## University of Wisconsin Milwaukee UWM Digital Commons

Theses and Dissertations

May 2014

# Predictors of Perceived Belonging Among U.S. Military Men and Women

Heidi M. Pfeiffer University of Wisconsin-Milwaukee

Follow this and additional works at: https://dc.uwm.edu/etd Part of the <u>Military and Veterans Studies Commons</u>, and the <u>Psychology Commons</u>

#### **Recommended** Citation

Pfeiffer, Heidi M., "Predictors of Perceived Belonging Among U.S. Military Men and Women" (2014). *Theses and Dissertations*. 421. https://dc.uwm.edu/etd/421

This Thesis is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact open-access@uwm.edu.

## PREDICTORS OF PERCEIVED BELONGING AMONG U.S. MILITARY MEN AND WOMEN

by

Heidi M. Pfeiffer

A Thesis Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Master of Science

in Psychology

at

The University of Wisconsin-Milwaukee

May 2014

#### ABSTRACT PREDICTORS OF PERCEIVED BELONGING AMONG U.S. MILITARY MEN AND WOMEN

by

#### Heidi M. Pfeiffer

The University of Wisconsin-Milwaukee, 2014 Under the Supervision of Professor Diane M. Reddy

This study aimed to identify predictors of perceived belonging within the military unit, a factor which has been shown to promote effectiveness, satisfaction, and mental health. Online survey responses from service members, veterans, and trainees were analyzed using hierarchical multiple regression. It was found that perceptions of positive military leadership, larger unit size, older age, and active duty (rather than reserve/guard) service were associated with higher perceived belonging, together explaining a significant portion of variance in scores. Male gender was also found to be associated with higher perceived belonging, but the increase in variance explained by the addition of this factor was not significant. The proportion of women within the unit, and the interaction between gender and the proportion of women within the unit, did not explain additional variance in perceived belonging scores. These findings can be used to focus future research and to guide military leaders and policymakers.

Dedicated to Mary, Don, Katie, and Dan Pfeiffer,

and to Kyle Buckley.

Thank you for your love and support.

List of T	ables vii
Acknow	ledgementsviii
I. In	troduction1
A	A. Gender
E	3. Sexual Orientation6
C	C. Race/Ethnicity6
Γ	D. Unit Composition7
	1. Unit Gender Composition9
	2. Unit Racial/Ethnic Composition10
E	E. Interaction Between Gender and Gender Composition10
F	F. Interaction Between Race/Ethnicity and Racial/Ethnic Composition
(	G. Unit Size12
ŀ	I. Military Leadership13
II. In	nportance of the Current Study13
III. Pı	imary Hypotheses16
IV. Se	econdary Hypotheses17
V. M	lethod17
A	A. Recruitment17
E	3. Participants17
C	C. Procedure
Ι	D. Scales
	1. General Belongingness Scale20

## TABLE OF CONTENTS

	2. Unit Cohesion Scale	21
	3. Charismatic Leadership Scale	21
	4. Destrudo-L Scale	22
	5. Combat Exposure Scale	22
VI.	Statistical Analyses	23
	A. Variable Selection	24
	B. Hierarchical Multiple Regressions	28
VII.	Results	29
	A. Unit Characteristics	29
	B. Deployment and Combat Exposure	30
	C. Perceptions of Positive and Negative Unit Leadership	30
	D. Experiences of Harassment, Abuse, Threat, or Discrimination Within the Military Unit	31
	E. Perceived Belonging Within the Military Unit	31
	F. Perceived Unit Cohesion	32
	G. Perceived Belonging Outside of the Military	34
	H. Gender Differences	34
VIII.	Discussion	35
	A. Predictors of Perceived Belonging Within the Military Unit	35
	B. Gender and Proportion Women	38
	C. Race/Ethnicity and Proportion Racial/Ethnic Minority Members	40
	D. Similarities and Differences Between Outcome Variables	41
IX.	References	44

X.	Appendix A: U.S. Military Survey (Current Service Member Version)	54
XI.	Appendix B: U.S. Military Survey (Trainee Version)	65
XII.	Appendix C: U.S. Military Survey (Veteran Version)	76

## LIST OF TABLES

Table 1:	Bivariate Tests Between Perceived Belonging Within Military Unit and Potential Predictors	.25
Table 2:	Variables and Steps for Hierarchical Multiple Regressions	.29
Table 3:	Hierarchical Multiple Regression of Perceived Belonging Within the Military Unit (Model 2)	.32
Table 4:	Hierarchical Multiple Regression of Perceived Unit Cohesion (Model 2)	.34

#### ACKNOWLEDGEMENTS

Thank you, Diane Reddy, for your wise and caring mentorship. Thank you also, Ray Fleming and Sue Lima: The support and guidance from all three of you—on this project, and throughout my graduate career—have been incredible.

Thank you, military friends and family. Jesse Steinke, Jessie Morris, Nicole Kinkade, Chris Wenzel, and John Jeson: I was very moved by your enthusiasm about this project and thoughtful feedback on the survey.

Gregory Simons, Sandy Michalski, Bill Lorber, and Heather Smith: Thank you for sharing with me your research expertise, and lessons from your many years of professional experience caring for service members and veterans.

I am very appreciative of the generous assistance and advice I received from many advocates and administrators in veteran organizations and ROTC programs across the state, as well as many family members and friends. Thank you for going above and beyond to help me extend the survey invitation to as many people as possible.

I am very grateful to Anjali Rameshbabu and Katie Ports, whose kind advice began before I even arrived at UW-Milwaukee, and continues even now that they have moved on to begin what I am sure will become illustrious careers.

Thank you to my fellow graduate students, for reminding me we are all in this together: Michelle DiPaolo, Emily Prosser, Sarah Kienzler; Sarah, Laura, Janice, (and JoAnne); and Laura Voith. Thank you also to my wonderful colleagues, Mike Duke and Leah Stoiber.

I am deeply grateful those who participated in the survey, both for taking the time to provide their feedback, and for their service to this country.

viii

#### Predictors of Perceived Belonging

#### Among U.S. Military Men and Women

Belonging has been shown to be essential to human health, happiness, and life satisfaction in a variety of contexts. In school settings, perceived belonging has been shown to promote academic performance and motivation (Gillen-O'Neel & Fuligni, 2013). In job settings, perceived belonging has shown to buffer against the ill-effects of job stress while promoting job satisfaction and retention, and enhancing professional identity (Hatmaker, 2013; Skaalvik & Skaalvik, 2011). High perceived belonging has also been shown to be protective against a host of mental health difficulties, including depression, anxiety, and suicidal ideation (Bryan, McNaughton-Cassill, & Osman, 2013; Ferrier-Auerbach, Erbes, Polusny, Rath, & Sponheim, 2010). However, there is perhaps no context in which belonging is more important than that of the military.

In combat zones, military members know their very lives depend on their fellow soldiers. The military has recognized solidarity and commitment to a shared mission as indispensible elements of an effective military, and designs every aspect of military practices to create cohesion and foster an attitude which places greater importance on the good of the group than on the needs of the individual (Braswell & Kushner, 2012; Dasberg, 1982). Military culture and belonging are so important to service members, in fact, that clinicians working with veterans are advised to keep in mind that many veterans feel a "subjective sense... of belonging to a separate and special class of Americans (those who have served in the armed forces)" which can be very important to their self-image, values, health behaviors, and coping styles (Hsu & Ketchen, 2013, p. 175).

It has been hypothesized that the loss of this strong sense of belonging following discharge from military service, accompanied by difficulty connecting with others in civilian life, is responsible for some of the poor mental health outcomes sometimes seen in veterans (e.g., PTSD and suicidal ideation) after returning from deployment (Monteith, Menefee, Pettit, Leopoulos, & Vincent, 2013). In fact, Dasberg (1982) asserts that whenever there is a case of "battle breakdown" (severe, negative psychological outcomes following combat), there is "an almost universal experience of loneliness as opposed to belonging" (p. 143).

Poor perceived belonging is no less problematic when experienced by military members who are still serving. The military places intense physical and psychological demands on its members, and this is especially true during deployment to war zones. During the current conflicts in Iraq and Afghanistan (known as Operation Enduring Freedom/ Operation Iraqi Freedom/ Operation New Dawn, or "OEF/OIF/OND") which began in 2001, more U.S. military members have been sent on multiple deployments than during any other conflict in U.S. history, a practice which has been shown to increase military members' stress levels (Kline, 2010). Under such conditions, distress and mental health symptoms are common, but a strong sense of belonging or cohesion has been found extremely important to improving sense of well-being and "combat readiness" during training and missions (Griffith, 2002) as well as lessening the extent to which combat exposure is associated with negative outcomes such as distress (Brooks, 2005), depression (Smith et al., 2013; Williams, Hagerty, Yousha, Hoyle, & Oe, 2002), PTSD (Brailey, Vasterling, Proctor, Constans, & Friedman, 2007; Smith et al., 2013), and suicidal behaviors (Bryan et al., 2013; Monteith et al., 2013).

Despite strong empirical indications that perceived belonging is essential to military members' health, safety, and effectiveness, little is known about the factors which interact to

create perceived belonging among military men and women. The following is a review of research related to several variables that might be expected to play a role in perceived military belonging, many of which are not yet fully understood.

#### Gender

Women are playing an increasingly important role in the U.S. military and their representation has increased dramatically; today women make up 14.5% of the active duty force, 15.5% of the guard, and 19.5% of the federal reserve (Boyd, Bradshaw, & Robinson, 2013). Eight percent of current veterans are women, but it is expected that women will make up 15% of veterans by the year 2035 (Boyd et al., 2013). Over 11% of forces deployed to Iraq and Afghanistan since 2001 have been women, and these women have increasingly served in combat roles alongside their male colleagues (Boyd et al., 2013). In response to these changes, psychological research with military populations has increasingly attempted to take the experiences of both male and female service members and veterans into account. Although gender differences in perceived belonging have not yet been studied, a large amount of research has identified numerous challenges military women face as a result of their gender, any number of which might threaten their sense of belonging.

It has been well established that masculinity is of key importance in the armed forces; Dunivin (1994) first described the military's Combat Masculine-Warrior paradigm two decades ago, and even today Braswell and Kushner (2012) call the masculine identity "the cementing principle of military life" (p. 533). Hsu and Ketchen (2013) indicated that such a male-centered culture by definition marginalizes anyone who is not perceived to be masculine, and indeed, qualitative reports from military women have indicated a sense that they must refute gender-based assumptions to "prove" themselves (Gutierrez et al., 2013). Kelty, Kleykamp, and Segal (2010) supported this idea, explaining "women endure numerous kinds of 'tests' (for example, sabotage, constant scrutiny, and indirect threats) that men do not necessarily experience, to prove they are capable of serving in the military" (p. 186). Military women have described setting extremely high self-standards and working extremely hard to avoid being seen as a burden (Gutierrez et al., 2013). Some women also explained that frequently being compared to their male counterparts by others made them feel like "outsiders," and some women socially withdrew even further in order to cope (Gutierrez et al., 2013).

Street, Gradus, Glasson, Vogt, and Resick (2013) have highlighted another challenge to military women's belonging by noting that a large percentage of female service members and veterans reported being sexually assaulted (50%) or harassed (25%) during service (compared to 11% and 1% of men, respectively). Large gender differences in frequency and severity of harassment or violence (physical, sexual, or emotional) have frequently been reported in previous research, and some researchers note that these reported numbers are likely underestimates due to victims' reluctance to report such incidents (Boyd et al., 2013; Braswell & Kushner, 2012). Street, Vogt, and Dutra (2009) pointed out that sexual trauma could be particularly problematic for female service members who are deployed, as sexual trauma and combat trauma can be cumulative or even multiplicative in their effects on mental health. While sexual harassment is the most common research focus, women are even more likely to experience gender-based harassment that is not sexual in nature. Fifty-four percent of female service members report such gender-based harassment annually, and some women have reported it is an even bigger concern than sexual harassment because of the chronic stress created by its continuous occurrence (Lipari, Cook, Rock, & Matos, 2008; Street et al., 2009).

Despite such challenges, military women do share many important similarities with their male colleagues which may increase perceived belonging. In recent years, military policy has become more inclusive; beginning in 2012, thousands of additional military jobs previously closed to women were opened (Boyd et al., 2013). The military offers women many opportunities for advancement, in some cases surpassing the opportunities available to women in the civilian sector. For example, Patten and Parker (2011) reported that the proportion of military women who were commissioned officers (17%) was slightly higher than the proportion of military men who were commissioned officers (15%), a finding which was counter to that in many male-dominated civilian sectors where women have been consistently underrepresented in management positions (Chartered Institute of Management Accountants, 2010). It is possible that women—even more than men—see the military as an opportunity for professional advancement, an idea which is supported by the finding that female veterans were significantly more likely than male veterans to report having joined the military due to difficulty finding jobs in the civilian sector (Patten & Parker, 2011).

In many cases female veterans perceive the same benefits of their service as do male veterans; Patten and Parker (2011) found that male and female veterans were equally likely to report their service helped them advance personally and professionally, they were proud of their service, someone had thanked them for their service, and they would advise a young person close to them to join the military. Such gender similarities in military experiences, when considered along with the gender differences in military experiences already described, highlight that the effect of gender on perceived belonging in the military is not obvious. More research is needed to deepen understanding of how the important benefits of perceived belonging are created in military members and veterans of both genders.

#### **Sexual Orientation**

The same Combat Masculine-Warrior military paradigm (Dunivin, 1994) that may create challenges for military women may also act as a barrier to perceived belonging among homosexual men in the military (Hale, 2012; Hsu & Ketchen, 2013). Kelty et al. (2010) reported that only 40% of military personnel approved of homosexual service members serving openly (although support was slightly higher among younger military members). Over one-third of service members reported being aware that a fellow service member had been harassed based on sexual orientation (Kelty et al., 2010). In the last several decades, official military policy has become increasingly accepting of homosexuality among service members, moving from its original policy of automatically classifying homosexuality as a "mental disorder" leading to discharge (1944), to the Don't Ask Don't Tell Act allowing "closeted" homosexual individuals but not "openly" homosexual individuals to serve (1994), to the removal of all bans on homosexuality in the military (2011) (Johnson, Rosenstein, Buhrke, & Halderman, 2013). However, some researchers have pointed out that such changes were opposed by many military and public leaders as a threat to military cohesion, and have asserted that policy changes alone are not likely to alter the dominant culture of masculinity enough to eliminate possible barriers to perceived belonging among homosexual service members and veterans (Hsu & Ketchen, 2013).

#### **Race/Ethnicity**

The military is characterized by a fair amount of racial diversity, especially among African American service members, whose proportion within the military is comparable to their proportion within the general population (Hsu & Ketchen, 2013). Burk and Espinoza (2012) noted that some sociologists have called the modern military "a model of good race relations" (p. 401), but asserted that some indirect (or even unintended) institutional racial

biases still exist in the military despite its progress toward racial equity over the decades. Although research on race relations in the military has covered such wide-reaching topics as recruitment and enlistment practices, representation in enlisted and officer positions, risk of injury and combat death, punishment for infractions, and mental health treatment and outcomes, very little research has focused on the concept of perceived belonging as it relates to race in the military (see Burk & Espinoza, 2012, for review).

Considerable research has demonstrated that social identity often includes multiple group memberships (e.g., gender, race, sexual orientation), and the salience of various characteristics in a given individual or group can vary according to context (Shore et al., 2011). Furthermore, the effects of membership in multiple minority groups can be additive or even multiplicative, a concept called "double jeopardy" or "intersectionality" (Shore et al., 2011; Stokke, 2011). For example, women of color in the military may face increased barriers to perceived belonging relative to white women or men of color, and indeed, women of color have been shown to be at the highest risk of sexual assault in the military (Stokke, 2011). The idea of intersectionality is of particular importance in the military context, because women in the military are racially diverse—more so than women in the general population or men in the military (Patten & Parker, 2011)—and the number of women of color in the military is increasing (Stokke, 2011). It was recently found that half of military women are of minority race or ethnicity, and 30% of military women are African American (Kelty et al., 2010).

#### **Unit Composition**

Although research regarding the influence of gender and race on perceived belonging in the military has already been described, no research to date has examined the extent to which gender and racial *proportions* within military units influence perceived belonging. Within the civilian professional setting, some research has indicated that greater heterogeneity within groups may weaken group identification, social integration and cohesion, as well as increase interpersonal conflict (Cummings, Kiesler, Zadeh, & Balakrishnan, 2013; Mannix & Neale, 2005; Williams & O'Reilly, 1998). Mannix and Neale (2005) summarized the research by saying that, although there have been findings of both positive and negative effects created by group heterogeneity, "the preponderance of the evidence favors a more pessimistic view: that diversity creates social divisions" (p. 31).

Some researchers have noted other variables which moderate the effect of group heterogeneity on group cohesion. For example, it was found that the influence of group diversity upon cohesion weakened over time if group membership remained constant (Mannix & Neale, 2005; Pelled, Eisenhardt, & Xin, 1999). Chatman and Spataro (2005) also pointed out that a collective work culture (as opposed to individualistic) led to greater cooperation in the face of demographic heterogeneity. Similarly, Hinds and Mortensen (2005) noted that strong shared identity in a group increased loyalty, trust, cooperation, and concern with group welfare despite other barriers to cohesion that resulted from heterogeneity. Shore et al. (2011) also suggested that an inclusive work culture, characterized by the promotion of both belonging and appreciation of unique qualities, can maximize the benefits of group diversity while minimizing its difficulties. On one hand, collective values and strong shared identity are characteristic of military contexts, but on the other hand, the dominance of masculinity in military culture may pose a challenge to the appreciation of unique qualities. Thus, the way in which group heterogeneity and military culture may interact to influence perceived belonging is unclear.

The theory on demographic proportions proposed by Kanter (1997a; 1997b) identifies four general categories of group compositions: "uniform" (homogenous members), "skewed" (1-15% minority members), "tilted" (15-35% minority members), or "balanced" (35-65% minority members). Kanter asserts that skewed groups (1-15%) pose the greatest threat for tokenism, stereotyping, and marginalization—factors which may hinder perceived belonging. Blalock (1967), on the other hand, points to competition theory in asserting that balanced groups represent the greatest danger for hostility and discrimination, due to feelings of competition and power threat that arise in majority members as the proportion of minority members increases. If this is the case, then perceived belonging might be expected to be lowest among balanced groups. Both theories have found some empirical support (see Mannix & Neale, 2005, for review), so further research is needed to understand these phenomena more fully.

In some research, general theories regarding the effects of group diversity have been applied to examine the effects of group gender and racial composition more specifically. Such research is described in the next section.

#### **Unit Gender Composition**

Although no research is available regarding whether the proportion of women in a military unit influences members' perceived belonging, some relevant research has been conducted in a civilian setting. Pelled (1997) reported that sex dissimilarity led to increased emotional conflict, but Pelled et al. (1999) did not find an effect of gender diversity on conflict. Kochan et al. (2003) found that gender diversity within a team tends to have either no effect or a positive effect on "team-focused processes" (i.e., activities aimed at building group commitment and increasing group spirit). Perceived belonging was not addressed

directly in any of the three studies. Shore et al. (2011) pointed out that gender similarity has been found to be related to trust and group cohesion in some instances, but findings have been mixed in other studies.

#### **Unit Racial/Ethnic Composition**

Although no research is available regarding whether the proportion of racial minority members in a military unit influences members' perceived belonging, again some research in civilian settings is available. In some cases, racial diversity has been shown to increase emotional conflict (Pelled et al., 1999), but in other cases (when the proportion of minorities in the sample was higher) no differences in conflict were found at varying levels of racial diversity (Pell, 1997). Kochan et al. (2003) found that racial diversity within teams tended to create difficulties in "team-focused processes" (attempts to build group commitment and spirit), but also noted that diversity training and a positive environment helped buffer against this negative effect.

#### **Interaction Between Gender and Gender Composition**

Once again, no research on this interaction as it relates to perceived belonging is available with a military population, but some civilian research has found men and women react differently to various gender compositions within groups. Williams and O'Reilly (1998) explained that when comparing women in male-dominated groups to men in femaledominated groups, the women in predominantly male settings were more likely to experience hostility, stereotyping, and poor social integration, but were less likely to show reduced satisfaction and worsened mental health outcomes compared to the men in predominantly female settings. Hewstone et al. (2006) reported that women were just as satisfied in maleskewed groups (85-99% men) as in male-tilted groups (70-85% men), and in fact it has been found that women tended to prefer either gender-balanced or male-dominated work groups (Mannix, 2005; Williams & O'Reilly, 1998). Men have shown a different pattern, tending to prefer either male-dominated or female-dominated settings, with lower happiness and satisfaction in gender-balanced settings (Mannix, 2005; Williams & O'Reilly, 1998). Although perceived belonging was not tested directly in any of these studies, it is logical that perceived belonging might have a relationship with hostility, stereotyping, social integration, or satisfaction.

The tendency for women's sense of belonging to be relatively unaffected by gender composition might be explained in part by the "queen bee" phenomenon identified in research with police officers. The "queen bee" response occurred when successful women in a male-dominated context adopted "male" characteristics, denied experiences of sexism, and distanced themselves from other women within the group, likely in order to achieve higher status (Derks, Van Laar, Ellemers, & de Groot, 2011). If military women perceive that other female unit members are intentionally distancing themselves, it could compound any gender effects on perceived belonging; Wittenbaum, Shulman, & Braz (2010) found that women experienced more pain after being excluded from a group with one man and one woman than they did after being excluded from a group with two men. Gutierrez et al. (2013) suggested that strategies to help military women connect with one another may be beneficial to these women in a male-dominated military setting, but did not test this hypothesis.

#### Interaction Between Race/Ethnicity and Racial/Ethnic Composition

No research has addressed this interaction as related to perceived belonging, in either a military or a civilian setting. However, a review by Williams and O'Reilly (1998) of research in professional settings pointed out that as a minority subgroup (e.g., a racial minority group) grew smaller within a given group, the members of that subgroup became more aware of their social identity. It is possible that increased awareness of social identity could have a detrimental effect on perceived belonging among racial minority members, especially given the finding of Brooks (2005) that a strong sense of racial identity created distress in racial minority members in the military. Findings regarding group "faultlines" (perceived barriers between subgroups) could also partially support this possibility: Faultlines related to group diversity influenced the strength of out-group effects (Mannix, 2005), and highlighting such faultlines (even in an active attempt to diminish their importance) did not improve belonging among heterogeneous groups (Williams & O'Reilly, 1998). Unfortunately, no research tested these speculations or provided findings specific to perceived belonging.

#### **Unit Size**

Research regarding the effect of military unit size on perceived belonging is scarce, inconsistent, and outdated. Doll and Gunderson (1970) found that among military members serving at scientific stations on Antarctica, members had higher perceptions of group compatibility when the groups were larger (20-30 members rather than 8-11 members). Another study by Doll and Gunderson (1971) found that members of larger Navy stations reported less hostility during early winter compared to members of smaller stations. These findings suggested that larger groups were more desirable to maximize perceived belonging. On the other hand, Niebuhr and Oswald (1992) indicated that active duty women in larger work groups experienced sexual harassment at a higher rate than women in smaller work groups, suggesting that perceived belonging may have been easier to achieve in smaller groups.

There has been much more research on the influence of group size in civilian settings, the majority of which has indicated that cohesion and sense of support are greater in smaller groups (Mueller, 2012; Shore et al., 2011; Wheelan, 2009)—particularly when the groups are heterogeneous (Cummings et al., 2013; Hinds & Mortensen, 2005; Shore et al., 2011). However, some research in civilian settings has suggested that larger groups may be more beneficial, such as that of Jackson (1999) which found members of larger groups to express less bias between different subgroups. The inconsistency of these findings suggests that further research is needed to understand these issues more fully.

#### **Military Leadership**

Much research in the civilian sector has established that good leadership is beneficial to creating a sense of belonging and inclusion among all members of an organization (see Shore et al., 2011, for review). Furthermore, charismatic and supportive leadership has often been found to have the greatest impact in heterogeneous work groups, and to have the most benefit for minority members who are vulnerable to feelings of isolation (Den Hartog, De Hoogh, & Keegan, 2007; Kearney & Gebert, 2009; Shore et al., 2011; Chatman & Spataro, 2005). Although research in a military context is more limited, positive leadership has been found to be associated with increased sense of belonging and commitment to the military (Kelty et al., 2010; Meyer, Goldenberg, Kam, & Bremner, 2013; Overdale & Gardner, 2012). Kelty et al. (2010) also pointed out that increases in the number of senior military women have provided more role models and mentors for young military women.

#### **Importance of the Current Study**

Although much research has highlighted the substantial influence of perceived belonging on military members' mental health, very little research has investigated specific

individual or organizational factors which predict such belonging. Research has identified some variables that show promise, but findings have often been mixed, social support has often been tested rather than perceived belonging, and studies have often taken place primarily in civilian settings. Furthermore, no previous study has considered several important variables simultaneously. Using hierarchical multiple regression, the current study tested the utility of several predictors as a set, and also examined the relative importance of each predictor in determining perceived belonging within the military unit. Additionally, by testing interaction terms (gender composition by gender, and racial/ethnic composition by race/ethnicity), this study explored the possibility that perceived belonging depends on factors which vary for different subgroups within the larger military population.

Another limitation of past research lies in the fact that no research has been devoted to quantifying the effect of gender on perceived belonging in the military, despite the existence of much knowledge about challenges to belonging military women have faced,. In most cases, if gender is considered at all in studies related to belonging, it is used only as a control variable. Furthermore, few studies on perceived belonging in the military have oversampled women so as to achieve comparable numbers of participants from both genders (Street et al., 2013, is one notable exception). Qualitative studies exclusively with military women have provided valuable information, but their findings are limited by the lack of male participants for comparison. In the current study, military women were oversampled, and hierarchical multiple regression was used to test the effect size of any influence gender had on perceived belonging over and above the influence of other variables. Importantly, this approach provided information about experiences of both the majority group (men) and the minority group (women).

This hierarchical multiple regression also had the capability to examine whether any gender-based differences in perceived belonging persisted after controlling for experiences of harassment, abuse, threat, or discrimination. Although it has been well established that military women much more frequently experience harassment or abuse compared to military men, whether such experiences may be related to differences in perceived belonging has not previously been examined. By considering such a link, the current study aimed to examine the extent to which any observed gender differences in perceived belonging were attributable to disparate frequencies of harassment or abuse.

Another limitation of the previous literature is that no studies have compared the perceived belonging of service members and veterans within the context of the military to the perceived belonging of these service members and veterans within society more generally. Measures of belonging used in military research have rarely focused on a specific social context; instead, scales typically measure participants' perceived belonging *overall* in *any* social group to which they may belong. Such an approach cannot distinguish between alternative explanations for the perceived belonging that military members report. A study by Smith et al. (2013) was one notable exception, but the study examined social support rather than perceived belonging, and furthermore limited the sample to a specific group: Marines still in training. The current study included participants with diverse military experiences (e.g., every branch, active duty and reserve/guard, currently serving, veterans, and trainees), and investigated: (1) predictors of belonging in the military, and (2) predictors of belonging in the larger (non-military) community.

#### **Primary Hypotheses**

Female gender will be associated with significantly lower perceived belonging in the military unit compared to male gender, and will explain a significant portion of variance in perceived belonging scores over and above the effects of other variables.

Together, (a) proportion of women in the unit, and (b) the interaction between gender and proportion of women in the unit, will explain a significant portion of variance in perceived unit belonging, over and above the variance explained by other variables.

A higher proportion of women within the military unit will be associated with decreased perceived belonging among men, but not among women.

Minority race/ethnicity will be associated with significantly lower perceived belonging in the military unit compared to Caucasian race/ethnicity, and will explain a significant portion of variance in perceived belonging scores over and above the effects of other variables.

Together, (a) proportion racial/ethnic minorities in the unit, and (b) the interaction between race/ethnicity and proportion racial/ethnic minorities in the unit, will explain a significant portion of variance in perceived unit belonging, over and above the variance explained by other variables.

A higher proportion of racial/ethnic minority members within the military unit will be associated with increased perceived belonging among racial/ethnic minority members, and decreased perceived belonging among Caucasian members. Unit size will be significantly, negatively associated with perceived belonging in the military unit.

Perception of positive unit leadership will be significantly, positively correlated with perceived belonging in the military unit.

Perception of negative unit leadership will be significantly, negatively correlated with perceived belonging in the military unit.

#### Method

This study was approved by the Institutional Review Board of the University of Wisconsin-Milwaukee. The data was collected through an anonymous, online survey.

#### Recruitment

Service members, veterans, and military trainees of at least 18 years of age were eligible to complete the survey. Participants were recruited through email announcements and flyers at universities, veteran resource centers, and ROTC programs across the state of Wisconsin. Participants were also recruited through public facebook announcements. All of the announcements emphasized a particular need for participants of both genders, all races, and all sexual orientations. To take advantage of snowball sampling, announcements encouraged recipients to forward the survey information along to any other military men and women they knew. There was no compensation associated with study participation.

#### **Participants**

At least one page of the survey was viewed by 133 participants, and 104 participants completed the entire survey. Of these, 67% were men and 33% were women. Participants ranged in age from 19 to 67, with a mean age of 37.2 years. Most participants were

Caucasian (86%), while 5% were African American, 4% were Hispanic, 2% were Asian, 1% were Alaskan Native, and 2% were biracial. The sample consisted largely of heterosexual individuals (92%), with 8% of participants indicating another sexual orientation. Over half (54%) of participants had children (compared to 46% with no children), and 63% of participants were married or in a committed relationship (compared to 38% with another relationship status). About one-quarter of participants (26%) reported having a mental health, alcohol, or substance abuse problem, while 74% reported having no problems.

Veterans made up 67% of the sample, current service members 15%, and ROTC students 18%. Sixty-seven percent of participants were/ had been active duty members, 21% reserve members, and 13% guard members. The largest group of participants were/ had been part of the Army (63%), while 19% represented the Air Force, 10% the Navy, 8% the Marine Corps, and 1% the Coast Guard. Most participants (55%) reported service during OEF/OIF/OND, 26% reported service during a previous era, and 19% did not indicate their era(s) of service.

#### Procedure

Participants completed the online survey at a time and place of their choosing. Details about the study and contact information for the research team were provided on the first page. No identifying information was collected. The survey took approximately 15-20 minutes to complete.

The survey was designed to measure perceived belonging and variables to which it might relate. The first question assessed the nature of participants' military involvement (current service member, veteran, or trainee), and then automatically routed participants to the corresponding version of the survey. The same questions were contained on each of the three versions, but wording was altered slightly to tailor them appropriately for each group. Additionally, several questions were duplicated on the veteran version of the survey so that relevant information was collected for two time points: at the time of survey completion, and at the end of military service. The complete survey is shown in Appendix A (current service member version), Appendix B (trainee version), and Appendix C (veteran version).

To ensure high quality, survey items were reviewed by multiple male and female service members and veterans, a mental health clinician and a mental health researcher at the Veterans Health Administration, a team of graduate students, and a tenured professor. At the beginning of the survey, a short message reminded participants about the survey's length, its anonymous nature, and that they were allowed skip questions they were not comfortable answering. This statement was designed to make the experience as positive as possible for participants and to encourage their honest responses.

Standardized scales (described in the next section) were used to assess all participants on perceived belonging outside of the military, combat exposure, perceived belonging within military unit, perceived unit cohesion, and perceptions of positive and negative leadership within military unit. The scales relating to military unit instructed participants to focus on one official military group of approximately 20-200 members that they were part of at the time of the survey (or for veterans, at the end of their service). The generic term "unit" is used in this paper due to the fact that military organization and naming systems vary between the branches. By focusing on a period of membership within a specific unit, participants' responses about perceived belonging could be specific, allowing for analysis in relation to other factors within that same context. Other information that participants provided about their experiences within this unit included deployment(s); experiences of harassment, abuse, threat, or discrimination; the race, gender, and rank of the unit commander they most often had contact with or received orders from; the number of unit members broken down by gender, race, and sexual orientation; and their confidence in their number estimates (on a 5point Likert scale ranging from "Not at all confident" to "Extremely confident").

The survey also included general questions about participants' demographics, sexual orientation, military occupation, military rank, and mental health, alcohol, or substance abuse problems. An open-ended question provided participants with the opportunity to comment on their service or on the survey. A thank you message, as well as a short list of local and national resources available to service members, veterans, their loved ones, and other members of the community, were included at the end of the survey.

#### Scales

General Belongingness Scale. Perceived belonging within military unit and perceived belonging outside of the military were each assessed using the General Belongingness Scale developed by Malone, Pillow, and Osman (2012). The scale was included twice in the survey: in one instance, items were altered to refer specifically to perceived belonging with people outside of the military rather than with people in general; in the other instance, items were altered to refer specifically to perceived belonging with people in the military unit. In each case, twelve statements related to perceived belonging were rated on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Half these items were worded in the positive direction to assess acceptance/inclusion, and half were worded in the negative direction to assess rejection/exclusion. After reverse coding the negatively worded items, an average score was calculated for this scale, leading to a range of possible scores from one (low perceived belonging) to seven (high perceived belonging). Malone et al. (2012) found this scale to have high internal reliability among both men and women, with Cronbach's  $\alpha = .92$  and average inter-item correlation = .49 (M = 70.0, SD = 10.9). This scale was also found to have significant predictive validity for important outcomes such as life satisfaction (r = .55), happiness (r = .60), and depression (r = .47).

**Unit Cohesion Scale.** Perceptions of unit cohesion were assessed using a three-item scale developed from the original 41-item scale created by Podsakoff and McKenzie (1994). This three-item version has been used in numerous large-scale studies with military personnel (Britt & Dawson, 2005; Britt, Dickinson, Moore, Castro, & Adler, 2007; Wright et al., 2009), and has been shown to have good reliability (Cronbach's  $\alpha$  = .89, Wright et al., 2009). Participants rated how much they agreed with the statements using a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." An average score was calculated for the scale, leading to a range of possible scores from one (low perceived unit cohesion) to five (high perceived unit cohesion).

**Charismatic Leadership Scale.** Perceived positive leadership within the military unit was assessed using a scale first developed by Den Hartog, De Hoogh, and Keegan (2007) to assess employees' perceptions of leader charisma. Item wording was altered to refer to the unit commander with whom participants most often had contact or from whom they most often received orders. Participants used a 5-point Likert scale ranging from "Not at all" to "Very much so" to rate the extent to which they felt each of seven statements described this commander. Den Hartog et al. (2007) found the scale to have a significant positive correlation with employees' perceived belonging (r = .23). An average score was calculated for the scale, leading to a possible range from one (low perception of positive unit leadership) to five (high perception of positive unit leadership).

**Destrudo-L Scale.** Perceived negative leadership within the military unit was assessed using the Destrudo-L Scale, a 20-item scale developed by Larsson, Brandebo, and Nilsson (2012) to measure destructive leadership behaviors among military leaders. Using a military sample, Larsson et al. (2012) identified five reliable factors within the scale with Cronbach's α values ranging from .80 to .84: (1) arrogant/ unfair, (2) threatening/ punishing/ over-demanding, (3) ego-oriented/ false, (4) passive/ cowardly, and (5) uncertain/ unclear/ messy (Larsson et al., 2012). Once again, item wording was altered in the current study to refer to the unit commander with whom participants most often had contact or from whom they most often received orders. Participants rated how much they agreed each statement described their commander on a 6-point Likert scale ranging from "Do not agree at all" to "Fully agree." An average score for the scale was calculated, leading to a range from one (low perception of negative unit leadership) to six (high perception of negative unit leadership).

**Combat Exposure Scale.** Participants' combat exposure was assessed using the Combat Exposure Scale. This scale has shown good test-retest reliability (r = .97, Keane et al., 1989), good internal consistency (Cronbach's  $\alpha = .93$ , Owens et al., 2009), and a significant positive correlation with PTSD symptoms in military samples (Sternke, 2011). Participants rated the frequency and severity of their combat exposure on the seven items using a 5-point Likert scale. Standard scoring for this scale was used, which consisted of a weighted sum based on the severity of exposure described in each item (Keane et al., 1989). In this way, a range of possible scores from zero to 41 was created, with higher number indicating more severe combat exposure. Keane et al. (1989) outlined the following categorization guidelines to interpret total scores: Combat exposure is considered "light" for

scores zero through eight, "light-moderate" for scores nine through 16, "moderate" for scores 17-24, "moderate-heavy" for scores 25-32, and "heavy" for scores 33-41.

#### **Statistical Analyses**

Data were analyzed using IBM SPSS Statistics 20. Analyses were conducted using all cases in which participants completed all three outcome measures (N = 104). Cronbach's  $\alpha$  was calculated for each scale, and the resulting range of values (.845 - .981) indicated acceptable internal reliability for all of the scales.

Due to low variability in responses, two variables were transformed into dichotomous variables: race/ethnicity (Caucasian versus another race/ethnicity); and sexual orientation (heterosexual versus another sexual orientation). Service component was also transformed into a dichotomous variable (active duty service vs. reserve/guard service) after a Mann-Whitney U Test revealed no significant difference between the reserve and guard groups on scores of perceived belonging within the military unit, U = 127.5, z = -.320, p = .749, r = .055.

Using participants' numeric estimates of women and total members within their military unit, a new variable, "Proportion women," was calculated. In the same way, participants' numeric estimates of racial/ethnic minority members and total members within their military unit was used to calculate another new variable, "Proportion racial/ethnic minority members." In order to make interpretation meaningful and to avoid multicollinearity in interaction terms, the following variables were centered: proportion women, proportion racial/ethnic minority members, perceived positive unit leadership, and perceived negative unit leadership. Two interaction terms were created: gender\*centered proportion women; and race/ethnicity\*centered proportion racial/ethnic minority members.

#### Variable Selection

Preliminary analyses of variables expected to influence perceived belonging were conducted to guide selection of predictors to be entered into hierarchical multiple regression models. These analyses allowed the best predictors to be identified, thus making it possible to maximize the predictive utility of the final models and to focus on a more limited number of variables which could be accommodated by the relatively small sample size in the study.

First, the strength of each potential predictor's relationship with perceived unit belonging was tested individually. Pearson product-moment correlation coefficients were calculated for continuous variables and Spearman rank order correlations were calculated for dichotomous categorical variables. The resulting correlations are shown in Table 1, with the potential predictors listed in order of decreasing association strength. Branch of service was tested using the Kruskal-Wallis Test and no significant difference in perceived unit belonging was found between Army, Navy, Air Force, Marine Corps, and Coast Guard participants,  $\chi^2$  (4, n = 104) = 2.30, p = .680. There was also no significant difference in perceived unit belonging found between current service members, ROTC students, and veterans,

$$\chi^2$$
 (2, *n* = 103) = 1.62, *p* = .446

## Table 1

## Bivariate Tests Between Perceived Unit Belonging and Potential Predictors

Perceived positive unit leadership.553**Perceived negative unit leadership496**Active duty vs. reserve/guard260*Months deployed with unit.257*Number of experiences of harassment,
Active duty vs. reserve/guard260*Months deployed with unit.257*
Months deployed with unit .257*
1 2
Number of experiences of heresement
abuse, threat, or discrimination257*
Unit size .224*
Age .219*
Ever harassed, abused, threatened, or discriminated against (no vs. yes)197*
Months of military service .194
Gender171
Months in unit .149
Combat exposure .134
Proportion women085
Service era (previous eras vs. OEF/OIF)074
Marital status (other statuses vs. married) .062
Mental health, alcohol, or substance abuse problem (no problem vs. any problem)035
Race/ethnicity (Caucasian vs. other groups) .030
Gender*proportion women029
Race*proportion racial/ethnic minority members019
Proportion racial/ethnic minority members .007
Confidence in estimates of unit proportions .004

Note. Potential predictors are listed in order of decreasing strength of association with perceived belonging within the military unit. \*p < .05. \*\*p < .001.

As can be seen in Table 1, the eight potential predictors calculated to have the largest correlations with perceived belonging were found to be significant. Total number of experiences of harassment, abuse, threat, or discrimination was found to be highly correlated with whether any such incident had ever occurred ( $r_s = .992$ , p < .001), so in order to avoid collinearity, only the stronger of the two predictors (number of incidents) was selected for subsequent analyses. Perception of positive unit leadership and perception of negative unit leadership were also found to be highly correlated (r = .812, p < .001), so once again only the stronger predictor (perception of positive unit leadership) was selected for subsequent analyses. Six variables resulted from this process and were retained for the next set of analyses: perceived positive unit leadership; active duty versus reserve/guard service; months deployed with unit; number of experiences of harassment, abuse, threat, or discrimination; unit size; and age.

No significant correlations were found between perceived belonging and any of the variables related to the primary hypotheses (gender, proportion women, gender\*proportion women, race/ethnicity, proportion racial/ethnic minority members, race/ethnicity\*proportion racial/ethnic minority members). The variables related to race/ethnicity showed extremely small effect sizes—race was the strongest predictor, but explained less than 0.1% of the variance in perceived belonging scores. Furthermore, the number of participants in the sample who indicated a race/ethnicity other than Caucasian was low (86% Caucasian, 14% another race/ethnicity). Due to these factors, the variables related to race/ethnicity were not included in further analyses. Gender explained a larger percentage of the variance in perceived belonging (2.9%) and was more well-balanced within the sample (67% men, 33% women), so it was decided to retain the variables related to gender for further analyses.

The nine variables that resulted from the above procedures were too many to be tested with the sample size based on the guidelines of Tabachnick and Fidell (2007), N > 50 + 8k, and Stevens (1996), N > 15k, which suggest that no more than seven predictors should be used for a sample of n = 104. Since it had been decided to retain the three gender-related variables for the purposes of testing the primary hypotheses, four variables needed to be chosen from the remaining six. To inform this decision, the remaining six variables—along with gender—were entered into a simultaneous regression model, so that their influences could be considered together. Based on the standardized correlation coefficients in the resulting model, the four variables with the strongest predictive ability were found to be perceived positive unit leadership, unit size, active vs. reserve/guard service , and age. These four variables were selected to be added to the three gender-related variables for use in the hierarchical multiple regressions.

Perceived belonging within the military unit was the primary outcome variable of interest in this study, but perceived unit cohesion and perceived belonging outside of the military were also collected. Pearson product-moment correlation coefficients revealed that perceived unit belonging shared 50.3% of variance with perceived unit cohesion (r = .709, p < .001) and 2.6% of variance with perceived belonging outside of the military (r = .160, p = .105). Perceived unit cohesion and perceived belonging outside of the military shared 1.6% of variance (r = .125, p = .204).

Although the effect size of the correlation between perceived unit belonging and perceived unit cohesion was large according to the guidelines of Cohen (1988), there was a conceptual difference between perceived unit belonging and perceived unit cohesion based on the scales used. Perceived unit belonging assessed participants' sense that they personally belonged with other members of their unit, whereas perceived unit cohesion assessed the extent to which participants felt the members of the unit were close to one another, without any personal reference. Due to this difference, both variables were chosen to be used as outcomes in two separate hierarchical multiple regressions.

The selection of some predictor variables related specifically to unit characteristics (unit size, perception of positive unit leadership) and military characteristics (active vs. reserve/guard service) created uncertainty as to whether the hierarchical multiple regression would be meaningful when used to analyze perceived belonging outside of the military. Nonetheless, it was decided that perceived belonging outside the military would be included as an outcome variable in a separate hierarchical multiple regression for the purposes of general comparison and description, and to help rule out alternative explanations for any findings related to perceived belonging within the military unit.

## **Hierarchical Multiple Regressions**

A hierarchical multiple regression was run for each of the three outcome variables perceived belonging within the military unit, perceived unit cohesion, and perceived belonging outside of the military—using the seven predictor variables that were selected through the steps outlined in the previous section. The variables and steps used for each of the three hierarchical multiple regressions are shown in Table 2. Table 2

## Variables and Steps for Hierarchical Multiple Regressions

## Predictor Variables

<u>Step 1</u> Perception of positive unit leadership Unit size Active vs. guard/reserve service Age

<u>Step 2</u> Gender

<u>Step 3</u> Proportion women Gender\*Proportion women

Outcome Variables

Perceived belonging within the military unit Perceived unit cohesion Perceived belonging outside of the military

*Note:* The predictor variables and steps were repeated separately for each of the three outcome variables.

## Results

## **Unit Characteristics**

Participants described units that ranged in size from seven to 300 members; the mean unit size was 96.2 members. The mean length of time participants spent in their units was 4 years and 10 months, with the shortest length of time being 5 months and the longest length of time being 34 years. The data showed that units were composed of 27.8% racial/ethnic minority members on average, and 20.7% percent women on average. The units that were described included instances of all-male units, all-female units, all-Caucasian units, and units

composed of up to 70% racial/ethnic minority members. Sixty-four percent of participants had been deployed at least once with their unit—the average length of time spent deployed with the unit was 3.1 months—while 36% of participants were never deployed with their unit.

## **Deployment and Combat Exposure**

Over half of participants (55%) reported being deployed at least once, while 45% were never deployed. Participants reported being deployed an average of 1.3 times (ranging from zero to 12 deployments). Three participants (2.9% of the sample) were deployed at the time of the survey.

Participants' scores on the Combat Exposure Scale ranged from zero to 36, thus covering the full range of categories that Keane et al. (1998) set forth (from "light" to "heavy" combat exposure). Participants' average score was 7.22, which was categorized as "light" combat exposure according to the guidelines.

## **Perceptions of Positive and Negative Unit Leadership**

Participants' scores on the Charismatic Leadership Scale covered the entire possible range of scores—from one (low perception of leader charisma) to five (high perception of leader charisma)—with a mean score of 3.81 for the sample. Participants' scores on the Destrudo-L (Destructive Leadership) Scale ranged from 1 (the lowest possible perception of destructive unit leadership) to 5.55 (out of a possible 6 corresponding with the highest possible perception of destructive unit leadership). The mean Destrudo-L score for the sample was 1.97.

## Experiences of Harassment, Abuse, Threat, or Discrimination Within the Unit

On average, participants reported 2.3 experiences of harassment, abuse, threat, or discrimination within their military unit. Many participants (78%) did not experience any such incidents, but 19% of participants experienced at least one incident, with a maximum of 70 incidents reported by a single participant.

## **Perceived Belonging Within the Military Unit**

Possible scores on the General Belonging Scale (altered to assess perceived belonging within military unit) ranged from one (low perceived belonging) to seven (high perceived belonging). Participants' scores covered this full range, and the mean score within the sample was 5.84. Hierarchical multiple regression analysis was used to test predictor variables in three steps (as outlined in Table 2), leading to three regression models.

Model 1—which included perceived positive unit leadership, unit size, active v. reserve/guard service, and age—explained 42.8% of the variance in perceived unit belonging scores, a significant finding ( $R^2 = .428$ , F(4, 80) = 14.95, p < .001). The addition of gender in Model 2 explained an additional 2% of the variance in perceived unit belonging over and above the other variables, a change which did not represent a significant increase ( $\Delta R^2 = .020$ ,  $\Delta F(1, 79) = 2.89$ , p = .093). In Model 3, the addition of proportion women and the interaction between gender and proportion women explained only 0.1% additional variance, a non-significant change ( $\Delta R^2 = .001$ ,  $\Delta F(2, 77) = .08$ , p = .972). Because Model 3 offered only minimal improvement, Model 2 was selected as the final model. Model 2 explained 44.8% of the variance in perceived unit belonging scores, indicative of significant predictive ability ( $R^2 = .448$ , F(5, 79) = 12.82, p < .001). According to the standardized regression coefficients in Model 2 (shown in Table 3), the predictors of high perceived unit belonging from strongest to weakest were perceived positive unit leadership, larger unit size, active duty service, older age, and male gender, with the first three of these reaching significant levels. Squared semi-partial correlation coefficients were calculated (shown in Table 3) in order to determine the percentage of variance in perceived unit belonging scores uniquely accounted for by each predictor variable (parceling out the effects of the other variables). The predictors ranged from 2% to 26.9% in terms of their unique contributions. All tolerance levels were well above .1 (ranging from .881 to .967), indicating there were no problems with collinearity.

Table 3

*Hierarchical Multiple Regression of Perceived Belonging Within the Military Unit (Model 2)* 

β	Semi-partial	Unique Contribution
.528**	.519	26.9%
.211*	.202	4.1%
195*	190	3.6%
.158	.148	2.2%
145	142	2.0%
	.528** .211* 195* .158	.528**       .519         .211*       .202        195*      190         .158       .148

*Note.* Predictor variables are listed in order of decreasing strength of predictive contribution. p < .05. p < .001.

## **Perceived Unit Cohesion**

Participants' scores covered this full range of possible scores on the Unit Cohesion Scale—from one (low perceived unit cohesion) to five (high perceived unit cohesion)—and the mean score within the sample was 4.26. Hierarchical multiple regression analysis was used to test predictor variables in three steps (as outlined in Table 2), leading to three regression models. Model 1—which included perceived positive unit leadership, unit size, active v.

reserve/guard service, and age—explained 50.1% of the variance in perceived unit cohesion scores, a significant finding ( $R^2 = .501$ , F(4, 80) = 20.08, p < .001). The addition of gender in Model 2 explained an additional 1.4% of the variance in perceived unit cohesion over and above the other variables, a change which did not represent a significant increase ( $\Delta R^2 = .140$ ,  $\Delta F(1, 79) = 2.25$ , p = .138). In Model 3, the addition of proportion women and the interaction between gender and proportion women explained only 0.4% additional variance, a non-significant change ( $\Delta R^2 = .004$ ,  $\Delta F(2, 77) = .29$ , p = .751). Because Model 3 offered only minimal improvement, Model 2 was selected as the final model. Model 2 explained 51.5% of the variance in perceived unit cohesion scores, indicative of significant predictive ability ( $R^2 = .515$ , F(5, 79) = 16.76, p < .001).

According to the standardized regression coefficients in Model 2 (shown in Table 4), the predictors of high perceived unit cohesion from strongest to weakest were perceived positive unit leadership, older age, larger unit size, male gender, and active duty service, with the first two of these reaching significant levels. Squared semi-partial correlation coefficients were calculated (shown in Table 4) in order to determine the percentage of variance in perceived unit cohesion scores uniquely accounted for by each predictor (parceling out the effects of the other predictors). The predictors ranged from 0% to 42.3% in terms of their unique contributions. All tolerance levels were well above .1 (ranging from .881 to .967), indicating there were no problems with collinearity.

#### Table 4

Predictor Variables	β	Semi-partial	Unique Contribution
Perception of positive unit leadership	.661**	.650	42.3%
Age	.172*	.161	2.6%
Unit size	.141	.135	1.8%
Gender	120	117	1.4%
Active vs. reserve/guard	.001	.001	0.00%

Hierarchical Multiple Regression of Perceived Unit Cohesion (Model 2)

*Note.* Variables are listed in order of decreasing strength of association with perceived unit belonging. \*p < .05. \*\*p < .001.

#### **Perceived Belonging Outside of the Military**

Participants' scores on the General Belongingness Scale (altered to assess perceived belonging outside of the military) covered the full range of possible scores—from one (low perceived belonging) to seven (high perceived belonging). The mean for the sample was 5.81. Hierarchical multiple regression using steps consistent with those of the other two outcome variables (outlined in Table 2) revealed that none of the models predicted a significant amount of variability in perceived belonging outside of the military, and none of the predictors in any of the models predicted a significant portion of the variance in scores.

## **Gender Differences**

Although the relationship between gender and perceived belonging within the military unit was found to be in the expected direction ( $M_{men} = 6.01$ ,  $M_{women} = 5.48$ ), there was no significant gender difference found. The relationship between gender and perceived unit cohesion was in this same direction ( $M_{men} = 4.36$ ,  $M_{women} = 4.03$ ), while the relationship between gender and perceived belonging outside the military was in the opposite direction ( $M_{men} = 5.76$ ,  $M_{women} = 5.95$ ), but the findings were not significant in either case.

A Chi-square test for independence (with Yates Continuity Correction) indicated that women were significantly more likely than men to have experienced at least one instance of harassment, abuse, threat, or discrimination,  $\chi^2$  (1, n = 100) = 7.47, p = .006, phi = -.03, and a Spearman's rank order correlation indicated that female gender was associated with a higher total number of such instances,  $r_s = .249$ , p = .012. This correlation indicated that gender and number of incidents of harassment, abuse, threat, or discrimination shared 6.2% of their variance. Among men, the mean number of incidents of harassment, abuse, threat, or discrimination was 0.79; among women, the mean number was 5.53.

A Spearman's rank order correlation indicated that female gender was associated with significantly lighter combat exposure,  $r_s = -.367$ , p < .001. The mean Combat Exposure Scale score for men was 9.31 ("light-moderate" combat exposure), and the mean score for women was 2.58 ("light" combat exposure), Keane et al., 1998.

#### Discussion

Through the use of several variables expected to be related to perceived belonging, this study was the first to develop a model which explained a significant portion of variability in perceived belonging within the military unit. Within this model, the relative importance of predictors (from most influence to least influence) was determined to be: perceived positive unit leadership, unit size, active versus guard/reserve service, age, and gender.

#### **Predictors of Perceived Belonging Within the Military Unit**

The predictor found to be strongest through the hierarchical multiple regression perceived positive unit leadership—was significantly, positively correlated with perceived belonging within the military unit, a finding which supported the hypotheses predicting the same. Perception of negative unit leadership was not entered into the hierarchical multiple regression models, but its significant, negative zero-order correlation with perceived unit belonging provided support for such a predicted correlation. The direction of these findings is consistent with previous research regarding the influence of leadership on belonging in both civilian and military settings (Kelty et al., 2010; Shore, 2011). This study's finding that perceived leadership was the strongest predictor of perceived unit belonging underscores the high level of attention that ought to be paid to training leaders and monitoring their effectiveness in a military setting. Furthermore, the fact that both leadership scales were found to be highly correlated with perceived unit belonging suggests that effective leadership involves positive, charismatic behaviors rather than the simple absence of negative, destructive behaviors.

This study's findings regarding the key role of leadership also serve to highlight leadership as an important focus for future research surrounding perceived military belonging. One valuable approach may be to examine factors which affect perceptions of leadership or which interact with leadership perceptions to affect perceived belonging. For example, the gender and race/ethnicity of the leader being described might be considered along with the gender and race/ethnicity of the participant when analyzing assessments of leadership and reports of perceived belonging. The general culture created by military leadership as a whole—rather than the behaviors of a specific leader—might also be considered, especially given that many service members have reported the leadership of their units changes frequently.

The finding of a significant positive correlation between unit size and perceived unit belonging did not provide support for the hypothesis, which had predicted a significant, negative correlation between the two. This finding is not completely unexpected, because previous research on the association between group size and belonging has been limited particularly among military populations—and the findings have been mixed. Group size has been shown to have a positive association with perceived belonging in some previous research (Mueller, 2021; Niebuhr & Oswald, 1992) and a negative association with perceived belonging in other previous studies (Doll & Gunderson, 1970, 1971; Jackson, 1999). This study's finding that larger unit size is associated with higher perceived belonging thus makes a theoretical contribution to this ongoing question. Further research could be aimed at identifying factors that interact with unit size to influence perceived belonging. Such research was already begun when Cummings et al. (2013) found larger group size to be related to decreased productively, *particularly* when the group was heterogeneous.

The current study's finding that unit size is positively associated with perceived belonging may also present the opportunity for practical applications. Service members are often part of multiple groups simultaneously, arranged in a hierarchical structure. If higher perceived belonging is more easily achieved in larger groups, any military efforts designed to promote bonding and cohesion might be most effective if focused on larger groups within this hierarchy.

The finding that active duty service is associated with higher perceived belonging than reserve or guard service is relatively unique. Previous studies comparing the experiences of active duty service members to reserve/guard service members have often focused on differences in outcomes during and following deployment (primarily due to the fact that reserve/guard members are typically not expecting to be deployed, and thus have not made all the appropriate arrangements for their extended absence ahead of time). The results of this study reveal differences in perceived belonging between active duty and reserve/guard service members to be another fruitful area of research. Future studies could attempt to pinpoint the characteristics of active duty service which operate to create higher perceived belonging compared to reserve/guard service. Active duty service can be a very different experience from reserve/guard service in terms the amount of time spent with unit members, the likelihood of deployment, and the duration of membership within the same unit; the extent to which these and other factors are responsible for the observed differences in perceived belonging warrants further study. Such knowledge could be applied in efforts to maximize perceived belonging among military members engaging in both types of service.

## **Gender and Proportion Women**

The hypothesis that female gender would be associated with significantly lower perceived unit belonging compared to male gender (above other variables) was not supported. Hierarchical multiple regression found that the addition of gender to the model did not significantly increase its predictive utility; however, the addition did explain a small amount of additional variance, with the relationship in the expected direction. This inconclusive finding is not totally unexpected given that previous research regarding gender and perceived belonging has been mixed: some previous research in military and civilian settings found that women were likely to perceive lower belonging than men (Gutierrez et al., 2013; Hsu & Ketchen, 2013), but other research suggested that men and women were likely to perceive belonging equally (Boyd et al., 2013; Patten & Parker, 2011).

Although conclusive support for a gender effect related to perceived belonging was not found, other findings from this study were consistent with previous research relating to differential experiences between military men and women. For example, female gender was found to be significantly associated with lighter combat exposure. Previous researchers with similar findings have suggested that women may be more likely to have experiences surrounding battle aftermath (e.g., seeing dead bodies, prisoners of war, or severe injuries) rather than combat as such, a fact which is not captured by the traditional Combat Exposure Scale. This possibility highlights the need for continued research on gender similarities and differences in military experiences. Women were also found to be significantly more likely to have experienced at least one instance of harassment, abuse, threat, or discrimination compared to men, and female gender was significantly associated with a higher total number of such instances. It is interesting to note that gender differences in harassment can be seen, yet a corresponding gender difference in perceived belonging is difficult to detect. This counterintuitive finding is another indication that more research is still needed to understand the influences on perceived belonging among both men and women—influences which may be distinct for each gender.

The hypothesis that a significant portion of variance in perceived unit belonging would be explained by the unit's proportion of women plus the interaction between gender and the proportion of women (above other variables) was not supported. Because the interaction term was not significant, the follow up hypothesis—that an increasing proportion of women would negatively influence perceived belonging among men (but not among women)—was not tested. Although previous research on the effects of gender heterogeneity in groups is limited, particularly among military samples, some previous research has been conducted with mixed results (Mannix & Neale, 2005; Shore, 2011). The ability to detect any significant relationships that may have existed regarding unit proportion of women was limited in this study due to unequal group sizes for men and women, as well as small overall sample size. Although oversampling of women was achieved (33% women in the sample,

compared to the current populations of 14.5% women in active duty service, 15.5% women in the guard, 19.5% women in the reserve, and 8% women veterans, Boyd et al., 2013), the number of women was too small to run separate regressions for women and men. Separate regressions would provide much more nuanced information about the factors that influence perceived belonging among women, and those that influence perceived belonging among men, than it is possible to obtain through a single interaction term.

#### **Race/Ethnicity and Proportion Racial/Ethnic Minority Members**

The hypothesis that minority race/ethnicity would be associated with significantly lower perceived unit belonging compared to Caucasian race/ethnicity (above other variables) was not supported. Race/ethnicity was not significantly associated with perceived belonging within the military unit, even at a bivariate level. Although previous research regarding race/ethnicity in the military has commonly focused on outcomes other than perceived belonging, this finding is not consistent with the previous research that does exist suggesting individuals of racial/ethnic minority are likely to perceive lower belonging (Burk and Espinoza, 2012; Hsu & Ketchen, 2013). Possible reasons for this finding again include unequal group size and small sample size. The racial/ethnic homogeneity of the sample was more extreme than the gender homogeneity; the percentage of racial/ethnic minority participants in the sample (14%) was in fact even lower than the percentage of racial/ethnic minority members within the wider population of those currently serving (30.3% of active duty forces and 24.5% of reserve/guard forces, Department of Defense, 2009) and veterans (18%, Hsu & Ketchen, 2013). In future studies, particular emphasis should be placed on including enough participants from multiple racial/ethnic groups.

The hypothesis that a significant portion of variance in perceived unit belonging would be explained by the proportion of racial ethnic/minority members plus the interaction between race/ethnicity and the proportion of racial/ethnic minority members (above other variables) was not tested directly. Due to the fact that the sample was fairly racially homogeneous, and to the fact that there were no significant bivariate associations between (a) race/ethnicity and perceived unit belonging, (b) proportion minority members and perceived unit belonging, or (c) the interaction term and perceived unit belonging, none of these variables were entered into a hierarchical multiple regression model. Previous research on these variables is also limited (Mannix & Neale, 2005; Shore, 2011), indicating that this remains an important area with a strong need for more future research.

#### **Similarities and Differences Between Outcome Variables**

Although the regressions of perceived unit belonging and of perceived unit cohesion were not identical, many similarities were noted. In each case, perception of positive unit leadership was the strongest predictor of higher outcome scores, and male gender was the weakest predictor of higher outcome scores. Larger unit size and older age were associated with higher outcome scores in each case, with unit size acting as the stronger predictor of perceived unit belonging and age as the stronger predictor of perceived unit cohesion. The main difference between these two models is the finding that active duty service was significantly associated with higher perceived unit belonging, whereas there was no significant difference found between active and reserve/guard service members with regard to unit cohesion.

Although it is logical that military and unit characteristics should affect both perceived unit belonging (with a personal aspect) and perceived unit cohesion (with no

personal aspect), it is less obvious that age and gender should necessarily be related to perceived unit cohesion (as these characteristics do not apply to the unit as a whole which is being assessed). The finding that these two characteristics influence perceived cohesion as well as perceived unit belonging may suggest that participants weighed their own experience heavily when assessing the overall extent to which the unit was cohesive. This potential explanation makes intuitive sense, as it would be difficult to judge the cohesion of a unit without taking your own experience into account.

It is perhaps not surprising that the model did not significantly predict belonging outside of the military, given that the predictors were so specific to unit and general military experiences. However, this finding does seem to lend credibility to the conclusion that the unit and military characteristics are indeed operating to influence the climate specifically within the unit, as opposed to simply acting to influence the way participants perceive belonging in every context they encounter. Intuitively, this finding seems to support the face validity that the unit and military characteristics seem to show in measuring aspects of experiences within the military unit, and seem to support the idea that altering these variables might influence the extent to which belonging is perceived within the unit.

Limitations in this study that have already been mentioned include small sample size, unequal group sizes for dichotomous categorical predictors, and low representation of women and racial/ethnic minority members. Another similar limitation was created by the low number of homosexual or bisexual participants in the sample (8%). As in the case of race/ethnicity, this low number meant that the influence of sexual orientation, the unit's proportion of homosexual/bisexual unit members, and the interaction between sexual orientation and proportion of homosexual/bisexual unit members upon perceived belonging could not be examined. Thus, future studies should aim to obtain sufficient numbers of homosexual and bisexual participants, so that these analyses might be carried out.

In addition to future research with a larger sample size and a greater proportion of female, racial/ethnic minority, and homosexual/bisexual members, it would also be valuable to conduct future research in which information about unit size and membership proportions can be obtained directly (e.g., through military records for a given unit) rather than through participants' estimates. In the current study, the participants' mean level of confidence in estimates of unit membership numbers (M = 3.05 out of a possible range of 1-5) was slightly above the scale midpoint, indicating moderate confidence. However, confidence in estimates decreased as unit size increased (r = -.263, p = .010), indicating that supplementary sources of information about membership proportions may be especially useful when studying the influence of heterogeneity within larger units.

By considering numerous variables which might be expected to influence perceived belonging at once, this study was successful in creating a model which explains a significant amount of the variability in perceived belonging within the military unit. This study was the first to examine the relative importance of various factors in predicting perceived belonging, and identified several key variables which had a significant influence upon perceived belonging within a military sample. Such findings have theoretical as well as practical implications, and they can guide future researchers and military policymakers. By extending knowledge relating to perceived belonging, this study contributes to the United States' future potential to maximize the efficiency, satisfaction, safety, and mental health of military men and women.

## References

Blalock, H. M. (1967). Toward a theory of minority-group relations. New York: Wiley.

- Boyd, M. A., Bradshaw, W., & Robinson, M. (2013). Mental health issues of women deployed to Iraq and Afghanistan. Archives of Psychiatric Nursing, 27(1), 10-22. doi:10.1016/j.apnu.2012.10.005
- Brailey, K, Vasterling J. J., Proctor, S. P., Constans, J. I., & Friedman, M. J. (2007). PTSD symptoms, life events, and unit cohesion in U.S. soldiers: Baseline findings from the neurocognition deployment health study. *Journal of Traumatic Stress*, 20(4), 495-503. doi:10.1002/jts.20234
- Braswell, H., & Kushner, H. I. (2012). Suicide, social integration, and masculinity in the U.S. military. *Social Science & Medicine*, 74, 530-536. doi:10.1016/j.socscimed.2010.07.031
- Britt, T. W., & Dawson, C. R. (2005). Predicting work-family conflict from workload, job attitudes, group attributes, and health: A longitudinal study. *Military Psychology*, 17, 203–227.
- Britt, T. W., Dickinson, J., Moore, D., Castro, C. A., & Adler, A. B. (2007). Correlates and consequences of morale versus depression under stressful conditions. *Journal of Occupational Health Psychology*, 12, 34–47.

Brooks, T. A. (2005). Ethnic identification level and mental health in a military environment. Dissertation Abstracts International Section A: Humanities and Social Sciences, 67(1-A), 103.

- Bryan, C. J., McNaughton-Cassill, M., & Osman, A. (2013). Age and belongingness moderate effects of combat exposure on suicidal ideation among active duty Air Force personnel. *Journal of Affective Disorders*, *150*, 1226-1229. doi:10.1016/j.jad.2013.05.087
- Burk, J., & Espinoza, E. (2012). Race relations within the US military. Annual Review of Socioogyl, 38, 401-422. doi:10.1146/annurev-soc-071811-145501
- Chartered Institute of Management Accountants. (2010). *Breaking glass: Strategies for tomorrow's leaders*. Retrieved from http://www.cimaglobal.com/Thoughtleadership/women/
- Chatman, J. & Spataro, S. (2005). Using self-categorization theory to understand relational demography-based variations in people's responsiveness to organizational culture. *Academy of Management Journal*, 48, 321–331.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for behavioral sciences. New York: Taylor & Francis.
- Cook, J. M., Elhai, J. D., Cassidy, E. L., Ruzek, J. I., Ram, G. D., & Sheikh, J. I. (2005).
   Assessment of trauma exposure and post-traumatic stress in long-term care veterans:
   Preliminary data on psychometrics and post-traumatic stress disorder prevalence.
   *Military Medicine*, 170(10), 862-866.

Cummings, J. N., Kiesler, S., Zadeh, R. B., & Balakrishnan, A. D. (2013). Group heterogeneity increases the risk of large group size: A longitudinal study of productivity in research groups. *Psychological Science*, 24, 880-890. doi:10.1177/0956797612463082

- Dasberg, H. (1982). Belonging and loneliness in relation to mental breakdown in battle. Series in Clinical & Community Psychology: Stress & Anxiety, 8, 143-150.
- Den Hartog, D. N., De Hoogh, A. H. B., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology*, 92(4), 1131-1139. doi:10.1037/0021-9010.92.4.1131
- Derks, B., Van Laar, C., Ellemers, N., & de Groot, K. (2011). Gender-bias primes elicit queen-bee responses among senior policewomen. *Psychological Science*, 22(10), 1243-1249.
- Doll, R. E., & Gunderson, E. E. (1970). The influence of group size on perceived compatibility and achievement in an extreme environment. *Personnel Psychology*, 24(2), 305-310. doi:10.1111/j.1744-6570.1971.tb02478.x
- Doll, R. E., & Gunderson, E. E. (1971). Group size, occupational status and psychological symptomatology in an extreme environment. *Journal of Clinical Psychology*, 27(2), 196-198.
- Dunivin, K. O. (1994). Military culture: Change and continuity. *Armed Forces and Society*, 20(4), 531-547.
- Ferrier-Auerbach, A. G., Erbes, C. R., Polusny, M. A., Rath, M., & Sponheim, S. R. (2010). Predictors of emotional distress reported by soldiers in the combat zone. *Journal of Psychiatric Research*, 44, 470-476. doi:10.1016/j.jpsychires.2009.10.010
- Gillen-O'Neel, C., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development*, 84(2), 678-692.
  doi:10.1111/j.1467-8624.2012.01862.x

Griffith, J. (2002). Multilevel analysis of cohesion's relation to stress, well-being, identification, disintegration, and perceived combat readiness. *Military Psychology*, 14(3), 217–239. doi:10.1207/S15327876MP1403\_3

- Gutierrez, P. M., Brenner, L. A., Rings, J. A., Devore, M. D., Kelly, P. J., Staves, P. J., ... Kaplan, M. S. (2013). A qualitative description of female veterans' deploymentrelated experiences and potential suicide risk factors. *Journal of Clinical Psychology*, 69(9), 923-935. doi:10.1002/jclp.21997
- Hale, H. C. (2012). The role of practice in the development of military masculinities. *Gender, Work and Organization, 19*(6), 699-722. doi:10.1111/j.1468-0432.2010.00542.x
- Hatmaker, D. M. (2013). Engineering identity: Gender and professional identity negotiation among women engineers. *Gender, Work and Organization, 20*(4), 382- 396.
  doi:10.1111/j.1468-0432.2012.00589.x
- Hewstone, M., Crisp, R. J., Contarello, A. Voci, A., Conway, L., Marletta, G., & Willis, H.
  (2006). Tokens in the tower: Perceptual processes and interaction dynamics in academic settings with skewed, tilted, and balanced sex ratios. *Group Processes and Intergroup Relations*, 9, 509-532.
- Hinds, P. J., & Mortensen, M. (2005). Understanding conflict in geographically distributed teams: The moderating effects of shared identity, shared context, and spontaneous communication. *Organization Science*, 16(3), 290-307. doi:10.1287/orsc.1050.0122

- Hsu, J., & Ketchen, B. R. (2013). Working with veterans, social class, and counseling:
  Understanding the veteran population and implications for treatment. In W. Ming Liu
  (Ed.), *The Oxford Handbook of Social Class in Counseling* (pp. 164-184). New York, NY: Oxford University Press.
- Jackson, J. W. (1999). How variations in social structure affect different types of intergroup bias and differential dimensions of social identity in a multi-intergroup setting. *Group Processes & Intergroup Relations*, 2, 145–173.
- Johnson, W. B., Rosenstein, J. E., Buhrke, R. A., & Haldeman, D. C. (2013). After "Don't Ask Don't Tell": Competent care of lesbian, gay and bisexual military personnel during the DoD policy transition. *Professional Psychology: Research and Practice*. Advance online publication. doi:10.1037/a0033051

Kanter, R. (1977a). Men and women of the organization. New York: Basic Books.

- Kanter, R. (1977b). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965–990.
- Keane, T. M., Fairbank, J. A., Caddell, J. M., Zimering, R. T., Taylor, K. L., & Mora, C. A. (1989). Clinical evaluation of a measure to assess combat exposure. *Psychological Assessment*, 1, 53–55.
- Kearney, E., & Gebert, D. 2009. Managing diversity and enhancing team outcomes: The promise of transformational leadership. *Journal of Applied Psychology*, *94*, 77-89.
- Kelty, R., Kleykamp, M., & Segal, D. R. (2010). The military and the transition to adulthood. *The Future of Children, 20*(1), 181-207.

- Kline, A., Falca-Dodson, M., Sussner, B., Ciccone, D. S., Changler, H., Callahan, L., & Losonczy, M. (2010). Effects of repeated deployment to Iraq and Afghanistan on the health of New Jersey Army National Guard troops: Implications for military readiness. *American Journal of Public Health*, 100(2), 276–284. doi:10.2105/AJPH.2009.162925
- Kochan, T., Bezrukova, K., Ely, R., Jackson, S., Joshi, A., Jehn, K., ... Thomas, D. (2003).The effects of diversity on business performance: Report of the diversity research network. *Human Resource Management*, 42, 3–21.
- Larsson, G., Brandebo, M. F., & Nilsson, S. (2012). Destrudo-L: Development of a short scale designed to measure destructive leadership behaviours in a military context. *Leadership and Organization Development Journal*, 33(4), 383-400. doi:10.1108/01437731211229313
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2014). Construct validity of the Need to Belong Scale: Mapping the nomological network. *Journal of Personality Assessment*, 95(6), 610-624. doi:10.1080/00223891.2013.819511
- Lipari, R. N., Cook, P. J., Rock, L. M., & Matos, K. (2008). 2006 gender relations survey of active duty members. Arlington, VA: Department of Defense Manpower Data Center. Retrieved from

http://www.ncdsv.org/images/DOD\_GenderRelationsSurveyOfActiveDutyMembers\_ 2006.pdf

Malone, G. P., Pillow, D. R., & Osman, A. The General Belongingness Scale (GBS):
Assessing achieved belongingness. (2012). Personality and *Individual Differences*, 51, 311-316. doi:10.1016/j.paid.2011.10.027

- Mannix, E., & Neale, M. A. (2005). What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science in the Public Interest*, 6(2), 31-55.
- Meyer, J. P., Goldenberg, I., Kam, C., & Bremner, N. L. (2013). Organizational commitment in the military: Application of a profile approach. *Military Psychology*, 25(4), 381-401. doi:10.1037/mil0000007
- Monteith, L. L., Menefee, D. S., Pettit, J. W., Leopoulos, W. L., & Vincent, J. P. (2013). Suicide and Life-Threatening Behavior, 43(4), 418-428. doi:10.1111/sltb.12027
- Mueller, J. S. (2012). Why individuals in larger teams perform worse. Organizational Behavior and Human Decision Processes, 117, 111-124.
  doi:10.1016/j.obhdp.2011.08.004
- Niebuhr, R., & Oswald, S. L. (1992). The impact of workgroup composition and other work unit/victim characteristics on perceptions of sexual harassment. *Applied HRM Research*, 3(1), 30-47.
- Overdale, S., & Gardner, D. (2012). Social support and coping adaptability in initial military training. *Military Psychology*, *24*, 312-330. doi:10.1080/08995605.2012.678243
- Owens, G. P., Badhevsky, B., Chard, K. M., Mohamed, S., Haji, U., Heppner, P. S., & Baker,
  D. G. (2009). The relationship between childhood trauma, combat exposure, and
  posttraumatic stress disorder in male veterans. *Military Psychology*, 21, 114-125.
  doi:10.1080/08995600802574530

Pallant, J. (2010). SPSS Survival Manual (4th ed.). New York, NY: McGraw-Hill

Patten, E., & Parker, K. (2011). Women in the U.S. Military: Growing share, distinctive profile. Retrieved from Pew Research Center website: http://www.pewsocialtrends.org/2011/12/22/women-in-the-u-s-military-growingshare-distinctive-profile/

- Pelled, L. (1997). Relational demography and perceptions of group conflict and performance:
  A field investigation. *International Journal of Conflict Resolution*, 7(3), 230-246.
  doi:10.1108/eb022783
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44(1), 1-28. doi:10.2307/2667029
- Podsakoff, P. M., & MacKenzie, S. B. (1994). An examination of the psychometric properties and nomological validity of some revised and reduced substitutes for leadership scales. *Journal of Applied Psychology*, 79, 702–713.

Rom, E., & Mikulincer, M. (2003). Attachment theory and group processes: The association between attachment style and group-related presentations, goals, memories, and functioning. *Journal of Personality and Social Psychology*, 84, 1220–1235. doi:10.1037/0022-3514.84.6.1220

- Schreindorfer, L., & Leary, M. (1996, March). Seeking acceptance versus avoiding rejection: Differential effects on emotion and behavior. Paper presented at the meeting of the Southeastern Psychological Association, Norfolk, VA.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37, 1262- 289. doi:10.1177/0149206310385943

- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27, 1029-1038. doi:10.1016/j.tate.2011.04.001
- Smith, B. N., Vaughn, R. A., Vogt, D., King, D. W., King, L. A., & Shipherd, J. C. (2013).
  Main and interactive effects of social support in predicting mental health symptoms in men and women following military stressor exposure. *Anxiety, Stress, & Coping: An International Journal, 26*(1), 52-69. doi:10.1080/10615806.2011.634001
- Sternke, L. M. (2011). Women veterans and gender differences in measurement of combat exposure and posttraumatic stress disorder (Doctoral dissertation). University of South Carolina, Columbia, SC.
- Stokke, A. M. (2011). Coping with sexual harassment from the perspective of women of color serving in the United States military (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3516522)
- Street, A. E., Gradus, J. L., Glasson, H. L., Vogt, D., & Resick, P. A. (2013). Gender differences among veterans deployed in support of the wars in Afghanistan and Iraq. *Journal of General Internal Medicine*, 28(Suppl. 2), S556-62. doi:10.1007/s11606-013-2333-4
- Street, A. E., Vogt, D., & Dutra, L. (2009). A new generation of women veterans: Stressors faced by women deployed to Iraq and Afghanistan. *Clinical Psychology Review*, 29, 685-694. doi:10.1016/j.cpr.2009.08.007
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5<sup>th</sup> ed.). Boston: Pearson Education.

- U.S. Department of Defense. (2012). 2012 Demographics: Profile of the Military Community. Retrieved from http://www.militaryonesource.mil/12038/MOS/Reports/2012\_Demographics\_Report. pdf
- Wheelan, S. A. (2009). Group size, group development, and group productivity. *Small Group Research*, 40, 247-262. doi:10.1177/1046496408328703
- Williams, R. A., Hagerty, B. M., Yousha, S. M., Hoyle, K. S., & Oe, H. (2002). Factors associated with depression in Navy recruits. *Journal of Clinical Psychology*, 58(4), 323-337.
- Williams, K. Y., & O'Reilly, C. A., III. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 20, 77-140.
- Wittenbaum, G. M., Shulman, H. C., & Braz, M. E. (2010). Social ostracism in task groups: The effects of group composition. *Small Group Research*, *41*, 330-353. doi:10.1177/1046496410363914
- Wright, K. M., Cabrera, O. A., Adler, A. B., Bliese, P. D., Hoge, C. W., & Castro, C. A.
  (2009). Stigma and barriers to care in soldiers postcombat. *Psychological Services*, 6(2), 108-116. doi:10.1037/a0012620

## Appendix A

## U.S. Military Survey: Current Service Member Version

## This anonymous survey takes about 20 minutes. Feel free to skip questions you are uncomfortable answering.

Which describes your current U.S. military involvement? (Please check one box)

Currently serving

Veteran

Basic training

Reserve Officers' Training Corps (ROTC)

Officer Candidate School (OCS)/ Officer Training School (OTS)

Military Academy

Other (please specify):

What is your current branch? (Please check one box)

Army

Navy

Air Force

Marine Corps

Coast Guard

Other (please specify):

Which describes your current service? (Please check one box)

- □ Active duty
- □ Reserve
- Guard Guard

□ Other (please specify):

Please check the box indicating how much you agree with these statements about <u>people outside of</u> <u>the military</u>:

	1 Strongly Disagree	2 Moder- ately Disagree	3 Disagree a Little	4 Neither Agree nor Disagree	5 Agree a Little	6 Moder- ately Agree	7 Strongly Agree
When I am with other people outside of the military, I feel included.							
I have close bonds with family and friends outside of the military.							
I feel like an outsider when outside of the military.							
I feel as if people do not care about me outside of the military.							
I feel accepted by others outside of the military.							

Because I do not belong, I				
feel distant during the				
holiday season outside of the				
military.				
I feel isolated from the rest				
of the world outside of the				
military.				
I have a sense of belonging				
outside of the military.				
When I am with other people				
outside of the military, I feel				
like a stranger.				
I have a place at the table				
with others outside of the				
military.				
I feel connected with others				
outside of the military.				
Friends and family outside of				
the military do not involve				
me in their plans.				

What is your age? (Please type the number)

What is your gender? Male
Female

What is your race/ethnicity?

□ White/Caucasian

□ Black/African American

□ Hispanic

Asian

- □ Pacific Islander
- American Indian
- Alaska Native

Multiracial

□ Other (please specify):

What is your marital status?
(Please check all that apply)
Single
In a committed relationship
Married
Divorced
Separated
Widowed

Are you in school? (Please check all that apply) Not in school In school full time In school part time
Do you have any children? (Please check all that apply) No Yes, # children
<ul> <li>Do you have any mental health, alcohol, or drug problem(s)?</li> <li>No</li> <li>Yes, (please specify):</li> </ul>
How long have you been serving in the military, in years and months? (If you left and re-entered service, please include all periods of service in this total.) years; and months
<ul> <li>What were/are your period(s) of service? (Please check all that apply)</li> <li>World War II</li> <li>Korean War</li> <li>Vietnam Era</li> <li>Post-Vietnam</li> <li>Persian Gulf War</li> <li>OEF/OIF/OND</li> <li>Other</li> </ul>
Have you ever been deployed?
Deployment #1: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
□ I am still deployed in this location
Deployment #2: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
□ I am still deployed in this location
Deployment #3: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
□ I am still deployed in this location

Deployment #4: Location: \_\_\_\_\_\_ Length of Deployment (in months): \_\_\_\_\_ months In which year (or years) did this deployment take place? (e.g., 2011-2012) \_\_\_\_\_

**I** am still deployed in this location

Deployment #5: Location: \_\_\_\_\_ Length of Deployment (in months): \_\_\_\_\_ months In which year (or years) did this deployment take place? (e.g., 2011-2012) \_\_\_\_\_

□ I am still deployed in this location

Additional Deployment(s):

Please check the box to answer the following questions:

	1	2	3	4	5
Did you ever go on combat patrols or	No	1-3 times	4-12 times	13-50	51 times or
have other very dangerous duty?				times	more
Were you ever under enemy fire?	Never	Less than 1	1-3 months	4-6 months	7 months
		month			or more
Were you ever surrounded by the	No	1-2 times	3-12 times	13-25	26 times or
enemy?				times	more
What percentage of the members in	None	1-25%	26-50%	51-75%	76% or
your unit were killed (KIA), wounded					more
or missing in action (MIA)?					
How often did you fire rounds at the	Never	1-2 times	3-12 times	13-50	51 times or
enemy?				times	more
How often did you see someone hit by	Never	1-2 times	3-12 times	13-50	51 times or
incoming or outgoing rounds?				times	more
How often were you in danger of being	Never	1-2 times	3-12 times	13-50	51 times or
injured or killed (i.e., pinned down,				times	more
overrun, ambushed, near miss, etc.)?					
How often did you see refugees who	Never	1-2 times	3-12 times	13-50	51 times or
had lost homes or belongings?				times	more
How often did you see civilians who	Never	1-2 times	3-12 times	13-50	51 times or
had been severely wounded or				times	more
disfigured?					
How often did you see detainees or	Never	1-2 times	3-12 times	13-50	51 times or
prisoners of war?				times	more
How often did you take care of	Never	1-2 times	3-12 times	13-50	51 times or
someone who was wounded?				times	more
How often did you see dead bodies?	Never	1-2 times	3-12 times	13-50	51 times or
				times	more
Were you ever hospitalized due to	Never	Once	Twice	Three	Four times
illness or injury?				times	or more
Were you ever a prisoner of war	Never	Less than 1	1-3 months	4-6 months	7 months
(POW)?		month			or more

What is your rank? (Please type answer)

What is your military job (e.g., MOS, Rate, or Air Force Specialty)? (Please type job title):

Please answer the questions about <u>one official military group you are CURRENTLY PART OF</u> <u>with APPROXIMATELY 20-200 MEMBERS</u> (e.g., your current unit, company, platoon, flight, squadron, vessel, etc.)

What is <u>the current military group of approximately 20-200 members which you have chosen</u> to answer the questions? (e.g., your current unit, company, platoon, flight, squadron, vessel, etc.)? (Please type answer)

How long have you been part of <u>the current military group of approximately 20-200 members</u> <u>which you have chosen</u>, in years and months?

\_\_\_\_\_ years; and

\_\_\_\_\_ months

Please check the box indicating how much you agree with these statements about **the current military group of approximately 20-200 members which you have chosen**:

	1	1		1			
	1	2	3	4	5	6	7
	Strongly	Moder-	Disagree	Neither	Agree a	Moder-	Strongly
	Disagree	ately	a Little	Agree	Little	ately	Agree
	U	Disagree		nor		Agree	U
		U		Disagree		U	
When I am with other							
members of my military							
group, I feel included.							
I have close bonds with							
members of my military							
group.							
I feel like an outsider in my							
military group.							
I feel as if people in my							
military group do not care							
about me.							
I feel accepted by others in							
my military group.							
Because I do not belong, I							
feel distant during service							
with my military group.							
I feel isolated from the rest							
of my military group.							
I have a sense of belonging							
in my military group.							
When I am with members of							
my military group, I feel like							
a stranger.							

I have a place at the table with others from my military group.				
I feel connected with others in my military group.				
Members of my military group do not involve me in their plans.				

## Please check the box indicating how much you agree with these statements about **the current military group of approximately 20-200 members which you have chosen**:

	1 Strongly Disagree	2 Disagree Somewhat	3 Neither Agree nor Disagree	4 Agree Somewhat	5 Strongly Agree
The members of this military group are cooperative with each other.					
The members of this military group know they can depend on each other.					
The members of this military group stand up for each other.					

## How many members are in <u>the current military group of approximately 20-200 members you</u> <u>have chosen</u>, including you? (Please type exact number or estimate):

Including yourself, how many members of <u>the current military group of approximately 20-200</u> <u>members you have chosen</u> are...

...Caucasian men? \_\_\_\_\_ (Please type exact number or estimate)

...Men of another race/ethnicity? \_\_\_\_\_(Please type exact number or estimate)

...Caucasian women? \_\_\_\_\_ (Please type exact number or estimate) \_\_\_\_\_ (Please type exact number or estimate)

\*Note: These four numbers should add up to the total number you typed in above

How confident are you about your above estimates?

- □ Not at all confident
- □ Slightly confident
- □ Moderately confident
- Very confident
- □ Extremely confident

Including yourself, do you know of any members of <u>the current military group of approximately</u> <u>20-200 members you have chosen</u> who are homosexual or bisexual?

- □ No
- □ Yes, #\_\_\_\_\_ women who are homosexual or bisexual

□ Yes, #\_\_\_\_\_ men who are homosexual or bisexual

Which best describes <u>the current military group of approximately 20-200 members you have</u> <u>chosen</u> ? Transport/Mechanic Medical Police Construction Engineers Combat Engineers Quartermaster/Supply/Cooks Infantry Artillery Communications Band Other
How many months have you ever been deployed with the current military group of approximately 20-200 members you have chosen? months Location(s):
How many months have you ever been deployed <u>with the current military group of approximately</u> <u>20-200 members you have chosen</u> , <u>SPECIFICALLY TO A WAR ZONE</u> ? (May overlap with the above question) <u>months</u> Location(s):
Have you ever been threatened, harassed, abused, or discriminated against by other members or leaders <u>in the current military group of approximately 20-200 members you have chosen</u> (emotionally, physically, or sexually)? (Please check/fill in estimates for all that apply) No Yes, threatened # times Yes, harassed # times Yes, abused # times Yes, discriminated against # times
What is your sexual orientation? <ul> <li>Heterosexual</li> <li>Homosexual</li> <li>Bisexual</li> <li>Other</li> </ul>

# [IF PARTICIPANTS INDICATED THEY ARE HOMOSEXUAL, BISEXUAL, OR OTHER, THEY WERE ASKED THE FOLLOWING QUESTION]

Please check the box indicating how "out" you are about your sexual orientation to other members in the current military group of approximately 20-200 members you have chosen:

<b>□</b> 1 =	Not "Out" At All
	(No one in the military group knows about my sexual orientation)
<b>□</b> 2 =	Somewhat "Out"
	(A few people in the military group know about my sexual orientation)
	Moderately "Out"

 $\square 3 =$  Moderately "Out" (About half of the people in the military group know about my sexual orientation)  $\Box 4 = Mostly "Out"$ 

(Most people in the military group know about my sexual orientation)

□ 5 = Completely "Out" (Everyone in the military group knows about my sexual orientation)

## [ALL PARTICIPANTS WERE ASKED THE REMAINDER OF THE QUESTIONS]

Do you know of any service member(s) who was/were dishonorably discharged due to sexual orientation? (Please check/fill in all that apply)

No

□ I know of #\_\_\_\_ members who were dishonorably discharged from the military due to sexual orientation

□ I know of #\_\_\_\_ members who were dishonorably discharged <u>from the current military group</u> of approximately 20-200 members I have chosen

Please answer the questions about

THE LEADER YOU MOST OFTEN HAVE CONTACT WITH AND RECEIVE ORDERS FROM in the current military group of approximately 20-200 members you have chosen. (e.g., platoon commander, battalion commander, squad leader, senior enlisted)

<u>*Note*</u>: If you are the leader in the current military group you have chosen, please answer the questions about whichever YOU most often have contact with and receive orders from.

What is the <u>title/role of the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen? (e.g., commanding officer, senior enlisted, etc.)

\_\_\_\_\_ (Please type answer)

What is the <u>rank of the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen? (Please type answer)

Please check the box indicating how true you think these statements are about <u>the leader you most</u> <u>often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen:

	1	2	3	4	5
	Not at All	Slightly	Moderately	Very True	Extremely
	True	True	True		True
This leader creates a shared sense in					
my military group that we are working					
together on an important mission.					
This leader acts in ways that make me					
proud to work in my military group.					
This leader sets a good example in my					
military group.					
This leader has a clear vision on the					
future opportunities of my military					
group.					
This leader demonstrates high levels of					
competence in leading my military					
group.					

This leader projects a convincing, powerful, and dynamic presence in my military group.			
This leader provides a good role-model for me to follow in my military group.			
I feel a personal connection with this leader in my military group.			

Please check the box indicating how true you think these statements are about <u>the leader you most</u> <u>often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen:

	1	2	3	4	5	6
	Strongly	Disagree	Somewhat	Somewhat	Agree	Strongly
	Disagree	Disagree	Disagree	Agree	rigice	Agree
This leader makes subordinates	Disagree		Disugree	Agree		Agree
in my military group feel						
stupid.						
This leader behaves arrogantly						
in my military group.						
This leader treats people						
differently in my military						
group.						
This leader is unpleasant in my						
military group.						
This leader shows violent						
tendencies in my military						
group.						
This leader punishes						
subordinates in my military						
group who make mistakes or						
do not reach set goals.						
This leader uses threats to get						
his/her way in my military						
group.						
This leader puts unreasonable						
demands on subordinates in my						
military group.						
This leader takes the honor of						
subordinates' work in my						
military group.						
This leader puts his/her own						
needs ahead of the group's.						
This leader does not trust						
his/her subordinates in my						
military group.						
This leader does not keep						
promises in my military group.						
This leader does not dare to						
confront others in my military						
group.						
This leader does not "show up"						
among subordinates in my						
military group.						

This leader does not show and			
active interest in my military			
group.			
This leader does not "take a			
grip on things" in my military			
group.			
This leader shows insecurity in			
his/her role in my military			
group.			
This leader is bad at structuring			
and planning in my military			
group.		 	
This leader gives unclear			
instructions in my military			
group.		 	
This leader behaves in a			
confused manner in my			
military group.			

What is the gender of the leader you most often have contact with/receive orders from within the

current military group of approximately 20-200 members you have chosen?

Male

Female

What is the race/ethnicity of <u>the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen?

- □ White/Caucasian
- □ Black/African American
- □ Hispanic
- Asian
- Pacific Islander
- American Indian
- Alaska Native
- □ Multiracial

□ Other (Please specify):

Please check the box indicating how true each statement is for you:

	1	2	3	4	5
	Not at All	Slightly	Moderately	Very True	Extremely
	True	True	True	-	True
If other people don't seem to accept me, I don't let it bother me.					
I try hard not to do things that will					
make other people avoid or reject me.					
I seldom worry about whether other					
people care about me.					
I need to feel there are people I can					
turn to in times of need.					
I want other people to accept me.					
I do not like being alone.					
Being apart from my friends for long					
periods of time does not bother me.					

I have a strong "need to belong."			
It bothers me a great deal when I am			
not included in other people's plans.			
My feelings are easily hurt when I feel			
that others do not accept me.			

How did you learn about this survey?

- Email announcement
- □ A friend
- □ Flyer (please specify where you saw the flyer):
- U.S. Military Survey Facebook Group
- □ Other (please specify):

Do you have any comments about your service or about this survey that you would like to tell the researchers?

## **THANK YOU** very much for your service and for taking the time to fill out this survey!

Your answers will be combined with other participants' answers to help represent the experiences of service members.

If you are facing any problem—be it chronic pain, anxiety, depression, sleeplessness, anger, disturbing memories of your tour of duty, or even homelessness—free, confidential support is available to you 24 hours a day, 7 days a week, 365 days a year. Below are just some examples of available resources.

Department of Veterans Affairs (VA) Military Crisis Hotline (24 hours/7 days): Free, confidential support for all service members, veterans, or their family or friends Website/Online Chat: <u>http://veteranscrisisline.net/</u> Phone: 1-800-273-8255 (then press 1) Text: 838255 TTY: 1-800-799-4889 (TeleTYpe for deaf/hard of hearing individuals)

Additional Help Options for Service Members, Veterans, and Their Families: <u>http://www.mentalhealth.gov/get-help/veterans/</u>

Milwaukee County Crisis Line (24 hours/7 days): Behavioral Health Division & Mental Health Association Phone: 414-257-7222 TDD: 414-257-6300 (Telecommunications Device for the Deaf)

Additional Suicide Hotlines in Every U.S. State and Many Other Countries: http://www.suicide.org/suicide-hotlines.html

### Appendix B

### U.S. Military Survey: Trainee Version

# This anonymous survey takes about 20 minutes. Feel free to skip questions you are uncomfortable answering.

Which describes your current U.S. military involvement? (Please check one box)
Currently serving
□ Veteran
□ Basic training
□ Reserve Officers' Training Corps (ROTC)
□ Officer Candidate School (OCS)/ Officer Training School (OTS)
□ Military Academy
□ Other (please specify):
Which branch are you training for? (Please check one box) Army Navy Air Force Marine Corps Coast Guard Other (please specify):

Which type of service do you play to enter upon completion of your training? (Please check one box) Active duty

- □ Active du □ Reserve
- Guard
- □ Other (please specify):

Please check the box indicating how much you agree with these statements about <u>people outside of</u> <u>the military</u>:

	1 Strongly Disagree	2 Moder- ately Disagree	3 Disagree a Little	4 Neither Agree nor Disagree	5 Agree a Little	6 Moder- ately Agree	7 Strongly Agree
When I am with other people outside of the military, I feel included. I have close bonds with family and friends outside of the military.							
I feel like an outsider when outside of the military.							
I feel as if people do not care about me outside of the military.							

I feel accepted by others outside of the military.				
Because I do not belong, I feel distant during the holiday season outside of the military.				
I feel isolated from the rest of the world outside of the military.				
I have a sense of belonging outside of the military.				
When I am with other people outside of the military, I feel like a stranger.				
I have a place at the table with others outside of the military.				
I feel connected with others outside of the military.				
Friends and family outside of the military do not involve me in their plans.				

What is your age? (Please type the number)

What is your gender? Male
Female

What is your race/ethnicity? Uhite/Caucasian

□ Black/African American

□ Hispanic

□ Asian

- □ Pacific Islander
- □ American Indian
- □ Alaska Native
- Multiracial

□ Other (please specify):

What is your marital status?
(Please check all that apply)
Single
In a committed relationship
Married
Divorced
Separated
Widowed

Do you have any children? (Please check all that apply) □ No □ Yes, #\_\_\_\_ children

Do you have any mental	health, alcohol, or drug problem(s)?
□ No	
□ Yes, (please specify):	

How long have you been in your military school or training program, in years and months?

\_\_\_\_\_ years, and \_\_\_\_\_ months

If you were enlisted prior to beginning your school/training program, how long have you been serving in the military, in years and months? (If you left and re-entered service, please include all periods of service in this total.)

\_\_\_\_\_ years, and \_\_\_\_\_ months

What were/are your period(s) of service or training? (Please check all that apply)

World War II
Korean War
Vietnam Era
Post-Vietnam
Persian Gulf War
OEF/OIF/OND
Other

Have you ever been deployed?

Deployment #1:	
Location:	
Length of Deployment (in months): months	
In which year (or years) did this deployment take place? (e.g., 2011-2012)	

□ I am still deployed in this location

Deployment #2:	
Location:	
Length of Deployment (in months): months	
In which year (or years) did this deployment take place? (e.g., 2011-2012)	

□ I am still deployed in this location

Deployment #3:	
Location:	
Length of Deployment (in months): months	
In which year (or years) did this deployment take place? (e.g., 2011-2012)	

□ I am still deployed in this location

Deployment #4: Location: \_\_\_\_\_\_ Length of Deployment (in months): \_\_\_\_\_ months In which year (or years) did this deployment take place? (e.g., 2011-2012) \_\_\_\_\_

□ I am still deployed in this location

Deployment #5: Location: \_\_\_\_\_ Length of Deployment (in months): \_\_\_\_\_ months In which year (or years) did this deployment take place? (e.g., 2011-2012) \_\_\_\_\_

□ I am still deployed in this location

Additional Deployment(s):

Please check the box to answer the following questions:

	1	2	3	4	5
Did you ever go on combat patrols or	No	1-3 times	4-12 times	13-50	51 times or
have other very dangerous duty?				times	more
Were you ever under enemy fire?	Never	Less than 1	1-3 months	4-6 months	7 months
		month			or more
Were you ever surrounded by the	No	1-2 times	3-12 times	13-25	26 times or
enemy?				times	more
What percentage of the members in	None	1-25%	26-50%	51-75%	76% or
your unit were killed (KIA), wounded					more
or missing in action (MIA)?					
How often did you fire rounds at the	Never	1-2 times	3-12 times	13-50	51 times or
enemy?				times	more
How often did you see someone hit by	Never	1-2 times	3-12 times	13-50	51 times or
incoming or outgoing rounds?				times	more
How often were you in danger of being	Never	1-2 times	3-12 times	13-50	51 times or
injured or killed (i.e., pinned down,				times	more
overrun, ambushed, near miss, etc.)?					
How often did you see refugees who	Never	1-2 times	3-12 times	13-50	51 times or
had lost homes or belongings?				times	more
How often did you see civilians who	Never	1-2 times	3-12 times	13-50	51 times or
had been severely wounded or				times	more
disfigured?					
How often did you see detainees or	Never	1-2 times	3-12 times	13-50	51 times or
prisoners of war?				times	more
How often did you take care of	Never	1-2 times	3-12 times	13-50	51 times or
someone who was wounded?				times	more
How often did you see dead bodies?	Never	1-2 times	3-12 times	13-50	51 times or
				times	more
Were you ever hospitalized due to	Never	Once	Twice	Three	Four times
illness or injury?				times	or more
Were you ever a prisoner of war	Never	Less than 1	1-3 months	4-6 months	7 months
(POW)?		month			or more

What is your rank/title? (Please type answer)

Are you training for a specific type of duty or military job (e.g., MOS, Rate, or Air Force Specialty)? (Please type job title and/or check appropriate box):

(Job title)
I am not training for a specific job
Transport/Mechanic
Medical
Police
Construction Engineers
Combat Engineers
Quartermaster/Supply/Cooks
Infantry
Artillery
Communications
Band
Other

Please answer the questions about <u>one official military group you are CURRENTLY PART OF</u> with <u>APPROXIMATELY 20-200 MEMBERS</u> (e.g., your current program, class, unit, etc.)

How long have you been part of <u>the current military group of approximately 20-200 members</u> <u>which you have chosen</u>, in years and months?

\_\_\_\_\_ years; and \_\_\_\_\_ months

Please check the box indicating how much you agree with these statements about **the current military group of approximately 20-200 members which you have chosen**:

	1 Strongly Disagree	2 Moder- ately Disagree	3 Disagree a Little	4 Neither Agree nor Disagree	5 Agree a Little	6 Moder- ately Agree	7 Strongly Agree
When I am with other members of my military group, I feel included. I have close bonds with members of my military group.							
I feel like an outsider in my military group.							
I feel as if people in my military group do not care about me.							

I feel accepted by others in my military group.				
Because I do not belong, I feel distant during service with my military group.				
I feel isolated from the rest of my military group.				
I have a sense of belonging in my military group.				
When I am with members of my military group, I feel like a stranger.				
I have a place at the table with others from my military group.				
I feel connected with others in my military group.				
Members of my military group do not involve me in their plans.				

Please Please check the box indicating how much you agree with these statements about **the current military group of approximately 20-200 members which you have chosen**:

	1	2	3	4	5
	Strongly	Disagree	Neither	Agree	Strongly
	Disagree	Somewhat	Agree nor	Somewhat	Agree
			Disagree		
The members of this military group					
are cooperative with each other.					
The members of this military group					
know they can depend on each other.					
The members of this military group					
stand up for each other.					

How many members are in <u>the current military group of approximately 20-200 members you</u> <u>have chosen</u>, including you? (Please type exact number or estimate):

Including yourself, how many members of <u>the current military group of approximately 20-200</u> <u>members you have chosen</u> are...

- ...Caucasian men? \_\_\_\_\_(Please type exact number or estimate)
- ...Men of another race/ethnicity? \_\_\_\_\_(Please type exact number or estimate)
- ...Caucasian women? \_\_\_\_\_ (Please type exact number or estimate)
- ...Women of another race/ethnicity? \_\_\_\_\_ (Please type exact number or estimate)

\*Note: These four numbers should add up to the total number you typed in above

How confident are you about your above estimates?

□ Not at all confident

□ Slightly confident

□ Moderately confident

□ Very confident

Extremely confident

Including yourself, do you know of any members of <u>the current military group of approximately</u> <u>20-200 members you have chosen</u> who are homosexual or bisexual?

🗖 No

□ Yes, #\_\_\_\_\_ women who are homosexual or bisexual

□ Yes, #\_\_\_\_\_ men who are homosexual or bisexual

How many months have you ever been deployed <u>with the current military group of approximately</u> <u>20-200 members you have chosen</u>?

\_\_\_\_\_ months

Location(s):\_\_\_\_\_

How many months have you ever been deployed <u>with the current military group of approximately</u> <u>20-200 members you have chosen</u>, <u>SPECIFICALLY TO A WAR ZONE</u>? (May overlap with the above question)

\_\_\_\_\_ months

Location(s):\_\_\_\_

Have you ever been threatened, harassed, abused, or discriminated against by other members or leaders **in the current military group of approximately 20-200 members you have chosen** 

(emotionally, physically, or sexually)? (Please check/fill in estimates for all that apply) □ No

□ Yes, threatened #\_\_\_\_\_ times

□ Yes, harassed #\_\_\_\_\_ times

□ Yes, abused #\_\_\_\_\_ times

□ Yes, discriminated against #\_\_\_\_\_ times

What is your sexual orientation?

□ Heterosexual

□ Homosexual

Bisexual

• Other

#### [IF PARTICIPANTS INDICATE THEY ARE HOMOSEXUAL, BISEXUAL, OR OTHER, THEY WERE ASKED THE FOLLOWING QUESTION]

Please check the box indicating how "out" you are about your sexual orientation to other members in the current military group of approximately 20-200 members you have chosen:

 1 = Not "Out" At All (No one in the military group knows about my sexual orientation)
 2 = Somewhat "Out"

(A few people in the military group know about my sexual orientation)

□ 3 = Moderately "Out" (About half of the people in the military group know about my sexual orientation)  $\Box 4 = Mostly "Out"$ 

(Most people in the military group know about my sexual orientation)

□ 5 = Completely "Out" (Everyone in the military group knows about my sexual orientation)

#### [ALL PARTICIPANTS WERE ASKED THE REMAINDER OF THE QUESTIONS]

Do you know of any service member(s) who was/were dishonorably discharged due to sexual orientation? (Please check/fill in all that apply)

No

□ I know of #\_\_\_\_ members who were dishonorably discharged from the military due to sexual orientation

□ I know of #\_\_\_\_ members who were dishonorably discharged <u>from the current military group</u> of approximately 20-200 members I have chosen

Please answer the questions about

THE LEADER YOU MOST OFTEN HAVE CONTACT WITH AND RECEIVE ORDERS FROM in the current military group of approximately 20-200 members you have chosen. (e.g., commander, instructor, senior cadet, etc.)

*Note*: If you are the leader in the current military group you have chosen, please answer the questions about whichever YOU most often have contact with and receive orders from.

What is the <u>title/role of the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen? (e.g., commander, instructor, senior cadet, etc.)

\_\_\_\_\_ (Please type answer)

What is the <u>rank of the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen? (Please type answer)

Please check the box indicating how true you think these statements are about <u>the leader you most</u> <u>often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen:

	1	2	3	4	5
	Not at All	Slightly	Moderately	Very True	Extremely
	True	True	True		True
This leader creates a shared sense in					
my military group that we are working					
together on an important mission.					
This leader acts in ways that make me					
proud to work in my military group.					
This leader sets a good example in my					
military group.					
This leader has a clear vision on the					
future opportunities of my military					
group.					
This leader demonstrates high levels of					
competence in leading my military					
group.					

This leader projects a convincing, powerful, and dynamic presence in my military group.			
This leader provides a good role-model for me to follow in my military group.			
I feel a personal connection with this leader in my military group.			

Please check the box indicating how true you think these statements are about <u>the leader you most</u> <u>often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen:

	1	2	3	4	5	6
	Strongly	Disagree	Somewhat	Somewhat	Agree	Strongly
	Disagree	Disagree	Disagree	Agree	rigice	Agree
This leader makes subordinates	Disagree		Disugree	Ingree		Agree
in my military group feel						
stupid.						
This leader behaves arrogantly						
in my military group.						
This leader treats people						
differently in my military						
group.						
This leader is unpleasant in my						
military group.						
This leader shows violent						
tendencies in my military						
group.						
This leader punishes						
subordinates in my military						
group who make mistakes or						
do not reach set goals.						
This leader uses threats to get						
his/her way in my military						
group.						
This leader puts unreasonable						
demands on subordinates in my						
military group.						
This leader takes the honor of						
subordinates' work in my						
military group.						
This leader puts his/her own						
needs ahead of the group's.						
This leader does not trust						
his/her subordinates in my						
military group.						
This leader does not keep						
promises in my military group.						
This leader does not dare to	ľ	ľ	1		ľ	
confront others in my military						
group.						
This leader does not "show up"						
among subordinates in my						
military group.						

This leader does not show and			
active interest in my military			
group.			
This leader does not "take a			
grip on things" in my military			
group.			
This leader shows insecurity in			
his/her role in my military			
group.			
This leader is bad at structuring			
and planning in my military			
group.			
This leader gives unclear			
instructions in my military			
group.			
This leader behaves in a			
confused manner in my			
military group.			

What is the gender of **the leader you most often have contact with/receive orders from** within the

current military group of approximately 20-200 members you have chosen?

Male

Female

What is the race/ethnicity of <u>the leader you most often have contact with/receive orders from</u> within the current military group of approximately 20-200 members you have chosen?

- □ White/Caucasian
- □ Black/African American
- □ Hispanic
- Asian
- Pacific Islander
- American Indian
- Alaska Native
- □ Multiracial

□ Other (Please specify):

Please check the box indicating how true each statement is for you:

	1	2	3	4	5
	Not at All	Slightly	Moderately	Very True	Extremely
	True	True	True	-	True
If other people don't seem to accept					
me, I don't let it bother me.					
I try hard not to do things that will					
make other people avoid or reject me.					
I seldom worry about whether other					
people care about me.					
I need to feel there are people I can					
turn to in times of need.					
I want other people to accept me.					
I do not like being alone.					
Being apart from my friends for long					
periods of time does not bother me.					

I have a strong "need to belong."			
It bothers me a great deal when I am			
not included in other people's plans.			
My feelings are easily hurt when I feel			
that others do not accept me.			

How did you learn about this survey?

- Email announcement
- □ A friend
- □ Flyer (please specify where you saw the flyer):
- U.S. Military Survey Facebook Group
- □ Other (please specify):

Do you have any comments about your service or about this survey that you would like to tell the researchers?

#### <u>THANK YOU</u> very much for your service and for taking the time to fill out this survey! Your answers will be combined with other participants' answers to help represent the experiences of

service members.

If you are facing any problem—be it chronic pain, anxiety, depression, sleeplessness, anger, disturbing memories of your tour of duty, or even homelessness—free, confidential support is available to you 24 hours a day, 7 days a week, 365 days a year. Below are just some examples of available resources.

Department of Veterans Affairs (VA) Military Crisis Hotline (24 hours/7 days): Free, confidential support for all service members, veterans, or their family or friends Website/Online Chat: <u>http://veteranscrisisline.net/</u> Phone: 1-800-273-8255 (then press 1) Text: 838255 TTY: 1-800-799-4889 (TeleTYpe for deaf/hard of hearing individuals)

Additional Help Options for Service Members, Veterans, and Their Families: <u>http://www.mentalhealth.gov/get-help/veterans/</u>

Milwaukee County Crisis Line (24 hours/7 days): Behavioral Health Division & Mental Health Association Phone: 414-257-7222 TDD: 414-257-6300 (Telecommunications Device for the Deaf)

Additional Suicide Hotlines in Every U.S. State and Many Other Countries: http://www.suicide.org/suicide-hotlines.html

### Appendix C

### U.S. Military Survey: Veteran Version

# This anonymous survey takes about 20 minutes. Feel free to skip questions you are uncomfortable answering.

Which describes your current U.S. military involvement? (Please check one box)
Currently serving
□ Veteran
□ Basic training
□ Reserve Officers' Training Corps (ROTC)
□ Officer Candidate School (OCS)/ Officer Training School (OTS)
□ Military Academy
□ Other (please specify):
What was your branch at the time you left the military? (Please check one box) Army Navy Air Force Marine Corps Coast Guard Other (please specify):
Which described your service at the time you left the military? (Please check one box) Active duty Reserve

Guard

□ Other (please specify):

Where was your permanent station at the time you left the military? (Please type answer)

Please check the box indicating how much you agree with these statements about <u>people outside of</u> <u>the military</u>:

	1 Strongly Disagree	2 Moder- ately Disagree	3 Disagree a Little	4 Neither Agree nor Disagree	5 Agree a Little	6 Moder- ately Agree	7 Strongly Agree
When I am with other people outside of the military, I feel included.							
I have close bonds with family and friends outside of the military.							
I feel like an outsider when outside of the military.							

I feel as if people do not care about me outside of the military. I feel accepted by others outside of the military.				
Because I do not belong, I feel distant during the holiday season outside of the military.				
I feel isolated from the rest of the world outside of the military.				
I have a sense of belonging outside of the military.				
When I am with other people outside of the military, I feel like a stranger.				
I have a place at the table with others outside of the military.				
I feel connected with others outside of the military.				
Friends and family outside of the military do not involve me in their plans.				

What is your age? (Please type the number)

What is your gender?

Male
Female

What is your race/ethnicity?
White/Caucasian
Black/African American
Hispanic
Asian
Pacific Islander
American Indian
Alaska Native
Multiracial
Other (please specify):

What is your marital status? (Please check all that apply)
<ul><li>Single</li><li>In a committed relationship</li></ul>
<ul> <li>Married</li> <li>Divorced</li> </ul>
□ Separated
□ Widowed
Are you in school?
(Please check all that apply) □ Not in school
□ In school full time
□ In school part time
Do you have any children?
(Please check all that apply)
□ No □ Yes, # children
Do you have any mental health, alcohol, or drug problem(s)?
□ No □ Yes, (please specify):
How long did you serve in the military, in years and months? (If you left and re-entered service,
please include all periods of service in this total.) years; and
months
What were your period(s) of service? (Please check all that apply)
• World War II
<ul> <li>Korean War</li> <li>Vietnam Era</li> </ul>
Persian Gulf War
□ OEF/OIF/OND
□ Other
What was the last year of your military service? (Please type year)

Were you dishonorably discharged?

- Not dishonorably discharged
   Dishonorably discharged due to my sexual orientation
   Dishonorably discharged for another reason

Were you ever deployed?

Deployment #1: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
Deployment #2: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
Deployment #3: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
Deployment #4: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)
Deployment #5: Location: Length of Deployment (in months): months In which year (or years) did this deployment take place? (e.g., 2011-2012)

Additional Deployment(s):

Please check the box to answer the following questions:

	1	2	3	4	5
Did you ever go on combat patrols or	No	1-3 times	4-12 times	13-50	51 times or
have other very dangerous duty?				times	more
Were you ever under enemy fire?	Never	Less than 1	1-3 months	4-6 months	7 months
		month			or more
Were you ever surrounded by the	No	1-2 times	3-12 times	13-25	26 times or
enemy?				times	more
What percentage of the members in	None	1-25%	26-50%	51-75%	76% or
your unit were killed (KIA), wounded					more
or missing in action (MIA)?					
How often did you fire rounds at the	Never	1-2 times	3-12 times	13-50	51 times or
enemy?				times	more
How often did you see someone hit by	Never	1-2 times	3-12 times	13-50	51 times or
incoming or outgoing rounds?				times	more
How often were you in danger of being	Never	1-2 times	3-12 times	13-50	51 times or
injured or killed (i.e., pinned down,				times	more
overrun, ambushed, near miss, etc.)?					
How often did you see refugees who	Never	1-2 times	3-12 times	13-50	51 times or
had lost homes or belongings?				times	more

How often did you see civilians who	Never	1-2 times	3-12 times	13-50	51 times or
had been severely wounded or				times	more
disfigured?					
How often did you see detainees or	Never	1-2 times	3-12 times	13-50	51 times or
prisoners of war?				times	more
How often did you take care of	Never	1-2 times	3-12 times	13-50	51 times or
someone who was wounded?				times	more
How often did you see dead bodies?	Never	1-2 times	3-12 times	13-50	51 times or
				times	more
Were you ever hospitalized due to	Never	Once	Twice	Three	Four times
illness or injury?				times	or more
Were you ever a prisoner of war	Never	Less than 1	1-3 months	4-6 months	7 months
(POW)?		month			or more

What was your rank at the time you left the military? (Please type answer)

What was your military job at the time you left the military (e.g., MOS, Rate, or Air Force Specialty)? (Please type job title):

Please answer the questions about <u>one official military group you were part of AT THE TIME</u> <u>YOU LEFT THE MILITARY with APPROXIMATELY 20-200 MEMBERS (e.g., your last unit, company, platoon, flight, squadron, vessel, etc.)</u>

What is **your last military group of approximately 20-200 members which you have chosen** to answer the questions? (e.g., your last unit, company, platoon, flight, squadron, vessel, etc.)? (Please type answer)

How long were you part of **your last military group of approximately 20-200 members which you have chosen**, in years and months?

\_\_\_\_\_ years; and

\_\_\_\_\_ months

Please check the box indicating how much you agree with these statements about **your last military group of approximately 20-200 members which you have chosen**:

	1 Strongly Disagree	2 Moder- ately Disagree	3 Disagree a Little	4 Neither Agree nor Disagree	5 Agree a Little	6 Moder- ately Agree	7 Strongly Agree
When I was with other members of my military group, I felt included.							
I had close bonds with members of my military group.							
I felt like an outsider in my military group.							

I felt as if people in my military group did not care about me.				
I felt accepted by others in my military group.				
Because I did not belong, I felt distant during service with my military group.				
I felt isolated from the rest of my military group.				
I had a sense of belonging in my military group.				
When I was with members of my military group, I felt like a stranger.				
I had a place at the table with others from my military group.				
I felt connected with others in my military group.				
Members of my military group did not involve me in their plans.				

Please check the box indicating how much you agree with these statements about **the last military group of approximately 20-200 members which you have chosen**:

	1 Strongly Disagree	2 Disagree Somewhat	3 Neither Agree nor Disagree	4 Agree Somewhat	5 Strongly Agree
The members of this military group					
were cooperative with each other.					
The members of this military group					
knew they could depend on each					
other.					
The members of this military group					
stood up for each other.					

How many members were in <u>the last military group of approximately 20-200 members you have</u> <u>chosen</u>, including you?

(Please type exact number or estimate):

Including yourself, how many members of <u>the last military group of approximately 20-200</u> <u>members you have chosen</u> were...

- ...Caucasian men? \_\_\_\_\_ (Please type exact number or estimate)
- ...Men of another race/ethnicity? \_\_\_\_\_(Please type exact number or estimate)
- ...Caucasian women? \_\_\_\_\_ (Please type exact number or estimate) ...Women of another race/ethnicity? \_\_\_\_\_ (Please type exact number or estimate)

\*Note: These four numbers should add up to the total number you typed in above

How confident are you about your above estimates?

- □ Not at all confident
- □ Slightly confident
- □ Moderately confident
- □ Very confident
- Extremely confident

Including yourself, did you know of any members of <u>the last military group of approximately 20-</u> 200 members you have chosen who are homosexual or bisexual?

🗖 No

□ Yes, #\_\_\_\_\_ women who were homosexual or bisexual

□ Yes, #\_\_\_\_\_ men who were homosexual or bisexual

Which best describes the last military group of approximately 20-200 members you have chosen?

- □ Transport/Mechanic
- Medical
- Police
- Construction Engineers
- Combat Engineers
- □ Quartermaster/Supply/Cooks
- □ Infantry
- □ Artillery
- **Communications**
- Band

□ Other

How many months were you ever been deployed <u>with the last military group of approximately 20-</u>200 members you have chosen?

\_\_\_\_\_ months

Location(s):\_\_\_\_\_

How many months were you ever been deployed <u>with the last military group of approximately 20-</u> 200 members you have chosen, <u>SPECIFICALLY TO A WAR ZONE</u>? (May overlap with the above question)

months

Location(s):\_\_\_\_\_

Were you ever been threatened, harassed, abused, or discriminated against by other members or leaders in the last military group of approximately 20-200 members you have chosen

(emotionally, physically, or sexually)? (Please check/fill in estimates for all that apply) □ No

□ Yes, threatened #\_\_\_\_\_ times

□ Yes, harassed #\_\_\_\_\_ times

□ Yes, abused #\_\_\_\_\_ times

□ Yes, discriminated against #\_\_\_\_\_ times

What is your sexual orientation?

Heterosexual

Homosexual

Bisexual

Other

# [IF PARTICIPANTS INDICATE THEY ARE HOMOSEXUAL, BISEXUAL, OR OTHER, THEY WERE ASKED THE FOLLOWING QUESTION]

Please check the box indicating how "out" you are about your sexual orientation to other members in the last military group of approximately 20-200 members you have chosen:

 $\Box 1 = \text{Not "Out" At All}$ 

(No one in the military group knew about my sexual orientation)

 $\square 2 =$  Somewhat "Out"

(A few people in the military group knew about my sexual orientation)

- □ 3 = Moderately "Out" (About half of the people in the military group knew about my sexual orientation)
- $\Box 4 = Mostly "Out"$

(Most people in the military group knew about my sexual orientation)

□ 5 = Completely "Out" (Everyone in the military group knew about my sexual orientation)

### [ALL PARTICIPANTS WERE ASKED THE REMAINDER OF THE QUESTIONS]

Did you know of any service member(s) who were dishonorably discharged due to sexual orientation? (Please check/fill in all that apply)

No

□ I know of #\_\_\_\_ members who were dishonorably discharged from the military due to sexual orientation

□ I knew of #\_\_\_\_ members who were dishonorably discharged <u>from the last military group of</u> <u>approximately 20-200 members I have chosen</u>

Please answer the questions about

# THE LEADER YOU MOST OFTEN HAD CONTACT WITH AND RECEIVED ORDERS FROM

#### in the last military group of approximately 20-200 members you have chosen.

(e.g., platoon commander, battalion commander, squad leader, senior enlisted)

<u>Note</u>: If you were the leader in the last military group you have chosen, please answer the questions about whichever YOU most often had contact with and received orders from.

What was the <u>title/role of the leader you most often had contact with/take orders from</u> within the last military group of approximately 20-200 members you have chosen? (e.g., commanding officer, senior enlisted, etc.)

(Please type answer)

Please check the box indicating how true you think these statements were about <u>the leader you most</u> <u>often had contact with/received orders from</u> within the last military group of approximately 20-200 members you have chosen:

	1	2	3	4	5
	Not at All	Slightly	Moderately	Very True	Extremely
	True	True	True		True
This leader created a shared sense in					
my military group that we were					
working together on an important					
mission.					
This leader acted in ways that made me					
proud to work in my military group.					
This leader set a good example in my					
military group.					
This leader had a clear vision on the					
future opportunities of my military					
group.					
This leader demonstrated high levels of					
competence in leading my military					
group.					
This leader projected a convincing,					
powerful, and dynamic presence in my					
military group.					
This leader provided a good role-					
model for me to follow in my military					
group.					
I felt a personal connection with this					
leader in my military group.					

Please check the box indicating how true you think these statements are about <u>the leader you most</u> <u>often had contact with/received orders from</u> within the last military group of approximately 20-200 members you have chosen:

	1	2	3	4	5	6
	Strongly	Disagree	Somewhat	Somewhat	Agree	Strongly
	Disagree	-	Disagree	Agree	-	Agree
This leader made subordinates						
in my military group feel						
stupid.						
This leader behaved arrogantly						

in my military group.					
This leader treated people		<u> </u>	<u> </u>	<u> </u>	
differently in my military					
group.					
This leader was unpleasant in					
my military group.					
This leader showed violent					
tendencies in my military					
group.					
This leader punished					
subordinates in my military					
group who made mistakes or					
did not reach set goals.					
This leader used threats to get					
his/her way in my military					
group.					
This leader put unreasonable					
demands on subordinates in my					
military group.					
This leader took the honor of	 				
subordinates' work in my					
military group.					
This leader put his/her own					
needs ahead of the group's.					
This leader did not trust his/her					
subordinates in my military					
group.					
This leader did not keep					
promises in my military group.					
This leader did not dare to					
confront others in my military					
group.					
This leader did not "show up"					
among subordinates in my					
military group.					
This leader did not show and		<u> </u>			
active interest in my military					
group.					
This leader did not "take a grip					
on things" in my military					
group.					
This leader showed insecurity					
in his/her role in my military					
group. This leader was bad at					
structuring and planning in my					
military group.					
This leader gave unclear					
instructions in my military					
group.					
This leader behaved in a					
confused manner in my					
military group.					

What was the gender of <u>the leader you most often had contact with/received orders from</u> within the last military group of approximately 20-200 members you have chosen? Male
Female

How old were you **at the end of your military service**? (Please type number):

What was your marital status at the end of your military service?

(Please check all that apply)

□ Single

□ In a committed relationship

□ Married

Divorced

□ Separated

□ Widowed

Were you in school **at the end of your military service**? (Please check all that apply)

□ Not in school

□ In school full time

□ In school part time

Did you have any children at the end of your military service?

(Please check all that apply)

🗖 No

□ Yes, #\_\_\_\_ children

Did you have any mental health, alcohol, or drug problem(s) **at the end of your military service**?

□ Yes, (please specify):

	1 Not at All	2 Slightly	3 Moderately	4 Very True	5 Extremely
	True	True	True		True
If other people don't seem to accept					
me, I don't let it bother me.					
I try hard not to do things that will					
make other people avoid or reject me.					
I seldom worry about whether other					
people care about me.					
I need to feel there are people I can					
turn to in times of need.					
I want other people to accept me.					
I do not like being alone.					
Being apart from my friends for long					
periods of time does not bother me.					
I have a strong "need to belong."					
It bothers me a great deal when I am					
not included in other people's plans.					
My feelings are easily hurt when I feel					
that others do not accept me.					

Please check the box indicating how true each statement is for you:

How did you learn about this survey?

- Email announcement
- □ A friend

□ Flyer (please specify where you saw the flyer):

- U.S. Military Survey Facebook Group
- □ Other (please specify):

Do you have any comments about your service or about this survey that you would like to tell the researchers?

#### **THANK YOU** very much for your service and for taking the time to fill out this survey!

Your answers will be combined with other participants' answers to help represent the experiences of service members.

If you are facing any problem—be it chronic pain, anxiety, depression, sleeplessness, anger, disturbing memories of your tour of duty, or even homelessness—free, confidential support is available to you 24 hours a day, 7 days a week, 365 days a year. Below are just some examples of available resources.

Department of Veterans Affairs (VA) Military Crisis Hotline (24 hours/7 days): Free, confidential support for all service members, veterans, or their family or friends Website/Online Chat: <u>http://veteranscrisisline.net/</u> Phone: 1-800-273-8255 (then press 1) Text: 838255 TTY: 1-800-799-4889 (TeleTYpe for deaf/hard of hearing individuals)

Additional Help Options for Service Members, Veterans, and Their Families: <u>http://www.mentalhealth.gov/get-help/veterans/</u>

Milwaukee County Crisis Line (24 hours/7 days): Behavioral Health Division & Mental Health Association Phone: 414-257-7222 TDD: 414-257-6300 (Telecommunications Device for the Deaf)

Additional Suicide Hotlines in Every U.S. State and Many Other Countries: http://www.suicide.org/suicide-hotlines.html