community.

Unlike lesbian women who differed little from straight women, gay men were significantly different from straight men on most outcomes. Gay men were found to have the lowest prevalence of depression and anxiety compared to all other groups – significantly lower than their male peers. This is surprising for two reasons. First, as discussed, minority stress theory (Hatzenbuehler, 2010; Meyer, 2003, 2007) suggests that sexual minority men existing in an environment characterized by conformity to hetero-masculine social norms (Caddick et al., 2015; Fox & Pease, 2012; Hinojosa, 2010; Van Gilder, 2019), such as the military, would experience a surplus of discriminatory stressors that negatively affect mental health. Yet, gay men were found to be the least likely group to struggle with depression or PTSD. Second, their low prevalence of depression is surprising in light of their high prevalence of suicidality, and similarly, low prevalence of PTSD is surprising in light of high frequency of exposure to physical assault and unwanted sexual contact. It is possible that homosexual male service members have enjoyed greater inclusion in the military community following the repeal

of DADT, whereas other members of the LGB SM population have continued to face marginalization, due largely to stigma against bisexual identity. A burgeoning sense of community may buffer mental health against the negative effects of traumatic exposures, but the question of high suicidality remains.

These findings surely point to a need for ongoing research into the welfare of gay men in the military.

Future Research

As only an initial investigation into the wellbeing of LGB SMs, the present research indicates manifold directions for future research. First, certain primary outcomes should receive increased research attention. For example, the divergence of outcomes between lesbian and bisexual women is prominent and an important topic of future research. How do these groups differ with respect to social support, comfort with sexual identity disclosure, and perceived safety in the military environment. The findings around gay men's relatively positive mental health are surprising, and require confirmation through replicated research. If supported, these findings indicate a need for in-depth qualitative study to develop new theory, or advance existing theory, to understand what is driving this counter-intuitive phenomenon.

Secondary implications of findings are also fertile grounds for future research. Because disclosure of LGB identity was forbidden, even within clinical settings, for so long, mental health providers who were trained in military settings have important military-specific knowledge but lack experience with LGB-specific concerns (Rerucha et al., 2018; Tong et al., 2013). In the past decade of LGB inclusion, clinicians may have been developing needed skills, but LGB cultural competence deserves to be evaluated.

Of particular importance is assessing and building competence around bisexual experiences. Due to the common monosexist belief in binary sexuality – often referred to as “bi-erasure” (Yoshino, 2000) – training on sexual minority cultural competency may overlook the specific needs of bisexual clients (MacKay et al., 2017; Spengler et al., 2016). Another secondary implication is to study how conceptualizations of masculinity may differ across generational groups, specifically with respect to the prominence and acceptability of homophobic and biphobic discourses. With over half the enlisted force aged 25 years or younger (Department of Defense, 2016, 2018, 2019, 2020), generational shifts toward more inclusive masculinity formations are likely to affect military climate (Anderson, 2018; Anderson & McCormack, Mark, 2018; Hammack et al., 2018; McCormack & Anderson, 2014).

Finally, beyond specific topics, the present research also implies specific methodologies. As a nascent field of inquiry, studies of active-duty LGB SMs that take both qualitative and quantitative approaches will be generative. Large-sample, longitudinal, and epidemiological research is needed to measure trends over time and to begin establishing datasets from which causal inferences may be drawn. At the same time, qualitative phenomenological research is needed to contextualize those findings. It will also be important for the military to use its substantial resources and ready access to the active-duty force and continue collecting data on LGB and transgender identity. The military may buttress the reliability of its findings if it allows unaffiliated civilian researchers to independently analyze the data it collects. Important limitations affecting the present research may be addressed with relatively minor adjustments to the military’s future data collection efforts.

Limitations

This study has several limitations that future research should address. Foremost is the inability to include transgender Service members in analysis. Importantly, the 2015 HRBS did ask respondents about trans-identity, so data is currently available for analysis, but more work will need to be done with the survey's original investigators to address their concerns about releasing this data. Methodological problems with the original survey, such as participant non-response, are another important limitation of the present analysis. Most impactful is the high percentage (15.5%) of respondents who did not answer the question about sexuality. While this may be the result of bias against such a question, it may also be attributable to survey construction and respondent fatigue. The 127th of 133 items, the question on sexuality was part of a consistent trend in declining responses toward the end of the survey, with each subsequent question, which were about the less stigmatized topic of sleep, having greater non-response than the one prior. Future waves of the HRBS will better serve LGB SMs by including questions about sexuality at the start of the survey with its other demographic indicators.

Implications for Intervention

This study highlights the need for policy changes and intervention strategies to support LGB SMs. From a macro-perspective, the military may support gender and sexual diversity by striving to shift the discourses of the warrior ethos away from its reliance on tropes of hypermasculinity to define and enforce military identity. As Caddick and colleagues have explained (2015), military masculinities are fluid and can be reconstructed in ways that benefit mental health and wellbeing without – supporting the development of men, not simply warriors. As scholarship on mental health

interventions in the United Kingdom's military have shown, precedents set by leaders have substantial influence over climate and establishing norms (Jones et al., 2012; Lawrence et al., 2021). As such, high-level mandates to interrupt instances of sexuality-based discrimination or hostility would be an important starting point for a cultural shift in discourses of masculinity.

Developing programs to build community among LGB SMs could have multiple benefits. First, the benefits of social support for those who engage in such programs may buffer adverse outcomes. Such programs and the communities they foster could increase visibility of LGB SMs and begin to erode sexuality-based prejudices in the larger military community. They would also be a location for reaching LGB SMs to disseminate resources around mental health, suicide prevention, and support for victims of abuse. Similarly, a more cohesive and "out" LGB SM community would improve researchers' ability to reach the population and continue the important work of studying its unique experiences and needs. Lastly, the potential gap in mental health clinician's experience with lesbian, gay, and particularly bisexual service members should be addressed. To do so, the military may wish to partner with the Department of Veterans Affairs, where substantial investment has already been made to insure equitable inclusion of lesbian, gay, and bisexual men and women who have served in the US military (e.g., Johnson & Federman, 2014; Lange et al., 2020; Sharpe & Uchendu, 2014; Shipherd, Darling, et al., 2018; Shipherd, Ruben, et al., 2018).

Works Cited

- Anderson, E. (2018). Generational masculinities. *Journal of Gender Studies*, 27(3), 243–247. <https://doi.org/10.1080/09589236.2017.1406088>
- Anderson, E., & McCormack, Mark. (2018). Inclusive Masculinity Theory: Overview, reflection and refinement. *Journal of Gender Studies*, 27(5), 547–561. <https://doi.org/10.1080/09589236.2016.1245605>
- Armed Forces Health Surveillance Branch. (2012). Annual Summary Issue. *Medical Surveillance Monthly Report*, 19(4).
- Armed Forces Health Surveillance Branch. (2013). Annual Summary Issue. *Medical Surveillance Monthly Report*, 20(4).
- Armed Forces Health Surveillance Branch. (2014). Annual Summary Report. *Medical Surveillance Monthly Report*, 21(4).
- Armed Forces Health Surveillance Branch. (2015). Annual Summary Issue. *Medical Surveillance Monthly Report*, 22(4), 36.
- Armed Forces Health Surveillance Branch. (2016). Annual Summary Issue. *Medical Surveillance Monthly Report*, 23(4).
- Armed Forces Health Surveillance Branch. (2017). Annual Summary Issue. *Medical Surveillance Monthly Report*, 24(4).
- Armed Forces Health Surveillance Branch. (2018). Annual Summary Issue. *Medical Surveillance Monthly Report*, 25(5), 76.
- Armed Forces Health Surveillance Branch. (2019). Annual Summary Issue. *Medical Surveillance Monthly Report*, 26(5), 52.
- Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, 54(3), 306–319. <https://doi.org/10.1037/0022-0167.54.3.306>
- Berube, A. (2010). *Coming out under fire: The history of gay men and women in World War II*. University of North Carolina Press.
- Black, S. A., Gallaway, M. S., Bell, M. R., & Ritchie, E. C. (2011). Prevalence and Risk Factors Associated With Suicides of Army Soldiers 2001–2009. *Military Psychology*, 23(4), 433–451. <https://doi.org/10.1080/08995605.2011.590409>

- Bliese, P. D., Wright, K. M., Adler, A. B., Cabrera, O., Castro, C. A., & Hoge, C. W. (2008). Validating the Primary Care Posttraumatic Stress Disorder Screen and the Posttraumatic Stress Disorder Checklist with soldiers returning from combat. *Journal of Consulting and Clinical Psychology, 76*(2), 272–281. <https://doi.org/10.1037/0022-006X.76.2.272>
- Blosnich, J. R., Gordon, A. J., & Fine, M. J. (2015). Associations of sexual and gender minority status with health indicators, health risk factors, and social stressors in a national sample of young adults with military experience. *Annals of Epidemiology, 25*(9), 661–667. <https://doi.org/10.1016/j.annepidem.2015.06.001>
- Borch, F. (2010). The History of “Don’t Ask, Don’t Tell” in the Army: How We Got to it and Why It Is What It Is. *Military Law Review, 203*, 189–206.
- Bryan, C. J., Hernandez, A. M., Allison, S., & Clemans, T. (2013). Combat Exposure and Suicide Risk in Two Samples of Military Personnel: Combat Exposure and Suicidality. *Journal of Clinical Psychology, 69*(1), 64–77. <https://doi.org/10.1002/jclp.21932>
- Burks, D. J. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of “Don’t Ask, Don’t Tell”? *American Psychologist, 66*(7), 604–613. <https://doi.org/10.1037/a0024609>
- Caddick, N., Smith, B., & Phoenix, C. (2015). Male combat veterans’ narratives of PTSD, masculinity, and health. *Sociology of Health & Illness, 37*(1), 97–111. <https://doi.org/10.1111/1467-9566.12183>
- Callis, A. S. (2013). The Black Sheep of the Pink Flock: Labels, Stigma, and Bisexual Identity. *Journal of Bisexuality, 13*(1), 82–105. <https://doi.org/10.1080/15299716.2013.755730>
- Campbell, W. R., Jahan, M., Bavaro, M. F., & Carpenter, R. J. (2017). Primary Care of Men Who Have Sex With Men in the U.S. Military in the Post-Don’t Ask, Don’t Tell Era: A Review of Recent Progress, Health Needs, and Challenges. *Military Medicine, 182*(3), e1603–e1611. <https://doi.org/10.7205/MILMED-D-16-00255>
- Castro, C. A., Kintzle, S., Schuyler, A. C., Lucas, C. L., & Warner, C. H. (2015). Sexual Assault in the Military. *Current Psychiatry Reports, 17*(7). <https://doi.org/10.1007/s11920-015-0596-7>
- Cochran, S. D., Sullivan, J. G., & Mays, V. M. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology, 71*(1), 53–61. <https://doi.org/10.1037/0022-006X.71.1.53>

- Department of Defense. (2016). *2015 Demographics Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2015-Demographics-Report.pdf>
- Department of Defense. (2018). *2017 Demographics: Profile of the Military Community*. Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy. <http://download.militaryonesource.mil/12038/MOS/Reports/2017-demographics-report.pdf>
- Department of Defense. (2019). *2018 Demographics: Profile of the Military Community*. <http://download.militaryonesource.mil/12038/MOS/Reports/2018-demographics-report.pdf>
- Department of Defense. (2020). *2019 Demographics: Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2019-demographics-report.pdf>
- Erickson-Schroth, L., & Mitchell, J. (2009). Queering Queer Theory, or Why Bisexuality Matters. *Journal of Bisexuality*, 9(3–4), 297–315. <https://doi.org/10.1080/15299710903316596>
- Flanders, C. E., Robinson, M., Legge, M. M., & Tarasoff, L. A. (2016). Negative identity experiences of bisexual and other non-monosexual people: A qualitative report. *Journal of Gay & Lesbian Mental Health*, 20(2), 152–172. <https://doi.org/10.1080/19359705.2015.1108257>
- Fox, J., & Pease, B. (2012). Military Deployment, Masculinity and Trauma: Reviewing the Connections. *The Journal of Men's Studies*, 20(1), 16–31. <https://doi.org/10.3149/jms.2001.16>
- Gibbons, S. W., Migliore, L., Convoy, S. P., Greiner, S., & DeLeon, P. H. (2014). Military Mental Health Stigma Challenges: Policy and Practice Considerations. *The Journal for Nurse Practitioners*, 10(6), 365–372. <https://doi.org/10.1016/j.nurpra.2014.03.021>
- Gilmore, A. K., Brignone, E., Painter, J. M., Lehavot, K., Fargo, J., Suo, Y., Simpson, T., Carter, M. E., Blais, R. K., & Gundlapalli, A. V. (2016). Military Sexual Trauma and Co-occurring Posttraumatic Stress Disorder, Depressive Disorders, and Substance Use Disorders among Returning Afghanistan and Iraq Veterans. *Women's Health Issues*, 26(5), 546–554. <https://doi.org/10.1016/j.whi.2016.07.001>
- Gonzalez, K. A., Ramirez, J. L., & Galupo, M. P. (2017). “I was and still am”: Narratives of Bisexual Marking in the #StillBisexual Campaign. *Sexuality & Culture*, 21(2), 493–515. <https://doi.org/10.1007/s12119-016-9401-y>

- Goodhart, A., & Taylor, J. K. (2020). LGBT Military Service Policies in the United States. In A. Goodhart & J. K. Taylor, *Oxford Research Encyclopedia of Politics*. Oxford University Press.
<https://doi.org/10.1093/acrefore/9780190228637.013.1289>
- Guerra, V. S., & Calhoun, P. S. (2011). Examining the relation between posttraumatic stress disorder and suicidal ideation in an OEF/OIF veteran sample. *Journal of Anxiety Disorders*, 25(1), 12–18. <https://doi.org/10.1016/j.janxdis.2010.06.025>
- Hammack, P. L., Frost, D. M., Meyer, I. H., & Pletta, D. (2018). Gay Men's Health and Identity: Social Change and the Life Course. *Archives of Sexual Behavior*, 47(1), 59–74. <https://doi.org/10.1007/s10508-017-0990-9>
- Hatzenbuehler, M. L. (2010). Social Factors as Determinants of Mental Health Disparities in LGB Populations: Implications for Public Policy: Social Factors as Determinants of Mental Health. *Social Issues and Policy Review*, 4(1), 31–62. <https://doi.org/10.1111/j.1751-2409.2010.01017.x>
- Hinojosa, R. (2010). Doing Hegemony: Military, Men, and Constructing a Hegemonic Masculinity. *The Journal of Men's Studies*, 18(2), 179–194. <https://doi.org/10.3149/jms.1802.179>
- Hyman, J., Ireland, R., Frost, L., & Cottrell, L. (2012). Suicide Incidence and Risk Factors in an Active Duty US Military Population. *American Journal of Public Health*, 102(Suppl 1), S138–S146. <https://doi.org/10.2105/AJPH.2011.300484>
- Institute of Medicine. (2011). *The Health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. The National Academies Press. <https://doi.org/10.17226/13128>
- Jakupcak, M., & Varra, E. M. (2011). Treating Iraq and Afghanistan War Veterans With PTSD Who Are at High Risk for Suicide. *Cognitive and Behavioral Practice*, 18(1), 85–97. <https://doi.org/10.1016/j.cbpra.2009.08.007>
- Johnson, L., & Federman, E. J. (2014). Training, experience, and attitudes of VA psychologists regarding LGBT issues: Relation to practice and competence. *Psychology of Sexual Orientation and Gender Diversity*, 1(1), 10–18. <https://doi.org/10.1037/sgd0000019>
- Jones, N., Seddon, R., Fear, N. T., McAllister, P., Wessely, S., & Greenberg, N. (2012). Leadership, Cohesion, Morale, and the Mental Health of UK Armed Forces in Afghanistan. *Psychiatry: Interpersonal and Biological Processes*, 75(1), 49–59. <https://doi.org/10.1521/psyc.2012.75.1.49>

- Kessler, R. C., Heeringa, S. G., Stein, M. B., Colpe, L. J., Fullerton, C. S., Hwang, I., Naifeh, J. A., Nock, M. K., Petukhova, M., Sampson, N. A., Schoenbaum, M., Zaslavsky, A. M., & Ursano, R. J. (2014). Thirty-Day Prevalence of DSM-IV Mental Disorders Among Nondeployed Soldiers in the US Army: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry*, *71*(5), 504. <https://doi.org/10.1001/jamapsychiatry.2014.28>
- Kimerling, R., Makin-Byrd, K., Louzon, S., Ignacio, R. V., & McCarthy, J. F. (2016). Military Sexual Trauma and Suicide Mortality. *American Journal of Preventive Medicine*, *50*(6), 684–691. <https://doi.org/10.1016/j.amepre.2015.10.019>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, *16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lange, T. M., Hilgeman, M. M., Portz, K. J., Intoccia, V. A., & Cramer, R. J. (2020). Pride in all Who Served: Development, Feasibility, and Initial Efficacy of a Health Education Group For LGBT Veterans. *Journal of Trauma & Dissociation*, *21*(4), 484–504. <https://doi.org/10.1080/15299732.2020.1770147>
- Lawrence, E. G., Jones, N., Greenberg, N., Fear, N. T., Wessely, S., Michael, G., Taylor-Beirne, S., & Simms, A. (2021). Mental well-being interventions in the military: The ten key principles. *BMJ Military Health*, bmjmilitary-2020-001740. <https://doi.org/10.1136/bmjilitary-2020-001740>
- LeardMann, C. A., Matsuno, R. K., Boyko, E. J., Powell, T. M., Reger, M. A., Hoge, C. W., & Millennium Cohort Study. (2021). Association of Combat Experiences With Suicide Attempts Among Active-Duty US Service Members. *JAMA Network Open*, *4*(2), e2036065. <https://doi.org/10.1001/jamanetworkopen.2020.36065>
- LeardMann, C. A., Powell, T. M., Smith, T. C., Bell, M. R., Smith, B., Boyko, E. J., Hooper, T. I., Gackstetter, G. D., Ghamsary, M., & Hoge, C. W. (2013). Risk Factors Associated With Suicide in Current and Former US Military Personnel. *JAMA*, *310*(5), 496. <https://doi.org/10.1001/jama.2013.65164>
- Lemaire, C. M., & Graham, D. P. (2011). Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of Affective Disorders*, *130*(1–2), 231–238. <https://doi.org/10.1016/j.jad.2010.10.021>
- MacKay, J., Robinson, M., Pinder, S., & Ross, L. E. (2017). A grounded theory of bisexual individuals' experiences of help seeking. *American Journal of Orthopsychiatry*, *87*(1), 52–61. <https://doi.org/10.1037/ort0000184>

- Mark, K. M., McNamara, K. A., Gribble, R., Rhead, R., Sharp, M.-L., Stevelink, S. A. M., Schwartz, A., Castro, C., & Fear, N. T. (2019). The health and well-being of LGBTQ serving and ex-serving personnel: A narrative review. *International Review of Psychiatry*, *31*(1), 75–94. <https://doi.org/10.1080/09540261.2019.1575190>
- McCormack, M., & Anderson, E. (2014). The Influence of Declining Homophobia on Men's Gender in the United States: An Argument for the Study of Homophobia. *Sex Roles*, *71*(3–4), 109–120. <https://doi.org/10.1007/s11199-014-0358-8>
- McNamara, K. A., Lucas, C. L., Goldbach, J. T., Kintzle, S., & Castro, C. A. (2019). Mental health of the bisexual Veteran. *Military Psychology*, *31*(2), 91–99. <https://doi.org/10.1080/08995605.2018.1541393>
- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). *2015 Department of Defense Health Related Behaviors Survey (HRBS)*. RAND Corporation. <https://doi.org/10.7249/RR1695>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H. (2007). Prejudice and Discrimination as Social Stressors. In I. H. Meyer & M. E. Northridge (Eds.), *The Health of Sexual Minorities* (pp. 242–267). Springer US. https://doi.org/10.1007/978-0-387-31334-4_10
- Mitchell, M. M., Gallaway, M. S., Millikan, A. M., & Bell, M. (2012). Interaction of Combat Exposure and Unit Cohesion in Predicting Suicide-Related Ideation Among Post-Deployment Soldiers: SUICIDE-RELATED IDEATION AMONG POST-DEPLOYMENT SOLDIERS. *Suicide and Life-Threatening Behavior*, *42*(5), 486–494. <https://doi.org/10.1111/j.1943-278X.2012.00106.x>
- Plöderl, M., & Tremblay, P. (2015). Mental health of sexual minorities. A systematic review. *International Review of Psychiatry*, *27*(5), 367–385. <https://doi.org/10.3109/09540261.2015.1083949>
- R Core Team. (2020). *R: A language and environment for statistical computing*. (4.0.2) [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Ramchand, R., Rudavsky, R., Grant, S., Tanielian, T., & Jaycox, L. (2015). Prevalence of, Risk Factors for, and Consequences of Posttraumatic Stress Disorder and Other Mental Health Problems in Military Populations Deployed to Iraq and Afghanistan. *Current Psychiatry Reports*, *17*(5). <https://doi.org/10.1007/s11920-015-0575-z>

- Ramirez, M. H., Rogers, S. J., Johnson, H. L., Banks, J., Seay, W. P., Tinsley, B. L., & Grant, A. W. (2013). If We Ask, What They Might Tell: Clinical Assessment Lessons from LGBT Military Personnel Post-DADT. *Journal of Homosexuality*, *60*(2–3), 401–418. <https://doi.org/10.1080/00918369.2013.744931>
- Reger, M. A., Tucker, R. P., Carter, S. P., & Ammerman, B. A. (2018). Military Deployments and Suicide: A Critical Examination. *Perspectives on Psychological Science*, *13*(6), 688–699. <https://doi.org/10.1177/1745691618785366>
- Rerucha, C. M., Runser, L. A., Ee, J. S., & Hersey, E. G. (2018). Military Healthcare Providers' Knowledge and Comfort Regarding the Medical Care of Active Duty Lesbian, Gay, and Bisexual Patients. *LGBT Health*, *5*(1), 86–90. <https://doi.org/10.1089/lgbt.2016.0210>
- Roberts, A. L., Austin, S. B., Corliss, H. L., Vander Morris, A. K., & Koenen, K. C. (2010). Pervasive Trauma Exposure Among US Sexual Orientation Minority Adults and Risk of Posttraumatic Stress Disorder. *American Journal of Public Health*, *100*(12), 2433–2441. <https://doi.org/10.2105/AJPH.2009.168971>
- Roberts, A. L., Rosario, M., Corliss, H. L., Koenen, K. C., & Austin, S. B. (2012). Elevated Risk of Posttraumatic Stress in Sexual Minority Youths: Mediation by Childhood Abuse and Gender Nonconformity. *American Journal of Public Health*, *102*(8), 1587–1593. <https://doi.org/10.2105/AJPH.2011.300530>
- Roberts, T., Horne, S., & Hoyt, W. (2015). Between a Gay and a Straight Place: Bisexual Individuals' Experiences with Monosexism. *Journal of Bisexuality*, *15*, 554–569. <https://doi.org/10.1080/15299716.2015.1111183>
- Ross, L. E., Salway, T., Tarasoff, L. A., MacKay, J. M., Hawkins, B. W., & Fehr, C. P. (2018). Prevalence of Depression and Anxiety Among Bisexual People Compared to Gay, Lesbian, and Heterosexual Individuals: A Systematic Review and Meta-Analysis. *The Journal of Sex Research*, *55*(4–5), 435–456. <https://doi.org/10.1080/00224499.2017.1387755>
- Selby, E. A., Anestis, M. D., Bender, T. W., Ribeiro, J. D., Nock, M. K., Rudd, M. D., Bryan, C. J., Lim, I. C., Baker, M. T., Gutierrez, P. M., & Joiner, T. E. (2010). Overcoming the fear of lethal injury: Evaluating suicidal behavior in the military through the lens of the Interpersonal–Psychological Theory of Suicide. *Clinical Psychology Review*, *30*(3), 298–307. <https://doi.org/10.1016/j.cpr.2009.12.004>
- Sharpe, V. A., & Uchendu, U. S. (2014). Ensuring Appropriate Care for LGBT Veterans in the Veterans Health Administration. *Hastings Center Report*, *44*(s4), S53–S55. <https://doi.org/10.1002/hast.372>
- Shilts, R. (1994). *Conduct unbecoming: Gays and lesbians in the U.S. military*. St. Martins.

- Shipherd, J. C., Darling, J. E., Klap, R. S., Rose, D., & Yano, E. M. (2018). Experiences in the Veterans Health Administration and Impact on Healthcare Utilization: Comparisons Between LGBT and Non-LGBT Women Veterans. *LGBT Health, 5*(5), 303–311. <https://doi.org/10.1089/lgbt.2017.0179>
- Shipherd, J. C., Ruben, M. A., Livingston, N. A., Curreri, A., & Skolnik, A. A. (2018). Treatment experiences among LGBT veterans with discrimination-based trauma exposure: A pilot study. *Journal of Trauma & Dissociation, 19*(4), 461–475. <https://doi.org/10.1080/15299732.2018.1451973>
- Spengler, E. S., Miller, D. J., & Spengler, P. M. (2016). Microaggressions: Clinical errors with sexual minority clients. *Psychotherapy, 53*(3), 360–366. <https://doi.org/10.1037/pst0000073>
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092. <https://doi.org/10.1001/archinte.166.10.1092>
- Stahlman, S., & Oetting, A. A. (2018). Mental health disorders and mental health problems, active component, U.S. Armed Forces, 2007–2016. *Medical Surveillance Monthly Report, 25*(3), 28.
- Taylor, J. (2018). Bisexual Mental Health: A Call to Action. *Issues in Mental Health Nursing, 39*(1), 83–92. <https://doi.org/10.1080/01612840.2017.1391904>
- Tong, R. L., Lane, J., McCleskey, P., Montenegro, B., & Mansalis, K. (2013). A Pilot Study Describing Knowledge and Practices in the Health Care of Men Who Have Sex With Men by U.S. Air Force Primary Care Providers. *Military Medicine, 178*(2), e248–e254. <https://doi.org/10.7205/MILMED-D-12-00331>
- Tucker, J., Smolenski, D. J., & Kennedy, C. (2019). *Department of Defense Suicide Event Report, Calendar Year 2018 Annual Report* (p. 78). Psychological Health Center of Excellence Research and Development Directorate Defense Health Agency. https://www.pdhealth.mil/sites/default/files/images/docs/TAB_B_2018_DoDSER_Annual_Report-508%20final-9MAR2020.pdf
- Van Gilder, B. J. (2019). Femininity as Perceived Threat to Military Effectiveness: How Military Service Members Reinforce Hegemonic Masculinity in Talk. *Western Journal of Communication, 83*(2), 151–171. <https://doi.org/10.1080/10570314.2018.1502892>
- Yoshino, K. (2000). The epistemic contract of bisexual erasure. *Stanford Law Review, 52*(2). https://link.gale.com/apps/doc/A60026975/AONE?u=wash_main&sid=AONE&xid=30eccc07

THE ROLE OF SOCIAL SUPPORT IN MENTAL HEALTH OUTCOMES FOR LESBIAN, GAY, AND BISEXUAL MEMBERS OF THE US MILITARY

Sexual minority members of the US military are uniquely at risk for adverse mental health outcomes. Facing both the chronic stress of institutionalized homophobia and risk factors associated with military service, lesbian, gay, and bisexual service members (LGB SMs) have, on average, higher prevalence of mental illness compared to heterosexual members of the armed forces (Dissertation Paper 1). As such, it is important to understand what factors may be contributing to these disparities so that interventions can be made to support this long-invisible component of the US military.

The minority stress model tells us that LGB individuals experience unique and chronic stressors due to homophobic social conditions that add to and compound the baseline stressors faced by their heterosexual peers (I. H. Meyer, 2003, 2007). Indeed, for all US military service members, baseline stressors are substantial. Military service is a uniquely demanding occupation, notwithstanding the protracted wars of the last two decades. Prior to Operations Iraqi Freedom and Enduring Freedom (OIF/OEF), 60% of respondents in a survey of patients at a military mental health clinic reported “suffering from significant work stress” and 43% perceived that work stress was contributing to the mental illness for which they were being treated (Pflanz, 2001). Beyond specifically work-related stressors, the psychological environment of the military is characterized by aggression, fear, boredom, and responsibility, while the physical environment is often extreme in terms of climate and terrain, uncomfortable, and simultaneously isolating but without privacy. Further, acculturating to military norms can be confusing, uncomfortable, and inconsistent with prior values (Campbell & Nobel, 2009). Sexual harassment is also prevalent in the military, with over one in twenty male service

members and one in every five female service members estimated to endure a sexually hostile work environment each year (8.8% of all Service members; Farris et al., 2016). One and a half percent of all service members are estimated to have endured a sexual assault in the past year – 0.95% of male and 4.87% of female Service members (Jaycox et al., 2016). Veteran studies have provided strong evidence that such military sexual trauma (MST) is linked to depression, anxiety, PTS, eating disorders, and substance use disorders (Gilmore et al., 2016; Maguen et al., 2012). Deployments, yet an additional layer of stress for service members and their families, are estimated to double the prevalence of depression, from 5.7% among never deployed to 12.0% among previously deployed service members (Gadermann et al., 2012). Those who are injured during a deployment face a two- to nine-fold increase in prevalence of depression, anxiety, and posttraumatic stress, depending on severity of their injury (MacGregor et al., 2009). Military service is clearly a source of myriad chronic stressors for all active-duty personnel.

While service members experience a baseline level of stress greater than most civilians, LGB SMs endure yet an additional layer of stress. Heterosexist institutional policies, such as the military's long-time statutory exclusion and marginalization of non-heterosexual service members are systemic sources of chronic stress. For example, state-level laws have been shown to affect the mental health of sexual minority individuals. Comparing LGB mental health outcomes in states with laws protecting them from hate crimes and employment discrimination to states without such protections, Hatzenbuehler and colleagues (2009) found that those living in states without protections had higher prevalence of generalized anxiety, PTS, and chronic low-grade depression. Though the military lifted its policy of LGB exclusion in 2011, the

culture of hyper-masculine heteronormativity that developed in tandem with the policy cannot be similarly ended by order of command.

The centrality of hetero-masculine norms in military culture is well understood. Military identity has been constructed and maintained through discourses of heteromascularity that advance “emotional control, overt heterosexual desire, physical fitness, self-discipline, self-reliance, the willingness to use aggression and physical violence, and risk-taking” (Hinojosa, 2010, p. 180) as ideal character traits. Service members compete for status by embodying these heteromascularity norms and subordinate or exclude their peers whose performances are deemed inadequate (Hale, 2012; Hinojosa, 2010). Sexualized hostility and violence is one mechanism through which adherence to heteromascularity norms is policed (Burks, 2011; Wood & Toppelberg, 2017). By the Department of Defense’s (DoD) own accounting, LGB and transgender service members are almost four times as likely as their heterosexual peers to experience sexual harassment (22.8% vs. 6.2%, past year) and more than five times as likely to be sexually assaulted (4.5% vs. 0.8%, past year; Davis et al., 2017). Service members who identify as non-heterosexual and whose lived experiences of gender expression, sexual attraction, or sexual behavior do not conform to the military’s engrained norms of heteromascularity are likely to face these, and other, harmful social stressors.

With these compounding sources of potential stressors, it is not surprising that preliminary evidence has found LGB SMs to have elevated likelihood of adverse mental health outcomes compared to their straight peers. Prior to its repeal in 2010, the military’s “Don’t Ask, Don’t Tell” (DADT) policy forbade LGB SMs from openly disclosing their sexuality and commanders from inquiring about service members’

sexuality. The policy thus prohibited DoD from gathering any data on the health and needs of LGB SMs. The first military-wide, DoD-sponsored study of service member health to collect data on sexual identity was conducted in 2015 and found that, compared to straight service members, those who identified as lesbian, gay, or bisexual had significantly greater prevalence of moderate (13.2% vs. 8.5%) or severe depression (13.7% vs 8.8%), past-year suicidal ideation (15.3% vs. 5.8%), and past-year suicide attempt (4.8% vs. 1.2%; Meadows et al., 2018). Further analysis of these data found bisexual, and gay male service members have a significantly higher prevalence of suicide attempts and exposures to unwanted sexual contact compared to their same-sex heterosexual peers (Dissertation Paper 1).

If the US military is to honor its commitment for full inclusion of LGB SMs, it must address their disparity in mental health outcomes. In addition to eliminating identifiable causes of stress, such as high incidence of sexual victimization, it is necessary to identifying the psychosocial risk and protective factors that affect LGB-SM mental health. Because longstanding policies have prevented research on this population, very little is known about their lived experiences in the military. So, we must start at a foundational level to determine whether, and to what extent, known risk and protective factors are operative in the LGB-SM population.

Social support has long been understood to be an important buffer to adverse mental health outcomes. In a seminal review of studies on social support and well-being, Cohen and Willis (1985) found evidence that social support has both a direct, positive effect on mental health while also serving as a buffer against adverse life events. The authors explain that large social networks may directly support positive mental health by facilitating a stable and rewarding social role that reinforces positive self-

worth. From a buffering perspective, social “support may intervene between the stressful event (or expectation of that event) and a stress reaction by attenuating or preventing a stress appraisal response” (p. 312). In other words, knowing support is available lessens the perceived harm of a stressor and increases opportunities for coping. Thoits (1986) suggests that social support can be conceptualized “as coping assistance, or the active participation of significant others in an individual's stress-management efforts” (p. 417). She goes on to explain that coping assistance can take multiple forms, for example material assistance such as help finding a new job, cognitive support to reframe situations into a less threatening paradigm, or empathetic support that helps to normalize stress reactions so that they are not evaluated as personal deficits or indicators of abnormality. More recently, theorists have proposed that social support promotes positive mental health by providing opportunities for ordinary, everyday conversations that serve to regulate emotions and cognitive processes (Lakey & Orehek, 2011) by fostering opportunities for growth and personal development (Feeney & Collins, 2015) or by inhibiting fear acquisition (Hornstein & Eisenberger, 2017). Social selection theories provide an alternative explanation for observed associations between social support and mental health, suggesting that psychological distress impairs the ability to fulfill social roles and maintain social capital, thus social support resources are lost (Johnson et al., 1999; Y. Wang et al., 2021). Regardless of directionality of effects or the precise mechanisms of action, social support plays an important role in psychological health.

The military's unique social environment with its emphasis on social integration may enhance the importance of social support while also excluding LGB SMs. Assimilation to military culture, group identity formation, unit cohesion, and

development of a warrior ethos are key aspects of military basic training – a “harsh, humiliating, and physically and emotionally exhausting process” in which “leaders deconstruct recruits’ civilian status and give them a new identity” (Redmond et al., 2015, p. 14). This harrowing ordeal is designed to create a “primary group...which is a fusion of individualities in a common whole and with oneself integrated into the common life and purpose of the group” (Siebold, 2011, pp. 450–451). The resulting culture of integration and homogenization certainly yields protective levels of social support for some service members; however, much of this socialization relies on discourses of heteromascularity that may marginalize LGB SMs and deprive them of access to full group inclusion and its protective benefits.

Service members are relatively isolated within the military environment making it difficult to achieve social support from outside communities. They live their lives across what many scholars have referred to as the “civil-military gap” – a cultural divide between civilians and those who have served that is driven by both civilian ignorance of military life and the insular nature of military culture (Rahbek-Clemmensen et al., 2012; Smith, 2018). Smith (2018) argues that there exists a “‘warrior caste’ in contemporary U.S. culture—wherein military members are culturally and often geographically removed from the civilian population” (p. 2). The literature on military cultural competence for civilian practitioners consistently emphasizes that warrior culture is decidedly distinct from civilian culture in a multitude of important ways and that those distinctions are central to service members’ sense of self (Atuel & Castro, 2018; E. G. Meyer, 2015; Savitsky et al., 2009; Zwiebach et al., 2019). As Meyer (2015) explains,

The military is, assuredly, a culture. It has its own history, laws, values, traditions, language, and customs. Military members are indoctrinated at a

young age, and military culture permeates almost every aspect of their lives, resulting in markedly high levels of acculturation... (p. 416)

The regular requirement to change duty locations and move to a new part of the country or world on a regular basis (E. G. Meyer, 2015; Savitsky et al., 2009) repeatedly disrupts any relationships with local civilians that service members may develop and returns them to an all-military environment, further reinforcing this extreme acculturation. These practical implications of military life and the nature of military culture are well documented, but the degree to which these actually affect service members' social engagement with civilians has not been empirically evaluated.

Ample scholarship has, however, defined the social support needs of service members as they discharge from the military and reintegrate into civilian life, and the need to relearn how to socialize with civilians is paramount in this literature (Ahern et al., 2015; Hinojosa & Hinojosa, 2011; Kranke et al., 2019; McAndrew et al., 2019; Romaniuk & Kidd, 2018). Looking at one aspect of the reintegration literature, conceptual frameworks for understanding and supporting new veterans, the importance of re-establishing relationships with civilians is a ubiquitous theme. Cooper and colleagues (2017) take a Bourdieu-inspired approach to develop the model of transition in veterans (MoTiVe), which encourages veterans to remobilize social capital prior to discharge while "bearing in mind that capital is assimilated differently between military and civilian fields [or environments]" (p. 57). Similarly, Castro and colleagues (2015) engage military transition theory to recommend that practitioners and policy makers "encourage and support veterans building new networks and connections with civilians while they are on active military service" (p 49). Blackburn (2016) proposes a four-phase military-civilian transition process model with recommendations for how and when to

begin developing relationships with civilians, while the relational communication model offered by Theiss and Knoblock (2013) focuses on extinguishing military communication styles that become maladaptive in romantic relationships with civilians. Robust empirical data has not detailed the sources of service members' social support, but their isolation from civilians is made obvious in the copious literature on military culture and veteran reintegration.

In such a socially confined environment where integration is so highly valued, the negative effects of marginalization may be exacerbated. Using data from the 2015 Military Health Related Behaviors Survey (HRBS 2015; Meadows et al., 2018), the present study therefore investigates social support as a mechanism through which LGB identity affects mental health outcomes for active-duty military personnel. Five hypotheses are tested:

- H1: LGB identity will have a positive total effect on adverse mental health.
- H2: LGB identity will have a direct, negative association with social support.
- H3: LGB identity will have a direct, positive association with adverse mental health.
- H4: Social support will have a direct, negative association with adverse mental health
- H5: LGB identity will have an indirect, positive effect on adverse mental health through its effect on social support.

These hypotheses will be tested with the full sample as well as with subsamples. First, due to the highly gendered nature of military culture, it is likely that men and women

experience its social environment differently, so the hypotheses will be tested separately. Then, they will be tested separately for each service branch. Each branch has a unique set of norms and practices that may differentially affect LGB SM's access to social support, and if study results indicate a need for clinical or policy intervention, it is important to know in which branch or branches such intervention is needed.

Methods

Sample

RAND Corporation, on behalf of DoD, collected survey data between November 2015 and April 2016. The sampling frame included all non-deployed military personnel with active-duty status on August 31, 2015. Members of the National Guard or reservist programs were not included. SMs were invited to complete the anonymous, online survey based on a random sample stratified by branch, pay grade, and gender. The final sample includes 16,699 usable cases. The present study focuses on personnel from the four services housed under DoD (Army, Navy, Marines, and Air Force), bringing the sample size for the present study to 12,548. For a full description of sampling procedures, see Meadows et al, 2018.

Measures

Demographics. Limited demographics are available in the public use data file for the 2015 HRBS. Some potentially interesting covariates, such as age and race, were collapsed into categories, that diminish their utility in the present analyses. As such, demographic variables are limited to service branch, binary gender, and LGB identity. To assess sexual identity, the survey included the prompt: "Do you consider yourself to

be...? Select one response”, with three response options: “1. Heterosexual or straight”, “2. Gay or lesbian”, and “3. Bisexual”. For the present study, responses 2 and 3 were combined to create a binary indicator of lesbian, gay, or bisexual identity.

Unfortunately, a survey item assessing transgender status was excluded from the data file.

Social Support. The 2015 HRBS included a variety of questions developed for the Patient-Reported Outcomes Measurement Information System (PROMIS), an extensive battery of publicly available and psychometrically evaluated health-outcome measures (Yount et al., 2019). To assess perceived emotional support, the present study uses a four-item instrument from the PROMIS Emotional Support item bank, which was designed to “assess perceived feelings of being cared for and valued as a person; having confidant relationships” (Hahn et al., 2014; PROMIS, 2020, p. 1). Respondents were presented with the following statements: “I have someone who will listen to me when I need to talk”; “I have someone to confide in or talk to about myself or my problems”; “I have someone who makes me feel appreciated”; and “I have someone to talk with when I have a bad day”. Response options included “Never” (1), “Rarely” (2), “Sometimes” (3), “Often” (4), and “Always” (5). The total score was then converted to a scaled T-score, using an item response theory algorithm, that standardizes the score to have a mean of 50 and standard deviation of 10, based on a large non-clinical, civilian sample (n = 14,931) of English-speaking adults (Cronbach’s alpha = 0.99; Hahn et al., 2014; PROMIS, 2020).

Mental Health. Survey respondents completed brief screening measures for depression, generalized anxiety, and posttraumatic stress. Each of these widely used and well validated measures provides a unique Likert-type set of responses for indicating

frequency of experiencing relevant symptoms. Total summed scores indicate relative levels of adverse mental health outcomes, while cut scores can be used to identify probable diagnoses. The PHQ9 is a 9-item measure of depression with total scores ranging from 0 to 27 (Kroenke et al., 2001) and with a score of ten or greater being an indicator of probable depression (Levis et al., 2019; Manea et al., 2012, 2015). The GAD7 is a 7-item measure of anxiety with a range of scores between 0 and 21, with cut points of 5, 10, and 15 indicating mild, moderate, and severe anxiety, respectively (Spitzer et al., 2006). Total severity score for the PTSD Checklist (PCL; Bliese et al., 2008) ranges from 17 to 85, and a cut-score of between 36 and 44 is recommended for indicating probable PTSD in veteran populations (VA National Center for PTSD, 2012). These instruments measure current mental health status – the PHQ9 and GAD7 ask about symptoms in the prior two weeks, while the PCL asks about prior 30 days. Lastly, it is notable that the original research team that implemented and interpreted the 2015 HRBS (Meadows et al., 2018), chose somewhat higher cut scores of 15 on PHQ for probable depression and 50 on PCL for probable PTSD. However, the present study focuses on total severity scores using a factor approach to represent a latent construct of mental health. Finally, because higher scores on these measures correspond with higher symptom severity, the construct of mental health is framed as “adverse mental health”.

Analysis

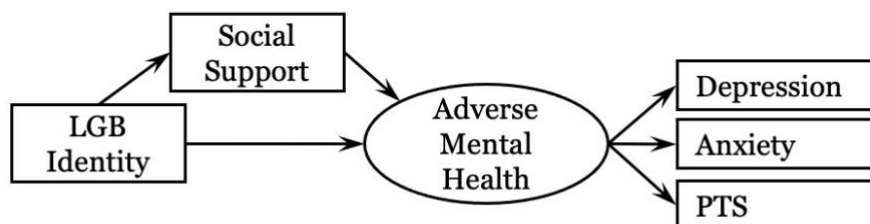
First, descriptive statistics were run using post-stratification weights calculated by original investigators to describe the mean of outcome variables (mental health and social support) for the full sample and each service branch separately. T-tests were then used to determine if the means of these variables are significantly different for LGB SMs

compared to heterosexual service members. Next, relationships between variables within specific sample subsets, based on gender and branch, were described with Pearson correlations and covariances. All analyses were conducted using 'R' (R Core Team, 2020). The 'Hmisc' (Harrell & Dupont, 2019) package was used for calculating weighted means and prevalences, the 'stats' (R Core Team, 2020) package for weighted variances and covariances, and the 'weights' package (Pasek & Tahk, 2020) for weighted correlations and t-tests.

Second, a structural equation model (SEM), visualized in Figure 1, was fit using the total sample as well as on subsamples representing gender- and branch-specific subgroups. The model employed a factor approach to represent the construct of adverse mental health as indicated by observed measures of depression (sum score of PHQ-9), anxiety (sum score of GAD-7), and PTS (sum score of PCL). Models were estimated using the 'lavaan' (v 0.6-5; Rosseel, 2012) package, which allows for the incorporation of post-stratification weights when using a robust maximum likelihood estimator and robust-Huber-White standard errors. Full information maximum likelihood accounted for missingness in endogenous variables; cases with missingness in the exogenous variable were dropped from analyses. Finally, multiple group comparisons were conducted to

determine if SEM path coefficients significantly differed across gender and branch subgroups

Figure 1
Hypothesized structural model



by comparing model fit of SEMs where groups were constrained to have the same parameters to models where regression coefficients were allowed to vary across groups.

Results

Sample Description

Comparison of LGB to non-LGB service members shows LGB SMs to have significantly ($ps < .001$) higher scores on indicators of adverse mental health and lower perceived social support, as seen in Table 1. The same disparity is observed in each of the four branches ($ps < .05$), with the exception of PTS in the Army where no significant difference was found between LGB and non-LGB SMs. Both groups, in the total sample and across branches, are estimated to have mean scores on the PHQ-9 and PCL below levels that would indicate probable depression or PTSD. With regard

Table 1

Mean of outcome variables by sexuality

	Sexuality		Test Statistic	
	LGB ($n^* = 834$)	Non-LGB ($n^* = 13,571$)	<i>t</i>	<i>p</i>
All Branches				
Female	0.42	0.14	14.76	<.001
Depression	6.81	4.79	8.03	<.001
Anxiety	5.30	3.72	7.00	<.001
PTS	28.19	26.09	4.80	<.001
Social Support	51.23	53.04	-3.97	<.001
Army				
Female	0.44	0.12	8.27	<.001
Depression	7.13	5.37	3.38	.001
Anxiety	5.02	4.11	2.02	.045
PTS	26.23	27.45	-1.20	.232
Social Support	50.61	52.78	-2.66	.008
Navy				
Female	0.35	0.16	4.97	<.001
Depression	6.87	5.05	3.99	<.001
Anxiety	5.74	4.01	4.19	<.001
PTS	31.16	26.67	4.25	<.001
Social Support	50.69	52.23	-2.67	.008
Marines				
Female	0.50	0.06	8.82	<.001
Depression	7.88	5.74	3.17	.002
Anxiety	6.69	4.66	3.01	.003
PTS	31.8	27.3	2.76	.007
Social Support	48.73	52.25	-3.71	<.001
Air Force				
Female	0.49	0.17	8.89	<.001
Depression	5.55	2.95	6.32	<.001
Anxiety	4.25	2.16	5.65	<.001
PTS	27.45	22.44	4.88	<.001
Social Support	54.64	54.79	2.56	.011

*Weighted frequencies

to anxiety, however, LGB SMs in the Army, Navy, and Marines show an average GAD-7 score above five, revealing a widespread but mild level of anxiety among LGB SMs.

Zero-order correlations presented in Tables 2 and 3 show LGB identity to have small (1999), positive correlations with each mental health outcome.

Model Fit

The proposed model fit the observed data well. As shown in Table 4, the comparative fit index (CFI) for the full population and subgroups was above the recommended threshold of 0.90, and the root mean-squared error of approximation

(RMSEA) index for each was below 0.05, indicating

a close model fit (Pituch &

Stevens, 2016). Further,

loadings for the adverse

mental health factor were

high, consistent, and

statistically significant (ps

< .001) across groups.

These fit indices and factor

loadings support the

validity of the model as an

accurate description of the

relationship between LGB

identity, social support, and

Table 2

Means, correlations (upper), variances (diagonal), and covariances (lower) by gender

	<i>M</i>	All					Social Support	
		LGB	Depr.	Anxiety	PTSD			
LGB	0.06	0.05	.17	.16	.14	-.04		
Depression	5.02	0.11	35.57	.83	.78	-.36		
Anxiety	3.88	0.09	25.94	27.51	.81	-.32		
PTSD	26.28	0.15	64.57	59.30	191.72	-.31		
Social Sup.	52.72	-0.10	-23.98	-18.50	-47.51	118.64		
			Females					
LGB	0.16	0.13	.15	.15	.16	-.04		
Depression	5.77	0.28	37.42	.82	.75	-.38		
Anxiety	4.66	0.26	27.31	30.40	.78	-.36		
PTSD	27.64	0.55	64.35	60.65	195.51	-.39		
Social Sup.	53.73	-0.08	-22.92	-19.09	-53.54	99.97		
			Males					
LGB	0.04	0.04	.15	.11	.06	-.08		
Depression	4.89	0.06	35.11	.83	.78	-.36		
Anxiety	3.74	0.04	25.56	26.86	.82	-.31		
PTSD	26.03	0.04	64.38	58.83	190.63	-.30		
Social Sup.	52.53	-0.12	-24.32	-18.55	-46.72	121.83		

Pearson correlations used for all relationships except those including LGB where biserial is used.

adverse mental health in the active-duty population at-large, for both male and female service members, and across service branches. In addition to fitting well with observed data, the estimated models support the direction of hypothesized relationships, though the magnitude and significance of effects varied across populations. Comparison of groups showed that path coefficients significantly differ between genders and between the service

Table 3

Means, correlations (upper), variances (diagonal), and covariances (lower) by service branch

	Army					
	<i>M</i>	LGB	Depr.	Anxiety	PTSD	Social Support
LGB	0.05	0.05	.12	.10	.05	-.04
Depression	5.60	0.09	39.43	.84	.79	-.40
Anxiety	4.24	0.04	29.38	30.89	.83	-.35
PTSD	27.36	-0.06	74.78	69.90	227.56	-.32
Social Sup.	52.47	-0.11	-29.38	-22.46	-55.24	125.61
	Navy					
LGB	0.09	0.08	.19	.16	.17	-.08
Depression	5.31	0.14	35.09	.80	.77	-.35
Anxiety	4.26	0.14	24.48	27.52	.79	-.30
PTSD	27.16	0.35	61.64	57.30	188.11	-.33
Social Sup.	51.70	-0.12	-23.86	-18.27	-52.64	126.16
	Marines					
LGB	0.04	0.04	.23	.24	.23	-.06
Depression	5.85	0.09	43.57	.83	.75	-.29
Anxiety	4.68	0.09	30.98	31.36	.78	-.25
PTSD	27.30	0.19	72.76	62.75	200.22	-.27
Social Sup.	52.09	-0.15	-22.86	-16.68	-42.27	123.82
	Air Force					
LGB	0.05	0.05	.18	.18	.16	.00
Depression	3.19	0.12	20.10	.83	.79	-.27
Anxiety	2.35	0.10	14.69	16.11	.81	-.25
PTSD	22.86	0.24	36.63	34.03	112.76	-.25
Social Sup.	54.61	-0.01	-11.22	-9.33	-23.88	91.34

Pearson correlations used for all relationships except those including LGB where biserial is used.

branches. The model with regression coefficients freed to vary across genders was a significant improvement in fit over a model where all parameters were constrained to be equal across branches, based on a threshold of change in comparative fit indices (DCFI) of .002, as suggested by Meade and colleagues (2008; .989 vs. .987). A likelihood ratio test also showed significant difference between the models ($p = .002$, $c^2(3) = 14.41$).

Regression coefficients were similarly found to significantly vary across branches (DCFI=.003; $p = .005$, $c^2(9) = 23.85$).

The model with equality constraints for all parameters across genders was found to be a significantly worse fit to the data in comparison to the model where paths were freed to vary between genders

Hypotheses

The strong model fit supports the first hypothesis that LGB identity will have a positive total effect on adverse mental health outcomes. More importantly, in the full sample, total effect was found to be positive and significant (0.32, $p < .001$). Total effect was also positive and significant in the subsample of female service members (0.37, $p < .001$), within the Navy (0.37, $p = .003$), and within the Air Force (0.59, $p < .001$), where the effect was strongest, predicting over half a standard deviation (SD) increase in adverse mental health.

Minimal support was observed for the second hypothesis, that LGB identity would have a direct negative association with social support. The path coefficient representing this relationship was found to be significant in only the male subsample (-0.29, $p = .032$). In the full sample, LGB identity was associated with a 0.17 SD decrease in social support, though the relationship did not meet statistical significance ($p = .055$). The magnitude of this relationship was similar among Soldiers (Army) and Sailors (Navy), much lower among Airmen (Air Force) and female service members, and higher among Marines, yet none of these subsamples approached statistical significance.

The third hypothesis predicted LGB identity having a positive direct effect on adverse mental health. Evidence supporting this relationship was somewhat more

robust. In the full sample, the direct effect of LGB identity on mental health was moderate and significant ($p = .001$), predicting a 0.25 SD increase in adverse mental health when controlling for social support. While statistically significant for both genders, ($ps < .001$), the magnitude of the effect among female SMs was much greater than among male service members (0.35 vs. 0.11, respectively). Across service branches, no significant effect was observed for Soldiers or Marines, while the relationship did reach an adequate level of significance among Sailors ($p = .012$), for whom LGB identity predicted a 0.31 SD increase in adverse mental health. The strongest direct effect was observed in the Air Force, where LGB identity was linked to a 0.58 SD increase in adverse mental health ($p < .001$).

The relationship between social support and mental health showed a consistent, significant association ($ps < .001$). In the total sample, a one SD increase in social support was associated with a 0.37 decrease in adverse mental health, controlling for LGB identity. A similar magnitude of effect was observed for both female (-0.41) and male (-0.37) service members, and for both Soldiers (-0.40) and Sailors (-0.37). Lesser, yet significant, effects were observed for Marines (-0.31) and Airmen (-0.28). These findings provide strong support for Hypothesis 4.

Finally, the indirect effect of LGB identity on mental health by way of effects on social support was found to be minimal and statistically nonsignificant, ranging from 0.00 to 0.10 in most groups. A significant ($p = .034$), indirect effect of 0.11 was detected for male service members. As such, these data fail to provide full support for Hypothesis 5.

Table 4

Standardized path coefficients and fit indices of structural equation models

	All	Gender		Service Branch			
		Females	Males	Army	Navy	Marines	Air Force
Measurement Model							
Depression	0.90 ¹	0.88 ¹	0.90 ¹	0.90 ¹	0.87 ¹	0.91 ¹	0.89 ¹
Anxiety	0.93 ^{***}	0.92 ^{***}	0.93 ^{***}	0.94 ^{***}	0.90 ^{***}	0.92 ^{***}	0.92 ^{***}
Posttraumatic Stress	0.88 ^{***}	0.86 ^{***}	0.88 ^{***}	0.88 ^{***}	0.88 ^{***}	0.86 ^{***}	0.87 ^{***}
Structural Model							
LGB → Social Support	-0.17	-0.06	-0.29 [*]	-0.19	-0.14	-0.32	-0.02
LGB → MH	0.25 ^{**}	0.35 ^{***}	0.11 ^{***}	0.07	0.31 [*]	0.28	0.58 ^{***}
Social Support → MH	-0.37 ^{***}	-0.41 ^{***}	-0.37 ^{***}	-0.40 ^{***}	-0.37 ^{***}	-0.31 ^{***}	-0.28 ^{***}
Effects of LGB on MH							
Indirect	0.06	0.02	0.11 [*]	0.08	0.05	0.10	0.00
Total	0.32 ^{***}	0.37 ^{***}	0.21	0.15	0.37 ^{**}	0.38	0.59 ^{***}
Fit Indices²							
RMSEA	.024	.027	.028	.045	.013	.008	.009
95% CI	(.021, .028)	(.020, .034)	(.023, .033)	(.038, .053)	(.000, .023)	(.000, .025)	(.000, .022)
CFI	.993	.993	.992	.980	.998	.999	.999

*** $p < .001$; ** $p < .01$; * $p < .05$; ¹ "index indicator"; ² Robust fit indices

Discussion

Lesbian, gay, and bisexual military service members are at elevated risk of adverse mental health outcomes when compared to their heterosexual peers. The present study investigated whether diminished access to social support may be a contributing factor in this disparity. Findings show that LGB identity has a total negative effect on mental health, consistent with prior studies. Social support was found to be protective against adverse mental health outcomes for all service members, regardless of sexuality. Social support was not, however, found to substantially mediate the effects of LGB identity on adverse mental health outcomes.

The total effect of LGB identity on mental health was observed for the LGB SM community as a whole, yet when divided by gender, the total effect was significant for

only lesbian and bisexual women in the military. This difference is consistent with a prior study that found a substantially greater prevalence of adverse mental health outcomes among lesbian and bisexual women compared to gay and bisexual men, and may be partially explained by the high prevalence of exposure to sexual assault among the former group, observed in the same study (Paper 1). Notably, the largest effect of LGB identity on adverse mental health was observed in the Air Force. As Air Force Lieutenant Colonel and academic Donnithorne (2013) explains, leadership culture in the Air Force is uniquely resistant to political pressures and the dictates of civilian rule, from which the mandate of LGB inclusion came. It is possible therefore that the Air Force has been more resistant to this mandate than other branches may have been, but further study will be needed to better understand this branch-specific phenomenon.

Evidence for the second hypothesized relationship, LGB identity having a direct, negative relationship with social support, was minimal. T-tests and correlations did detect statistically significant relationships between the two variables for most of the studied populations; however, the set of structural equation models, which control for the effects of all proposed relationships simultaneously only detected a statistically significant relationship between these indicators in the Army population. As such, the present study finds support for the second hypothesis only among Soldiers.

With regard to the third hypothesis, t-tests revealed slightly higher and statistically significant mean PHQ-9, GAD-7, and PCL scores for LGB SMs compared to non-LGB SMs in all subpopulations, with the exception of no difference being detected for the PCL among Soldiers. Correlations also detected significant relationships between LGB identity and mental health measures with a few exceptions. The SEM analyses supported the second hypothesis for the full military sample, as well as among both

male and female service members, with LGB identity among female service members showing a stronger effect on adverse mental health, compared to male service members. However, when examining the relationship within specific service branches, no significant relationship was detected among Soldiers or Marines. Among Sailors, support at the 95% level of confidence was detected for a moderate relationship between LGB identity and adverse mental health. A substantially stronger relationship was detected within the Air Force at a much higher, 99.9%, level of confidence. In total, the present study finds support for the third hypothesis within the total military population, with the strongest effects experienced by female service members and members of the Air Force.

The fourth hypothesis was supported by both correlations and SEMs. The strength of the relationship was moderate and consistent across most populations, with one SD increase in social support predicting a 0.37 to 0.41 decrease in adverse mental health. The relationship was somewhat weaker among Marines and Airmen, but overall the present study provides strong evidence that social support is an important buffer against adverse mental health across military populations. The final hypothesis, that LGB identity would increase adverse mental health via an indirect path through social support, failed to be supported by the present study, with a possible exception in the Army population.

These findings, taken as a whole, confirm the original analysis of these data showing LGB SMs to have worse mental health outcomes than their heterosexual peers (Meadows et al., 2018). This study also adds to the substantial body of literature on social support and mental health, showing that regardless of sexual identity, social support is an important and consistent contributor to mental health (Bovier et al., 2004;

Brewin et al., 2000; Cohen & Wills, 1985; Dalgard et al., 1995; Lakey & Orehek, 2011; Thoits, 1986; J. Wang et al., 2018). The motivating assumption of this study – that alienation from social support may contribute to adverse mental health among LGB SMs – was contradicted by its findings. This null finding is, in fact, a positive sign for the majority of the LGB SMs who appear to enjoy similar levels of social support as their non-LGB military peers. Perhaps the military has been more successful at LGB inclusion than may have otherwise been assumed. At the same time, this study does not find that social integration has benefitted the mental health of LGB SMs, who face elevated risk of adverse outcomes.

With social support showing a consistently positive effect on mental health for all service members, regardless of sexual orientation, continuing to improve social integration and support of LGB SMs could be a strategy for improving mental health outcomes. While the present study does not show LGB identity to negatively impact mental health through effects on social support, it should not be misconstrued to suggest that increasing social support for LGB SMs would not be a useful path for addressing the observed disparity in mental health. Future research should follow the current line of inquiry to explore what other mechanisms may be affecting the mental health of LGB SMs. A qualitative exploration of LGB experiences in different service branches may uncover aspects of climate, custom, or services that potentially explain why LGB status is associated with adverse mental health in the Air Force but not the Army or Marines. It will also be important to repeat and expand the current research when data from a more recent version of the Health-Related Behaviors Survey becomes available. A key limitation of the current study is the exclusion of transgender service members who are likely to be negatively affected by the capriciousness of policy

dictating their inclusion in the military. Future researchers should continue working to obtain data on this population. In addition to the etiology of adverse mental health among LGB SMs, it will be important to look more down-stream at what barriers may be standing in the way of LGB SMs accessing mental healthcare.

Limitations

These findings should be interpreted with an understanding of several important limitations. The general nature of the social support questionnaire is a primary limitation. Service members are largely isolated within the military community, but that isolation is not, of course, absolute, and the social support measure used in the present study did not specify the source of social support. As such, it is possible that LGB SMs are receiving support from outside the military while support within the military remains poor. Future researchers may consider a more exhaustive measure of social support that includes items assessing military cohesion, if they wish to better pinpoint sources of support for LGB SMs.

Limits to the present analytic plan should also be considered. The cross-sectional nature of the available data limits the ability to make causal inferences, whereas a longitudinal design would provide an opportunity to investigate the alternative hypothesis that the relationship between social support and adverse mental health is reciprocal (Y. Wang et al., 2021), rather than unidirectional as posited in the present research. Relatedly, the measurement of cyclic psychosocial processes, such as those between adverse mental health and social support, at a single point in time can belie temporal fluctuations in associations and artificially inflate the degree of correlation between constructs. Additionally, the present study tested social support as a mediator

between LGB identity and mental health, yet it is possible that it serves more of a moderating role – a topic for future research.

Finally, limitations of the data itself may be addressed by future research. Survey attrition was a likely cause of missing data on sexual identity, as the question was asked at the end of the survey. By placing the item at the beginning of the survey with other demographic indicators, researchers will expand the sample size of studies on LGB SMs and will be able to better understand when the item was intentionally skipped versus missed because of survey fatigue.

Conclusion

The present study was the first to examine the role of social support in the mental health of LGB SMs. Promisingly, LGB SMs were found to have similar levels of social support as their straight military peers. As such, findings suggest that lack of social support is not a significant factor in the disproportionately high prevalence of adverse mental health outcomes among LGB SMs. At the same time, the disparity in mental health outcomes between LGB and straight service members remains, particularly for lesbian and bisexual women in the military, so additional research will be needed to further explore the etiology of LGB SM mental health. In the meantime, the present study confirms that social support has direct positive mental health benefits for all service members, regardless of gender, branch or sexuality, so any efforts to increase social support for LGB SMs will likely benefit their mental health.

Works Cited

- Bliese, P. D., Wright, K. M., Adler, A. B., Cabrera, O., Castro, C. A., & Hoge, C. W. (2008). Validating the Primary Care Posttraumatic Stress Disorder Screen and the Posttraumatic Stress Disorder Checklist with soldiers returning from combat. *Journal of Consulting and Clinical Psychology, 76*(2), 272–281. <https://doi.org/10.1037/0022-006X.76.2.272>
- Burks, D. J. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of “Don’t Ask, Don’t Tell”? *American Psychologist, 66*(7), 604–613. <https://doi.org/10.1037/a0024609>
- Campbell, D. J., & Nobel, O. B.-Y. (2009). Occupational Stressors in Military Service: A Review and Framework. *Military Psychology, 21*(sup2), S47–S67. <https://doi.org/10.1080/08995600903249149>
- Cohen, J. (1988). *Statistical power analysis for behavioral sciences*. (2nd ed.). Erlbaum.
- Davis, L., Grifka, A., Williams, K., & Coffey, M. (2017). *2016 Workplace and Gender Relations Survey of Active Duty Members* (OPA Report No. 2016-050). Defense Technical Information Center.
- Farris, C., Jaycox, L., Schell, T., Street, A., Kilpatrick, D., & Tanielian, T. (2016). Chapter 4: Sexual Harassment and Gender Discrimination Findings, Active Component. In A. Morral, K. Gore, & T. Schell (Eds.), *Sexual Assault and Sexual Harassment in the U.S. Military: Volume 2. Estimates for Department of Defense Service Members from the 2014 RAND Military Workplace Study* (pp. 31–54). RAND Corporation. http://www.rand.org/pubs/research_reports/RR870z2.html
- Feeney, B. C., & Collins, N. L. (2015). A New Look at Social Support: A Theoretical Perspective on Thriving Through Relationships. *Personality and Social Psychology Review, 19*(2), 113–147. <https://doi.org/10.1177/1088868314544222>
- Gadermann, A. M., Engel, C. C., Naifeh, J. A., Nock, M. K., Petukhova, M., Santiago, P. N., Wu, B., Zaslavsky, A. M., & Kessler, R. C. (2012). Prevalence of DSM-IV Major Depression Among U.S. Military Personnel: Meta-Analysis and Simulation. *Military Medicine, 177*(8S), 47–59. <https://doi.org/10.7205/MILMED-D-12-00103>
- Gilmore, A. K., Brignone, E., Painter, J. M., Lehavot, K., Fargo, J., Suo, Y., Simpson, T., Carter, M. E., Blais, R. K., & Gundlapalli, A. V. (2016). Military Sexual Trauma and Co-occurring Posttraumatic Stress Disorder, Depressive Disorders, and Substance Use Disorders among Returning Afghanistan and Iraq Veterans. *Women’s Health Issues, 26*(5), 546–554. <https://doi.org/10.1016/j.whi.2016.07.001>

- Hahn, E. A., DeWalt, D. A., Bode, R. K., Garcia, S. F., DeVellis, R. F., Correia, H., & Cella, D. (2014). New English and Spanish Social Health Measures Will Facilitate Evaluating Health Determinants. *Health Psychology : Official Journal of the Division of Health Psychology, American Psychological Association*, 33(5), 490–499. <https://doi.org/10.1037/hea0000055>
- Hale, H. C. (2012). The Role of Practice in the Development of Military Masculinities: ROLE OF PRACTICE IN DEVELOPING MILITARY MASCULINITIES. *Gender, Work & Organization*, 19(6), 699–722. <https://doi.org/10.1111/j.1468-0432.2010.00542.x>
- Harrell, F., & Dupont, C. (2019). *Hmisc: Harrell Miscellaneous*. (4.2-0) [R package]. <https://CRAN.R-project.org/package=Hmisc>
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730. <https://doi.org/10.1037/a0016441>
- Hinojosa, R. (2010). Doing Hegemony: Military, Men, and Constructing a Hegemonic Masculinity. *The Journal of Men’s Studies*, 18(2), 179–194. <https://doi.org/10.3149/jms.1802.179>
- Hornstein, E. A., & Eisenberger, N. I. (2017). Unpacking the buffering effect of social support figures: Social support attenuates fear acquisition. *PLOS ONE*, 12(5), e0175891. <https://doi.org/10.1371/journal.pone.0175891>
- Jaycox, L., Schell, T., Morral, A., Street, A., Farris, C., Kilpatrick, D., & Tanielian, T. (2016). Chapter 3: Sexual Assault Findings, Active Component. In A. Morral, K. Gore, & T. Schell (Eds.), *Sexual Assault and Sexual Harassment in the U.S. Military: Volume 2. Estimates for Department of Defense Service Members from the 2014 RAND Military Workplace Study* (pp. 9–30). RAND Corporation. <https://doi.org/10.7249/RR870.2-1>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*, 118(3), 482–495. <https://doi.org/10.1037/a0023477>
- Levis, B., Benedetti, A., & Thombs, B. (2019). Accuracy of Patient Health Questionnaire-9 (PHQ-9) for screening to detect major depression: Individual participant data meta-analysis. *BMJ*, l1476. <https://doi.org/10.1136/bmj.l1476>
- MacGregor, A. J., Shaffer, R. A., Dougherty, A. L., Galarneau, M. R., Raman, R., Baker, D. G., Lindsay, S. P., Golomb, B. A., & Corson, K. S. (2009). Psychological Correlates of Battle and Nonbattle Injury Among Operation Iraqi Freedom

- Veterans. *Military Medicine*, 174(3), 224–231.
<https://doi.org/10.7205/MILMED-D-03-9107>
- Maguen, S., Cohen, B., Ren, L., Bosch, J., Kimerling, R., & Seal, K. (2012). Gender Differences in Military Sexual Trauma and Mental Health Diagnoses among Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder. *Women's Health Issues*, 22(1), e61–e66. <https://doi.org/10.1016/j.whi.2011.07.010>
- Manea, L., Gilbody, S., & McMillan, D. (2012). Optimal cut-off score for diagnosing depression with the Patient Health Questionnaire (PHQ-9): A meta-analysis. *Canadian Medical Association Journal*, 184(3), E191–E196.
<https://doi.org/10.1503/cmaj.110829>
- Manea, L., Gilbody, S., & McMillan, D. (2015). A diagnostic meta-analysis of the Patient Health Questionnaire-9 (PHQ-9) algorithm scoring method as a screen for depression. *General Hospital Psychiatry*, 37(1), 67–75.
<https://doi.org/10.1016/j.genhosppsy.2014.09.009>
- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). *2015 Department of Defense Health Related Behaviors Survey (HRBS)*. RAND Corporation. <https://doi.org/10.7249/RR1695>
- Meyer, I. H. (1995). Minority Stress and Mental Health in Gay Men. *Journal of Health and Social Behavior*, 36(1), 38–56. JSTOR. <https://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H. (2007). Prejudice and Discrimination as Social Stressors. In I. H. Meyer & M. E. Northridge (Eds.), *The Health of Sexual Minorities* (pp. 242–267). Springer US. https://doi.org/10.1007/978-0-387-31334-4_10
- Pasek, J., Tahk, A., R Core Team, Culter, G., & Schwemmler, M. (2020). *weights: Weighting and Weighted Statistics* (1.0.1) [R package]. <https://CRAN.R-project.org/package=weights>
- Pflanz, S. (2001). Occupational Stress and Psychiatric Illness in the Military: Investigation of the Relationship between Occupational Stress and Mental Illness among Military Mental Health Patients. *Military Medicine*, 166(6), 457–462.
<https://doi.org/10.1093/milmed/166.6.457>
- Pituch, A. K., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences*. (6th ed.). Routledge.

- PROMIS. (2020). *PROMIS Short Form v2.0—Emotional Support 4a, Measure-Specific Scoring Guide*. Health Measures. <https://www.healthmeasures.net/search-view-measures?task=Search.search>
- R Core Team. (2019). *R: A language and environment for statistical computing*. (4.2-0) [Computer software]. R Foundation for Statistical Computing. <https://CRAN.R-project.org/package=Hmisc>
- Redmond, S. A., Wilcox, S. L., Campbell, S., Kim, A., Finney, K., Barr, K., & Hassan, A. M. (2015). A brief introduction to the military workplace culture. *Work, 50*(1), 9–20. <https://doi.org/10.3233/WOR-141987>
- Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of Statistical Software, 48*(2), 1–36.
- Rothrock, N. E., Amtmann, D., & Cook, K. F. (2020). Development and validation of an interpretive guide for PROMIS scores. *Journal of Patient-Reported Outcomes, 4*(1). <https://doi.org/10.1186/s41687-020-0181-7>
- Siebold, G. L. (2011). Key Questions and Challenges to the Standard Model of Military Group Cohesion. *Armed Forces & Society, 37*(3), 448–468. <https://doi.org/10.1177/0095327X11398451>
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092. <https://doi.org/10.1001/archinte.166.10.1092>
- Thoits, P. A. (1986). Social Support as Coping Assistance. *Journal of Consulting and Clinical Psychology, 54*(4), 416–423.
- VA National Center for PTSD. (2012). *Using the PTSD Checklist (PCL)*. Department of Veterans Affairs. <https://sph.umd.edu/sites/default/files/files/PTSDChecklistScoring.pdf>
- Wood, E. J., & Toppelberg, N. (2017). The persistence of sexual assault within the US military. *Journal of Peace Research, 54*(5), 620–633. <https://doi.org/10.1177/0022343317720487>
- Yount, S. E., Cella, D., & Blozis, S. (2019). PROMIS®: Standardizing the patient voice in health psychology research and practice. *Health Psychology, 38*(5), 343–346. <https://doi.org/10.1037/hea0000741>

BARRIERS TO MENTAL HEALTH CARE AMONG OFTEN-MARGINALIZED MEMBERS OF THE US MILITARY

High prevalence of mental health disorders, such as depression, anxiety, and posttraumatic stress (PTS) among military personnel is well established (Gadermann et al., 2012; Kessler et al., 2014; Mustillo et al., 2015; Ramchand et al., 2015; Stevelink et al., 2015; Stoltz, 2013). Consequences range from lost work productivity (Adler & Castro, 2013; Hourani et al., 2006; Pflanz, 2001; Reed-Fitzke & Lucier-Greer, 2020) to suicide (LeardMann et al., 2013; Nock et al., 2014; Ramsawh et al., 2014). Despite such outcomes, service members are more reluctant than their civilian peers to access available mental health treatments, with a recent systematic review showing that fewer than one in three service members who need treatment are receiving it (Hom et al., 2017). Researchers have developed a variety of interventions to address this gap in service utilization, focusing on mental health stigma and practical barriers to care as primary drivers. Psychoeducation programs that increase mental health literacy aim to reduce stigma around help-seeking (Dickstein et al., 2010; Lunasco et al., 2010; Nash et al., 2009). Novel screening and referral programs seek to overcome practical barriers to care, such as scheduling and time off work by, for example, offering telehealth options or screening with providers embedded in units, (Lee et al., 2014; Sipos et al., 2012; Warner et al., 2008). Importantly, however, the literature describing military-specific barriers to care that informs such interventions is limited by a tendency to homogenize the military experience. Summarizing their systematic review of research on mental health service utilization among service members, Hom and colleagues (2017) warn “that there is a dearth of studies investigating service use among demographic groups underrepresented within the military that may face unique barriers to care (e.g.,

females, ethnic/ sexual minority groups)” (p. 67) and call for researchers to investigate the needs of these populations, especially lesbian, gay, and bisexual service members (LGB-SMs) who are greatly under-studied. The present study addresses this gap in the literature by describing the barriers to mental health treatment experienced by underrepresented subgroups of the military population.

Military Barriers to Care

Military culture and procedures create unique barriers to mental health treatment for active-duty service members. First, troops are trained and enculturated to value strength, resilience, self-sacrifice, tolerance of pain and of personal discomfort (Bryan et al., 2012; Fox & Pease, 2012; Nash et al., 2009). During combat, “suppressing fear, anger, grief, and self-doubt...is highly adaptive” (Bryan et al., 2012, p. 98), but once back home, the expectation to independently manage suffering places immense stigma on psychotherapy. Unlike civilian contexts where socialization to group norms is relatively organic, in the military, it is highly formalized through the training process. As such, normative beliefs may have greater purchase than they otherwise would. Beyond enculturated values, stigma against mental health treatment may also be related to the reality of military policies and practices.

Stigma against psychotherapy has received considerable attention as a prime deterrent to treatment-seeking, yet limits to confidentiality and associated career consequences are salient issues for military personnel (Christensen & Yaffe, 2012). Department of Defense (DoD) policy mandates that prompt mental health appointments be available for all service members at military treatment facilities (Defense Health Agency, 2020), and time receiving care is not deducted from leave

allowances (Military OneSource, 2020). However, the degree to which these policies are uniformly implemented is unknown. Moreover, confidentiality is not guaranteed. In seeking treatment at a military facility, service members surrender control of treatment planning to their clinicians and non-medical commanders (Christensen & Yaffe, 2012; Delaney et al., 2019). Treatment plans may also be made mandatory (Defense Health Agency, 2019). Such collaboration between clinicians and command occurs only when the clinician assesses a risk to self, others, property, or military readiness. However, Christensen and Yaffe (2012) found it to occur in 34% of cases in a sample of non-deployed Airmen. They also found that 10% of mental health evaluations resulted in some form of duty restriction.

Service members considering seeking treatment consistently cite potential career harm as a primary concern (Acosta et al., 2014; Coleman et al., 2017; Eckart & Dufrene, 2015; Gould et al., 2010; Warner et al., 2011; Zinzow et al., 2013), and the concern is legitimate. Commanders who are not mental health professionals determine if a service member is “mentally fit” for duty (Acosta et al., 2014). Mandated treatment plans may restrict assignments to the many duty stations that have limited capacity for mental health care (Eckart & Dufrene, 2015). A systematic review of military policies conducted by RAND identified 97 policies affecting personnel with mental health disorders, including potential disqualification from serving as a chaplain assistant, drill sergeant, or postal clerk. The ability to obtain a security clearance – key to many paths of career advancement – is also contingent upon mental health assessment. (Acosta et al., 2014). Certainly, not all contacts with mental health providers are reported to commanders or harm one’s career, yet the potential loss of control over one’s mental health care,

privacy, and livelihood are likely to weigh heavily in decisions about whether or not to seek care.

Target Groups

As service members face a surplus of barriers to mental healthcare compared to civilians, those who have a marginalized social identity based on race, ethnicity, gender or sexuality face yet an additional surplus of barriers. The benefits of military service should serve as an equalizing force across various identities and community affiliations with respect to organizational barriers such as ability to pay for treatment, scheduling, and getting time off work. At the same time, it cannot erase the patterns of social marginalization and discrimination that exist in the civilian world. And, as Acosta and colleagues (2014) note after systematically reviewing military policies around mental health, “Despite the presence of equal-opportunity policies, wide variability and ambiguity in policies that prohibit service members with [mental health disorders] from career opportunities might inadvertently create opportunities for discrimination” (p. xviii). It follows, then, that service members who are members of a marginalized or “target” group – persons of color, Latino/a, LGB, or female – are more likely to be confronted by these organizational barriers than members of dominant or “agent” groups.

Research on stigma against mental illness has found higher prevalence in communities of color. Studies have shown that, compared to white participants, shame around mental illness to be significantly higher for Black (Sanders Thompson et al., 2004), Latino/a, and Asian-American (Wong et al., 2016) study participants. Possibly more salient for members of the military is the stigmatizing belief noted in communities

of color that people with mental illness are dangerous (Rao et al., 2007; Rastogi et al., 2012) or weak and ineffective (Sanders Thompson et al., 2004; Wong et al., 2016). Importantly, several studies have found that experiencing race-based discrimination is uniquely associated with such mental health stigma (Burgess et al., 2008; Krill-Williston et al., 2019). Regardless of the cause, being characterized as shameful, dangerous, or weak would be especially damaging to self-esteem and social standing in a military culture that values pride, reliability, and strength.

Military culture may also moderate perceptions of mental health treatment among women, who, in the civilian world, are typically more favorable to it than men. Research in civilian populations have shown that women, compared to men, have less stigma against mental health treatment (Bradbury, 2020; Corrigan & Watson, 2007; Currin et al., 2011; Ojeda & Bergstresser, 2008) greater treatment engagement (Brand et al., 2019; Pedrelli et al., 2016; Seehuus et al., 2021), and higher perceived treatment efficacy (Anglin et al., 2008). In research with military populations, women have been more likely to engage in needed, effective treatments (Gallegos et al., 2015) and to do so faster (Maguen et al., 2012) than men, yet one study of combat medics found both genders to have high, yet statistically similar, prevalence of stigma against mental health treatment (Elnitsky et al., 2013). However, the lives of women in the military differ greatly from civilian women. Comprising 50.8% of the general US population (2015 estimates; U.S. Census Bureau, 2021), women account for only 15.5% of the military force (2015 count; Department of Defense, 2016). This discrepancy confers upon them a marginalized, target status that is magnified by the hyper-masculinity of military culture (Braswell & Kushner, 2012; Caddick et al., 2015). Through the enculturation process

and in response to prevailing social norms, female SMs may hold perceptions of mental health treatment that is more similar to military men than to civilian women.

Similar to women, though less researched, LGB civilians are more amenable to mental health treatment. Recent studies in civilian populations have found LGB individuals to have higher rates of psychotherapy utilization than heterosexuals when controlling for demographic characteristics (Platt et al., 2018) and symptom severity (Seehuus et al., 2021). However, prior to the 2011 repeal of the “Don’t Ask Don’t Tell” (DADT) policy, which barred LGB individuals from military service, mental health clinicians were required to notify command if an active-duty client disclosed same-sex attraction or behavior. Many military clinicians, therefore, have limited experience with the unique needs of LGB individuals (Rerucha et al., 2018; Shrader et al., 2017). As such, LGB-SMs have reason to be skeptical about the quality of individualized treatment they may receive. Moreover, military culture is not only hyper-masculine, but also hyper-heteronormative. For LGB-SMs who, like women, are a small demographic minority, the push to conform to prevailing social norms (including stigmatization of mental health treatment) may be formidable, and the desire to prevent mental health stigma from compounding with sexuality stigma, substantial.

Military norms against psychotherapy may be reinforced by cultural understandings of various target groups. The institutionalization of whiteness in clinical research and care has engendered a justified distrust of psychotherapeutic intervention in many communities of color. Distrust and disengagement is seen in studies that show Black, Latino/a, and Asian-American individuals to be less likely than non-Latino/a whites to receive mental health care (Dobalian & Rivers, 2008; McClendon et al., 2020; Wang et al., 2005; Wong et al., 2016). Lester and colleagues (2010) found that Black

women were three times less likely than their white peers to initiate cognitive processing therapy to treat their PTSD. In a VA setting, where socioeconomic barriers should be reduced, Maguen and colleagues (2014) found that Black veterans diagnosed with PTSD took, on average, three months longer than their white peers to initiate treatment. While this gap in service provision is often attributed, in at least part, to cost of care (e.g., Cabassa et al., 2006; Kouyoumdjian et al., 2003; Sanders Thompson et al., 2004; Ward et al., 2009), cultural memory and lived experiences cannot be overlooked.

In a large qualitative study on beliefs about psychotherapy with an all-Black sample, “[p]sychologists were described as older White males, who were unsympathetic, uncaring, and unavailable... elitist and too far removed from the community to be of assistance to most African Americans” (Sanders Thompson et al., 2004, p. 23). Much of their distrust was driven by a belief that therapists rely too heavily on stereotypes to understand the needs of diverse clients. Rastogi and colleagues (2012) argue that prevailing models of psychotherapy are inconsistent with the needs and values of the Latino community, as “Eurocentric models of therapy tend to value individual traits and independence whereas Latino culture values family unity (*familismo*), loyalty to familial and interpersonal relationships, and one’s role within the social context” (p. 5). Indeed these perceptions of psychotherapy are likely to play out in the lived experience of treatment. Koo and colleagues (2016) found that, compared to their white peers, “racial/ethnic minority” veterans in a residential treatment program for PTSD endorsed lower therapeutic alliance, goal agreement, and bond with their clinicians. Because of these cultural understandings of psychotherapy, coupled with anti-therapy aspects of military culture, persons of color serving in the military are likely to prefer to manage mental health without the support of professional care.

The Current Study

Military culture and procedures produce substantial barriers to mental health treatment for service members, and a great variety of causes do the same for members of marginalized or target communities. However, little is known about barriers faced by individuals whose military identity intersects with a target identity. The present study seeks to describe barriers to care expressed by service members who have an unmet need for mental health treatment and who belong to one of four often-marginalized communities – women, LGB, PoC, and Latino/a SMs. The study tests a set of broad hypotheses based on barriers to care described in civilian populations. First, because health services are integrated into the work-life of all SMs, (H₁) I do not expect to find significantly different prevalence of practical barriers – cost, time off work, and scheduling – when comparing service members within any of the specified communities to those without. However, because of higher rates of stigma, exposure to discrimination, and primacy of military norms, (H₂) I anticipate finding that members of target groups are more likely to endorse career- and stigma-related concerns, compared to agent groups. Further, based on treatment perceptions identified in civilian populations, (H₃) I hypothesize that significantly more Latino/a and PoC service members will endorse negative treatment beliefs – that it won't be helpful or a preference to handle problems on their own – than will non-Latino/a and white service members, respectively.

Methods

Design & Sample

Conducted roughly every three years, Department of Defense Health Related Behaviors Survey (HRBS; Meadows et al., 2018) assesses the psychosocial and behavioral wellbeing of the full active-duty force with a large, representative sample. Original investigators provided data from the 2015 wave of the survey (n=16,699) for the present research. To answer this study's questions, the sample is narrowed to only active-duty personnel in the four primary branches (Army, Navy, Air Force, and Marines) who are identified as having an unmet need for treatment (n=1,237), as explained in the following Measurement section. Post-stratification weights developed by the original investigators, based on the known parameters of gender, branch, and rank, are used in all analyses to improve generalizability to the larger military population. See Meadows et al. (2018) for a complete description of sampling and data collection procedures.

Measurement

Unmet Treatment Need. To identify need for mental health services, the 2015 HRBS asked respondents, "At any time in the PAST 12 MONTHS, did you feel that you needed counseling, therapy, or treatment from either a military or civilian mental health professional?" and "At any time in the PAST 12 MONTHS, did SOMEONE ELSE tell you that you need counseling, therapy, or treatment from either a military or civilian mental health professional?". A subsequent set of questions asked about receipt of mental health treatment from either military or civilian mental health professionals, medical doctors, religious leaders, and/or self-help groups, in the past 12 months. Respondents

who (1) endorsed self-perceived need and/or other-perceived need, and who (2) did not endorse receiving any form of mental health services were classified as having an “unmet treatment need.”

Barriers to Care. Service members classified as having an unmet treatment need were routed to the item: “You said you needed counseling, therapy, or treatment in the PAST 12 MONTHS but that you did not receive it from any source on our list. Why didn’t you receive counseling, therapy, or treatment?”. The item then included a matrix with a set of reasons for not having received treatment, listed in Table 1, and “yes” or “no” response options.

Subgroup Indicators. A set of four dummy-coded variables indicated membership in a specific subgroup relevant to analyses. Self-identification as lesbian, gay, or bisexual (LGB) was derived from the item asking, “Do you consider yourself to be...? (1) Heterosexual or straight, (2) Gay or lesbian, (3) bisexual” (Meadows et al., 2018, p. 319). The binary gender indicator was recoded to represent female gender identity. The public use data file made available for this study collapsed race into a single variable representing “Non-white Minority Race.” I reframed this variable as “persons of color” or “PoC.” Lastly, the survey included one question assessing ethnicity: “Are you Spanish/Hispanic/Latino?”. Respondents could select either “Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, or other Spanish/ Hispanic/Latino” or “No, not Spanish/Hispanic/Latino” (Meadows et al., 2018, p. 283). For the present study, a dummy variable representing “Latino/a” was used.

Table 1*Survey items assessing barriers to mental health care*

Statements

-
- 1) “I could not afford the cost.”
 - 2) “It was too difficult to get time off work for treatment.”
 - 3) “It was too difficult to schedule an appointment.”
 - 4) “It would have harmed my career.”
 - 5) “I could have been denied security clearance in the future.”
 - 6) “I was concerned that the information I gave the counselor might not be kept confidential.”
 - 7) “I was afraid my supervisor/unit leadership would have a negative opinion of me.”
 - 8) “My coworkers would have had less confidence in me if they found out.”
 - 9) “I wanted to handle the problem on my own.”
 - 10) “I did not think treatment would help.”
-

(Meadows et al., 2018, p. 312)

Analysis

All analyses were conducted using R (R Core Team, 2020). First, unweighted and weighted frequencies were calculated using the ‘questionr’ package (Barnier et al., 2020) to describe sample demographics. Weighted frequencies were normalized such that weighted totals matched unweighted totals. Next, subsamples were created for each of the target groups as well as their comparison groups (e.g., separate subgroups for female/male, LGB/heterosexual). To estimate the proportion of group members endorsing each of the ten reasons for not seeking care, the base package ‘stats’ was used to calculate their weighted means for the total sample, target groups, and agent groups. The choice was made to analyze each barrier separately, rather than using a data-reduction method to cluster similar barriers into factors. This approach provides more actionable data for the targeting of interventions. For example, female service members

disproportionately endorsing difficulty scheduling appointments and getting time off work better indicates an intervention strategy than would a more generalized finding, such as female service members disproportionately endorsing “practical barriers.”

Next, the package ‘weights’ (Pasek & Tahk, 2020) was used to conduct a series of chi-square tests. Each test estimated if a relationship was likely to exist between sets of dummy variables – one indicating group membership and the other endorsement of a barrier to care. In other words, the tests determined if the proportion of target group members endorsing a given barrier was significantly different from that of the comparison agent group. Recognizing the diversity of experiences among service members who may have multiple intersecting identities across analyzed groups, the choice was made not to isolate the marginal effect of specific group identities by controlling for all other group identities. In other words, to control for female identity while analyzing PoC effects would be to artificially divide the experiences of women of color into separate categories rather than to include the intersecting female and PoC identity into the totality of PoC experiences.

Results

Sample

The sample of service members who were identified as having an unmet need for mental health treatment is described in Table 2. Because gender was a stratifying variable for the original survey, male and female personnel are represented in relatively equal proportion in the unweighted sample. In the weighted sample, females represent 17.5%, which is only slightly higher than was their actual proportion of the entire force

at the time data were collected (15.5%; Department of Defense, 2016). The remaining three indicators were not used as stratifying variables, so their weighted and unweighted proportions are more similar. LGB-SMs comprise 8.5% of the weighted sample; their actual proportion was not included in the military's 2015 Census report (cited above). PoC service members comprise 39.4% of the weighted sample and Latino/a service members 18%. Both groups were represented in greater proportion than they were in the total force where they comprise 31.3% and 11.8%, respectively.

Practical Barriers to Care

Practical barriers to care – cost, time off work, and scheduling – were among the least-endorsed reasons for not seeking care across the total sample at 3.63%, 24.26%, and 15.94%, respectively. Results of the chi-square tests, shown in Table 3, partially support H₁, as no significant differences were detected between male and female service members or between LGB and straight service members, with respect to practical

Table 2

Demographic characteristics of sample

	Unweighted	Weighted*
Gender		
Female	620 (50.1)	217 (17.5)
Male	617 (49.9)	1,020 (82.5)
Sexuality		
LGB	95 (7.9)	103 (8.5)
Heterosexual	1,111 (92.1)	1,103 (91.5)
Race		
Persons of Color	449 (36.4)	486 (39.4)
White	785 (63.6)	748 (60.6)
Ethnicity		
Latino/a	165 (13.3)	223 (18.0)
Non-Latino/a	1,071 (86.7)	1,013 (82.0)

*Weighted counts normalized so that total is the same as unweighted total

Table 3
Proportion of service members endorsing various reasons for not seeking mental health treatment and chi-square tests of difference based on social identities

	%									
	Cost	Time off work	Difficulty scheduling	Career harm	Security clearance	Supervisors - stigma	Coworkers - stigma	Confident.	Wouldn't help	Handle on my own
Gender										
Female	2.75	24.71	14.85	25.73	16.68	28.86	17.66	31.21	34.01	64.50
Male	3.82	24.17	16.17	36.68	25.39	32.09	26.38	30.10	33.61	60.76
(p)	(.448)	(.868)	(.635)	(.002)	(.007)	(.359)	(.008)	(.751)	(.912)	(.310)
Sexuality										
LGB	1.78	18.48	14.70	43.96	15.87	18.16	14.46	44.70	32.63	70.07
Heterosexual	3.64	24.82	16.08	33.91	24.64	32.94	25.93	28.74	33.24	60.59
(p)	(.327)	(.153)	(.715)	(.042)	(.047)	(.002)	(.010)	(.001)	(.900)	(.060)
Race										
Persons of Color	2.25	18.76	14.69	31.27	17.42	23.76	20.63	26.13	35.88	62.13
White	4.51	27.77	16.75	36.92	27.97	36.37	27.45	32.87	32.35	61.05
(p)	(.041)	(<.001)	(.340)	(.045)	(<.001)	(<.001)	(.008)	(.013)	(.208)	(.706)
Ethnicity										
Latino/a	1.30	23.20	11.85	41.67	19.46	28.98	23.96	30.83	45.90	64.04
Non-Latino/a	4.15	24.50	16.85	33.23	24.86	32.10	25.04	30.18	30.94	60.82
(p)	(.041)	(.683)	(.067)	(.017)	(.089)	(.367)	(.736)	(.851)	(<.001)	(.374)
Total	3.63	24.26	15.94	34.77	23.87	31.53	24.85	30.30	33.68	61.41

Statistically significant differences ($p < .05$) highlighted in bold. All estimates are derived using poststratification weights.

□

barriers. However, PoC, compared to white, service members were significantly less likely to endorse cost (2.25% vs 4.51%, $c^2(1) = 4.19, p = .041$) and difficulty getting time off work (18.76% vs 27.77%, $c^2(1) = 12.62, p < .001$) as reasons for not seeking care. Concern about cost was also three times less prevalent among Latino/a than non-Latino/a service members (1.30% vs 4.15%, $c^2(1) = 4.19, p = .041$).

Career, Stigma, and Confidentiality

The second hypothesis predicted that target groups would be more likely to endorse barriers related to career and stigma. With a few exceptions, the opposite was found. Compared to white personnel, PoC service members were less likely to endorse each of the barriers in this group: concerns about career harm (31.27% vs 36.92%, $c^2(1) = 4.03, p = .045$), security clearance (17.42% vs 27.97%, $c^2(1) = 17.51, p < .001$), supervisors' negative opinions (23.76% vs 36.37%, $c^2(1) = 21.09, p < .001$), loss of confidence from coworkers (20.63% vs 27.45%, $c^2(1) = 7.12, p = .008$), and potential loss of confidentiality (26.13% vs 32.87%, $c^2(1) = 6.15, p = .013$). Similarly, compared to males, fewer females endorsed concerns about career harm (25.73% vs 36.68%, $c^2(1) = 9.23, p = .002$), security clearance (16.68% vs 25.39%, $c^2(1) = 7.30, p = .007$), and confidence of coworkers (14.46% vs 25.93%, $c^2(1) = 7.09, p = .008$). LGB SMs were also less likely to endorse concerns about security clearance (15.87% vs 34.645%, $c^2(1) = 3.95, p = .047$) stigma from supervisors (18.16% vs 32.94%, $c^2(1) = 9.42, p = .002$), and stigma from peers (14.46% vs 25.93%, $c^2(1) = 6.52, p = .010$), in comparison to their straight peers. Supporting H₂, LGB SMs were the only target group to more prevalently endorse concern about confidentiality (44.70% vs 28.74%, $c^2(1) = 11.29, p = .001$). Concerns about career harm were also more prevalent for LGB SMs (43.96% vs 33.91%,

$c^2(1) = 4.15, p = .042$) and Latino/a SMs (41.67% vs 33.23%, $c^2(1) = 5.67, p = .017$), relative to their comparison groups. Latino/a service members were not found to be statistically different from their non-Latino/a peers with respect to the other four career and stigma-related concerns.

Treatment Perceptions

Hypothesis 3 was only partially supported by the finding that Latino/a service members were roughly 50% more likely to endorse the belief that treatment wouldn't help (45.90% vs 30.94%, $c^2(1) = 18.09, p = <.001$). No other statistically significant differences between target and agent groups were found.

Discussion

The concerns motivating this study – that members of often-marginalized groups may struggle with greater barriers to mental health treatment when serving in the military – were largely unsupported by its findings. In many instances, findings directly contradicted predicted outcomes, as members of target groups were less likely to report barriers to care in comparison to agent groups. LGB and Latino/a service members were the exception to these generally positive findings for a few barriers, but, overall the results are encouraging evidence that military service may be more protective than harmful for marginalized communities with respect to mental healthcare.

PoC service members were predicted to endorse reasons for not seeking care at similar or higher rates than white service members, yet they were found to have significantly lower prevalence for seven of the ten barriers. Though cost of care was the least prevalent barrier overall, PoC service members were half as likely to endorse it as a

reason for not accessing care compared to their white peers. Similarly, Latino/a service members were a third as likely as non-Latino/a service members to endorse cost as a barrier. This is a positive finding, as cost is often noted as a reason for not seeking care among PoC and Latino/a civilians.

It is possible that the access to relatively affordable and available health care coverage that comes with entering the military is a greater contrast for PoC service members who may have been less likely to have such access in the civilian sector. Comparison of their current costs to their costs prior to service may account for why half as many PoC service members endorsed cost as a barrier, relatively, than did their white peers for whom affordable health care is generally more accessible in the civilian sector. Such an interpretation of results is consistent with Gifford's (2006) conceptualization of the military as a substantial component of the U.S. welfare state, which offers personnel, and their families, a robust set of cash and in-kind benefits for health care, housing, childcare, and consumer subsidies. These benefits are uniformly provided to all constituents without the personal scrutiny that is required to receive the majority of means-tested civilian social welfare provisions. The generosity and fairness of these benefits, relative to civilian benefits, may positively influence how other aspects of the military system are perceived.

Despite the often punitive and contradictory nature of the military's many policies on mental health, noted by Acosta and colleagues (2014), their transparency and codification may be reassuring to PoC for whom, in the civilian world, so many of the social and political forces that too often harm them are opaque and dispersed. The military's structure and relative generosity of health benefits may buffer the concerns PoC service members have when thinking about receiving care, which could account for

the lower proportion of PoC who endorsed career- and stigma-related reasons for not seeking care. Indeed, PoC service members have reason to believe that the military system is a fair one in which race will not be an impediment to career advancement. Within the enlisted paygrades (E1 to E9), where 87% of PoC personnel were ranked at the time of the present study's data collection (Department of Defense, 2016), PoC service members were represented in greater proportions at the higher ranks – 30.7% of grades E1 to E4, 35.1% of grades E5 to E6, and 38.3% of the highest ranks E7 to E9. Compared to the civilian sector where laws and policies are not sufficiently robust to prevent racial discrimination in employment, the military system may provide a context in which concerns about mental health stigma harming one's career are markedly reduced.

These results do suggest a relatively positive environment for PoC service members; however, it is important to recognize that despite lower endorsement of the listed reasons for not seeking treatment, PoC members of the present sample are identified as having an unmet need for treatment. If not as likely to experience these ten barriers to treatment, what are the other more salient barriers? Given the unexpected outcomes of the present study, exploratory qualitative research may be needed to determine what barriers are faced by PoC personnel that were *not* asked about in the 2015 HRBS.

If the military's unique set of benefits are having a positive effect for PoC, one may also expect it to be true for Latino/a who are similarly vulnerable to discrimination in the civilian sector. Results do not, however, show similar outcomes. On most measures of career/stigma barriers, Latino/a respondents were statistically similar to their non-Latino peers, with two exceptions. Latino/a service members were a third

more likely to endorse concern about harm to career and half as likely to endorse the belief that treatment would not help. Unlike for PoC service members, the military does not provide demographic information by rank for Latino/a personnel, so it is difficult to interpret how this group may perceive their opportunities for advancement. The highest proportion of all groups, nearly half (45.9%) of the Latino/a respondents endorsed the belief that treatment would not be effective. This finding suggests that the negative perceptions of psychotherapy in the Latino/a community, described by Rastogi and colleagues (2012), may not be affected by military service and, in fact, may be exacerbated by similar perceptions prevalent in military culture.

LGB-SMs were the least likely of any group, and significantly less likely than heterosexual SMs to endorse concerns about security clearance, and stigma from coworkers and supervisors. Perhaps concerns about mental health stigma are much less salient than are concerns about other forms of stigma within the military environment. A lack of expectation that security clearance could be possible in any circumstances may account for clearance being relatively less of a concern. However, from the presently available data, it is not possible to know what accounts for these differences. Future research is needed to qualitatively explore the experiences of LGB SMs following the repeal of DADT. Importantly, however, concerns that must have been quite prevalent before the repeal – harm to career and loss of confidentiality – continue to be elevated for LGB SMs. It will be important to continue tracking these barriers for LGB SMs over time to see if they remain high or dissipate over time along with memories of DADT-era persecution. If they do not, it will be important for the military to address the disparity as it strives for full inclusion of LGB SMs.

Many of the present study's findings are unexpectedly positive, showing that often-marginalized groups were less likely to endorse reasons for not seeking care relative to their comparison groups. The current findings must not, however, be misinterpreted to suggest that need for mental health treatment is lower within target groups or that they are behaviorally more likely to engage in treatment. They were simply less likely to endorse the listed barriers to care, in many instances. As previously mentioned, if the current sample has an unmet need for treatment and the included reasons for not seeking treatment are less prevalent for these target groups, there must be other more relevant but unmeasured reasons for not seeking care. Additional research is needed to understand how perceived barriers affect treatment initiation and retention for members of marginalized communities serving in the military.

Limitations

The data made available for this research is critically important for understanding the behavioral health needs of active-duty service members. Importantly, the 2015 HRBS was also the first to ask about sexuality. Nevertheless, the present study is limited by its use of secondary data. Primarily, the release of data for public use necessitates that some variables be omitted or categories collapsed, and although the survey asked about trans* identity, the variable was not included in the data file. Race was also collapsed into a single binary variable, which prevented a more nuanced exploration of the topic, and it is also important to note that many Latino/a survey respondents were also classified as persons of color, creating excess overlap in the categories. The full sample was quite large, but because sexual minority identity is relatively rare, the subsample of LGB SMs available for the current study (n=95) was

insufficient to allow for analysis by gender and/or sexuality subgroups. Future iterations of the HRBS may consider over-sampling LGB SMs to allow for such additional analyses.

The narrow way in which unmet treatment need was defined is another notable limitation. Survey respondents were routed to questions about barriers to care only if they reported a need for care and no engagement with mental health supports over the past year. As such, an individual who met one time with a clinician but did not return was not asked about barriers and therefore necessarily excluded from the present sample. Future iterations of the HRBS may consider a less strict definition in order to understand the barriers faced by service members who have received less-than-adequate mental health care.

Conclusion

Seeking to understand barriers to mental health care for often-marginalized groups as they serve in the US military, the present study compared reasons for not seeking care between four target communities (female, LGB, PoC, and Latino/a service members), and their agent community counterparts (male, heterosexual, White, and non-Latino/a service members). Contradicting hypotheses, results generally show that target group members endorsed the listed reasons for not seeking care at a similar or lesser frequency than their agent group military peers. Military service may provide a unique environment that buffers negative perceptions of mental health treatment for these groups. At the same time, these groups may have other reasons for not seeking care that were not included in the original survey. LGB-SMs were more likely to endorse concerns about career harm and loss of confidentiality than were straight service

members, and Latino/a service members were also more prevalently endorsed concern about career harm and the belief that treatment would not be helpful than non-Latino/a service members. Behavioral health leaders in the military may wish to continue monitoring the unique experiences of these often-vulnerable groups and seek to target interventions that lessen these specific concerns and perceptions.

Works Cited

- Acosta, J., Becker, A., Cerully, J., Fisher, M., Martin, L., Vardavas, R., Slaughter, M., & Schell, T. (2014). *Mental Health Stigma in the Military*. RAND Corporation. <https://doi.org/10.7249/RR426>
- Adler, A. B., & Castro, C. A. (2013). An Occupational Mental Health Model for the Military. *Military Behavioral Health, 1*(1), 41–45. <https://doi.org/10.1080/21635781.2012.721063>
- Anglin, D. M., Alberti, P. M., Link, B. G., & Phelan, J. C. (2008). Racial Differences in Beliefs About the Effectiveness and Necessity of Mental Health Treatment. *American Journal of Community Psychology, 42*(1–2), 17–24. <https://doi.org/10.1007/s10464-008-9189-5>
- Barnier, J., Briatte, F., & Larmarange, J. (2020). *questionr: Functions to Make Surveys Processing Easier* (0.7.4) [Computer software]. <https://CRAN.R-project.org/package=questionr>
- Bradbury, A. (2020). Mental Health Stigma: The Impact of Age and Gender on Attitudes. *Community Mental Health Journal, 56*(5), 933–938. <https://doi.org/10.1007/s10597-020-00559-x>
- Brand, E., Rodriguez-Monguio, R., & Volberg, R. (2019). Gender differences in mental health and substance use disorders and related healthcare services utilization. *The American Journal on Addictions, 28*(1), 9–15. <https://doi.org/10.1111/ajad.12826>
- Braswell, H., & Kushner, H. I. (2012). Suicide, social integration, and masculinity in the U.S. military. *Social Science & Medicine, 74*(4), 530–536. <https://doi.org/10.1016/j.socscimed.2010.07.031>
- Bryan, C. J., Jennings, K. W., Jobes, D. A., & Bradley, J. C. (2012). Understanding and Preventing Military Suicide. *Archives of Suicide Research, 16*(2), 95–110. <https://doi.org/10.1080/13811118.2012.667321>
- Burgess, D., Ding, Y., Hargreaves, M., van Ryn, M., & Phelan, S. (2008). The Association between Perceived Discrimination and Underutilization of Needed Medical and Mental Health Care in a Multi-Ethnic Community Sample. *Journal of Health Care for the Poor and Underserved, 19*(3), 894–911. <https://doi.org/10.1353/hpu.0.0063>
- Cabassa, L. J., Zayas, L. H., & Hansen, M. C. (2006). Latino Adults' Access to Mental Health Care. *Administration and Policy in Mental Health, 33*(3), 316–330. <https://doi.org/10.1007/s10488-006-0040-8>

- Caddick, N., Smith, B., & Phoenix, C. (2015). Male combat veterans' narratives of PTSD, masculinity, and health. *Sociology of Health & Illness*, 37(1), 97–111. <https://doi.org/10.1111/1467-9566.12183>
- Christensen, B. N., & Yaffe, J. (2012). Factors Affecting Mental Health Service Utilization Among Deployed Military Personnel. *Military Medicine*, 177(3), 278–283. <https://doi.org/10.7205/MILMED-D-11-00353>
- Coleman, S. J., Stevelink, S. A. M., Hatch, S. L., Denny, J. A., & Greenberg, N. (2017). Stigma-related barriers and facilitators to help seeking for mental health issues in the armed forces: A systematic review and thematic synthesis of qualitative literature. *Psychological Medicine*, 47(11), 1880–1892. <https://doi.org/10.1017/S0033291717000356>
- Corrigan, P. W., & Watson, A. C. (2007). The Stigma of Psychiatric Disorders and the Gender, Ethnicity, and Education of the Perceiver. *Community Mental Health Journal*, 43(5), 439–458. <https://doi.org/10.1007/s10597-007-9084-9>
- Currin, J. B., Hayslip, B., & Temple, J. R. (2011). The relationship between age, gender, historical change, and adults' perceptions of mental health and mental health services. *International Journal of Aging & Human Development*, 72(4), 317–341. <https://doi.org/10.2190/AG.72.4.c>
- Defense Health Agency. (2019). *Standard Processes, Guidelines, and Responsibilities of the DoD Patient Bill of Rights and Responsibilities in the Military Health System (MHS) Military Medical Treatment Facilities (MTFs)* (Procedural Instruction DHA-PI 6025.10). <https://health.mil/Reference-Center/Policies/2019/12/20/DHA-PI-6025-10-Change-1-Patient-Rights-and-Responsibilities>
- Defense Health Agency. (2020). *Interim Procedures Memorandum 18-001, "Standard Appointing Processes, Procedures, Hours of Operation, Productivity, Performance Measures and Appointment Types in Primary, Specialty, and Behavioral Health Care in Medical Treatment Facilities (MTFs)"* (DHA-IPM 18-001). <https://health.mil/Reference-Center/Policies?query=behavioral&isDateRange=0&broadVector=000&newsVector=0000000&refVector=000000000100000&refSrc=1>
- Delaney, E., Webb-Murphy, J., Bhakta, J., Nebeker, B., & Johnston, S. (2019). Barriers to Mental Health Care In Military Settings: What We Know and Where to go From Here? *Military Behavioral Health*, 7(1), 1–3. <https://doi.org/10.1080/21635781.2019.1590265>
- Department of Defense. (2016). *2015 Demographics Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2015-Demographics-Report.pdf>

- Dickstein, B. D., Vogt, D. S., Handa, S., & Litz, B. T. (2010). Targeting Self-Stigma in Returning Military Personnel and Veterans: A Review of Intervention Strategies. *Military Psychology (Taylor & Francis Ltd)*, 22(2), 224–236. <https://doi.org/10.1080/08995600903417399>
- Dobalian, A., & Rivers, P. A. (2008). Racial and Ethnic Disparities in the Use of Mental Health Services. *The Journal of Behavioral Health Services & Research*, 35(2), 128–141. <https://doi.org/10.1007/s11414-007-9097-8>
- Eckart, E., & Dufrene, R. (2015). Barriers to Mental Health Treatment in the Military. *Journal of Military and Government Counseling*, 3(1), 67.
- Elnitsky, C. A., Chapman, P. L., Thurman, R. M., Pitts, B. L., Figley, C., & Unwin, B. (2013). Gender Differences in Combat Medic Mental Health Services Utilization, Barriers, and Stigma. *Military Medicine*, 178(7), 775–784. <https://doi.org/10.7205/MILMED-D-13-00012>
- Fox, J., & Pease, B. (2012). Military Deployment, Masculinity and Trauma: Reviewing the Connections. *The Journal of Men's Studies*, 20(1), 16–31. <https://doi.org/10.3149/jms.2001.16>
- Gadermann, A. M., Engel, C. C., Naifeh, J. A., Nock, M. K., Petukhova, M., Santiago, P. N., Wu, B., Zaslavsky, A. M., & Kessler, R. C. (2012). Prevalence of DSM-IV Major Depression Among U.S. Military Personnel: Meta-Analysis and Simulation. *Military Medicine*, 177(8S), 47–59. <https://doi.org/10.7205/MILMED-D-12-00103>
- Gallegos, A. M., Wolff, K. B., Streltsov, N. A., Adams, L. B., Carpenter-Song, E., Nicholson, J., & Stecker, T. (2015). Gender Differences in Service Utilization among OEF/OIF Veterans with Posttraumatic Stress Disorder after a Brief Cognitive–Behavioral Intervention to Increase Treatment Engagement: A Mixed Methods Study. *Women's Health Issues*, 25(5), 542–547. <https://doi.org/10.1016/j.whi.2015.04.008>
- Gifford, B. (2006). The Camouflaged Safety Net: The U.S. Armed Forces as Welfare State Institution. *Social Politics: International Studies in Gender, State & Society*, 13(3), 372–399. <https://doi.org/10.1093/sp/jxl003>
- Gould, M., Adler, A., Zamorski, M., Castro, C., Hanily, N., Steele, N., Kearney, S., & Greenberg, N. (2010). Do stigma and other perceived barriers to mental health care differ across Armed Forces? *Journal of the Royal Society of Medicine*, 103(4), 148–156. <https://doi.org/10.1258/jrsm.2010.090426>
- Hom, M. A., Stanley, I. H., Schneider, M. E., & Joiner, T. E. (2017). A systematic review of help-seeking and mental health service utilization among military service members. *Clinical Psychology Review*, 53, 59–78. <https://doi.org/10.1016/j.cpr.2017.01.008>

- Hourani, L. L., Williams, T. V., & Kress, A. M. (2006). Stress, Mental Health, and Job Performance among Active Duty Military Personnel: Findings from the 2002 Department of Defense Health-Related Behaviors Survey. *Military Medicine*, *171*(9), 849–856. <https://doi.org/10.7205/MILMED.171.9.849>
- Kessler, R. C., Heeringa, S. G., Stein, M. B., Colpe, L. J., Fullerton, C. S., Hwang, I., Naifeh, J. A., Nock, M. K., Petukhova, M., Sampson, N. A., Schoenbaum, M., Zaslavsky, A. M., & Ursano, R. J. (2014). Thirty-Day Prevalence of DSM-IV Mental Disorders Among Nondeployed Soldiers in the US Army: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry*, *71*(5), 504. <https://doi.org/10.1001/jamapsychiatry.2014.28>
- Koo, K. H., Tiet, Q. Q., & Rosen, C. S. (2016). Relationships between racial/ethnic minority status, therapeutic alliance, and treatment expectancies among veterans with PTSD. *Psychological Services*, *13*(3), 317–321. <https://doi.org/10.1037/ser0000029>
- Kouyoumdjian, H., Zamboanga, B. L., & Hansen, D. J. (2003). Barriers to Community Mental Health Services for Latinos: Treatment Considerations. *Clinical Psychology: Science and Practice*, *10*(4), 394–422.
- Krill-Williston, S., Martinez, J. H., & Abdullah, T. (2019). Mental health stigma among people of color: An examination of the impact of racial discrimination. *International Journal of Social Psychiatry*, *65*(6), 458–467. <https://doi.org/10.1177/0020764019858651>
- LeardMann, C. A., Powell, T. M., Smith, T. C., Bell, M. R., Smith, B., Boyko, E. J., Hooper, T. I., Gackstetter, G. D., Ghamsary, M., & Hoge, C. W. (2013). Risk Factors Associated With Suicide in Current and Former US Military Personnel. *JAMA*, *310*(5), 496. <https://doi.org/10.1001/jama.2013.65164>
- Lee, D. J., Warner, C. H., & Hoge, C. W. (2014). Advances and Controversies in Military Posttraumatic Stress Disorder Screening. *Current Psychiatry Reports*, *16*(9), 467. <https://doi.org/10.1007/s11920-014-0467-7>
- Lester, K., Resick, P., Young-Xu, Y., & Artz, C. (2010). Impact of Race on Early Treatment Termination and Outcomes in Posttraumatic Stress Disorder Treatment. *Journal of Consulting and Clinical Psychology*, *78*, 480–489. <https://doi.org/10.1037/a0019551>
- Lunasco, T. K., Goodwin, E. A., Ozanian, A. J., & Loflin, E. M. (2010). One Shot-One Kill: A Culturally Sensitive Program for the Warrior Culture. *Military Medicine*, *175*(7), 509–513. <https://doi.org/10.7205/MILMED-D-09-00182>

- Maguen, S., Madden, E., Cohen, B. E., Bertenthal, D., & Seal, K. H. (2012). Time to Treatment Among Veterans of Conflicts in Iraq and Afghanistan With Psychiatric Diagnoses. *Psychiatric Services*, *63*(12), 1206–1212. <https://doi.org/10.1176/appi.ps.201200051>
- Maguen, S., Madden, E., Neylan, T. C., Cohen, B. E., Bertenthal, D., & Seal, K. H. (2014). Timing of Mental Health Treatment and PTSD Symptom Improvement Among Iraq and Afghanistan Veterans. *Psychiatric Services*, *65*(12), 1414–1419. <https://doi.org/10.1176/appi.ps.201300453>
- McClendon, J., Dean, K. E., & Galovski, T. (2020). Addressing Diversity in PTSD Treatment: Disparities in Treatment Engagement and Outcome Among Patients of Color. *Current Treatment Options in Psychiatry*, *7*(3), 275–290. <https://doi.org/10.1007/s40501-020-00212-0>
- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). *2015 Department of Defense Health Related Behaviors Survey (HRBS)*. RAND Corporation. <https://doi.org/10.7249/RR1695>
- Military OneSource. (2020). *Military Leave: What It Is and How It Works*. <https://www.militaryonesource.mil/military-life-cycle/new-to-the-military/getting-settled/military-leave-and-how-it-works/>
- Mustillo, S. A., Kysar-Moon, A., Douglas, S. R., Hargraves, R., Wadsworth, S. M., Fraine, M., & Frazer, N. L. (2015). Overview of Depression, Post-Traumatic Stress Disorder, and Alcohol Misuse Among Active Duty Service Members Returning From Iraq and Afghanistan, Self-Report and Diagnosis. *Military Medicine*, *180*(4), 419–427. <https://doi.org/10.7205/MILMED-D-14-00335>
- Nash, W. P., Silva, C., & Litz, B. (2009). The Historic Origins of Military and Veteran Mental Health Stigma and the Stress Injury Model as a Means to Reduce It. *Psychiatric Annals*, *39*(8), 789–794. <https://doi.org/10.3928/00485713-20090728-05>
- Nock, M. K., Stein, M. B., Heeringa, S. G., Ursano, R. J., Colpe, L. J., Fullerton, C. S., Hwang, I., Naifeh, J. A., Sampson, N. A., Schoenbaum, M., Zaslavsky, A. M., & Kessler, R. C. (2014). Prevalence and Correlates of Suicidal Behavior Among Soldiers: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry*, *71*(5), 514. <https://doi.org/10.1001/jamapsychiatry.2014.30>
- Ojeda, V. D., & Bergstresser, S. M. (2008). Gender, Race-Ethnicity, and Psychosocial Barriers to Mental Health Care: An Examination of Perceptions and Attitudes among Adults Reporting Unmet Need. *Journal of Health and Social Behavior*, *49*(3), 317–334.

- Pasek, J., & Tahk, A. (2020). *weights: Weighting and Weighted Statistics* (1.0.1) [Computer software]. <https://CRAN.R-project.org/package=weights>
- Pedrelli, P., Borsari, B., Lipson, S. K., Heinze, J. E., & Eisenberg, D. (2016). Gender Differences in the Relationships Among Major Depressive Disorder, Heavy Alcohol Use, and Mental Health Treatment Engagement Among College Students. *Journal of Studies on Alcohol and Drugs*, *77*(4), 620–628. <https://doi.org/10.15288/jsad.2016.77.620>
- Pflanz, S. (2001). Occupational Stress and Psychiatric Illness in the Military: Investigation of the Relationship between Occupational Stress and Mental Illness among Military Mental Health Patients. *Military Medicine*, *166*(6), 457–462. <https://doi.org/10.1093/milmed/166.6.457>
- Platt, L. F., Wolf, J. K., & Scheitle, C. P. (2018). Patterns of Mental Health Care Utilization Among Sexual Orientation Minority Groups. *Journal of Homosexuality*, *65*(2), 135–153. <https://doi.org/10.1080/00918369.2017.1311552>
- R Core Team. (2020). *R: A language and environment for statistical computing*. (4.0.2) [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Ramchand, R., Rudavsky, R., Grant, S., Tanielian, T., & Jaycox, L. (2015). Prevalence of, Risk Factors for, and Consequences of Posttraumatic Stress Disorder and Other Mental Health Problems in Military Populations Deployed to Iraq and Afghanistan. *Current Psychiatry Reports*, *17*(5). <https://doi.org/10.1007/s11920-015-0575-z>
- Ramsawh, H. J., Fullerton, C. S., Mash, H. B. H., Ng, T. H. H., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2014). Risk for suicidal behaviors associated with PTSD, depression, and their comorbidity in the U.S. Army. *Journal of Affective Disorders*, *161*, 116–122. <https://doi.org/10.1016/j.jad.2014.03.016>
- Rao, D., Feinglass, J., & Corrigan, P. (2007). Racial and Ethnic Disparities in Mental Illness Stigma. *Journal of Nervous & Mental Disease*, *195*(12), 1020–1023. <https://doi.org/10.1097/NMD.0b013e31815c046e>
- Rastogi, M., Massey-Hastings, N., & Wieling, E. (2012). Barriers to Seeking Mental Health Services in the Latino/a Community: A Qualitative Analysis. *Journal of Systemic Therapies*, *31*(4), 1–17. <https://doi.org/10.1521/jsyt.2012.31.4.1>
- Reed-Fitzke, K., & Lucier-Greer, M. (2020). The Buffering Effect of Relationships on Combat Exposure, Military Performance, and Mental Health of U.S. Military Soldiers: A Vantage Point for CFTs. *Journal of Marital and Family Therapy*, *46*(2), 321–336. <https://doi.org/10.1111/jmft.12402>

- Rerucha, C. M., Runser, L. A., Ee, J. S., & Hersey, E. G. (2018). Military Healthcare Providers' Knowledge and Comfort Regarding the Medical Care of Active Duty Lesbian, Gay, and Bisexual Patients. *LGBT Health, 5*(1), 86–90. <https://doi.org/10.1089/lgbt.2016.0210>
- Sanders Thompson, V. L. S., Bazile, A., & Akbar, M. (2004). African Americans' Perceptions of Psychotherapy and Psychotherapists. *Professional Psychology: Research and Practice, 35*(1), 19–26. <https://doi.org/10.1037/0735-7028.35.1.19>
- Seehuus, M., Moeller, R. W., & Peisch, V. (2021). Gender effects on mental health symptoms and treatment in college students. *Journal of American College Health, 69*(1), 95–102. <https://doi.org/10.1080/07448481.2019.1656217>
- Shrader, A., Casero, K., Casper, B., Kelley, M., Lewis, L., & Calohan, J. (2017). Military Lesbian, Gay, Bisexual, and Transgender (LGBT) Awareness Training for Health Care Providers Within the Military Health System. *Journal of the American Psychiatric Nurses Association, 23*(6), 385–392. <https://doi.org/10.1177/1078390317711768>
- Sipos, M. L., Foran, H. M., Crane, M. L., Wood, M. D., & Wright, K. M. (2012). Postdeployment Behavioral Health Screening: Face-to-Face Versus Virtual Behavioral Health Interviews. *Military Medicine, 177*(5), 525–530. <https://doi.org/10.7205/MILMED-D-11-00399>
- Stevellink, S. A. M., Malcolm, E. M., Mason, C., Jenkins, S., Sundin, J., & Fear, N. T. (2015). The prevalence of mental health disorders in (ex-)military personnel with a physical impairment: A systematic review. *Occupational and Environmental Medicine, 72*(4), 243–251. <https://doi.org/10.1136/oemed-2014-102207>
- Stoltz, R. F. (2013). The Mental Health of Our Deploying Generation. *Medical Surveillance Monthly Report, 20*(7), 28.
- U.S. Census Bureau. (2021). *American Community Survey Demographic and Housing Estimates 2015*. <https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&tid=ACSDP5Y2015.DP05>
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-Month Use of Mental Health Services in the United States: Results From the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 629. <https://doi.org/10.1001/archpsyc.62.6.629>
- Ward, E. C., Clark, L. O., & Heidrich, S. (2009). African American Women's Beliefs, Coping Behaviors, and Barriers to Seeking Mental Health Services. *Qualitative Health Research, 19*(11), 1589–1601. <https://doi.org/10.1177/1049732309350686>

- Warner, C. H., Appenzeller, G. N., Grieger, T., Belenkiy, S., Breitbach, J., Parker, J., Warner, C. M., & Hoge, C. (2011). Importance of Anonymity to Encourage Honest Reporting in Mental Health Screening After Combat Deployment. *ARCH GEN PSYCHIATRY*, 68(10), 7.
- Warner, C. H., Appenzeller, G. N., Mullen, K., Warner, C. M., & Grieger, T. (2008). Soldier Attitudes toward Mental Health Screening and Seeking Care upon Return from Combat. *Military Medicine*, 173(6), 563–569. <https://doi.org/10.7205/MILMED.173.6.563>
- Wong, E., Collins, R., Cerully, J., Seelam, R., & Roth, E. (2016). Racial and Ethnic Differences in Mental Illness Stigma and Discrimination Among Californians Experiencing Mental Health Challenges. *RAND Health Quarterly*, 6(2). http://www.rand.org/pubs/research_reports/RR1441.html
- Zinzow, H. M., Britt, T. W., Pury, C. L. S., Raymond, M. A., McFadden, A. C., & Burnette, C. M. (2013). Barriers and Facilitators of Mental Health Treatment Seeking Among Active-Duty Army Personnel. *Military Psychology*, 25(5), 514–535. <https://doi.org/10.1037/mil0000015>

CONCLUSION

The U.S. military is an institution characterized by hetero-masculine social norms with formal structures that were designed specifically to exclude those who engage in same-sex behavior or experience same-sex attraction. With the 2011 repeal of the law commonly known as “Don’t Ask, Don’t Tell” (DADT), lesbian, gay, and bisexual service members (LGB SMs) were permitted to serve openly for the first time in U.S. history. The repeal also allowed data to be collected from this heretofore largely unstudied population. However, in the ten years since the repeal, few researchers have sought to investigate the welfare of LGB SMs, despite strong theoretical support and anecdotal evidence that the population is likely to have disproportionately high levels of adverse mental health outcomes. For the military to make good on its promise of sexual minority inclusion, it is essential that we assess the welfare of the LGB SM population.

Summary of Main Outcomes

This dissertation helps to begin what I hope will be ongoing work by both military leaders and civilian researchers to understand the welfare of LGB SMs. Analyzing data from the first military-wide epidemiological study to assess sexual orientation, the *2015 Department of Defense Health Related Behaviors Survey* (HRBS; Meadows et al., 2018), I conducted a series of three interconnected studies. First, I expanded upon the important work of the HRBS which was the first military-sponsored document to empirically identify disproportionately high prevalence of adverse behavioral- and mental health outcomes among the total population of LGB SMs in comparison to straight-identified service members. Because the classification of “LGB” applies to a heterogenous mix of individuals whose interactions with peers and their environments are shaped by both their gender and sexual orientation, I investigated mental health

outcomes and exposures to trauma among subgroups of the population. As expected, prevalence of adverse mental health, suicidality, and trauma exposures were generally higher among LGB SMs, though the analysis of subgroups highlighted a notable disparity between gay or lesbian service members and bisexual service members with the latter having higher prevalence of negative outcomes. In the second paper, I tested the effect of social support as a potential buffer against adverse mental health, hypothesizing that LGB identity would negatively affect service members' experience of social support which would, in turn, negatively affect mental health. The structural equation models fit for these analyses again confirmed LGB status to be negatively related to mental health, as well as confirming that social support is an important buffer against adverse mental health for all service members across all branches, regardless of sexuality. Importantly, however, the crux of the model – that LGB identity would negatively affect social support – was not supported by the data. In the third study I limited my sample to only those service members who were identified as having an unmet need for mental health treatment. I then compared LGB SMs to their straight peers with respect to the reasons they endorsed for not having received needed care. Notably, LGB SMs endorsed stigma as a barrier to care with significantly lower prevalence than did straight service members, and overall the proportion endorsing stigma barriers was lower than any other groups analyzed. On the other hand, endorsement of barriers related to concerns about harm to career and lack of confidentiality were highest among LGB SMs – significantly higher than their straight counterparts.

Viewing the results of these studies together and looking at the LGB SM population as a whole (for now), I must reconsider some of the primary assumptions

that motivated this work. I had proposed that LGB SMs would endure an excess of proximal stressors in their daily micro-level interactions due to the hyper-heteronormative culture within the military as well as an excess of more distal stressors related to the long and recent history of statutory exclusion enacted within the military exosystem. These excess stressors, I argued, would have detrimental effects on mental health, in line with the minority stress model (Meyer, 2003). Limited by the available data and the scope of my studies, I was not able to identify what factors are driving the generally higher prevalence of adverse mental health among LGB SMs. My research does, however, provide preliminary evidence that it is *not* caused by interpersonal marginalization. My second study found that while LGB SMs, as a whole, scored lower than their heterosexual peers on the measure of social support ($p < .001$), the practical difference in scores was minimal – less than two points for the average LGB SM. Importantly, the scores of both LGB and straight service members were both slightly above the average score (50) observed in the general population (PROMIS, 2020). Additional results of that study failed to detect a negative effect of LGB identity on mental health as mediated by social support, and indeed no relationship between sexuality and social support was found in the structural model for LGB SMs as a whole. My third study found that prevalence of stigma as a barrier to mental healthcare was significantly lower among LGB SMs than their straight peers, and the lowest observed prevalence of any group analyzed. Only 14.5% endorsed concerns about coworkers losing confidence in them, and 18.2% endorsed concerns about supervisors having a negative opinion of them. While these items do not directly address sexuality-based stigma, they do relate to the level of comfort and assurance one has in their daily environments. Such low prevalence of these barriers suggests that the average LGB SM

has a sufficient degree of social confidence and is unconcerned that receiving mental healthcare – a highly stigmatized action in the military – would harm their interpersonal relationships. Results showing that LGB SMs have slightly lower social support than straight service members, but generally as good of social support as average civilians, and evidence of confidence in social standing, refute the general hypothesis that the micro- and meso-levels of the military environment would be particularly stressful for sexual minority service members.

These more positive findings do not, however, help to illuminate what factors may be driving the high prevalence of adverse mental health among LGB SMs. Again, taking the LGB SM population as a whole, results from the third study, which showed LGB SMs to have a significantly higher prevalence of concerns about mental healthcare harming their careers and their confidentiality not being maintained, hint at one possible driver. As Hatzenbuehler and colleagues (2010; 2009, 2010) have shown, discriminatory policies at the exo-level of the environment can negatively affect targeted individuals regardless whether or not they experience direct, interpersonal discrimination. The high prevalence of concerns about how the larger military system, which controls careers and assures confidentiality, suggests LGB SMs have a generalized distrust of military's assurances about fair treatment. Certainly, more research will be needed to explore how LGB SMs perceive military policy and how that, in turn, may affect their mental health. However, given the short time between the repeal of DADT and the collection of these data, concerns among LGB SMs about the degree to which policies will protect them may be an important area of inquiry for leaders seeking full and equitable inclusion of this population.

Key Findings: Lesbian and Bisexual Women

Lesbian and bisexual women in the military were found to have higher prevalence of negative outcomes compared to gay and bisexual male service members. The structural model from my second study showed LGB identity to have over three times the negative impact on mental health as it did for males (0.35 vs 0.11, p 's < .001), and the total negative effect of LGB identity on mental health was statistically significant (p < .001) for women but not men. Compared to straight men and women, as well as to gay and bisexual men, prevalence among lesbian and bisexual women was higher for PTSD, anxiety, and depression, when measured separately (Paper 1).

Gender-based violence is an important factor in the etiology of mental health disparities among women (Howard et al., 2017; Oram et al., 2017), and a substantial proportion of lesbian and bisexual women in the current study reported experiencing unwanted sexual contact. Prevalence was particularly high among bisexual women for whom one in three have experienced unwanted sexual contact since joining the military. This group also reported the highest prevalence of physical assault since joining the military (7.5%; Paper 1). Importantly, Oram and colleagues (2017) also caution that women who are experiencing a mental illness are more likely to be targets of abuse. Regardless of the directionality, mental illness and victimization are high among lesbian and bisexual women in the military, and efforts should be made protect these service members and to ensure their access to mental healthcare. This is especially important for the third of bisexual female service members who have experienced military sexual trauma, which service members are known to be trepidatious about reporting to command (Dardis et al., 2018; Holliday & Monteith, 2019). Evidence from the present set of studies suggests that a substantial amount of sexual assault perpetrated against

bisexual women may go unreported, given its high prevalence in this population coupled (Paper 1) with the high prevalence of confidentiality concerns among LBG SMs (Paper 3). In addition to stopping the perpetration of sexual and physical assaults, it is important for the military to improve reporting procedures for victims.

Key Findings: Gay and Bisexual Men

Among male service members, the direct effect of LGB identity on adverse mental health outcomes was found to be lower than the same effect among female service members and the total effect, which included an indirect pathway through social support, was found to be statistically significant for women ($p < .001$) but not for men (Paper 2). In other words, being gay or bisexual harms the mental health of female but not male service members when accounting for social support. However, differences between gay and bisexual male service members are notable. Similar to bisexual women, bisexual men were found to have a higher prevalence of adverse mental health outcomes than both straight and gay men. Gay male service members, on the other hand, were found to have lower prevalence of depression and PTS than any other group measured. For gay men, the odds of screening positive for depression were found to be only 30% what they were for straight males ($p < .01$) and roughly half for PTS (ns). Odds of anxiety were estimated to be slightly higher for gay compared to straight men, but the difference was not statistically significant. Despite greater prevalence of unwanted sexual contact and physical assault while on active duty, gay men were found to be functioning quite well with regard to mental health (Paper 1). This is a surprising finding that should certainly be investigated further by first seeing if it is replicable and then exploring the underlying causes. The latter effort would likely require robust

mixed-methods analysis, but until that work is done, existing research and theory can inform potential avenues of inquiry.

Positive Mental Health Outcomes among Gay Male Service Members

A growing literature on the evolving nature of bonds between same-sex men may provide insight into the post-DADT gay male military experience and possible effects on mental health. In *Epistemology of the Closet*, queer theorist Eve Kosofsky Sedgwick (1990) introduced the term “homosociality” in her critique of gender-segregated spaces. Originally intended to “emphasize the continuum between homosocial institutions and homosexual desire, despite the apparent homophobia of many homosocial formations” (Creekmur, 2003, p. 51), the term has been more widely applied to the study of same-sex bonding and institutions. First, it is important to recognize the many post-structuralist critiques that rightly admonish male homosocial spaces as central to the reproduction and reinforcement of patriarchy and gender-based inequality (Bird, 1996; Flood, 2008; Hawkesworth, 2020; Roberts et al., 2021). More recently, the study of homosocial spaces has exposed the insidious practice of non-consensual dissemination of privately shared electronic images that is increasingly common in all-male environments (Hall et al., 2021; Hansen Mandau, 2020; Hunehall Berndtsson & Odenbring, 2021; Maas et al., 2021; Semenzin & Bainotti, 2020). Certainly, gender-segregated institutions and male homosocial spaces perpetuate a multitude of injustices. At the same time, this fact cannot preclude the possibility that such spaces may have positive implications for men in those groups.

Gay men may emotionally benefit from the deep connections made with other male service members. Analysis of male homosocial spaces has described the ways in which some men are able to successfully perform non-hegemonic masculine discourses

as they negotiate their positions in all male social systems (Arxer, 2011). While these performances may ultimately reinforce male hegemony, such reconfigurations of masculine norms opens opportunity for alternative male subjectivities to arise and potentially thrive. As acceptance of homosexuality over the past decades has grown, the normalization of platonic affection between men has followed (2018). “Homoaffectivity” is another concept introduced by scholars to split “the category *sexual* into fields such as *erotic*, *social*, and *affective*” (Klosowska, 2007, p. 711). Indeed, a homosexual orientation is not solely based on erotic desire, but a deep desire for social and emotional connection with others of the same gender, and if homophobia within the the military has decreased in concert with the larger U.S. society, the military may in fact be a positive environment for gay men to form fulfilling homoaffective bonds with other men.

With over half of enlisted service members aged 25 years or younger (Department of Defense, 2016) and younger generations typically leading social change, it is possible that these younger service members are establishing a positive milieu for their gay male peers. Recent scholarship has documented the rapidly changing social norms around homoaffectivity among adolescent and young adult males in homosocial spaces. In qualitative interviews conducted by Robinson and colleagues (2018, 2019), late adolescent heterosexual-identified males have spoken openly and proudly about the strength and emotional intimacy of their relationships with other young men. These authors report that their participants almost unanimously agreement that they “found it easier to open up and express their feelings” (2019, p. 863) with male friends than it was with their female romantic partners, characterizing their same-sex relationships as “more satisfying in their emotional intimacy, compared to their heterosexual romances”

(2019, p 894). A predominantly expressed reason for this was the belief that desire for erotic connection with women introduces a major complication into their heterosexual relationships that interferes with their ability to be uninhibited and emotionally vulnerable. Other researchers have chronicled the ways in which contemporary young men have reconfigured masculine identity as one that allows for not only emotional intimacy but also the ability to share physical touch with other men for both comfort and pleasure without fear of derision or injury to a heteromale self-image (Anderson & McCormack, 2015; Carrillo & Hoffman, 2018; Drummond et al., 2015; Savin-Williams, 2018).

Anderson and McCormack (2018) introduced “inclusive masculinity theory” to explain this cultural shift. Central to the theory is the idea of “homophobia” – the fear of being socially perceived as gay – which exists in cultures where homosexuality is socially stigmatized and/or institutionally sanctioned. In environments where homophobia is operative, homophobic discourses may be employed to police gender and thus reinforce male hegemony. In the military under DADT, where until as recently as 2010 an anonymous tip could initiate a formal investigation of a service member’s sexuality and result in his other-than-honorable discharge (Borch, 2010), homophobia has without a doubt been an effective tool for social control.

The power of military homophobia would have been enhanced by the fact that homoaffective bonding, emotional intimacies and facultative same-sex erotic exchanges between heterosexual-identified men (a.k.a., situational homosexuality or deprivational homosexuality) have long been a largely hidden component of military life, especially during times of war (Belkin, 2001; Berube, 2010; Shilts, 1994; Zealand, 1993, 1995). For example, historian D’Emilio (1998) explains that during World War II, “Army canteens

witnessed men dancing with one another, an activity that in peacetime subjected homosexuals to arrest” (quoted from, Belkin, 2001, p. 96). Similarly, Zeeland (1995), after conducting dozens of longitudinal interviews with male Sailors and Marines about homoaffectivity (a term not yet coined at his time of writing), ponders,

Boundaries between what is homo- and heterosexual and what is sexual and nonsexual are subject to disagreement. Navy initiation rituals involving cross dressing, spanking, simulated [sex acts between men] might be homosexual. An officer's love for his men might be homosexual. The intimate buddy relationships men form in barracks, aboard ships, and most especially in combat — often described as being a love greater than between man and woman — might be homosexual — whether or not penetration and ejaculation ever occur. (p. 5)

Strong bonds between men are an inevitable, and as some have argued necessary (Belkin, 2001), facet of a well-integrated fighting force. Because of the ubiquity of these bonds and the suspicions about sexual identity that they may evoke, “military homophobia and its consequent regulatory apparatus” was employed as a discursive tool that has allowed “the armed forces to imagine a straightforward and easily identified boundary that distinguishes same-sex practice from lesbian and gay identity” (Belkin, 2001, p. 94). In other words, open derision of homosexuality was used as a tool for defining and defending one’s own heterosexual identity and the heteromasculine virility of the U.S. military. By pointing the finger at others, one seeks to position themselves as not-other, as normal, as heterosexual.

The strong homoaffective bonds between young adult men that are increasingly accepted, and even celebrated, in the civilian sector have long been an uneasy fact of military life. The emergence of these new, more inclusive constructions of masculinity in the popular imagination, occurring over the past two decades, may mollify the tensions straight service members hold about their homoaffective bonds and, in turn, limit the

necessity of publicly reaffirming a heterosexual identity through homophobic discourses. Further, the repeal of DADT ended the institutional backing of homophobia, and without the abiding fear of being outed or falsely accused of being homosexual, the power of homophobia would similarly weaken. Military heteromascularity may still exist but the power to use homophobia as a means for policing it may have substantially lost purchase.

Finally, I suggest that as longstanding military norms of homoaffectivity have converged with growing public acceptance thereof to lessen homophobia in the ranks, and as fear of discharge for homosexuality has ended, gay men in the military may be newly liberated to experience the positive effects of their homosocial and homoaffective bonds without fear of consequence. The socio-emotional benefits of those bonds coupled with relief of the emotional and cognitive burden imposed by DADT, may account for the positive mental health outcomes for gay men observed in my first and second studies. Certainly these findings and conjecture about possible shifts in military culture should not be over-generalized. Additional studies are necessary to confirm the present findings and explore the associated theoretical suppositions before any claim can be made that the U.S. military is a benefit to gay men's mental health.

I now turn to a discussion of how positive outcomes for gay men may come at the expense of bisexual service members.

Key Findings: Bisexual Service Members

High prevalence of adverse outcomes among bisexual service members are another important issue identified through subgroup analyses. Results showed bisexual service members to have a higher prevalence of negative mental health outcomes compared to both straight and gay/lesbian service members (Paper 1). These results are

consistent with recent studies showing similar outcomes for bisexual civilians (Ross et al., 2018; Taylor, 2018). This disparity is often attributed to the unique social construction of bisexuality, or perhaps lack thereof. Contemporary scholars of sexuality largely concur with Foucault's proposition that homosexual subjectivity was constructed in the mid-19th century (Klosowska, 2007). In other words, for over 150 years, we have been collectively defining, and redefining, what it means to be homosexual – what a homosexual *is*. By continually reformulating what a gay or lesbian person is – mentally ill, weak, predatory, hedonistic, or fabulous – we have affirmed that gay and lesbian people do indeed exist. I would argue that no such collective formulation of bisexual identity has occurred, or at least not to the extent it has for gays and lesbians. As such, many people lack the schemas needed to understand and recognize bisexuality.

Misunderstandings about bisexuality lead to stigma and discrimination against bisexual individuals. Application of the minority stress model has shown that biphobic discrimination adversely affects bisexuals' mental health (Lambe et al., 2017). Importantly, the stigma of bisexuality is layered on top of homophobic stigma, as bisexuals are often marginalized by the larger LGBTQ community (Pachankis et al., 2020). Stigma against bisexuality often takes the form of "erasure," or the contention that bisexuality is only a phase or a stepping stone to coming out as gay or lesbian (Barker, 2015; Flanders et al., 2016; Rodríguez, 2016). Bisexual erasure can be internalized by bisexual men and women and cause uncertainty about their sexual orientation, which in turn leads to rumination, stress, and self-doubt (Borders et al., 2014) or a denial of their bisexual identity (Dyar & London, 2018). These stressors likely account for a substantial proportion of the mental health disparities observed in bisexual service members.

It is possible that the cultural shifts that I suggest may benefit gay male service members may contribute to biphobic discourses. Anderson and McCormack (2015) contend that a component of the movement toward more inclusive masculinities, young people are increasingly recognizing that sexual attraction exists on a continuum. However, I contend that if the discourses of contemporary civilian young men who are increasingly engaging in open homoaffective relationships are being similarly adopted by the military's young men, as I have considered, the positive gains they have possibly afforded gay male service members may reinforce bisexual erasure. For example, when young men describe the ways in which homoaffective bonds are superior to heterosexual romantic relationships (Robinson et al., 2018, 2019), or the reasons homoaffective touch is comfortable and acceptable (Anderson & McCormack, 2015), they make certain to state their lack of any sexual attraction. For example, one undergraduate male participant in a study conducted by Robinson and colleagues (2018) described a male with whom he could deeply connect as "Someone you can share secrets and pain with, and love, but there is no sort of sexual attraction. It can be intimate though" (p. 98). Another study participant explained that his best friend "does more for me than a normal friend would. It creates a love feeling for me, not sexual though" (p. 98). The need to reaffirm heterosexuality as a justification for homoaffective bonding furthers the homosexual/heterosexual binary, as an acknowledgement of bisexuality would expose their homoaffective intimacies to the possibility of sexual desires that they assert harms their heterosexual romantic relationships. In the context of military homoaffective bonding, if gay service members are increasingly accepted, bi-erasure may now serve the same purpose homophobia once did – to reaffirm heteromascularity in a context of frequent homoaffective intimacy between men.

Limitations

Findings of this research must be understood within the context of important limitations.

Analytic Concerns

The 2015 HRBS was the first population-level military study to ask about sexual identity, however there was substantial missingness in this important variable. Of the 16,699 usable cases included in the dataset, 2,294 (13.74%) did not endorse a sexuality. However, reviewing the structure of the survey and response rate patterns, I am confident this level of non-response is more attributable to attrition than it is to item-specific bias. Unlike other demographic variables asked at the start of the survey, the sexuality question was the 127th of 133 items (many with multiple sub-items). Toward the end of the survey, rates of non-response grew steadily and the sexuality item was not an exception to that trend. For example, by the 126th item, 2,227 participants had stopped responding, which means only 17 respondents stopped specifically at the sexuality question. The next reported item asks a non-sensitive question about sleep and includes 2,324 non-responses – a further attrition of 30 respondents. Based on these qualitative observations, I am confident that there is not substantial bias in the data due to respondents not wanting to report their sexual orientation. Nevertheless, because sexuality is a key item in much of my analysis, missingness in this variable required that many otherwise eligible cases be excluded, which limited the size of the LGB subsample.

The second and third papers of this dissertation were limited by the relatively small subsample of service members who identified as lesbian, gay, or bisexual. The subsample size ($n = 863$) was sufficient to further divide the group into gender and sexuality categories while retaining sufficient power to conduct logistic regressions

(Paper 1). Unfortunately, the structural equation modeling approach used in the second paper requires a larger sample size, which allowed for subgroup analysis based only on gender. Additionally, in the third paper, I chose to look at the important subsample of individuals who were identified as having an unmet treatment need, which greatly narrowed my sample of both LGB and straight service members and prevented analysis of gender- and sexuality-based subgroups. While this did open an opportunity for including other marginalized groups in my analysis, it limited the degree to which I was able to draw specific, yet overarching, conclusions from the full set of papers.

I strongly suggest that future iterations of the HRBS position questions about sexuality at the front of the survey along with other demographics. Even more ideal would be to over-sample LGB SMs to allow for in-depth analysis of this previously unstudied population. If, however, the subsample of LGB SMs remains relatively small in future iterations, researchers may compensate with analytic techniques such as multiple imputation to fill in missing data or selecting statistical techniques that do not require as large of samples.

Secondary Data

Additional limitations are inherent in secondary data analysis. For one, I was limited by the choice of items the original researchers chose to include in the survey, as well as by the fact that quantitative data forces respondents to express themselves through predefined response options. Certainly, the large sample size is a true benefit of this survey data, but it is a relatively blunt instrument for answering heretofore unasked questions about the nuanced experiences of LGB SMs. Qualitative studies will be important in developing inductive theories about the effects of military service on LGB

SMs, as with the currently available data I must rely largely on conjecture and theory to interpret my findings.

With secondary data, some important questions may not be asked while others may not be shared. My analyses and choice of research questions were somewhat limited by the fact that some demographic items were collapsed into lower levels of measurement in the shared dataset. For example, the many response categories for the race variable were collapsed into a dichotomous indicator of “white” or “non-white.” Additionally, having age as in its originally measured form of a ratio-level variable would have allowed for exploration of generational effects. Unfortunately, in the dataset made available to me, those responses were reduced to an ordinal-level variable of unequal intervals, which greatly reduced its statistical utility.

Omitted Data on Transgender Identity. Finally, the omission of data on trans-identity was a major limitation to this dissertation’s ultimate goal of describing the well-being of gender- and sexual-minority service members. At the time these data were collected, between November 2015 and April 2016, the Obama administration was several years past its repeal of DADT and was in the midst of conducting a broad study of transgender service, which would culminate in the June 2016 announcement that transgender service members would be permitted to serve openly (Embser-Herbert, 2020; Meadows et al., 2018). However, by the time I received these data, the Trump administration had tweeted a change to policy that would revoke the right of trans individuals to serve in the military. The roughly 8,000 trans men and women who were serving at that time (95% CI: 3,409 - 12,224; Department of Defense, 2016; Meadows et al., 2018), would become the next group of service members to endure the life-altering

vacillations of military policy born from competing political visions of what it means to have a strong military.

It is critical that those who advocated for LGB military inclusion continue the fight for the rights of transgender service members and for studies of their welfare to be permitted. Studies in civilian populations show that transgender individuals face substantial adversity with respect to employment discrimination (Ciprikis et al., 2020; Davidson, 2016; Eger, 2018; Kattari et al., 2016; Leppel, 2016), housing discrimination (Glick et al., 2019, 2020; Henderson et al., 2019; Kattari et al., 2016; Seelman, 2016), barriers to and discrimination within healthcare (Bakko & Kattari, 2020; Hafeez et al., n.d.; Romanelli & Lindsey, 2020; Seelman et al., 2017; White Hughto et al., 2017), and high prevalence of violent victimization (Fernández-Rouco et al., 2017; Griner et al., 2020; Henry et al., 2021; Peitzmeier et al., 2020; Wirtz et al., 2020). All of these adversities contribute to mental and physical health disparities, (Downing & Przedworski, 2018; McCann & Sharek, 2016; Newcomb et al., 2020; Su et al., 2016; Valentine & Shipherd, 2018), as well as elevated prevalence of suicidal behavior (Barboza et al., 2016; Mak et al., 2020; Turban et al., 2020). While the Veteran's Administration has supported important research with transgender veterans (e.g., Carter et al., 2019; Dietert et al., 2017; Kauth et al., 2017; Lehavot et al., 2016, 2017; Lindsay et al., 2016), active duty transgender service members are almost completely unstudied as they face the same adversities as their civilian peers while also navigating capricious policies of exclusion within the military. It will be important for the military to conduct its own studies of transgender service members and to overcome whatever barriers have prevented the sharing of data on trans-identity previously to allow research by outside investigators.

Conclusion

Through policies of exclusion and ubiquitous heteromascuine discourses, the U.S. military has long insisted upon exclusion and denial of the lesbian, gay, and bisexual men and women who choose to serve. With the repeal of DADT, LGB SMs gained statutory inclusion in the service, and this three-paper dissertation sought to understand their mental health status and needs now that the formal recognition of their presence has permitted such research. The disproportionately adverse mental health outcomes within the LGB SM population, originally reported in the 2015 HRBS, were found to not be driven by a disproportionate lack of social support and to vary across gender and sexuality subgroups. Surprisingly, gay male service members were found to have significantly lower prevalence of depression and PTS than any other group, including straight men. Conversely, bisexual male and female service members were found to have the highest prevalence of adverse mental health outcomes, with a high percentage of bisexual women enduring unwanted sexual contact while on active duty. Among the subset of LGB SMs who had an unmet need for mental health treatment, stigma was not found to have been a barrier. Instead, concerns about career harm and confidentiality were the more salient obstacles. This and the finding of adequate social support suggest that the interpersonal lives of LGB SMs are less of a detriment to them than is their suspicion of unfair treatment from military leadership.

As these were among the first studies of the population, much more research is needed. First to confirm the present findings and then to explore their causes. Qualitative work will be important to develop a deep understanding of the LGB SM experience and qualitative work will be important for confirming emergent theories and monitoring population health. To this end, continued cooperation between future

administrators of the HRBS and non-military investigators is essential. Moving forward, the HRBS will greatly benefit the study of LGB SMs if it simply asks about sexual identity earlier in its survey to minimize attrition and nonresponse on this critical item. Additionally, it will be important for investigators outside the military to focus on this heretofore unstudied population.

Aaron Belkin (2001), scholar and advocate of gender and sexual minority service members, optimistically wrote,

The U.S. military insists on a rigid norm of tolerance within its ranks. Although military culture includes blatant homophobia, sexism, and racism, simultaneously it entails tolerant norms that are designed to lead to unconditional acceptance and trust among service members who serve and fight together in the same units. (p. 99)

I too am hopeful that the values of integrity, respect, honor, and courage which characterize the military will strengthen and hasten its mission of equitable inclusion for lesbian, gay, bisexual, and transgender service members.

Works Cited

- Anderson, E., & McCormack, M. (2015). Cuddling and Spooning: Heteromascularity and Homosocial Tacitility among Student-athletes. *Men and Masculinities*, 18(2), 214–230. <https://doi.org/10.1177/1097184X14523433>
- Anderson, E., & McCormack, Mark. (2018). Inclusive Masculinity Theory: Overview, reflection and refinement. *Journal of Gender Studies*, 27(5), 547–561. <https://doi.org/10.1080/09589236.2016.1245605>
- Arxer, S. L. (2011). Hybrid Masculine Power: Reconceptualizing the Relationship between Homosociality and Hegemonic Masculinity. *Humanity & Society*, 35(4), 390–422. <https://doi.org/10.1177/016059761103500404>
- Bakko, M., & Kattari, S. K. (2020). Transgender-Related Insurance Denials as Barriers to Transgender Healthcare: Differences in Experience by Insurance Type. *Journal of General Internal Medicine*, 35(6), 1693–1700. <https://doi.org/10.1007/s11606-020-05724-2>
- Barboza, G. E., Dominguez, S., & Chace, E. (2016). Physical victimization, gender identity and suicide risk among transgender men and women. *Preventive Medicine Reports*, 4, 385–390. <https://doi.org/10.1016/j.pmedr.2016.08.003>
- Barker, M. J. (2015). Depression and/or Oppression? Bisexuality and Mental Health. *Journal of Bisexuality*, 15(3), 369–384. <https://doi.org/10.1080/15299716.2014.995853>
- Belkin, A. (2001). Breaking Rank: Military Homophobia and the Production of Queer Practices and Identities. *Georgetown Journal of Gender and the Law*, 3(1), 83–106.
- Berube, A. (2010). *Coming out under fire: The history of gay men and women in World War II*. University of North Carolina Press.
- Bird, S. (1996). WELCOME TO THE MEN'S CLUB: Homosociality and the Maintenance of Hegemonic Masculinity. *Gender & Society*, 10(2), 120–132. <https://doi.org/10.1177/089124396010002002>
- Borch, F. (2010). The History of “Don't Ask, Don't Tell” in the Army: How We Got to it and Why It Is What It Is. *Military Law Review*, 203, 189–206.
- Borders, A., Guillén, L. A., & Meyer, I. H. (2014). Rumination, Sexual Orientation Uncertainty, and Psychological Distress in Sexual Minority University Students. *The Counseling Psychologist*, 42(4), 497–523. <https://doi.org/10.1177/0011000014527002>

- Carrillo, H., & Hoffman, A. (2018). 'Straight with a pinch of bi': The construction of heterosexuality as an elastic category among adult US men. *Sexualities*, 21(1–2), 90–108. <https://doi.org/10.1177/1363460716678561>
- Carter, S. P., Montgomery, A. E., Henderson, E. R., Ketterer, B., Dichter, M., Gordon, A. J., Shipherd, J. C., Kauth, M. R., & Blossnich, J. R. (2019). Housing Instability Characteristics Among Transgender Veterans Cared for in the Veterans Health Administration, 2013–2016. *American Journal of Public Health*, 109(10), 1413–1418. <https://doi.org/10.2105/AJPH.2019.305219>
- Cipriakis, K., Cassells, D., & Berrill, J. (2020). Transgender labour market outcomes: Evidence from the United States. *Gender, Work & Organization*, 27(6), 1378–1401. <https://doi.org/10.1111/gwao.12501>
- Creekmur, C. (2003). Homoeroticism and Homosociality. In M. Stein (Ed.), *Encyclopedia of Lesbian, Gay, Bisexual and Transgender History in America* (pp. 50–52). Gale, Cengage Learning. <http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4392390>
- Dardis, C. M., Reinhardt, K. M., Foynes, M. M., Medoff, N. E., & Street, A. E. (2018). "Who Are You Going to Tell? Who's Going to Believe You?": Women's Experiences Disclosing Military Sexual Trauma. *Psychology of Women Quarterly*, 42(4), 414–429. <https://doi.org/10.1177/0361684318796783>
- Davidson, S. (2016). Gender inequality: Nonbinary transgender people in the workplace. *Cogent Social Sciences*, 2(1), 1236511. <https://doi.org/10.1080/23311886.2016.1236511>
- D'Emilio, J. (1998). *Sexual politics, sexual communities: The making of a homosexual minority in the United States, 1940-1970* (2nd ed). University of Chicago Press.
- Department of Defense,. (2016). *2015 Demographics Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2015-Demographics-Report.pdf>
- Dietert, M., Dentice, D., & Keig, Z. (2017). Addressing the Needs of Transgender Military Veterans: Better Access and More Comprehensive Care. *Transgender Health*, 2(1), 35–44. <https://doi.org/10.1089/trgh.2016.0040>
- Downing, J. M., & Przedworski, J. M. (2018). Health of Transgender Adults in the U.S., 2014–2016. *American Journal of Preventive Medicine*, 55(3), 336–344. <https://doi.org/10.1016/j.amepre.2018.04.045>
- Drummond, M. J. N., Filiault, S. M., Anderson, E., & Jeffries, D. (2015). Homosocial intimacy among Australian undergraduate men. *Journal of Sociology*, 51(3), 643–656. <https://doi.org/10.1177/1440783313518251>

- Dyar, C., & London, B. (2018). Longitudinal Examination of a Bisexual-Specific Minority Stress Process Among Bisexual Cisgender Women. *Psychology of Women Quarterly, 42*(3), 342–360. <https://doi.org/10.1177/0361684318768233>
- Eger, E. K. (2018). Transgender Jobseekers Navigating Closeting Communication. *Management Communication Quarterly, 32*(2), 276–281. <https://doi.org/10.1177/0893318917740226>
- Embser-Herbert, M. (2020). “Welcome! Oh, wait...” Transgender Military Service in a Time of Uncertainty. *Sociological Inquiry, 90*(2), 405–429. <https://doi.org/10.1111/soin.12329>
- Fernández-Rouco, N., Fernández-Fuertes, A. A., Carcedo, R. J., Lázaro-Visa, S., & Gómez-Pérez, E. (2017). Sexual Violence History and Welfare in Transgender People. *Journal of Interpersonal Violence, 32*(19), 2885–2907. <https://doi.org/10.1177/0886260516657911>
- Flanders, C. E., Robinson, M., Legge, M. M., & Tarasoff, L. A. (2016). Negative identity experiences of bisexual and other non-monosexual people: A qualitative report. *Journal of Gay & Lesbian Mental Health, 20*(2), 152–172. <https://doi.org/10.1080/19359705.2015.1108257>
- Flood, M. (2008). Men, Sex, and Homosociality: How Bonds between Men Shape Their Sexual Relations with Women. *Men and Masculinities, 10*(3), 339–359. <https://doi.org/10.1177/1097184X06287761>
- Glick, J. L., Lopez, A., Pollock, M., & Theall, K. P. (2019). “Housing Insecurity Seems to Almost Go Hand in Hand with Being Trans”: Housing Stress among Transgender and Gender Non-conforming Individuals in New Orleans. *Journal of Urban Health, 96*(5), 751–759. <https://doi.org/10.1007/s11524-019-00384-y>
- Glick, J. L., Lopez, A., Pollock, M., & Theall, K. P. (2020). Housing insecurity and intersecting social determinants of health among transgender people in the USA: A targeted ethnography. *International Journal of Transgender Health, 21*(3), 337–349. <https://doi.org/10.1080/26895269.2020.1780661>
- Griner, S. B., Vamos, C. A., Thompson, E. L., Logan, R., Vázquez-Otero, C., & Daley, E. M. (2020). The Intersection of Gender Identity and Violence: Victimization Experienced by Transgender College Students. *Journal of Interpersonal Violence, 35*(23–24), 5704–5725. <https://doi.org/10.1177/0886260517723743>
- Hafeez, H., Zeshan, M., Tahir, M. A., Jahan, N., & Naveed, S. (n.d.). Health Care Disparities Among Lesbian, Gay, Bisexual, and Transgender Youth: A Literature Review. *Cureus, 9*(4). <https://doi.org/10.7759/cureus.1184>
- Hall, M., Hearn, J., & Lewis, R. (2021). “Upskirting,” Homosociality, and Craftmanship: A Thematic Analysis of Perpetrator and Viewer Interactions. *Violence Against Women, 10778012211008980*. <https://doi.org/10.1177/10778012211008981>

- Hansen Mandau, M. B. (2020). Homosocial positionings and ambivalent participation: A qualitative analysis of young adults' non-consensual sharing and viewing of privately produced sexual images. *MedieKultur: Journal of Media and Communication Research*, 36(67), 055–075.
<https://doi.org/10.7146/mediekultur.v36i67.113976>
- Hatzenbuehler, M. L. (2010). Social Factors as Determinants of Mental Health Disparities in LGB Populations: Implications for Public Policy: Social Factors as Determinants of Mental Health. *Social Issues and Policy Review*, 4(1), 31–62.
<https://doi.org/10.1111/j.1751-2409.2010.01017.x>
- Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). State-Level Policies and Psychiatric Morbidity In Lesbian, Gay, and Bisexual Populations. *American Journal of Public Health*, 99(12), 7.
- Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, K. M., & Hasin, D. S. (2010). The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study. *American Journal of Public Health*, 100(3), 452–459. <https://doi.org/10.2105/AJPH.2009.168815>
- Hawkesworth, M. (2020). Visibility Politics: Theorizing Racialized Gendering, Homosociality, and the Femicidal State. *Signs: Journal of Women in Culture and Society*, 45(2), 311–319. <https://doi.org/10.1086/704986>
- Henderson, E. R., Jabson, J., Russomanno, J., Paglisotti, T., & Blosnich, J. R. (2019). Housing and food stress among transgender adults in the United States. *Annals of Epidemiology*, 38, 42–47. <https://doi.org/10.1016/j.annepidem.2019.08.004>
- Henry, R. S., Perrin, P. B., Coston, B. M., & Calton, J. M. (2021). Intimate Partner Violence and Mental Health Among Transgender/Gender Nonconforming Adults. *Journal of Interpersonal Violence*, 36(7–8), 3374–3399.
<https://doi.org/10.1177/0886260518775148>
- Holliday, R., & Monteith, L. L. (2019). Seeking help for the health sequelae of military sexual trauma: A theory-driven model of the role of institutional betrayal. *Journal of Trauma & Dissociation*, 20(3), 340–356.
<https://doi.org/10.1080/15299732.2019.1571888>
- Howard, L. M., Ehrlich, A. M., Gamlen, F., & Oram, S. (2017). Gender-neutral mental health research is sex and gender biased. *The Lancet Psychiatry*, 4(1), 9–11.
[https://doi.org/10.1016/S2215-0366\(16\)30209-7](https://doi.org/10.1016/S2215-0366(16)30209-7)
- Hunehäll Berndtsson, K., & Odenbring, Y. (2021). They don't even think about what the girl might think about it': Students' views on sexting, gender inequalities and power relations in school. *Journal of Gender Studies*, 30(1), 91–101.
<https://doi.org/10.1080/09589236.2020.1825217>

- Kattari, S. K., Whitfield, D. L., Walls, N. E., Langenderfer-Magruder, L., & Ramos, D. (2016). Policing Gender Through Housing and Employment Discrimination: Comparison of Discrimination Experiences of Transgender and Cisgender LGBTQ Individuals. *Journal of the Society for Social Work and Research, 7*(3), 427–447. <https://doi.org/10.1086/686920>
- Kauth, M. R., Blosnich, J. R., Marra, J., Keig, Z., & Shipherd, J. C. (2017). Transgender Health Care in the U.S. Military and Veterans Health Administration Facilities. *Current Sexual Health Reports, 9*(3), 121–127. <https://doi.org/10.1007/s11930-017-0120-7>
- Klosowska, A. (2007). Homoaffectivity, concept. In F. Malti-Douglas (Ed.), *Encyclopedia of sex and gender* (1st ed., pp. 710–712). Macmillan Reference. <http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4392200>
- Lambe, J., Cerezo, A., & O’Shaughnessy, T. (2017). Minority stress, community involvement, and mental health among bisexual women. *Psychology of Sexual Orientation and Gender Diversity, 4*(2), 218–226. <https://doi.org/10.1037/sgd0000222>
- Lehavot, K., Katon, J. G., Simpson, T. L., & Shipherd, J. C. (2017). Transgender Veterans’ Satisfaction With Care and Unmet Health Needs. *Medical Care, 55*(Suppl 9 2), S90–S96. <https://doi.org/10.1097/MLR.0000000000000723>
- Lehavot, K., Simpson, T. L., & Shipherd, J. C. (2016). Factors Associated with Suicidality Among a National Sample of Transgender Veterans. *Suicide and Life-Threatening Behavior, 46*(5), 507–524. <https://doi.org/10.1111/sltb.12233>
- Leppel, K. (2016). The labor force status of transgender men and women. *International Journal of Transgenderism, 17*(3–4), 155–164. <https://doi.org/10.1080/15532739.2016.1236312>
- Lindsay, J. A., Keo-Meier, C., Hudson, S., Walder, A., Martin, L. A., & Kauth, M. R. (2016). Mental Health of Transgender Veterans of the Iraq and Afghanistan Conflicts Who Experienced Military Sexual Trauma. *Journal of Traumatic Stress, 29*(6), 563–567. <https://doi.org/10.1002/jts.22146>
- Maas, M. K., Cary, K. M., Clancy, E. M., Klettke, B., McCauley, H. L., & Temple, J. R. (2021). Slutpage Use Among U.S. College Students: The Secret and Social Platforms of Image-Based Sexual Abuse. *Archives of Sexual Behavior*. <https://doi.org/10.1007/s10508-021-01920-1>
- Mak, J., Shires, D. A., Zhang, Q., Prieto, L. R., Ahmedani, B. K., Kattari, L., Becerra-Culqui, T. A., Bradlyn, A., Flanders, W. D., Getahun, D., Giammattei, S. V., Hunkeler, E. M., Lash, T. L., Nash, R., Quinn, V. P., Robinson, B., Roblin, D., Silverberg, M. J., Slovis, J., ... Goodman, M. (2020). Suicide Attempts Among a Cohort of Transgender and Gender Diverse People. *American Journal of*

- Preventive Medicine*, 59(4), 570–577.
<https://doi.org/10.1016/j.amepre.2020.03.026>
- McCann, E., & Sharek, D. (2016). Mental Health Needs of People Who Identify as Transgender: A Review of the Literature. *Archives of Psychiatric Nursing*, 30(2), 280–285. <https://doi.org/10.1016/j.apnu.2015.07.003>
- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). 2015 Department of Defense Health Related Behaviors Survey (HRBS). RAND Corporation. <https://doi.org/10.7249/RR1695>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Newcomb, M. E., Hill, R., Buehler, K., Ryan, D. T., Whitton, S. W., & Mustanski, B. (2020). High Burden of Mental Health Problems, Substance Use, Violence, and Related Psychosocial Factors in Transgender, Non-Binary, and Gender Diverse Youth and Young Adults. *Archives of Sexual Behavior*, 49(2), 645–659. <https://doi.org/10.1007/s10508-019-01533-9>
- Oram, S., Khalifeh, H., & Howard, L. M. (2017). Violence against women and mental health. *The Lancet Psychiatry*, 4(2), 159–170. [https://doi.org/10.1016/S2215-0366\(16\)30261-9](https://doi.org/10.1016/S2215-0366(16)30261-9)
- Pachankis, J. E., Clark, K. A., Burton, C. L., Hughto, J. M. W., Bränström, R., & Keene, D. E. (2020). Sex, status, competition, and exclusion: Intraminority stress from within the gay community and gay and bisexual men's mental health. *Journal of Personality and Social Psychology*, 119(3), 713–740. <https://doi.org/10.1037/pspp0000282>
- Peitzmeier, S. M., Malik, M., Kattari, S. K., Marrow, E., Stephenson, R., Agénor, M., & Reisner, S. L. (2020). Intimate Partner Violence in Transgender Populations: Systematic Review and Meta-analysis of Prevalence and Correlates. *American Journal of Public Health*, 110(9), e1–e14. <https://doi.org/10.2105/AJPH.2020.305774>
- PROMIS. (2020). *PROMIS Short Form v2.0—Emotional Support 4a, Measure-Specific Scoring Guide*. Health Measures. <https://www.healthmeasures.net/search-view-measures?task=Search.search>
- Roberts, S., Ravn, S., Maloney, M., & Ralph, B. (2021). Navigating the Tensions of Normative Masculinity: Homosocial Dynamics in Australian Young Men's Discussions of Sexting Practices. *Cultural Sociology*, 15(1), 22–43. <https://doi.org/10.1177/1749975520925358>

- Robinson, S., Anderson, E., & White, A. (2018). The Bromance: Undergraduate Male Friendships and the Expansion of Contemporary Homosocial Boundaries. *Sex Roles, 78*(1–2), 94–106. <https://doi.org/10.1007/s11199-017-0768-5>
- Robinson, S., White, A., & Anderson, E. (2019). Privileging the Bromance: A Critical Appraisal of Romantic and Bromantic Relationships. *Men and Masculinities, 22*(5), 850–871. <https://doi.org/10.1177/1097184X17730386>
- Rodríguez, J. M. (2016). Queer Politics, Bisexual Erasure: *Lambda Nordica, 21*(1–2), 169–182.
- Romanelli, M., & Lindsey, M. A. (2020). Patterns of Healthcare Discrimination Among Transgender Help-Seekers. *American Journal of Preventive Medicine, 58*(4), e123–e131. <https://doi.org/10.1016/j.amepre.2019.11.002>
- Ross, L. E., Salway, T., Tarasoff, L. A., MacKay, J. M., Hawkins, B. W., & Fehr, C. P. (2018). Prevalence of Depression and Anxiety Among Bisexual People Compared to Gay, Lesbian, and Heterosexual Individuals: A Systematic Review and Meta-Analysis. *The Journal of Sex Research, 55*(4–5), 435–456. <https://doi.org/10.1080/00224499.2017.1387755>
- Savin-Williams, R. C. (2018). *Mostly Straight: Sexual Fluidity among Men*. <https://doi.org/10.4159/9780674981034>
- Sedgwick, E. K. (1990). *Epistemology of the closet*. Univ. of California Press.
- Seelman, K. L. (2016). Transgender Adults' Access to College Bathrooms and Housing and the Relationship to Suicidality. *Journal of Homosexuality, 63*(10), 1378–1399. <https://doi.org/10.1080/00918369.2016.1157998>
- Seelman, K. L., Colón-Díaz, M. J. P., LeCroix, R. H., Xavier-Brier, M., & Kattari, L. (2017). Transgender Noninclusive Healthcare and Delaying Care Because of Fear: Connections to General Health and Mental Health Among Transgender Adults. *Transgender Health, 2*(1), 17–28. <https://doi.org/10.1089/trgh.2016.0024>
- Semenzin, S., & Bainotti, L. (2020). The Use of Telegram for Non-Consensual Dissemination of Intimate Images: Gendered Affordances and the Construction of Masculinities. *Social Media + Society, 6*(4), 2056305120984453. <https://doi.org/10.1177/2056305120984453>
- Shilts, R. (1994). *Conduct unbecoming: Gays and lesbians in the U.S. military*. St. Martins.
- Sinclair, D. (2009). Homosexuality and the Military: A Review of the Literature. *Journal of Homosexuality, 56*(6), 701–718. <https://doi.org/10.1080/00918360903054137>

- Su, D., Irwin, J. A., Fisher, C., Ramos, A., Kelley, M., Mendoza, D. A. R., & Coleman, J. D. (2016). Mental Health Disparities Within the LGBT Population: A Comparison Between Transgender and Nontransgender Individuals. *Transgender Health, 1*(1), 12–20. <https://doi.org/10.1089/trgh.2015.0001>
- Taylor, J. (2018). Bisexual Mental Health: A Call to Action. *Issues in Mental Health Nursing, 39*(1), 83–92. <https://doi.org/10.1080/01612840.2017.1391904>
- Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association Between Recalled Exposure to Gender Identity Conversion Efforts and Psychological Distress and Suicide Attempts Among Transgender Adults. *JAMA Psychiatry, 77*(1), 68. <https://doi.org/10.1001/jamapsychiatry.2019.2285>
- Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review, 66*, 24–38. <https://doi.org/10.1016/j.cpr.2018.03.003>
- White Hughto, J. M., Rose, A. J., Pachankis, J. E., & Reisner, S. L. (2017). Barriers to Gender Transition-Related Healthcare: Identifying Underserved Transgender Adults in Massachusetts. *Transgender Health, 2*(1), 107–118. <https://doi.org/10.1089/trgh.2017.0014>
- Wirtz, A. L., Poteat, T. C., Malik, M., & Glass, N. (2020). Gender-Based Violence Against Transgender People in the United States: A Call for Research and Programming. *Trauma, Violence, & Abuse, 21*(2), 227–241. <https://doi.org/10.1177/1524838018757749>
- Zeeland, S. (1993). *Barrack buddies and soldier lovers: Dialogues with gay young men in the U.S. military*. Harrington Park Press.
- Zeeland, S. (1995). *Sailors and sexual identity: Crossing the line between “straight” and “gay” in the U.S. Navy*. Haworth Press.

BIBLIOGRAPHY

- Acosta, J., Becker, A., Cerully, J., Fisher, M., Martin, L., Vardavas, R., Slaughter, M., & Schell, T. (2014). *Mental Health Stigma in the Military*. RAND Corporation. <https://doi.org/10.7249/RR426>
- Adler, A. B., & Castro, C. A. (2013). An Occupational Mental Health Model for the Military. *Military Behavioral Health*, 1(1), 41–45. <https://doi.org/10.1080/21635781.2012.721063>
- Ahern, J., Worthen, M., Masters, J., Lippman, S. A., Ozer, E. J., & Moos, R. (2015). The Challenges of Afghanistan and Iraq Veterans' Transition from Military to Civilian Life and Approaches to Reconnection. *PLOS ONE*, 10(7), e0128599. <https://doi.org/10.1371/journal.pone.0128599>
- Alexander, S. E. (2004). A ban by any other name: Ten years of “Don’t Ask, Don’t Tell.” *Hofstra Labor & Employment Law Journal*, 21(2), 403–436.
- Andersen, J. P., & Blosnich, J. R. (2013). Disparities in Adverse Childhood Experiences among Sexual Minority and Heterosexual Adults: Results from a Multi-State Probability-Based Sample. *PLoS ONE*, 8(1), e54691. <https://doi.org/10.1371/journal.pone.0054691>
- Anderson, E. (2018). Generational masculinities. *Journal of Gender Studies*, 27(3), 243–247. <https://doi.org/10.1080/09589236.2017.1406088>
- Anderson, E., & McCormack, M. (2015). Cuddling and Spooning: Heteromascularity and Homosocial Tactility among Student-athletes. *Men and Masculinities*, 18(2), 214–230. <https://doi.org/10.1177/1097184X14523433>
- Anderson, E., & McCormack, Mark. (2018). Inclusive Masculinity Theory: Overview, reflection and refinement. *Journal of Gender Studies*, 27(5), 547–561. <https://doi.org/10.1080/09589236.2016.1245605>
- Anglin, D. M., Alberti, P. M., Link, B. G., & Phelan, J. C. (2008). Racial Differences in Beliefs About the Effectiveness and Necessity of Mental Health Treatment. *American Journal of Community Psychology*, 42(1–2), 17–24. <https://doi.org/10.1007/s10464-008-9189-5>
- Armed Forces Health Surveillance Branch. (2012). Annual Summary Issue. *Medical Surveillance Monthly Report*, 19(4).
- Armed Forces Health Surveillance Branch. (2013). Annual Summary Issue. *Medical Surveillance Monthly Report*, 20(4).
- Armed Forces Health Surveillance Branch. (2014). Annual Summary Report. *Medical Surveillance Monthly Report*, 21(4).

- Armed Forces Health Surveillance Branch. (2015). Annual Summary Issue. *Medical Surveillance Monthly Report*, 22(4), 36.
- Armed Forces Health Surveillance Branch. (2016). Annual Summary Issue. *Medical Surveillance Monthly Report*, 23(4).
- Armed Forces Health Surveillance Branch. (2017). Annual Summary Issue. *Medical Surveillance Monthly Report*, 24(4).
- Armed Forces Health Surveillance Branch. (2018). Annual Summary Issue. *Medical Surveillance Monthly Report*, 25(5), 76.
- Armed Forces Health Surveillance Branch. (2019). Annual Summary Issue. *Medical Surveillance Monthly Report*, 26(5), 52.
- Arxer, S. L. (2011). Hybrid Masculine Power: Reconceptualizing the Relationship between Homosociality and Hegemonic Masculinity. *Humanity & Society*, 35(4), 390–422. <https://doi.org/10.1177/016059761103500404>
- Atuel, H. R., & Castro, C. A. (2018). Military Cultural Competence. *Clinical Social Work Journal*, 46(2), 74–82. <https://doi.org/10.1007/s10615-018-0651-z>
- Austin, A., Herrick, H., & Proescholdbell, S. (2016). Adverse Childhood Experiences Related to Poor Adult Health Among Lesbian, Gay, and Bisexual Individuals. *American Journal of Public Health*, 106(2), 314–320. <https://doi.org/10.2105/AJPH.2015.302904>
- Bachman, J. G., Segal, D. R., Freedman-Doan, P., & O'Malley, P. M. (2000). Who Chooses Military Service? Correlates of Propensity and Enlistment in the U.S. Armed Forces. *Military Psychology*, 12(1), 1–30. https://doi.org/10.1207/S15327876MP1201_1
- Bakko, M., & Kattari, S. K. (2020). Transgender-Related Insurance Denials as Barriers to Transgender Healthcare: Differences in Experience by Insurance Type. *Journal of General Internal Medicine*, 35(6), 1693–1700. <https://doi.org/10.1007/s11606-020-05724-2>
- Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, 54(3), 306–319. <https://doi.org/10.1037/0022-0167.54.3.306>
- Barber, M. E. (2012). Mental Health Effects of Don't Ask Don't Tell. *Journal of Gay & Lesbian Mental Health*, 16(4), 346–352. <https://doi.org/10.1080/19359705.2012.705143>
- Barboza, G. E., Dominguez, S., & Chace, E. (2016). Physical victimization, gender identity and suicide risk among transgender men and women. *Preventive Medicine Reports*, 4, 385–390. <https://doi.org/10.1016/j.pmedr.2016.08.003>

- Barker, M. J. (2015). Depression and/or Oppression? Bisexuality and Mental Health. *Journal of Bisexuality*, 15(3), 369–384. <https://doi.org/10.1080/15299716.2014.995853>
- Barnes, V. A., Rigg, J. L., & Williams, J. J. (2013). Clinical Case Series: Treatment of PTSD With Transcendental Meditation in Active Duty Military Personnel. *Military Medicine*, 178(7), e836–e840. <https://doi.org/10.7205/MILMED-D-12-00426>
- Barnier, J., Briatte, F., & Larmarange, J. (2020). *questionr: Functions to Make Surveys Processing Easier* (0.7.4) [Computer software]. <https://CRAN.R-project.org/package=questionr>
- Belkin, A. (2001). Breaking Rank: Military Homophobia and the Production of Queer Practices and Identities. *Georgetown Journal of Gender and the Law*, 3(1), 83–106.
- Bergfeld, J. R., & Chiu, E. Y. (2017). Mediators in the relationship between minority stress and depression among young same-sex attracted women. *Professional Psychology: Research and Practice*, 48(5), 294–300. <https://doi.org/10.1037/pro0000155>
- Berube, A. (2010). *Coming out under fire: The history of gay men and women in World War II*. University of North Carolina Press.
- Bérubé, A. (2011). Marching to a Different Drummer Lesbian and Gay GIs in World War II. In J. D’Emilio & E. B. Freedman (Eds.), *My Desire for History* (pp. 85–99). University of North Carolina Press. https://doi.org/10.5149/9780807877982_berube.8
- Besthorn, F. H. (2013). Ecological Approach. In M. Gray & S. A. Webb (Eds.), *Social Work: Theories and Methods* (2nd Edition, pp. 173–182). SAGE.
- Biddix, J. M., Fogel, C. I., & Perry Black, B. (2013). Comfort Levels of Active Duty Gay/Bisexual Male Service Members in the Military Healthcare System. *Military Medicine*, 178(12), 1335–1340. <https://doi.org/10.7205/MILMED-D-13-00044>
- Bird, S. (1996). WELCOME TO THE MEN’S CLUB: Homosociality and the Maintenance of Hegemonic Masculinity. *Gender & Society*, 10(2), 120–132. <https://doi.org/10.1177/089124396010002002>
- Black, S. A., Gallaway, M. S., Bell, M. R., & Ritchie, E. C. (2011). Prevalence and Risk Factors Associated With Suicides of Army Soldiers 2001–2009. *Military Psychology*, 23(4), 433–451. <https://doi.org/10.1080/08995605.2011.590409>
- Blackburn, D. (2016). Transitioning from Military to Civilian Life: Examining the Final Step in a Military Career. *Canadian Military Journal*, 16, 53–61.

- Bliese, P. D., Wright, K. M., Adler, A. B., Cabrera, O., Castro, C. A., & Hoge, C. W. (2008a). Validating the Primary Care Posttraumatic Stress Disorder Screen and the Posttraumatic Stress Disorder Checklist with soldiers returning from combat. *Journal of Consulting and Clinical Psychology, 76*(2), 272–281. <https://doi.org/10.1037/0022-006X.76.2.272>
- Bliese, P. D., Wright, K. M., Adler, A. B., Cabrera, O., Castro, C. A., & Hoge, C. W. (2008b). Validating the Primary Care Posttraumatic Stress Disorder Screen and the Posttraumatic Stress Disorder Checklist with soldiers returning from combat. *Journal of Consulting and Clinical Psychology, 76*(2), 272–281. <https://doi.org/10.1037/0022-006X.76.2.272>
- Blosnich, J. R., & Andersen, J. P. (2015). Thursday's child: The role of adverse childhood experiences in explaining mental health disparities among lesbian, gay, and bisexual US adults. *Social Psychiatry and Psychiatric Epidemiology, 50*(2), 335–338. <https://doi.org/10.1007/s00127-014-0955-4>
- Blosnich, J. R., Dichter, M. E., Cerulli, C., Batten, S. V., & Bossarte, R. M. (2014). Disparities in Adverse Childhood Experiences Among Individuals With a History of Military Service. *JAMA Psychiatry, 71*(9), 1041. <https://doi.org/10.1001/jamapsychiatry.2014.724>
- Blosnich, J. R., Foynes, M. M., & Shipherd, J. C. (2013). Health Disparities Among Sexual Minority Women Veterans. *Journal of Women's Health, 22*(7), 631–636. <https://doi.org/10.1089/jwh.2012.4214>
- Blosnich, J. R., Gordon, A. J., & Fine, M. J. (2015). Associations of sexual and gender minority status with health indicators, health risk factors, and social stressors in a national sample of young adults with military experience. *Annals of Epidemiology, 25*(9), 661–667. <https://doi.org/10.1016/j.annepidem.2015.06.001>
- Blosnich, J. R., Mays, V. M., & Cochran, S. D. (2014). Suicidality Among Veterans: Implications of Sexual Minority Status. *American Journal of Public Health, 104*(S4), S535–S537. <https://doi.org/10.2105/AJPH.2014.302100>
- Borch, F. (2010). The History of “Don't Ask, Don't Tell” in the Army: How We Got to it and Why It Is What It Is. *Military Law Review, 203*, 189–206.
- Borders, A., Guillén, L. A., & Meyer, I. H. (2014). Rumination, Sexual Orientation Uncertainty, and Psychological Distress in Sexual Minority University Students. *The Counseling Psychologist, 42*(4), 497–523. <https://doi.org/10.1177/0011000014527002>
- Bovier, P. A., Chamot, E., & work(s):, T. V. P. R. (2004). Perceived Stress, Internal Resources, and Social Support as Determinants of Mental Health among Young Adults. *Quality of Life Research, 13*(1), 161–170.

- Bradbury, A. (2020). Mental Health Stigma: The Impact of Age and Gender on Attitudes. *Community Mental Health Journal*, 56(5), 933–938. <https://doi.org/10.1007/s10597-020-00559-x>
- Brand, E., Rodriguez-Monguio, R., & Volberg, R. (2019). Gender differences in mental health and substance use disorders and related healthcare services utilization. *The American Journal on Addictions*, 28(1), 9–15. <https://doi.org/10.1111/ajad.12826>
- Braswell, H., & Kushner, H. I. (2012a). Suicide, social integration, and masculinity in the U.S. military. *Social Science & Medicine*, 74(4), 530–536. <https://doi.org/10.1016/j.socscimed.2010.07.031>
- Braswell, H., & Kushner, H. I. (2012b). Suicide, social integration, and masculinity in the U.S. military. *Social Science & Medicine*, 74(4), 530–536. <https://doi.org/10.1016/j.socscimed.2010.07.031>
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, 68(5), 748–766. <https://doi.org/10.1037/0022-006X.68.5.748>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bryan, C. J., Hernandez, A. M., Allison, S., & Clemans, T. (2013). Combat Exposure and Suicide Risk in Two Samples of Military Personnel: Combat Exposure and Suicidality. *Journal of Clinical Psychology*, 69(1), 64–77. <https://doi.org/10.1002/jclp.21932>
- Bryan, C. J., Jennings, K. W., Jobes, D. A., & Bradley, J. C. (2012). Understanding and Preventing Military Suicide. *Archives of Suicide Research*, 16(2), 95–110. <https://doi.org/10.1080/13811118.2012.667321>
- Bunn, S. (2010). Straight Talk: Implications of Repealing Don't Ask, Don't Tell and the Rationale for Preserving Aspects of the Current Policy. *Military Law Review*, 203(1), 207–283.
- Burgess, D., Ding, Y., Hargreaves, M., van Ryn, M., & Phelan, S. (2008). The Association between Perceived Discrimination and Underutilization of Needed Medical and Mental Health Care in a Multi-Ethnic Community Sample. *Journal of Health Care for the Poor and Underserved*, 19(3), 894–911. <https://doi.org/10.1353/hpu.0.0063>
- Burks, D. J. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of “Don't Ask, Don't Tell”? *American Psychologist*, 66(7), 604–613. <https://doi.org/10.1037/a0024609>

- Burns, S. M., & Mahalik, J. R. (2011). Suicide and dominant masculinity norms among current and former United States military servicemen. *Professional Psychology: Research and Practice, 42*(5), 347–353. <https://doi.org/10.1037/a0025163>
- Cabassa, L. J., Zayas, L. H., & Hansen, M. C. (2006). Latino Adults' Access to Mental Health Care. *Administration and Policy in Mental Health, 33*(3), 316–330. <https://doi.org/10.1007/s10488-006-0040-8>
- Caddick, N., Smith, B., & Phoenix, C. (2015). Male combat veterans' narratives of PTSD, masculinity, and health. *Sociology of Health & Illness, 37*(1), 97–111. <https://doi.org/10.1111/1467-9566.12183>
- Callis, A. S. (2013). The Black Sheep of the Pink Flock: Labels, Stigma, and Bisexual Identity. *Journal of Bisexuality, 13*(1), 82–105. <https://doi.org/10.1080/15299716.2013.755730>
- Campbell, D. J., & Nobel, O. B.-Y. (2009). Occupational Stressors in Military Service: A Review and Framework. *Military Psychology, 21*(sup2), S47–S67. <https://doi.org/10.1080/08995600903249149>
- Campbell, W. R., Jahan, M., Bavaro, M. F., & Carpenter, R. J. (2017). Primary Care of Men Who Have Sex With Men in the U.S. Military in the Post-Don't Ask, Don't Tell Era: A Review of Recent Progress, Health Needs, and Challenges. *Military Medicine, 182*(3), e1603–e1611. <https://doi.org/10.7205/MILMED-D-16-00255>
- Carrillo, H., & Hoffman, A. (2018). 'Straight with a pinch of bi': The construction of heterosexuality as an elastic category among adult US men. *Sexualities, 21*(1–2), 90–108. <https://doi.org/10.1177/1363460716678561>
- Carter, S. P., Montgomery, A. E., Henderson, E. R., Ketterer, B., Dichter, M., Gordon, A. J., Shipherd, J. C., Kauth, M. R., & Blosnich, J. R. (2019). Housing Instability Characteristics Among Transgender Veterans Cared for in the Veterans Health Administration, 2013–2016. *American Journal of Public Health, 109*(10), 1413–1418. <https://doi.org/10.2105/AJPH.2019.305219>
- Castro, C. A., Kintzle, S., & Hassan, A. (2015). *The state of the American veteran: The Orange County Veterans Study* (p. 54). USC School of Social Work. https://cir.usc.edu/wp-content/uploads/2015/02/OC-Veterans-Study_USC-CIR_Feb-2015.pdf
- Castro, C. A., Kintzle, S., Schuyler, A. C., Lucas, C. L., & Warner, C. H. (2015). Sexual Assault in the Military. *Current Psychiatry Reports, 17*(7). <https://doi.org/10.1007/s11920-015-0596-7>
- Choi, Y. S., Cucura, J., Jain, R., & Berry-Caban, C. (2015). Telemedicine in US Army soldiers with type 1 diabetes. *Journal of Telemedicine and Telecare, 21*(7), 392–395. <https://doi.org/10.1177/1357633X15583425>

- Christensen, B. N., & Yaffe, J. (2012). Factors Affecting Mental Health Service Utilization Among Deployed Military Personnel. *Military Medicine*, 177(3), 278–283. <https://doi.org/10.7205/MILMED-D-11-00353>
- Ciprikis, K., Cassells, D., & Berrill, J. (2020). Transgender labour market outcomes: Evidence from the United States. *Gender, Work & Organization*, 27(6), 1378–1401. <https://doi.org/10.1111/gwao.12501>
- Cochran, B. N., Balsam, K., Flentje, A., Malte, C. A., & Simpson, T. (2013). Mental Health Characteristics of Sexual Minority Veterans. *Journal of Homosexuality*, 60(2–3), 419–435. <https://doi.org/10.1080/00918369.2013.744932>
- Cochran, S. D., Sullivan, J. G., & Mays, V. M. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, 71(1), 53–61. <https://doi.org/10.1037/0022-006X.71.1.53>
- Cohen, S., & Wills, T. A. (1985). Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Coleman, S. J., Stevelink, S. A. M., Hatch, S. L., Denny, J. A., & Greenberg, N. (2017). Stigma-related barriers and facilitators to help seeking for mental health issues in the armed forces: A systematic review and thematic synthesis of qualitative literature. *Psychological Medicine*, 47(11), 1880–1892. <https://doi.org/10.1017/S0033291717000356>
- Cooper, D. B., Bunner, A. E., Kennedy, J. E., Balldin, V., Tate, D. F., Eapen, B. C., & Jaramillo, C. A. (2015). Treatment of persistent post-concussive symptoms after mild traumatic brain injury: A systematic review of cognitive rehabilitation and behavioral health interventions in military service members and veterans. *Brain Imaging and Behavior*, 9(3), 403–420. <https://doi.org/10.1007/s11682-015-9440-2>
- Cooper, L., Caddick, N., Godier, L., Cooper, A., Fossey, M., & Engward, H. (2017). A model of military to civilian transition: Bourdieu in action. *Journal of Military, Veteran and Family Health*, 3(2), 53–60. <https://doi.org/10.3138/jmvfh.4301>
- Corrigan, P. W., & Watson, A. C. (2007). The Stigma of Psychiatric Disorders and the Gender, Ethnicity, and Education of the Perceiver. *Community Mental Health Journal*, 43(5), 439–458. <https://doi.org/10.1007/s10597-007-9084-9>
- Creekmur, C. (2003). Homoeroticism and Homosociality. In M. Stein (Ed.), *Encyclopedia of Lesbian, Gay, Bisexual and Transgender History in America* (pp. 50–52). Gale, Cengage Learning. <http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=43923>

- Currin, J. B., Hayslip, B., & Temple, J. R. (2011). The relationship between age, gender, historical change, and adults' perceptions of mental health and mental health services. *International Journal of Aging & Human Development*, 72(4), 317–341. <https://doi.org/10.2190/AG.72.4.c>
- Dalgard, O. S., Bjørk, S., & Tambs, K. (1995). Social Support, Negative Life Events and Mental Health. *British Journal of Psychiatry*, 166(1), 29–34. <https://doi.org/10.1192/bjp.166.1.29>
- Dardis, C. M., Reinhardt, K. M., Foynes, M. M., Medoff, N. E., & Street, A. E. (2018). “Who Are You Going to Tell? Who’s Going to Believe You?”: Women’s Experiences Disclosing Military Sexual Trauma. *Psychology of Women Quarterly*, 42(4), 414–429. <https://doi.org/10.1177/0361684318796783>
- Davidson, S. (2016). Gender inequality: Nonbinary transgender people in the workplace. *Cogent Social Sciences*, 2(1), 1236511. <https://doi.org/10.1080/23311886.2016.1236511>
- Davis, L., Vega, R., & McLeod, J. (2017). DoD Sexual Assault LGB chapter.pdf. In L. Davis, A. Grifka, K. Williams, & M. Coffey (Eds.), *2016 Workplace and Gender Relations Survey of Active Duty Members, Overview Report* (pp. 355–361). Office of People Analytics - Defense Research, Surveys, and Statistics Center.
- Defense Health Agency. (2019). *Standard Processes, Guidelines, and Responsibilities of the DoD Patient Bill of Rights and Responsibilities in the Military Health System (MHS) Military Medical Treatment Facilities (MTFs)* (Procedural Instruction DHA-PI 6025.10). <https://health.mil/Reference-Center/Policies/2019/12/20/DHA-PI-6025-10-Change-1-Patient-Rights-and-Responsibilities>
- Defense Health Agency. (2020). *Interim Procedures Memorandum 18-001, “Standard Appointing Processes, Procedures, Hours of Operation, Productivity, Performance Measures and Appointment Types in Primary, Specialty, and Behavioral Health Care in Medical Treatment Facilities (MTFs)”* (DHA-IPM 18-001). <https://health.mil/Reference-Center/Policies?query=behavioral&isDateRange=0&broadVector=000&newsVector=0000000&refVector=000000000100000&refSrc=1>
- Delaney, E., Webb-Murphy, J., Bhakta, J., Nebeker, B., & Johnston, S. (2019). Barriers to Mental Health Care In Military Settings: What We Know and Where to go From Here? *Military Behavioral Health*, 7(1), 1–3. <https://doi.org/10.1080/21635781.2019.1590265>
- D’Emilio, J. (1998). *Sexual politics, sexual communities: The making of a homosexual minority in the United States, 1940-1970* (2nd ed). University of Chicago Press.

- Department of Defense. (2016). *2015 Demographics Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2015-Demographics-Report.pdf>
- Department of Defense. (2018). *2017 Demographics: Profile of the Military Community*. Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy. <http://download.militaryonesource.mil/12038/MOS/Reports/2017-demographics-report.pdf>
- Department of Defense. (2019). *2018 Demographics: Profile of the Military Community*. <http://download.militaryonesource.mil/12038/MOS/Reports/2018-demographics-report.pdf>
- Department of Defense. (2020). *2019 Demographics: Profile of the Military Community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2019-demographics-report.pdf>
- Dickstein, B. D., Vogt, D. S., Handa, S., & Litz, B. T. (2010). Targeting Self-Stigma in Returning Military Personnel and Veterans: A Review of Intervention Strategies. *Military Psychology (Taylor & Francis Ltd)*, 22(2), 224–236. <https://doi.org/10.1080/08995600903417399>
- Dietert, M., Dentice, D., & Keig, Z. (2017). Addressing the Needs of Transgender Military Veterans: Better Access and More Comprehensive Care. *Transgender Health*, 2(1), 35–44. <https://doi.org/10.1089/trgh.2016.0040>
- Dobalian, A., & Rivers, P. A. (2008). Racial and Ethnic Disparities in the Use of Mental Health Services. *The Journal of Behavioral Health Services & Research*, 35(2), 128–141. <https://doi.org/10.1007/s11414-007-9097-8>
- Donnithorne, J. W. (2013). *Culture wars: Air Force culture and civil-military relations*. Air University Press, Air Force Research Institute.
- Downing, J. M., & Przedworski, J. M. (2018). Health of Transgender Adults in the U.S., 2014–2016. *American Journal of Preventive Medicine*, 55(3), 336–344. <https://doi.org/10.1016/j.amepre.2018.04.045>
- Drummond, M. J. N., Filiault, S. M., Anderson, E., & Jeffries, D. (2015). Homosocial intimacy among Australian undergraduate men. *Journal of Sociology*, 51(3), 643–656. <https://doi.org/10.1177/1440783313518251>
- Dyar, C., & London, B. (2018). Longitudinal Examination of a Bisexual-Specific Minority Stress Process Among Bisexual Cisgender Women. *Psychology of Women Quarterly*, 42(3), 342–360. <https://doi.org/10.1177/0361684318768233>

- Eckart, E., & Dufrene, R. (2015). Barriers to Mental Health Treatment in the Military. *Journal of Military and Government Counseling*, 3(1), 67.
- Eger, E. K. (2018). Transgender Jobseekers Navigating Closeting Communication. *Management Communication Quarterly*, 32(2), 276–281. <https://doi.org/10.1177/0893318917740226>
- Eighmey, J. (2006). Why Do Youth Enlist?: Identification of Underlying Themes. *Armed Forces & Society*, 32(2), 307–328. <https://doi.org/10.1177/0095327X05281017>
- Elnitsky, C. A., Chapman, P. L., Thurman, R. M., Pitts, B. L., Figley, C., & Unwin, B. (2013). Gender Differences in Combat Medic Mental Health Services Utilization, Barriers, and Stigma. *Military Medicine*, 178(7), 775–784. <https://doi.org/10.7205/MILMED-D-13-00012>
- Embser-Herbert, M. (2020). “Welcome! Oh, wait...” Transgender Military Service in a Time of Uncertainty. *Sociological Inquiry*, 90(2), 405–429. <https://doi.org/10.1111/soin.12329>
- Erickson-Schroth, L., & Mitchell, J. (2009). Queering Queer Theory, or Why Bisexuality Matters. *Journal of Bisexuality*, 9(3–4), 297–315. <https://doi.org/10.1080/15299710903316596>
- Evans, R. (2001). *US Military Policy Concerning Homosexuals: Development, Implementation, and Outcomes*. Center for the Study of Sexual Minorities in the Military, University of California at Santa Barbara. <https://www.palmcenter.org/u-s-military-policies-concerning-homosexuals/>
- Evans, R. (2002). *U.S MILITARY POLICIES CONCERNING HOMOSEXUALS: DEVELOPMENT, IMPLEMENTATION AND OUTCOMES*. 84.
- Farris, C., Jaycox, L., Schell, T., Street, A., Kilpatrick, D., & Tanielian, T. (2016). Chapter 4: Sexual Harassment and Gender Discrimination Findings, Active Component. In A. Morral, K. Gore, & T. Schell (Eds.), *Sexual Assault and Sexual Harassment in the U.S. Military: Volume 2. Estimates for Department of Defense Service Members from the 2014 RAND Military Workplace Study* (pp. 31–54). RAND Corporation. http://www.rand.org/pubs/research_reports/RR870z2.html
- Feeney, B. C., & Collins, N. L. (2015). A New Look at Social Support: A Theoretical Perspective on Thriving Through Relationships. *Personality and Social Psychology Review*, 19(2), 113–147. <https://doi.org/10.1177/1088868314544222>
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology*, 80(5), 917–927. <https://doi.org/10.1037/a0029425>

- Ferguson, J., Keeling, J. J., & Bluman, E. M. (2010). Recent Advances in Lower Extremity Amputations and Prosthetics for the Combat Injured Patient. *Foot and Ankle Clinics*, *15*(1), 151–174. <https://doi.org/10.1016/j.fcl.2009.10.001>
- Fernández-Rouco, N., Fernández-Fuertes, A. A., Carcedo, R. J., Lázaro-Visa, S., & Gómez-Pérez, E. (2017). Sexual Violence History and Welfare in Transgender People. *Journal of Interpersonal Violence*, *32*(19), 2885–2907. <https://doi.org/10.1177/0886260516657911>
- Flanders, C. E., Robinson, M., Legge, M. M., & Tarasoff, L. A. (2016). Negative identity experiences of bisexual and other non-monosexual people: A qualitative report. *Journal of Gay & Lesbian Mental Health*, *20*(2), 152–172. <https://doi.org/10.1080/19359705.2015.1108257>
- Flood, M. (2008). Men, Sex, and Homosociality: How Bonds between Men Shape Their Sexual Relations with Women. *Men and Masculinities*, *10*(3), 339–359. <https://doi.org/10.1177/1097184X06287761>
- Fox, J., & Pease, B. (2012). Military Deployment, Masculinity and Trauma: Reviewing the Connections. *The Journal of Men's Studies*, *20*(1), 16–31. <https://doi.org/10.3149/jms.2001.16>
- Gadermann, A. M., Engel, C. C., Naifeh, J. A., Nock, M. K., Petukhova, M., Santiago, P. N., Wu, B., Zaslavsky, A. M., & Kessler, R. C. (2012). Prevalence of DSM-IV Major Depression Among U.S. Military Personnel: Meta-Analysis and Simulation. *Military Medicine*, *177*(8S), 47–59. <https://doi.org/10.7205/MILMED-D-12-00103>
- Gallegos, A. M., Wolff, K. B., Streltzov, N. A., Adams, L. B., Carpenter-Song, E., Nicholson, J., & Stecker, T. (2015). Gender Differences in Service Utilization among OEF/OIF Veterans with Posttraumatic Stress Disorder after a Brief Cognitive–Behavioral Intervention to Increase Treatment Engagement: A Mixed Methods Study. *Women's Health Issues*, *25*(5), 542–547. <https://doi.org/10.1016/j.whi.2015.04.008>
- Garcia, J., Vargas, N., Clark, J. L., Magaña Álvarez, M., Nelons, D. A., & Parker, R. G. (2020). Social isolation and connectedness as determinants of well-being: Global evidence mapping focused on LGBTQ youth. *Global Public Health*, *15*(4), 497–519. <https://doi.org/10.1080/17441692.2019.1682028>
- Gibbons, S. W., Migliore, L., Convoy, S. P., Greiner, S., & DeLeon, P. H. (2014). Military Mental Health Stigma Challenges: Policy and Practice Considerations. *The Journal for Nurse Practitioners*, *10*(6), 365–372. <https://doi.org/10.1016/j.nurpra.2014.03.021>
- Gifford, B. (2006). The Camouflaged Safety Net: The U.S. Armed Forces as Welfare State Institution. *Social Politics: International Studies in Gender, State & Society*, *13*(3), 372–399. <https://doi.org/10.1093/sp/jxl003>

- Gilmore, A. K., Brignone, E., Painter, J. M., Lehavot, K., Fargo, J., Suo, Y., Simpson, T., Carter, M. E., Blais, R. K., & Gundlapalli, A. V. (2016). Military Sexual Trauma and Co-occurring Posttraumatic Stress Disorder, Depressive Disorders, and Substance Use Disorders among Returning Afghanistan and Iraq Veterans. *Women's Health Issues, 26*(5), 546–554. <https://doi.org/10.1016/j.whi.2016.07.001>
- Girard, P. (2007). Military and VA telemedicine systems for patients with traumatic brain injury. *The Journal of Rehabilitation Research and Development, 44*(7), 1017–1026. <https://doi.org/10.1682/JRRD.2006.12.0174>
- Gitterman, A. (2017). Life Model of Social Work Practice. In F. J. Turner (Ed.), *Social Work Treatment: Interlocking Theoretical Approaches* (6th ed., pp. 287–301). Oxford University Press.
- Glick, J. L., Lopez, A., Pollock, M., & Theall, K. P. (2019). “Housing Insecurity Seems to Almost Go Hand in Hand with Being Trans”: Housing Stress among Transgender and Gender Non-conforming Individuals in New Orleans. *Journal of Urban Health, 96*(5), 751–759. <https://doi.org/10.1007/s11524-019-00384-y>
- Glick, J. L., Lopez, A., Pollock, M., & Theall, K. P. (2020). Housing insecurity and intersecting social determinants of health among transgender people in the USA: A targeted ethnography. *International Journal of Transgender Health, 21*(3), 337–349. <https://doi.org/10.1080/26895269.2020.1780661>
- Gonzalez, K. A., Ramirez, J. L., & Galupo, M. P. (2017). “I was and still am”: Narratives of Bisexual Marking in the #StillBisexual Campaign. *Sexuality & Culture, 21*(2), 493–515. <https://doi.org/10.1007/s12119-016-9401-y>
- Goodhart, A., & Taylor, J. K. (2020). LGBT Military Service Policies in the United States. In A. Goodhart & J. K. Taylor, *Oxford Research Encyclopedia of Politics*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228637.013.1289>
- Gould, M., Adler, A., Zamorski, M., Castro, C., Hanily, N., Steele, N., Kearney, S., & Greenberg, N. (2010). Do stigma and other perceived barriers to mental health care differ across Armed Forces? *Journal of the Royal Society of Medicine, 103*(4), 148–156. <https://doi.org/10.1258/jrsm.2010.090426>
- Griner, S. B., Vamos, C. A., Thompson, E. L., Logan, R., Vázquez-Otero, C., & Daley, E. M. (2020). The Intersection of Gender Identity and Violence: Victimization Experienced by Transgender College Students. *Journal of Interpersonal Violence, 35*(23–24), 5704–5725. <https://doi.org/10.1177/0886260517723743>
- Guerra, V. S., & Calhoun, P. S. (2011). Examining the relation between posttraumatic stress disorder and suicidal ideation in an OEF/OIF veteran sample. *Journal of Anxiety Disorders, 25*(1), 12–18. <https://doi.org/10.1016/j.janxdis.2010.06.025>

- Hafeez, H., Zeshan, M., Tahir, M. A., Jahan, N., & Naveed, S. (2017). Health Care Disparities Among Lesbian, Gay, Bisexual, and Transgender Youth: A Literature Review. *Cureus*, 9(4). <https://doi.org/10.7759/cureus.1184>
- Hahn, E. A., DeWalt, D. A., Bode, R. K., Garcia, S. F., DeVellis, R. F., Correia, H., & Cella, D. (2014). New English and Spanish Social Health Measures Will Facilitate Evaluating Health Determinants. *Health Psychology : Official Journal of the Division of Health Psychology, American Psychological Association*, 33(5), 490–499. <https://doi.org/10.1037/hea0000055>
- Hale, H. C. (2012). The Role of Practice in the Development of Military Masculinities: ROLE OF PRACTICE IN DEVELOPING MILITARY MASCULINITIES. *Gender, Work & Organization*, 19(6), 699–722. <https://doi.org/10.1111/j.1468-0432.2010.00542.x>
- Hall, M., Hearn, J., & Lewis, R. (2021). “Upskirting,” Homosociality, and Craftmanship: A Thematic Analysis of Perpetrator and Viewer Interactions. *Violence Against Women*, 10778012211008980. <https://doi.org/10.1177/10778012211008981>
- Hammack, P. L., Frost, D. M., Meyer, I. H., & Pletta, D. (2018). Gay Men’s Health and Identity: Social Change and the Life Course. *Archives of Sexual Behavior*, 47(1), 59–74. <https://doi.org/10.1007/s10508-017-0990-9>
- Hansen Mandau, M. B. (2020). Homosocial positionings and ambivalent participation: A qualitative analysis of young adults’ non-consensual sharing and viewing of privately produced sexual images. *MedieKultur: Journal of Media and Communication Research*, 36(67), 055–075. <https://doi.org/10.7146/mediekultur.v36i67.113976>
- Harrell, F., & Dupont, C. (2019). *Hmisc: Harrell Miscellaneous*. (4.2-0) [R package]. <https://CRAN.R-project.org/package=Hmisc>
- Hatzenbuehler, M. L. (2010). Social Factors as Determinants of Mental Health Disparities in LGB Populations: Implications for Public Policy: Social Factors as Determinants of Mental Health. *Social Issues and Policy Review*, 4(1), 31–62. <https://doi.org/10.1111/j.1751-2409.2010.01017.x>
- Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). State-Level Policies and Psychiatric Morbidity In Lesbian, Gay, and Bisexual Populations. *American Journal of Public Health*, 99(12), 7.
- Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, K. M., & Hasin, D. S. (2010). The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study. *American Journal of Public Health*, 100(3), 452–459. <https://doi.org/10.2105/AJPH.2009.168815>

- Hawkesworth, M. (2020). Visibility Politics: Theorizing Racialized Gendering, Homosociality, and the Feminicidal State. *Signs: Journal of Women in Culture and Society*, 45(2), 311–319. <https://doi.org/10.1086/704986>
- Helmick, K. M., Spells, C. A., Malik, S. Z., Davies, C. A., Marion, D. W., & Hinds, S. R. (2015). Traumatic brain injury in the US military: Epidemiology and key clinical and research programs. *Brain Imaging and Behavior*, 9(3), 358–366. <https://doi.org/10.1007/s11682-015-9399-z>
- Henderson, E. R., Jabson, J., Russomanno, J., Paglisotti, T., & Blosnich, J. R. (2019). Housing and food stress among transgender adults in the United States. *Annals of Epidemiology*, 38, 42–47. <https://doi.org/10.1016/j.annepidem.2019.08.004>
- Henry, R. S., Perrin, P. B., Coston, B. M., & Calton, J. M. (2021). Intimate Partner Violence and Mental Health Among Transgender/Gender Nonconforming Adults. *Journal of Interpersonal Violence*, 36(7–8), 3374–3399. <https://doi.org/10.1177/0886260518775148>
- Hinojosa, R. (2010). Doing Hegemony: Military, Men, and Constructing a Hegemonic Masculinity. *The Journal of Men's Studies*, 18(2), 179–194. <https://doi.org/10.3149/jms.1802.179>
- Hinojosa, R., & Hinojosa, M. S. (2011). Using military friendships to optimize postdeployment reintegration for male Operation Iraqi Freedom/Operation Enduring Freedom veterans. *The Journal of Rehabilitation Research and Development*, 48(10), 1145. <https://doi.org/10.1682/JRRD.2010.08.0151>
- Holliday, R., & Monteith, L. L. (2019). Seeking help for the health sequelae of military sexual trauma: A theory-driven model of the role of institutional betrayal. *Journal of Trauma & Dissociation*, 20(3), 340–356. <https://doi.org/10.1080/15299732.2019.1571888>
- Hom, M. A., Stanley, I. H., Schneider, M. E., & Joiner, T. E. (2017). A systematic review of help-seeking and mental health service utilization among military service members. *Clinical Psychology Review*, 53, 59–78. <https://doi.org/10.1016/j.cpr.2017.01.008>
- Hornstein, E. A., & Eisenberger, N. I. (2017). Unpacking the buffering effect of social support figures: Social support attenuates fear acquisition. *PLOS ONE*, 12(5), e0175891. <https://doi.org/10.1371/journal.pone.0175891>
- Hourani, L. L., Williams, T. V., & Kress, A. M. (2006). Stress, Mental Health, and Job Performance among Active Duty Military Personnel: Findings from the 2002 Department of Defense Health-Related Behaviors Survey. *Military Medicine*, 171(9), 849–856. <https://doi.org/10.7205/MILMED.171.9.849>

- Howard, L. M., Ehrlich, A. M., Gamlen, F., & Oram, S. (2017). Gender-neutral mental health research is sex and gender biased. *The Lancet Psychiatry*, *4*(1), 9–11. [https://doi.org/10.1016/S2215-0366\(16\)30209-7](https://doi.org/10.1016/S2215-0366(16)30209-7)
- Hunehäll Berndtsson, K., & Odenbring, Y. (2021). They don't even think about what the girl might think about it': Students' views on sexting, gender inequalities and power relations in school. *Journal of Gender Studies*, *30*(1), 91–101. <https://doi.org/10.1080/09589236.2020.1825217>
- Hyman, J., Ireland, R., Frost, L., & Cottrell, L. (2012). Suicide Incidence and Risk Factors in an Active Duty US Military Population. *American Journal of Public Health*, *102*(Suppl 1), S138–S146. <https://doi.org/10.2105/AJPH.2011.300484>
- Institute of Medicine. (2011). *The Health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. The National Academies Press. <https://doi.org/10.17226/13128>
- Jakupcak, M., & Varra, E. M. (2011). Treating Iraq and Afghanistan War Veterans With PTSD Who Are at High Risk for Suicide. *Cognitive and Behavioral Practice*, *18*(1), 85–97. <https://doi.org/10.1016/j.cbpra.2009.08.007>
- Jaycox, L., Schell, T., Morral, A., Street, A., Farris, C., Kilpatrick, D., & Tanielian, T. (2016). Chapter 3: Sexual Assault Findings, Active Component. In A. Morral, K. Gore, & T. Schell (Eds.), *Sexual Assault and Sexual Harassment in the U.S. Military: Volume 2. Estimates for Department of Defense Service Members from the 2014 RAND Military Workplace Study* (pp. 9–30). RAND Corporation. <https://doi.org/10.7249/RR870.2-1>
- Johnson, J. G., Cohen, P., Dohrenwend, B. P., Link, B. G., & Brook, J. S. (1999). A Longitudinal Investigation of Social Causation and Social Selection Processes Involved in the Association Between Socioeconomic Status and Psychiatric Disorders. *Journal of Abnormal Psychology*, *108*(3), 490–499. <https://doi.org/10.1037/0021-843X.108.3.490>
- Johnson, L., & Federman, E. J. (2014). Training, experience, and attitudes of VA psychologists regarding LGBT issues: Relation to practice and competence. *Psychology of Sexual Orientation and Gender Diversity*, *1*(1), 10–18. <https://doi.org/10.1037/sgd0000019>
- Jones, N., Seddon, R., Fear, N. T., McAllister, P., Wessely, S., & Greenberg, N. (2012). Leadership, Cohesion, Morale, and the Mental Health of UK Armed Forces in Afghanistan. *Psychiatry: Interpersonal and Biological Processes*, *75*(1), 49–59. <https://doi.org/10.1521/psyc.2012.75.1.49>
- Kang, H. K., Bullman, T. A., Smolenski, D. J., Skopp, N. A., Gahm, G. A., & Reger, M. A. (2015). Suicide risk among 1.3 million veterans who were on active duty during the Iraq and Afghanistan wars. *Annals of Epidemiology*, *25*(2), 96–100. <https://doi.org/10.1016/j.annepidem.2014.11.020>

- Katon, J. G., Lehavot, K., Simpson, T. L., Williams, E. C., Barnett, S. B., Grossbard, J. R., Schure, M. B., Gray, K. E., & Reiber, G. E. (2015). Adverse Childhood Experiences, Military Service, and Adult Health. *American Journal of Preventive Medicine, 49*(4), 573–582. <https://doi.org/10.1016/j.amepre.2015.03.020>
- Kattari, S. K., Whitfield, D. L., Walls, N. E., Langenderfer-Magruder, L., & Ramos, D. (2016). Policing Gender Through Housing and Employment Discrimination: Comparison of Discrimination Experiences of Transgender and Cisgender LGBTQ Individuals. *Journal of the Society for Social Work and Research, 7*(3), 427–447. <https://doi.org/10.1086/686920>
- Katz-Wise, S. L., Rosario, M., & Tsappis, M. (2016). Lesbian, Gay, Bisexual, and Transgender Youth and Family Acceptance. *Pediatric Clinics of North America, 63*(6), 1011–1025. <https://doi.org/10.1016/j.pcl.2016.07.005>
- Kauth, M. R., Blosnich, J. R., Marra, J., Keig, Z., & Shipherd, J. C. (2017). Transgender Health Care in the U.S. Military and Veterans Health Administration Facilities. *Current Sexual Health Reports, 9*(3), 121–127. <https://doi.org/10.1007/s11930-017-0120-7>
- Kessler, R. C., Heeringa, S. G., Stein, M. B., Colpe, L. J., Fullerton, C. S., Hwang, I., Naifeh, J. A., Nock, M. K., Petukhova, M., Sampson, N. A., Schoenbaum, M., Zaslavsky, A. M., & Ursano, R. J. (2014). Thirty-Day Prevalence of DSM-IV Mental Disorders Among Nondeployed Soldiers in the US Army: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry, 71*(5), 504. <https://doi.org/10.1001/jamapsychiatry.2014.28>
- Kimerling, R., Makin-Byrd, K., Louzon, S., Ignacio, R. V., & McCarthy, J. F. (2016). Military Sexual Trauma and Suicide Mortality. *American Journal of Preventive Medicine, 50*(6), 684–691. <https://doi.org/10.1016/j.amepre.2015.10.019>
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry, 8*(1). <https://doi.org/10.1186/1471-244X-8-70>
- Kitchiner, N. J., Lewis, C., Roberts, N. P., & Bisson, J. I. (2019). Active duty and ex-serving military personnel with post-traumatic stress disorder treated with psychological therapies: Systematic review and meta-analysis. *European Journal of Psychotraumatology, 10*(1), 1684226. <https://doi.org/10.1080/20008198.2019.1684226>
- Kleykamp, M. A. (2006). College, Jobs, or the Military? Enlistment During a Time of War. *Social Science Quarterly, 87*(2), 272–290. JSTOR.

- Kleykamp, M. A., & Hipes, C. (2013). *Social Programs for Soldiers and Veterans* (D. Béland, K. J. Morgan, & C. Howard, Eds.; Vol. 1). Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780199838509.013.003>
- Klosowska, A. (2007). Homoaffectivity, concept. In F. Malti-Douglas (Ed.), *Encyclopedia of sex and gender* (1st ed., pp. 710–712). Macmillan Reference.
<http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4392200>
- Koo, K. H., Tiet, Q. Q., & Rosen, C. S. (2016). Relationships between racial/ethnic minority status, therapeutic alliance, and treatment expectancies among veterans with PTSD. *Psychological Services, 13*(3), 317–321.
<https://doi.org/10.1037/ser0000029>
- Kotchikov, I. S., Hwang, B. Y., Appelboom, G., Kellner, C. P., & Connolly, E. S. (2010). Brain-computer interfaces: Military, neurosurgical, and ethical perspective. *Neurosurgical Focus, 28*(5), E25. <https://doi.org/10.3171/2010.2.FOCUS1027>
- Kouyoumdjian, H., Zamboanga, B. L., & Hansen, D. J. (2003). Barriers to Community Mental Health Services for Latinos: Treatment Considerations. *Clinical Psychology: Science and Practice, 10*(4), 394–422.
- Kranke, D., Floersch, J., & Dohalian, A. (2019). Identifying Aspects of Sameness to Promote Veteran Reintegration with Civilians: Evidence and Implications for Military Social Work. *Health & Social Work, 44*(1), 61–64.
<https://doi.org/10.1093/hsw/hly036>
- Krill-Williston, S., Martinez, J. H., & Abdullah, T. (2019). Mental health stigma among people of color: An examination of the impact of racial discrimination. *International Journal of Social Psychiatry, 65*(6), 458–467.
<https://doi.org/10.1177/0020764019858651>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001a). The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine, 16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001b). The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine, 16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review, 118*(3), 482–495. <https://doi.org/10.1037/a0023477>
- Lambe, J., Cerezo, A., & O’Shaughnessy, T. (2017). Minority stress, community involvement, and mental health among bisexual women. *Psychology of Sexual Orientation and Gender Diversity, 4*(2), 218–226.
<https://doi.org/10.1037/sgd0000222>

- Lamson, A., Richardson, N., & Cobb, E. (2020). The Health and Readiness of Service Members: ACEs to PACEs. *Military Medicine*, 185(Supplement_1), 348–354. <https://doi.org/10.1093/milmed/usz197>
- Lange, T. M., Hilgeman, M. M., Portz, K. J., Intoccia, V. A., & Cramer, R. J. (2020). Pride in all Who Served: Development, Feasibility, and Initial Efficacy of a Health Education Group For LGBT Veterans. *Journal of Trauma & Dissociation*, 21(4), 484–504. <https://doi.org/10.1080/15299732.2020.1770147>
- Lawrence, E. G., Jones, N., Greenberg, N., Fear, N. T., Wessely, S., Michael, G., Taylor-Beirne, S., & Simms, A. (2021). Mental well-being interventions in the military: The ten key principles. *BMJ Military Health*, bmjmilitary-2020-001740. <https://doi.org/10.1136/bmjmilitary-2020-001740>
- LeardMann, C. A., Matsuno, R. K., Boyko, E. J., Powell, T. M., Reger, M. A., Hoge, C. W., & Millennium Cohort Study. (2021). Association of Combat Experiences With Suicide Attempts Among Active-Duty US Service Members. *JAMA Network Open*, 4(2), e2036065. <https://doi.org/10.1001/jamanetworkopen.2020.36065>
- LeardMann, C. A., Powell, T. M., Smith, T. C., Bell, M. R., Smith, B., Boyko, E. J., Hooper, T. I., Gackstetter, G. D., Ghamsary, M., & Hoge, C. W. (2013). Risk Factors Associated With Suicide in Current and Former US Military Personnel. *JAMA*, 310(5), 496. <https://doi.org/10.1001/jama.2013.65164>
- Lee, D. J., Warner, C. H., & Hoge, C. W. (2014). Advances and Controversies in Military Posttraumatic Stress Disorder Screening. *Current Psychiatry Reports*, 16(9), 467. <https://doi.org/10.1007/s11920-014-0467-7>
- Lehavot, K., Katon, J. G., Simpson, T. L., & Shipherd, J. C. (2017). Transgender Veterans' Satisfaction With Care and Unmet Health Needs. *Medical Care*, 55(Suppl 9 2), S90–S96. <https://doi.org/10.1097/MLR.0000000000000723>
- Lehavot, K., & Simpson, T. L. (2014). Trauma, posttraumatic stress disorder, and depression among sexual minority and heterosexual women veterans. *Journal of Counseling Psychology*, 61(3), 392–403. <https://doi.org/10.1037/cou0000019>
- Lehavot, K., Simpson, T. L., & Shipherd, J. C. (2016). Factors Associated with Suicidality Among a National Sample of Transgender Veterans. *Suicide and Life-Threatening Behavior*, 46(5), 507–524. <https://doi.org/10.1111/sltb.12233>
- Lemaire, C. M., & Graham, D. P. (2011). Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of Affective Disorders*, 130(1–2), 231–238. <https://doi.org/10.1016/j.jad.2010.10.021>
- Leppel, K. (2016). The labor force status of transgender men and women. *International Journal of Transgenderism*, 17(3–4), 155–164. <https://doi.org/10.1080/15532739.2016.1236312>

- Lester, K., Resick, P., Young-Xu, Y., & Artz, C. (2010). Impact of Race on Early Treatment Termination and Outcomes in Posttraumatic Stress Disorder Treatment. *Journal of Consulting and Clinical Psychology, 78*, 480–489. <https://doi.org/10.1037/a0019551>
- Levis, B., Benedetti, A., & Thombs, B. (2019). Accuracy of Patient Health Questionnaire-9 (PHQ-9) for screening to detect major depression: Individual participant data meta-analysis. *BMJ, 11476*. <https://doi.org/10.1136/bmj.11476>
- Liao, K. Y.-H., Kashubeck-West, S., Weng, C.-Y., & Deitz, C. (2015). Testing a mediation framework for the link between perceived discrimination and psychological distress among sexual minority individuals. *Journal of Counseling Psychology, 62*(2), 226–241. <https://doi.org/10.1037/cou0000064>
- Lindsay, J. A., Keo-Meier, C., Hudson, S., Walder, A., Martin, L. A., & Kauth, M. R. (2016). Mental Health of Transgender Veterans of the Iraq and Afghanistan Conflicts Who Experienced Military Sexual Trauma. *Journal of Traumatic Stress, 29*(6), 563–567. <https://doi.org/10.1002/jts.22146>
- Lovering, M. E., Proctor, S. P., & Heaton, K. J. (2013). A retrospective study of anxiety disorder diagnoses in the military from 2000 to 2009. *Journal of Anxiety Disorders, 27*(1), 25–32. <https://doi.org/10.1016/j.janxdis.2012.10.003>
- Lucas, C. L., Goldbach, J. T., Mamey, M. R., Kintzle, S., & Castro, C. A. (2018). Military Sexual Assault as a Mediator of the Association Between Posttraumatic Stress Disorder and Depression Among Lesbian, Gay, and Bisexual Veterans: Military Sexual Assault, PTSD, and Depression. *Journal of Traumatic Stress, 31*(4), 613–619. <https://doi.org/10.1002/jts.22308>
- Lucas, C. C. (2014). Don't Ask, Don't Tell, Don't Serve. In R. Conrad (Ed.), *Against equality: Queer revolution, not mere inclusion* (pp. 109–112). AK Press.
- Lunasco, T. K., Goodwin, E. A., Ozanian, A. J., & Loflin, E. M. (2010). One Shot-One Kill: A Culturally Sensitive Program for the Warrior Culture. *Military Medicine, 175*(7), 509–513. <https://doi.org/10.7205/MILMED-D-09-00182>
- Lutz, A. (2008). Who Joins the Military?: A Look at Race, Class, and Immigration Status. *Journal of Political and Military Sociology, 36*(2), 167–188.
- Maas, M. K., Cary, K. M., Clancy, E. M., Klettke, B., McCauley, H. L., & Temple, J. R. (2021). Slutpage Use Among U.S. College Students: The Secret and Social Platforms of Image-Based Sexual Abuse. *Archives of Sexual Behavior*. <https://doi.org/10.1007/s10508-021-01920-1>
- MacGregor, A. J., Shaffer, R. A., Dougherty, A. L., Galarneau, M. R., Raman, R., Baker, D. G., Lindsay, S. P., Golomb, B. A., & Corson, K. S. (2009). Psychological Correlates of Battle and Nonbattle Injury Among Operation Iraqi Freedom

- Veterans. *Military Medicine*, 174(3), 224–231.
<https://doi.org/10.7205/MILMED-D-03-9107>
- MacKay, J., Robinson, M., Pinder, S., & Ross, L. E. (2017). A grounded theory of bisexual individuals' experiences of help seeking. *American Journal of Orthopsychiatry*, 87(1), 52–61. <https://doi.org/10.1037/ort0000184>
- Maguen, S., Cohen, B., Ren, L., Bosch, J., Kimerling, R., & Seal, K. (2012). Gender Differences in Military Sexual Trauma and Mental Health Diagnoses among Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder. *Women's Health Issues*, 22(1), e61–e66. <https://doi.org/10.1016/j.whi.2011.07.010>
- Maguen, S., Madden, E., Cohen, B. E., Bertenthal, D., & Seal, K. H. (2012). Time to Treatment Among Veterans of Conflicts in Iraq and Afghanistan With Psychiatric Diagnoses. *Psychiatric Services*, 63(12), 1206–1212.
<https://doi.org/10.1176/appi.ps.201200051>
- Maguen, S., Madden, E., Neylan, T. C., Cohen, B. E., Bertenthal, D., & Seal, K. H. (2014). Timing of Mental Health Treatment and PTSD Symptom Improvement Among Iraq and Afghanistan Veterans. *Psychiatric Services*, 65(12), 1414–1419.
<https://doi.org/10.1176/appi.ps.201300453>
- Mak, J., Shires, D. A., Zhang, Q., Prieto, L. R., Ahmedani, B. K., Kattari, L., Becerra-Culqui, T. A., Bradlyn, A., Flanders, W. D., Getahun, D., Giammattei, S. V., Hunkeler, E. M., Lash, T. L., Nash, R., Quinn, V. P., Robinson, B., Roblin, D., Silverberg, M. J., Slovis, J., ... Goodman, M. (2020). Suicide Attempts Among a Cohort of Transgender and Gender Diverse People. *American Journal of Preventive Medicine*, 59(4), 570–577.
<https://doi.org/10.1016/j.amepre.2020.03.026>
- Manea, L., Gilbody, S., & McMillan, D. (2012). Optimal cut-off score for diagnosing depression with the Patient Health Questionnaire (PHQ-9): A meta-analysis. *Canadian Medical Association Journal*, 184(3), E191–E196.
<https://doi.org/10.1503/cmaj.110829>
- Manea, L., Gilbody, S., & McMillan, D. (2015). A diagnostic meta-analysis of the Patient Health Questionnaire-9 (PHQ-9) algorithm scoring method as a screen for depression. *General Hospital Psychiatry*, 37(1), 67–75.
<https://doi.org/10.1016/j.genhosppsych.2014.09.009>
- Mark, K. M., McNamara, K. A., Gribble, R., Rhead, R., Sharp, M.-L., Stevelink, S. A. M., Schwartz, A., Castro, C., & Fear, N. T. (2019). The health and well-being of LGBTQ serving and ex-serving personnel: A narrative review. *International Review of Psychiatry*, 31(1), 75–94.
<https://doi.org/10.1080/09540261.2019.1575190>
- McAndrew, L. M., Slotkin, S., Kimber, J., Maestro, K., Phillips, L. A., Martin, J. L., Credé, M., & Eklund, A. (2019). Cultural incongruity predicts adjustment to

- college for student veterans. *Journal of Counseling Psychology*, 66(6), 678–689. <https://doi.org/10.1037/cou0000363>
- McCann, E., & Brown, M. (2019). Homelessness among youth who identify as LGBTQ+: A systematic review. *Journal of Clinical Nursing*, 28(11–12), 2061–2072. <https://doi.org/10.1111/jocn.14818>
- McCann, E., & Sharek, D. (2016). Mental Health Needs of People Who Identify as Transgender: A Review of the Literature. *Archives of Psychiatric Nursing*, 30(2), 280–285. <https://doi.org/10.1016/j.apnu.2015.07.003>
- McClendon, J., Dean, K. E., & Galovski, T. (2020). Addressing Diversity in PTSD Treatment: Disparities in Treatment Engagement and Outcome Among Patients of Color. *Current Treatment Options in Psychiatry*, 7(3), 275–290. <https://doi.org/10.1007/s40501-020-00212-0>
- McCormack, M., & Anderson, E. (2014). The Influence of Declining Homophobia on Men's Gender in the United States: An Argument for the Study of Homophobia. *Sex Roles*, 71(3–4), 109–120. <https://doi.org/10.1007/s11199-014-0358-8>
- McCrea, M., Pliskin, N., Barth, J., Cox, D., Fink, J., French, L., Hammeke, T., Hess, D., Hopewell, A., Orme, D., Powell, M., Ruff, R., Schrock, B., Terryberry-Spohr, L., Vanderploeg, R., & Yoash-Gantz, R. (2008). Official Position of the Military TBI Task Force on the Role of Neuropsychology and Rehabilitation Psychology in the Evaluation, Management, and Research of Military Veterans with Traumatic Brain Injury. *The Clinical Neuropsychologist*, 22(1), 10–26. <https://doi.org/10.1080/13854040701760981>
- McDonald, J. L., Ganulin, M. L., Dretsch, M. N., Taylor, M. R., & Cabrera, O. A. (2020). Assessing the Well-being of Sexual Minority Soldiers at a Military Academic Institution. *Military Medicine*, 185(Supplement_1), 342–347. <https://doi.org/10.1093/milmed/usz198>
- McNamara, K. A., Lucas, C. L., Goldbach, J. T., Kintzle, S., & Castro, C. A. (2019). Mental health of the bisexual Veteran. *Military Psychology*, 31(2), 91–99. <https://doi.org/10.1080/08995605.2018.1541393>
- Meade, A. W., Johnson, E. C., & Braddy, P. W. (2008). Power and sensitivity of alternative fit indices in tests of measurement invariance. *Journal of Applied Psychology*, 93(3), 568–592. <https://doi.org/10.1037/0021-9010.93.3.568>
- Meadows, S., Engel, C., Collins, R., Beckman, R., Cefalu, M., Hawes-Dawson, J., Doyle, M., Kress, A., Sontag-Padilla, L., Ramchand, R., & Williams, K. (2018). 2015 Department of Defense Health Related Behaviors Survey (HRBS). RAND Corporation. <https://doi.org/10.7249/RR1695>
- Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance

- System in 23 States. *JAMA Pediatrics*, 172(11), 1038.
<https://doi.org/10.1001/jamapediatrics.2018.2537>
- Meyer, E. G. (2015). The Importance of Understanding Military Culture. *Academic Psychiatry*, 39(4), 416–418. <https://doi.org/10.1007/s40596-015-0285-1>
- Meyer, I. H. (1995). Minority Stress and Mental Health in Gay Men. *Journal of Health and Social Behavior*, 36(1), 38–56. JSTOR. <https://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Meyer, I. H. (2007). Prejudice and Discrimination as Social Stressors. In I. H. Meyer & M. E. Northridge (Eds.), *The Health of Sexual Minorities* (pp. 242–267). Springer US. https://doi.org/10.1007/978-0-387-31334-4_10
- Military OneSource. (2020). *Military Leave: What It Is and How It Works*. <https://www.militaryonesource.mil/military-life-cycle/new-to-the-military/getting-settled/military-leave-and-how-it-works/>
- Mitchell, M. M., Gallaway, M. S., Millikan, A. M., & Bell, M. (2012). Interaction of Combat Exposure and Unit Cohesion in Predicting Suicide-Related Ideation Among Post-Deployment Soldiers: SUICIDE-RELATED IDEATION AMONG POST-DEPLOYMENT SOLDIERS. *Suicide and Life-Threatening Behavior*, 42(5), 486–494. <https://doi.org/10.1111/j.1943-278X.2012.00106.x>
- Mittelstadt, J. (2011). “The Army is a Service, Not a Job”: Unionization, Employment, and the Meaning of Military Service in the Late-Twentieth Century United States. *International Labor and Working-Class History*, 80(1), 29–52. <https://doi.org/10.1017/S0147547911000068>
- Mittelstadt, J. (2015a). *The rise of the military welfare state* (First edition). Harvard University Press.
- Mittelstadt, J. (2015b). *Welfare’s last stand*. Aeon. <https://aeon.co/essays/how-the-us-military-became-a-welfare-state>
- Mustillo, S. A., Kysar-Moon, A., Douglas, S. R., Hargraves, R., Wadsworth, S. M., Fraine, M., & Frazer, N. L. (2015). Overview of Depression, Post-Traumatic Stress Disorder, and Alcohol Misuse Among Active Duty Service Members Returning From Iraq and Afghanistan, Self-Report and Diagnosis. *Military Medicine*, 180(4), 419–427. <https://doi.org/10.7205/MILMED-D-14-00335>
- Nash, W. P., Silva, C., & Litz, B. (2009). The Historic Origins of Military and Veteran Mental Health Stigma and the Stress Injury Model as a Means to Reduce It. *Psychiatric Annals*, 39(8), 789–794. <https://doi.org/10.3928/00485713-20090728-05>

- National Association of Social Workers. (2017). *Code of Ethics*.
<https://www.socialworkers.org/About/Ethics/Code-of-Ethics>
- National Defense Research Institute (Ed.). (2010). *Sexual orientation and U.S. military personnel policy: An update of RAND's 1993 study*. Rand Corporation.
- Newcomb, M. E., Hill, R., Buehler, K., Ryan, D. T., Whitton, S. W., & Mustanski, B. (2020). High Burden of Mental Health Problems, Substance Use, Violence, and Related Psychosocial Factors in Transgender, Non-Binary, and Gender Diverse Youth and Young Adults. *Archives of Sexual Behavior, 49*(2), 645–659.
<https://doi.org/10.1007/s10508-019-01533-9>
- Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical Psychology Review, 30*(8), 1019–1029. <https://doi.org/10.1016/j.cpr.2010.07.003>
- Nock, M. K., Stein, M. B., Heeringa, S. G., Ursano, R. J., Colpe, L. J., Fullerton, C. S., Hwang, I., Naifeh, J. A., Sampson, N. A., Schoenbaum, M., Zaslavsky, A. M., & Kessler, R. C. (2014). Prevalence and Correlates of Suicidal Behavior Among Soldiers: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARSS). *JAMA Psychiatry, 71*(5), 514.
<https://doi.org/10.1001/jamapsychiatry.2014.30>
- Nussbaum, M. (2002). Capabilities and Social Justice. *International Studies Review, 4*(2), 123–135. <https://doi.org/10.1111/1521-9488.00258>
- Nussbaum, M. (2007). Human Rights and Human Capabilities. *Harvard Human Rights Journal, 20*, 4.
- O'Brien, C., Keith, J., & Shoemaker, L. (2015). Don't tell: Military culture and male rape. *Psychological Services, 12*(4), 357–365. <https://doi.org/10.1037/ser0000049>
- Ojeda, V. D., & Bergstresser, S. M. (2008). Gender, Race-Ethnicity, and Psychosocial Barriers to Mental Health Care: An Examination of Perceptions and Attitudes among Adults Reporting Unmet Need. *Journal of Health and Social Behavior, 49*(3), 317–334.
- Oram, S., Khalifeh, H., & Howard, L. M. (2017). Violence against women and mental health. *The Lancet Psychiatry, 4*(2), 159–170. [https://doi.org/10.1016/S2215-0366\(16\)30261-9](https://doi.org/10.1016/S2215-0366(16)30261-9)
- Pachankis, J. E., Clark, K. A., Burton, C. L., Hughto, J. M. W., Bränström, R., & Keene, D. E. (2020). Sex, status, competition, and exclusion: Intraminority stress from within the gay community and gay and bisexual men's mental health. *Journal of Personality and Social Psychology, 119*(3), 713–740.
<https://doi.org/10.1037/pspp0000282>

- Pardeck, J. T. (1988). An Ecological Approach for Social Work Practice. *Journal of Sociology and Social Welfare*, 15(2), 133–142.
- Parra, L. A., Bell, T. S., Benibgui, M., Helm, J. L., & Hastings, P. D. (2018). The buffering effect of peer support on the links between family rejection and psychosocial adjustment in LGB emerging adults. *Journal of Social and Personal Relationships*, 35(6), 854–871. <https://doi.org/10.1177/0265407517699713>
- Pasek, J., & Tahk, A. (2020). *weights: Weighting and Weighted Statistics* (1.0.1) [Computer software]. <https://CRAN.R-project.org/package=weights>
- Pedrelli, P., Borsari, B., Lipson, S. K., Heinze, J. E., & Eisenberg, D. (2016). Gender Differences in the Relationships Among Major Depressive Disorder, Heavy Alcohol Use, and Mental Health Treatment Engagement Among College Students. *Journal of Studies on Alcohol and Drugs*, 77(4), 620–628. <https://doi.org/10.15288/jsad.2016.77.620>
- Peitzmeier, S. M., Malik, M., Kattari, S. K., Marrow, E., Stephenson, R., Agénor, M., & Reisner, S. L. (2020). Intimate Partner Violence in Transgender Populations: Systematic Review and Meta-analysis of Prevalence and Correlates. *American Journal of Public Health*, 110(9), e1–e14. <https://doi.org/10.2105/AJPH.2020.305774>
- Pflanz, S. (2001). Occupational Stress and Psychiatric Illness in the Military: Investigation of the Relationship between Occupational Stress and Mental Illness among Military Mental Health Patients. *Military Medicine*, 166(6), 457–462. <https://doi.org/10.1093/milmed/166.6.457>
- Pituch, A. K., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences*. (6th ed.). Routledge.
- Platt, L. F., Wolf, J. K., & Scheitle, C. P. (2018). Patterns of Mental Health Care Utilization Among Sexual Orientation Minority Groups. *Journal of Homosexuality*, 65(2), 135–153. <https://doi.org/10.1080/00918369.2017.1311552>
- Plöderl, M., & Tremblay, P. (2015). Mental health of sexual minorities. A systematic review. *International Review of Psychiatry*, 27(5), 367–385. <https://doi.org/10.3109/09540261.2015.1083949>
- Poropatich, R., Lai, E., McVeigh, F., & Bashshur, R. (2013). The U.S. Army Telemedicine and m-Health Program: Making a Difference at Home and Abroad. *Telemedicine and E-Health*, 19(5), 380–386. <https://doi.org/10.1089/tmj.2012.0297>
- PROMIS. (2020). *PROMIS Short Form v2.0—Emotional Support 4a, Measure-Specific Scoring Guide*. Health Measures. <https://www.healthmeasures.net/search-view-measures?task=Search.search>

- Puckett, J. A., Levitt, H. M., Horne, S. G., & Hayes-Skelton, S. A. (2015). Internalized heterosexism and psychological distress: The mediating roles of self-criticism and community connectedness. *Psychology of Sexual Orientation and Gender Diversity, 2*(4), 426–435. <https://doi.org/10.1037/sgd0000123>
- R Core Team. (2020). *R: A language and environment for statistical computing*. (4.0.2) [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Rahbek-Clemmensen, J., Archer, E. M., Barr, J., Belkin, A., Guerrero, M., Hall, C., & Swain, K. E. O. (2012). Conceptualizing the Civil–Military Gap: A Research Note. *Armed Forces & Society, 38*(4), 669–678. <https://doi.org/10.1177/0095327X12456509>
- Ramchand, R., Rudavsky, R., Grant, S., Tanielian, T., & Jaycox, L. (2015). Prevalence of, Risk Factors for, and Consequences of Posttraumatic Stress Disorder and Other Mental Health Problems in Military Populations Deployed to Iraq and Afghanistan. *Current Psychiatry Reports, 17*(5). <https://doi.org/10.1007/s11920-015-0575-z>
- Ramirez, M. H., Rogers, S. J., Johnson, H. L., Banks, J., Seay, W. P., Tinsley, B. L., & Grant, A. W. (2013). If We Ask, What They Might Tell: Clinical Assessment Lessons from LGBT Military Personnel Post-DADT. *Journal of Homosexuality, 60*(2–3), 401–418. <https://doi.org/10.1080/00918369.2013.744931>
- Ramsawh, H. J., Fullerton, C. S., Mash, H. B. H., Ng, T. H. H., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2014). Risk for suicidal behaviors associated with PTSD, depression, and their comorbidity in the U.S. Army. *Journal of Affective Disorders, 161*, 116–122. <https://doi.org/10.1016/j.jad.2014.03.016>
- Rao, D., Feinglass, J., & Corrigan, P. (2007). Racial and Ethnic Disparities in Mental Illness Stigma. *Journal of Nervous & Mental Disease, 195*(12), 1020–1023. <https://doi.org/10.1097/NMD.0b013e31815c046e>
- Rastogi, M., Massey-Hastings, N., & Wieling, E. (2012). Barriers to Seeking Mental Health Services in the Latino/a Community: A Qualitative Analysis. *Journal of Systemic Therapies, 31*(4), 1–17. <https://doi.org/10.1521/jsyt.2012.31.4.1>
- Redmond, S. A., Wilcox, S. L., Campbell, S., Kim, A., Finney, K., Barr, K., & Hassan, A. M. (2015). A brief introduction to the military workplace culture. *Work, 50*(1), 9–20. <https://doi.org/10.3233/WOR-141987>
- Reed-Fitzke, K., & Lucier-Greer, M. (2020). The Buffering Effect of Relationships on Combat Exposure, Military Performance, and Mental Health of U.S. Military Soldiers: A Vantage Point for CFTs. *Journal of Marital and Family Therapy, 46*(2), 321–336. <https://doi.org/10.1111/jmft.12402>

- Reger, M. A., Tucker, R. P., Carter, S. P., & Ammerman, B. A. (2018). Military Deployments and Suicide: A Critical Examination. *Perspectives on Psychological Science, 13*(6), 688–699. <https://doi.org/10.1177/1745691618785366>
- Reisman, M. (2016). PTSD Treatment for Veterans: What's Working, What's New, and What's Next. *Pharmacy and Therapeutics, 41*(10), 623–634.
- Rerucha, C. M., Runser, L. A., Ee, J. S., & Hersey, E. G. (2018). Military Healthcare Providers' Knowledge and Comfort Regarding the Medical Care of Active Duty Lesbian, Gay, and Bisexual Patients. *LGBT Health, 5*(1), 86–90. <https://doi.org/10.1089/lgbt.2016.0210>
- Richardson, L. K., Frueh, B. C., & Acierno, R. (2010). Prevalence Estimates of Combat-Related Post-Traumatic Stress Disorder: Critical Review. *Australian & New Zealand Journal of Psychiatry, 44*(1), 4–19. <https://doi.org/10.3109/00048670903393597>
- Rizzo, A. 'Skip,' & Shilling, R. (2017). Clinical Virtual Reality tools to advance the prevention, assessment, and treatment of PTSD. *European Journal of Psychotraumatology, 8*(sup5), 1414560. <https://doi.org/10.1080/20008198.2017.1414560>
- Roberts, A. L., Austin, S. B., Corliss, H. L., Vander Morris, A. K., & Koenen, K. C. (2010). Pervasive Trauma Exposure Among US Sexual Orientation Minority Adults and Risk of Posttraumatic Stress Disorder. *American Journal of Public Health, 100*(12), 2433–2441. <https://doi.org/10.2105/AJPH.2009.168971>
- Roberts, A. L., Rosario, M., Corliss, H. L., Koenen, K. C., & Austin, S. B. (2012). Elevated Risk of Posttraumatic Stress in Sexual Minority Youths: Mediation by Childhood Abuse and Gender Nonconformity. *American Journal of Public Health, 102*(8), 1587–1593. <https://doi.org/10.2105/AJPH.2011.300530>
- Roberts, S., Ravn, S., Maloney, M., & Ralph, B. (2021). Navigating the Tensions of Normative Masculinity: Homosocial Dynamics in Australian Young Men's Discussions of Sexting Practices. *Cultural Sociology, 15*(1), 22–43. <https://doi.org/10.1177/1749975520925358>
- Roberts, T., Horne, S., & Hoyt, W. (2015). Between a Gay and a Straight Place: Bisexual Individuals' Experiences with Monosexism. *Journal of Bisexuality, 15*, 554–569. <https://doi.org/10.1080/15299716.2015.1111183>
- Robinson, B. A. (2018). Conditional Families and Lesbian, Gay, Bisexual, Transgender, and Queer Youth Homelessness: Gender, Sexuality, Family Instability, and Rejection. *Journal of Marriage and Family, 80*(2), 383–396. <https://doi.org/10.1111/jomf.12466>

- Robinson, S., Anderson, E., & White, A. (2018). The Bromance: Undergraduate Male Friendships and the Expansion of Contemporary Homosocial Boundaries. *Sex Roles, 78*(1–2), 94–106. <https://doi.org/10.1007/s11199-017-0768-5>
- Robinson, S., White, A., & Anderson, E. (2019). Privileging the Bromance: A Critical Appraisal of Romantic and Bromantic Relationships. *Men and Masculinities, 22*(5), 850–871. <https://doi.org/10.1177/1097184X17730386>
- Rodríguez, J. M. (2016). Queer Politics, Bisexual Erasure: *Lambda Nordica, 21*(1–2), 169–182.
- Romanelli, M., & Lindsey, M. A. (2020). Patterns of Healthcare Discrimination Among Transgender Help-Seekers. *American Journal of Preventive Medicine, 58*(4), e123–e131. <https://doi.org/10.1016/j.amepre.2019.11.002>
- Romaniuk, M., & Kidd, C. (2018). *The Psychological Adjustment Experience of Reintegration Following Discharge from Military Service: A Systemic Review. 26*(2), 14.
- Ross, L. E., Salway, T., Tarasoff, L. A., MacKay, J. M., Hawkins, B. W., & Fehr, C. P. (2018). Prevalence of Depression and Anxiety Among Bisexual People Compared to Gay, Lesbian, and Heterosexual Individuals: A Systematic Review and Meta-Analysis. *The Journal of Sex Research, 55*(4–5), 435–456. <https://doi.org/10.1080/00224499.2017.1387755>
- Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of Statistical Software, 48*(2), 1–36.
- Rosser, B. R. S., Bockting, W. O., Ross, M. W., Miner, M. H., & Coleman, E. (2008). The Relationship Between Homosexuality, Internalized Homo-Negativity, and Mental Health in Men Who Have Sex with Men. *Journal of Homosexuality, 55*(2), 185–203. <https://doi.org/10.1080/00918360802129394>
- Sanders Thompson, V. L. S., Bazile, A., & Akbar, M. (2004). African Americans' Perceptions of Psychotherapy and Psychotherapists. *Professional Psychology: Research and Practice, 35*(1), 19–26. <https://doi.org/10.1037/0735-7028.35.1.19>
- Sanders, W. (2021, February 22). "It's Pinkwashing:" *The Case Against LGBTQ+ Military Inclusion, Explained*. Them. <https://www.them.us/story/case-against-lgbtq-military-inclusion-explained>
- Savin-Williams, R. C. (2018). *Mostly Straight: Sexual Fluidity among Men*. Harvard University Press. <https://doi.org/10.4159/9780674981034>
- Savitsky, L., Illingworth, M., & DuLaney, M. (2009). Civilian Social Work: Serving the Military and Veteran Populations. *Social Work, 54*(4), 327–339. <https://doi.org/10.1093/sw/54.4.327>

- Schneeberger, A. R., Dietl, M. F., Muenzenmaier, K. H., Huber, C. G., & Lang, U. E. (2014). Stressful childhood experiences and health outcomes in sexual minority populations: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, 49(9), 1427–1445. <https://doi.org/10.1007/s00127-014-0854-8>
- Schuyler, A. C., Klemmer, C., Mamey, M. R., Schragar, S. M., Goldbach, J. T., Holloway, I. W., & Castro, C. A. (2020). Experiences of Sexual Harassment, Stalking, and Sexual Assault During Military Service Among LGBT and Non-LGBT Service Members. *Journal of Traumatic Stress*, 33(3), 257–266. <https://doi.org/10.1002/jts.22506>
- Sedgwick, E. K. (1990). *Epistemology of the closet*. Univ. of California Press.
- Seehuus, M., Moeller, R. W., & Peisch, V. (2021). Gender effects on mental health symptoms and treatment in college students. *Journal of American College Health*, 69(1), 95–102. <https://doi.org/10.1080/07448481.2019.1656217>
- Seelman, K. L. (2016). Transgender Adults' Access to College Bathrooms and Housing and the Relationship to Suicidality. *Journal of Homosexuality*, 63(10), 1378–1399. <https://doi.org/10.1080/00918369.2016.1157998>
- Seelman, K. L., Colón-Díaz, M. J. P., LeCroix, R. H., Xavier-Brier, M., & Kattari, L. (2017). Transgender Noninclusive Healthcare and Delaying Care Because of Fear: Connections to General Health and Mental Health Among Transgender Adults. *Transgender Health*, 2(1), 17–28. <https://doi.org/10.1089/trgh.2016.0024>
- Selby, E. A., Anestis, M. D., Bender, T. W., Ribeiro, J. D., Nock, M. K., Rudd, M. D., Bryan, C. J., Lim, I. C., Baker, M. T., Gutierrez, P. M., & Joiner, T. E. (2010). Overcoming the fear of lethal injury: Evaluating suicidal behavior in the military through the lens of the Interpersonal–Psychological Theory of Suicide. *Clinical Psychology Review*, 30(3), 298–307. <https://doi.org/10.1016/j.cpr.2009.12.004>
- Semenzin, S., & Bainotti, L. (2020). The Use of Telegram for Non-Consensual Dissemination of Intimate Images: Gendered Affordances and the Construction of Masculinities. *Social Media + Society*, 6(4), 2056305120984453. <https://doi.org/10.1177/2056305120984453>
- Sharpe, V. A., & Uchendu, U. S. (2014). Ensuring Appropriate Care for LGBT Veterans in the Veterans Health Administration. *Hastings Center Report*, 44(s4), S53–S55. <https://doi.org/10.1002/hast.372>
- Shen, Y.-C., Arkes, J., & Williams, T. V. (2012). Effects of Iraq/Afghanistan Deployments on Major Depression and Substance Use Disorder: Analysis of Active Duty Personnel in the US Military. *American Journal of Public Health*, 102(Suppl 1), S80–S87. <https://doi.org/10.2105/AJPH.2011.300425>

- Shields, D. M., Kuhl, D., & Westwood, M. J. (2017). Abject masculinity and the military: Articulating a fulcrum of struggle and change. *Psychology of Men & Masculinity*, 18(3), 215–225. <https://doi.org/10.1037/men0000114>
- Shilts, R. (1994). *Conduct unbecoming: Gays and lesbians in the U.S. military*. St. Martins.
- Shipherd, J. C., Darling, J. E., Klap, R. S., Rose, D., & Yano, E. M. (2018). Experiences in the Veterans Health Administration and Impact on Healthcare Utilization: Comparisons Between LGBT and Non-LGBT Women Veterans. *LGBT Health*, 5(5), 303–311. <https://doi.org/10.1089/lgbt.2017.0179>
- Shipherd, J. C., Ruben, M. A., Livingston, N. A., Curreri, A., & Skolnik, A. A. (2018). Treatment experiences among LGBT veterans with discrimination-based trauma exposure: A pilot study. *Journal of Trauma & Dissociation*, 19(4), 461–475. <https://doi.org/10.1080/15299732.2018.1451973>
- Shrader, A., Casero, K., Casper, B., Kelley, M., Lewis, L., & Calohan, J. (2017). Military Lesbian, Gay, Bisexual, and Transgender (LGBT) Awareness Training for Health Care Providers Within the Military Health System. *Journal of the American Psychiatric Nurses Association*, 23(6), 385–392. <https://doi.org/10.1177/1078390317711768>
- Siebold, G. L. (2011). Key Questions and Challenges to the Standard Model of Military Group Cohesion. *Armed Forces & Society*, 37(3), 448–468. <https://doi.org/10.1177/0095327X11398451>
- Sinclair, D. (2009). Homosexuality and the Military: A Review of the Literature. *Journal of Homosexuality*, 56(6), 701–718. <https://doi.org/10.1080/00918360903054137>
- Sipos, M. L., Foran, H. M., Crane, M. L., Wood, M. D., & Wright, K. M. (2012). Postdeployment Behavioral Health Screening: Face-to-Face Versus Virtual Behavioral Health Interviews. *Military Medicine*, 177(5), 525–530. <https://doi.org/10.7205/MILMED-D-11-00399>
- Skocpol, T. (1992). *Protecting soldiers and mothers: The political origins of social policy in the United States*. Belknap Press of Harvard University Press.
- Smith, A. (2018). “My Understanding ... Has Literally Changed”: Addressing the Military-Civilian Gap with an Academic-Community Engagement Project. *Journal of Veterans Studies*, 3(1), 1. <https://doi.org/10.21061/jvs.1>
- Smith, D. M. (2008). Active Duty Military Personnel Presenting for Care at a Gay Men’s Health Clinic. *Journal of Homosexuality*, 54(3), 277–279. <https://doi.org/10.1080/00918360801982173>

- Spade, D., & Belkin, A. (2021). Queer Militarism?! *GLQ: A Journal of Lesbian and Gay Studies*, 27(2), 281–307. <https://doi.org/10.1215/10642684-8871705>
- Spence, N. J., Henderson, K. A., & Elder, G. H. (2013). Does Adolescent Family Structure Predict Military Enlistment? A Comparison of Post–High School Activities. *Journal of Family Issues*, 34(9), 1194–1216. <https://doi.org/10.1177/0192513X12457347>
- Spengler, E. S., Miller, D. J., & Spengler, P. M. (2016). Microaggressions: Clinical errors with sexual minority clients. *Psychotherapy*, 53(3), 360–366. <https://doi.org/10.1037/pst0000073>
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006a). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092. <https://doi.org/10.1001/archinte.166.10.1092>
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006b). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092. <https://doi.org/10.1001/archinte.166.10.1092>
- Stahlman, S., & Oetting, A. A. (2018). Mental health disorders and mental health problems, active component, U.S. Armed Forces, 2007–2016. *Medical Surveillance Monthly Report*, 25(3), 28.
- Stevellink, S. A. M., Malcolm, E. M., Mason, C., Jenkins, S., Sundin, J., & Fear, N. T. (2015). The prevalence of mental health disorders in (ex-)military personnel with a physical impairment: A systematic review. *Occupational and Environmental Medicine*, 72(4), 243–251. <https://doi.org/10.1136/oemed-2014-102207>
- Stoltz, R. F. (2013). The Mental Health of Our Deploying Generation. *Medical Surveillance Monthly Report*, 20(7), 28.
- Su, D., Irwin, J. A., Fisher, C., Ramos, A., Kelley, M., Mendoza, D. A. R., & Coleman, J. D. (2016). Mental Health Disparities Within the LGBT Population: A Comparison Between Transgender and Nontransgender Individuals. *Transgender Health*, 1(1), 12–20. <https://doi.org/10.1089/trgh.2015.0001>
- Szymanski, D. M., & Mikorski, R. (2016). External and internalized heterosexism, meaning in life, and psychological distress. *Psychology of Sexual Orientation and Gender Diversity*, 3(3), 265–274. <https://doi.org/10.1037/sgd0000182>
- Taylor, J. (2018). Bisexual Mental Health: A Call to Action. *Issues in Mental Health Nursing*, 39(1), 83–92. <https://doi.org/10.1080/01612840.2017.1391904>
- Theiss, J. A., & Knobloch, L. K. (2013). A Relational Turbulence Model of Military Service Members' Relational Communication During Reintegration: Relational Turbulence and Reintegration. *Journal of Communication*, 63(6), 1109–1129. <https://doi.org/10.1111/jcom.12059>

- Thoits, P. A. (1986). Social Support as Coping Assistance. *Journal of Consulting and Clinical Psychology*, 54(4), 416–423.
- Tong, R. L., Lane, J., McCleskey, P., Montenegro, B., & Mansalis, K. (2013). A Pilot Study Describing Knowledge and Practices in the Health Care of Men Who Have Sex With Men by U.S. Air Force Primary Care Providers. *Military Medicine*, 178(2), e248–e254. <https://doi.org/10.7205/MILMED-D-12-00331>
- Tucker, J., Smolenski, D. J., & Kennedy, C. (2019). *Department of Defense Suicide Event Report, Calendar Year 2018 Annual Report* (p. 78). Psychological Health Center of Excellence Research and Development Directorate Defense Health Agency. https://www.pdhealth.mil/sites/default/files/images/docs/TAB_B_2018_DoDSER_Annual_Report-508%20final-9MAR2020.pdf
- Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association Between Recalled Exposure to Gender Identity Conversion Efforts and Psychological Distress and Suicide Attempts Among Transgender Adults. *JAMA Psychiatry*, 77(1), 68. <https://doi.org/10.1001/jamapsychiatry.2019.2285>
- U.S. Census Bureau. (2021). *American Community Survey Demographic and Housing Estimates 2015*. <https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&tid=ACSDP5Y2015.DP05>
- VA National Center for PTSD. (2012). *Using the PTSD Checklist (PCL)*. Department of Veterans Affairs. <https://sph.umd.edu/sites/default/files/files/PTSDChecklistScoring.pdf>
- Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review*, 66, 24–38. <https://doi.org/10.1016/j.cpr.2018.03.003>
- Van Gilder, B. J. (2019). Femininity as Perceived Threat to Military Effectiveness: How Military Service Members Reinforce Hegemonic Masculinity in Talk. *Western Journal of Communication*, 83(2), 151–171. <https://doi.org/10.1080/10570314.2018.1502892>
- Van Winkle, E., Williams, K., Hurley, M., Davis, L., Grifka, A., Severance, L., Klahr, A., Debus, J., Vega, R., Luchman, J., Khun, J., & Daniel, S. (2017). *2016 Workplace and Gender Relations Survey of Active Duty Members: Overview Report* (OPA Report No. 2016–050). Department of Defense: Office of People Analytics.
- Walker, D. D., Walton, T. O., Neighbors, C., Kaysen, D., Mbilinyi, L., Darnell, J., Rodriguez, L., & Roffman, R. A. (2017). Randomized trial of motivational interviewing plus feedback for soldiers with untreated alcohol abuse. *Journal of Consulting and Clinical Psychology*, 85(2), 99–110. <https://doi.org/10.1037/ccp0000148>

- Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review. *BMC Psychiatry, 18*(1). <https://doi.org/10.1186/s12888-018-1736-5>
- Wang, L., Elder, G. H., & Spence, N. J. (2012). Status Configurations, Military Service and Higher Education. *Social Forces, 91*(2), 397–422. <https://doi.org/10.1093/sf/sos174>
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-Month Use of Mental Health Services in the United States: Results From the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 629. <https://doi.org/10.1001/archpsyc.62.6.629>
- Wang, Y., Chung, M. C., Wang, N., Yu, X., & Kenardy, J. (2021). Social support and posttraumatic stress disorder: A meta-analysis of longitudinal studies. *Clinical Psychology Review, 85*, 101998. <https://doi.org/10.1016/j.cpr.2021.101998>
- Ward, E. C., Clark, L. O., & Heidrich, S. (2009). African American Women's Beliefs, Coping Behaviors, and Barriers to Seeking Mental Health Services. *Qualitative Health Research, 19*(11), 1589–1601. <https://doi.org/10.1177/1049732309350686>
- Warner, C. H., Appenzeller, G. N., Grieger, T., Belenkiy, S., Breitbach, J., Parker, J., Warner, C. M., & Hoge, C. (2011). Importance of Anonymity to Encourage Honest Reporting in Mental Health Screening After Combat Deployment. *ARCH GEN PSYCHIATRY, 68*(10), 7.
- Warner, C. H., Appenzeller, G. N., Mullen, K., Warner, C. M., & Grieger, T. (2008). Soldier Attitudes toward Mental Health Screening and Seeking Care upon Return from Combat. *Military Medicine, 173*(6), 563–569. <https://doi.org/10.7205/MILMED.173.6.563>
- White-Hughto, J. M., Rose, A. J., Pachankis, J. E., & Reisner, S. L. (2017). Barriers to Gender Transition-Related Healthcare: Identifying Underserved Transgender Adults in Massachusetts. *Transgender Health, 2*(1), 107–118. <https://doi.org/10.1089/trgh.2017.0014>
- Whitworth, S. (2008). Militarized Masculinity and Post Traumatic Stress Disorder. In I. J. Parpart & M. Zalewski (Eds.), *Rethinking the Wo/man Question in International Relations* (pp. 109–126). Zed Books.
- Wilder, H., & Wilder, J. (2012). In the Wake of Don't Ask Don't Tell: Suicide Prevention and Outreach for LGB Service Members. *Military Psychology, 24*(6), 624–642. <https://doi.org/10.1080/08995605.2012.737725>
- Wirtz, A. L., Poteat, T. C., Malik, M., & Glass, N. (2020). Gender-Based Violence Against Transgender People in the United States: A Call for Research and Programming.

- Trauma, Violence, & Abuse*, 21(2), 227–241.
<https://doi.org/10.1177/1524838018757749>
- Wolf, E. J., Cruz, T. H., Emondi, A. A., Langhals, N. B., Naufel, S., Peng, G. C. Y., Schulz, B. W., & Wolfson, M. (2020). Advanced technologies for intuitive control and sensation of prosthetics. *Biomedical Engineering Letters*, 10(1), 119–128.
<https://doi.org/10.1007/s13534-019-00127-7>
- Wong, C. F., Schrage, S. M., Holloway, I. W., Meyer, I. H., & Kipke, M. D. (2014). Minority Stress Experiences and Psychological Well-Being: The Impact of Support from and Connection to Social Networks Within the Los Angeles House and Ball Communities. *Prevention Science*, 15(1), 44–55.
<https://doi.org/10.1007/s11121-012-0348-4>
- Wong, E., Collins, R., Cerully, J., Seelam, R., & Roth, E. (2016). Racial and Ethnic Differences in Mental Illness Stigma and Discrimination Among Californians Experiencing Mental Health Challenges. *RAND Health Quarterly*, 6(2).
http://www.rand.org/pubs/research_reports/RR1441.html
- Wood, E. J., & Toppelberg, N. (2017). The persistence of sexual assault within the US military. *Journal of Peace Research*, 54(5), 620–633.
<https://doi.org/10.1177/0022343317720487>
- Yoshino, K. (2000). The epistemic contract of bisexual erasure. *Stanford Law Review*, 52(2).
https://link.gale.com/apps/doc/A60026975/AONE?u=wash_main&sid=AONE&xid=30eccc07
- Yount, S. E., Cella, D., & Blozis, S. (2019). PROMIS®: Standardizing the patient voice in health psychology research and practice. *Health Psychology*, 38(5), 343–346.
<https://doi.org/10.1037/hea0000741>
- Zeeland, S. (1993). *Barrack buddies and soldier lovers: Dialogues with gay young men in the U.S. military*. Harrington Park Press.
- Zeeland, S. (1995). *Sailors and sexual identity: Crossing the line between “straight” and “gay” in the U.S. Navy*. Haworth Press.
- Zinzow, H. M., Britt, T. W., Pury, C. L. S., Raymond, M. A., McFadden, A. C., & Burnette, C. M. (2013). Barriers and Facilitators of Mental Health Treatment Seeking Among Active-Duty Army Personnel. *Military Psychology*, 25(5), 514–535. <https://doi.org/10.1037/mil0000015>
- Zou, C., & Andersen, J. P. (2015). Comparing the Rates of Early Childhood Victimization across Sexual Orientations: Heterosexual, Lesbian, Gay, Bisexual, and Mostly Heterosexual. *PLoS ONE*, 10(10). <https://doi.org/10.1371/journal.pone.0139198>

Zwiebach, L., Lannert, B. K., Sherrill, A. M., McSweeney, L. B., Sprang, K., Goodnight, J. R. M., Lewis, S. C., & Rauch, S. A. M. (2019). Military cultural competence in the context of cognitive behavioural therapy. *The Cognitive Behaviour Therapist*, *12*, e5. <https://doi.org/10.1017/S1754470X18000132>

2011 – 2017	Project Director Innovative Programs Research Group University of Washington, School of Social Work <i>Warrior Check-Up</i>	Seattle, WA P.I. Denise Walker
2010 – 2011	Assessor Innovative Programs Research Group University of Washington, School of Social Work <i>Men’s Domestic Abuse Check-Up</i> <i>Warrior Check-Up</i>	Seattle, WA P.I. Lyungai Mbilinyi P.I. Denise Walker
2006 – 2010	Research Study Coordinator 2 Northwest Research Group on Aging University of Washington, School of Nursing <i>Efficacy of Early Stage Alzheimer’s Support Groups</i> <i>Efficacy of Behavioral Interventions to Improve Sleep in AFHs</i> <i>Behavioral Treatment of Nocturnal Disturbances in Alzheimer’s</i> <i>Evaluation of Dementia Day Services</i>	Seattle, WA P.I. Rebecca Logsdon P.I. Rebecca Logsdon P.I. Susan McCurry P.I. Rebecca Logsdon
2005 – 2006	Survey Coordinator Social Development Research Group University of Washington, School of Social Work <i>Communities That Care Project</i> <i>Community Youth Development Study</i>	Seattle, WA P.I. David Hawkins P.I. David Hawkins
2004 – 2005	Research Assistant Child Health Institute University of Washington, Department of Psychiatry and Behavioral Science <i>Developmental Pathways Project</i>	Seattle, WA P.I. Ann Vander Stoep
2002 – 2004	Research Coordinator & Case Manager Street Outreach LifeWorks Youth and Family Services <i>Substance Abuse and Sexual Health Education Initiative</i>	Austin, TX P.I. Ronnie Mendoza

TRAINING & AWARDS

- | | |
|------|--|
| 2019 | <i>Nominated for Graduate School Presidential Dissertation Fellowship</i> |
| 2017 | Boeing Endowed Fellowship |
| 2016 | TL1 Translational Research Training Fellowship |
| 2010 | Warren L. Johnson Scholarship |

PUBLICATIONS

- Walker, D. D., Jaffe, A. E., Pierce, A. R., **Walton, T. O.**, & Kaysen, D. L. (2020). Discussing substance use with clients during the COVID-19 pandemic: A motivational interviewing approach. *Psychological Trauma Theory Research Practice and Policy*, 12(S1).
- Rodriguez, L., Neighbors, C., **Walton, T.**, & Walker, D. (2020). Mechanisms and moderators of intervention efficacy for soldiers with untreated alcohol use disorder. *Journal of Consulting and Clinical Psychology*, 88(2): 137-148.
- Walton, T.**, & Stuber, J. (2019). Firearms retailers and suicide: Results from a survey assessing willingness to engage in prevention efforts. *Suicide and Life-Threatening Behavior*, 50(4).
- Dworkin, E. R., Bergman, H. E., **Walton, T. O.**, Walker, D. D., & Kaysen, D. L. (2019). Co-occurring PTSD and AUD in U.S. military and veteran populations. *Alcohol Research: Current Reviews*, 88(2): 137-148.
- Walton, T.** & Walker, D.D. (in press). Spice use in the U.S. military. In J.S. Stogner (Ed.), *Synthetic and Novel Drugs: Emerging Issues, Legal, Policy, and Public Health*. CRC Press (Taylor & Francis).
- Walker, D.D., **Walton, T.**, Neighbors, C., Kaysen, D., Roffman, R., & Rodriguez, L. (2017). Randomized Trial of Motivational Interviewing plus Feedback for Soldiers with Untreated Alcohol Abuse. *Journal of Consulting and Clinical Psychology*, 85(2), 99-110.
- Neighbors, C., Walker, D., Rodriguez, L. M., **Walton, T.**, Mbilinyi, L., Kaysen, D., & Roffman, R. (2014). Normative misperceptions of alcohol use among substance abusing military personnel. *Military Behavioral Health*, 2, 203-209. doi: 10.1080/21635781.2014.890883
- Walker, D.D., Neighbors, C., **Walton, T.**, Pierce, A., Mbilinyi, L., Kaysen, D., & Roffman, R. (2014). Spicing up the military: Use and effects of synthetic cannabis in substance abusing military personnel. *Addictive Behaviors*, 39, 1139-1144.
- Walton, T.**, Walker, D.D., Kaysen, D., Roffman, R.A., Mbilinyi, L.F., & Neighbors, C. (2013). Reaching soldiers with untreated substance use disorder: Lessons learned in the development of a marketing campaign for the Warrior Check-Up study. *Substance Use and Misuse*, 48, 908-921.

CONFERENCE PRESENTATIONS

- Walker, D.D., **Walton, T.**, Kaysen, D., Neighbors, C., Mbilinyi, L., & Roffman, R. (November 2015). *Attracting treatment participation among active duty army personnel with co-morbid substance abuse disorder and posttraumatic stress disorder: Applications from the warrior check-up*. Paper presented at the annual meeting of the International Society for Traumatic Stress Studies, New Orleans, LA.
- Walker, D.D., **Walton, T.**, Neighbors, C., Kaysen, D., Mbilinyi, L., & Roffman, R. (October 2015). *Attracting substance abusing soldiers to voluntarily take stock of their use: Preliminary outcomes from the warrior check-up MET intervention*. Paper presented at the annual meeting of Addiction Health Services Research, Marina Del Rey, CA.
- Walker, D.D., **Walton, T.**, Neighbors, C., Kaysen, D., Mbilinyi, L., & Roffman, R. (August 2015). *Suicide and depression among substance abusing soldiers: Findings from the Warrior Check-Up*. Paper presented at the American Psychological Association, Toronto, Canada.
- Walker, D.D., **Walton, T.**, Neighbors, C., Kaysen, D., Mbilinyi, L., & Roffman, R. (June 2015). *Attracting substance abusing soldiers to voluntarily take stock of their use: Preliminary outcomes from the Warrior Check-Up MET intervention*. Paper presented at the International Conference for the Treatment of Addictive Behaviors, Odense, Denmark.
- Walker, D.D., Neighbors, C., **Walton, T.**, Roffman, R., Kaysen, D., & Mbilinyi, L. (August 2014). *Attracting substance abusing soldiers to voluntarily take stock of their use: Preliminary outcomes from the warrior check-up MET intervention*. Paper presented at the Military Health System Research Symposium, Fort Lauderdale, FL.
- Walker, D.D., **Walton, T.**, Kaysen, D., Mbilinyi, L., Neighbors, C., & Roffman, R.A. (2012, November). *Motivating treatment engagement among active duty army personnel with co-morbid substance abuse disorder and posttraumatic stress disorder: Applications from the warrior check-up*. Paper presented at the annual meeting of the International Society for Traumatic Stress Studies, Los Angeles, CA.
- Walton, T.**, Walker, D.D., Kaysen, D., Roffman, R.A., Mbilinyi, L., Neighbors, C. (2012, November). *Reaching soldiers with untreated comorbid PTSD and substance abuse disorder: Lessons learned from the warrior check-up study*. Poster presented at the International Society for Traumatic Stress Studies, Los Angeles, CA.

INVITED PRESENTATIONS

Walton, T. (2018, December). *Firearm Retailers and Suicide: Results from a Survey Assessing Willingness to Engage in Prevention Efforts*. Research presented to the Washington State Safer Homes Suicide Prevention, Firearm Taskforce, Seattle, WA.

MEDIA APPEARANCES

Fall 2019 **Patricia Murphy, KUOW:** Invited to discuss my qualifying paper work on engaging firearm retailers in suicide prevention with Patricia Murphy

TEACHING & MENTORSHIP

Winter 20201 **Instructor**
SOC W 505: Foundations of Social Welfare Research

Fall 2020 **Instructor**
SOC W 505: Social Welfare Research and Evaluation

Fall 2019 **Lab Instructor**
SOC WF 390: Introduction to Social Welfare Research (both sections)

Fall 2018 **Guest Lecturer**
Warrior Check-Up: Research, Translation, & Teamwork
 SOC WL 578: Seminar in Prevention Research
 Instructor: Paula Nurius
 University of Washington

2017 - 2018 **Mentor to Undergraduate Intern**
Milo Dowling
 Psychology B.S. & Rhetoric B.A.
 Seattle University

Winter 2017 **Guest Lecturer**
Using Theories of Behavior Change to Foster Participation in Social Change Movements
 SOC W 512: Practice 3 – Organizational Practice
 Instructor: Scott Winn
 University of Washington

2012 **Primary Mentor**
Camilla Brewer
 Stipend for Training Aspiring Researchers (STAR) Program

TRAININGS

Fall 2018 **Cognitive Processing Therapy Workshop**
14-hour clinical training on evidence-based treatment for PTSD
 Trainers: Debra Kaysen & Cindy Stappenbeck
 University of Washington, Department of Psychiatry and Behavioral Science

SERVICE

2018 **Committee Member – Doctoral Student Representative**
PhD Program Committee
 University of Washington, School of Social Work

2016 - 2017 **Committee Member – Doctoral Student Representative**
PhD Curriculum Committee
 University of Washington, School of Social Work

2016 - 2017 **Senator – Social Welfare Representative**
Graduate and Professional Student Senate
 University of Washington

2015 **Volunteer Needs-Assessment Researcher**
Kitsap County Veteran’s Program
 Washington State

2013 - 2015 **Staff Representative – Innovative Programs Research Group**
Staff Council
 University of Washington, School of Social Work

2013 **Staff Representative**
Budget Reform Committee
 University of Washington, School of Social Work

Ongoing **Peer Reviewer**
 Invited: *Military Behavioral Health*
 Addictive Behaviors
 Child & Family Social Work
 Ad Hoc: *Trauma, Violence and Abuse*
 Journal of Studies on Alcohol and Drugs
 Journal of Clinical Child and Adolescent Psychology