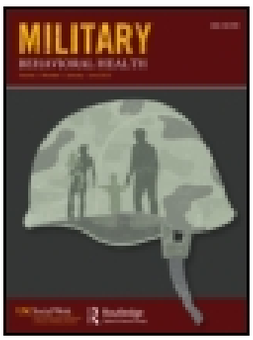

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Group Perceptions of Acceptance of Racial/Ethnic, Sexual and Gender Minorities in the United States Military

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ABSTRACT

Recruitment of soldiers from diverse backgrounds has increasingly become a priority for the U.S. military. Although there has been success in recruiting a more diverse and representative military workforce, perceptions of acceptance of minority military personnel remains underexplored. The present study sought to measure perceptions of acceptance among active-duty military personnel with diverse backgrounds by comparing perceived levels of acceptance both in and outside minority group membership among racial and ethnic, gender, and sexual minority-identifying participants. Results suggest members of minority groups tended to perceive lower acceptance of both their minority group and other minority groups compared with their perceptions of acceptance of majority groups. In particular, White, heterosexual, cisgender males tended to perceive minority groups as more accepted than those in minority groups perceived themselves. These results suggest the implementation of programs designed to improve workplace climate and awareness of diversity and equity issues may be beneficial.

KEYWORDS

Military; acceptance; diversity; workplace climate

Introduction

Recruitment of soldiers from socially marginalized groups, including women, racial and ethnic minorities, and sexual and gender minorities, has increasingly become a priority for the U.S. military in an effort to maintain a socially representative force (Armor & Gilroy, 2010; Hajjar, 2010; Kamarck, 2015). Diversity in the armed forces provides opportunities for representation of various perspectives, which is thought to increase the ability to interact successfully with different groups of people at home and abroad (Hajjar, 2010). Although the recruitment of solders from socially marginalized groups is a contemporary goal of the U.S. military, past exclusionary policies may affect current perceptions of acceptance among socially marginalized groups.

Military integration of socially marginalized groups

A 2015 Congressional Research Service report outlined the integration of socially marginalized groups in the armed forces and provided an overview of issues affecting three social groups (racial, gender, and sexual minorities) that have experienced discriminatory policies in the military (Kamarck, 2015). Racial minorities have been recruited or drafted into the military as far back as the Revolutionary War (MacGregor, 1981). Although racial minorities were permitted to join the military, the purpose of recruitment was growing the armed forces rather than establishing a socially representative force (Kamarck, 2015). Racial minorities experienced segregation following the Civil War lasting until the mid-20th century. During the wars in Korea and Vietnam, concerns about the mistreatment and inequality of racial minority service members continued, with evidence suggesting Black service members were deliberately placed in higher-risk positions compared with their White counterparts (Binkin & Eitelberg, 1982). Concerns about the treatment of and opportunities for racial minorities continue today. Researchers have highlighted the disproportionate rates of disciplinary

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action toward Black service members compared with their White counterparts as an example of continued racial bias (Kamarck, 2015).

Similar to racial minorities, women's involvement in the U.S. military dates back to the nation's founding, although the occupational roles women were permitted to perform were limited to medical or clerical roles. Women were extended the right to permanently join the armed forces in 1948 with the Women's Armed Services Integration Act. However, limits to their involvement, including a 2% quota on female enlistment and restriction of available occupational roles, remained under this policy (Kamarck, 2015). Concerns about opportunity and advancement for women continued into the 21st century. For example, women were barred from direct-combat positions until 2013, when the Direct Ground Combat and Assignment Rule was withdrawn (Kamarck, 2015), highlighting the ongoing effort to create an accepting environment for women in the military.

Lesbian, gay, bisexual, and transgender (LGBT) individuals have been informally and formally barred from military service dating back to World War II. Initially, LGBT individuals were not explicitly barred from service, although behavioral characteristics were used to limit LGBT involvement—"homosexual proclivities" and acts of "sexual perversion" were grounds for disqualification from military service (Kamarck, 2015). In 1981, the Department of Defense (DoD) issued a directive stating homosexuality was incompatible with military service and anyone attempting to engage in homosexual activity would be subject to discharge (Pruitt, 2019). In 1994, this directive was rescinded and replaced by the controversial "Don't Ask, Don't Tell" policy, which allowed LGBT service members to join the military but required them to not disclose their sexual identity. This policy was formally revoked in 2010 (Suh, 2019), but scholars have argued that its legacy remains (Castro & Goldbach, 2018). Transgender service members were permitted to openly join the armed forced starting in 2017 under a directive from President Obama signed on July 1, 2016, although this was quickly reversed under the Trump Administration, which reinstituted the ban on transgender individuals diagnosed with gender dysphoria or who have undergone medical gender transition (Downing et al., 2018). The ban has been challenged by the Democratic-held House of Representatives (Dunlap et al., 2020), although the U.S. Supreme Court has lifted injunctions, allowing the ban to continue during litigation.

Although past policies allowed discrimination, the DoD has developed and implemented more recent policies aimed at increasing representation and acceptance while reducing incidents of discrimination and harassment among racial, gender, and sexual minorities (Kamarck, 2015). Examples include the creation of the Military Leadership Diversity Commission, tasked with creating uniform standards and definitions of diversity and inclusion to be implemented throughout the DoD (Kamarck, 2015; Military Leadership Diversity Commission, 2011), and the Military Equal Opportunity Program, which recently revised its policy to include sexual orientation antidiscrimination language (Kamarck, 2015). Although the DoD has implemented policies aimed at reducing discrimination and increasing social representation, little is known about the impact of these policies on levels of acceptance in the armed forces among and between diverse groups of active-duty personnel.

Minority group acceptance

As observed in other workplace settings, recruitment of a diverse workforce alone does not lead to feelings of acceptance among members of minority groups (Chen & Hamilton, 2015; Homan et al., 2010). Acceptance refers to the belief that an individual or group is recognized and valued in a system (Rose et al., 2012). Feelings of acceptance largely depend on perceptions of diversity and the advantages of a diverse workforce (Chen & Hamilton, 2015). A person's perception of acceptance in the workplace affects job satisfaction, employment retention, and intergroup conflict (Jehn et al., 2008; McKay et al., 2007), thereby reducing or eliminating those benefits if acceptance is perceived to be low (Chrobot-Mason & Aramovich, 2013). Indeed, lower perceived acceptance has been shown to result in lower job satisfaction and lower feelings of equity in other workplace settings (Lewis & Pitts, 2017; Moore & Webb, 2000). Additionally, feelings of exclusion have been linked to adverse mental health outcomes including posttraumatic stress among service members, which may persist after military involvement (Olson, 2020). Understanding perceptions of acceptance in the military has the potential to improve intergroup relations; bolster trust toward military leaders, who remain predominantly White, male, and heterosexual (Hajjar, 2010; Office of the Deputy Assistant Secretary of Defense for Military Community & Family Policy, 2017); and contribute to overall psychological well-being of minority group

active-duty service members and veterans (Chrobot-Mason & Aramovich, 2013; Kintzle et al., 2018).

The present study sought to measure perceptions of acceptance among active-duty military personnel from socially marginalized groups (racial, gender, and sexual minorities) compared with those from majority groups (non-Hispanic White, male, and heterosexual). Specifically, we aimed to understand differences in perceptions of acceptance, which has direct implications for integration, productivity, and job satisfaction. Based on previous literature, we hypothesized that members of majority groups would perceive acceptance of minority groups at higher levels than members of minority groups themselves based on previous literature.

Methods

Participants and procedures

Data for this analysis came from the *Improving Acceptance, Integration and Health among LGBT Service Members study*. This study aimed to better understand the unique experiences of LGBT military service members compared with their heterosexual cisgender counterparts. Respondent-driven sampling (RDS) was used to recruit participants. RDS recruitment begins with known members of the population of interest (seeds)—in this case, active-duty military service members. Seeds used their social ties to engage in peer-to-peer recruitment. Initial seeds were selected through the study's expert advisory panel and study staff's personal network contacts and were chosen to represent diverse identity groups, including women and racial and ethnic minorities. As chain recruitment by initial seeds slowed, recruitment was expanded by promoting the study through popular military-related media outlets including blogs, newspapers, and Facebook groups. The study was also promoted at military-related events and on college campuses using flyers and purchased advertising. Each strategy was accompanied with a unique referral code used to monitor and track referral effectiveness. Additional details of the RDS recruitment and enrollment procedures will be reported in a forthcoming article and can be made available upon request.

Recruitment lasted from August 2017 to March 2018. Individuals were eligible to participate if they met the following criteria: active-duty military, spoke English, and willing and able to provide verbal consent. For the LGBT sample, participants were eligible if they self-reported as LGBT. It is important to note that recruitment occurred while transgender service members were permitted to openly serve and as the DoD was developing protocols for transgender service members' integration into the military. Once screened eligible, participants were directed to a secure online survey using the Qualtrics platform, which took approximately 45 minutes to complete. After completing the survey, all participants received unique referral codes to send to other service members. In total, 544 participants completed the survey, of whom 248 identified as LGBT. Participants received a $25 electronic gift card for completing the survey (if the survey was taken off duty during time off, i.e., during a lunch period or before first formation or after last formation of the day) and a $10 electronic gift card for each referral who completed the survey. The study procedures were approved by the institutional review boards of the of the University of Southern California (USC) and the University of California, Los Angeles (UCLA).

Measures

Descriptive characteristics

Sexual orientation was measured using a single item: "What is your sexual identity? (straight/heterosexual, gay/lesbian, bisexual, or sexual orientation not listed; please specify)." Gender identity was assessed using a two-step process, as recommended in prior research (GenIUSS Group, 2014). First, sex assigned at birth was asked using one item: "What sex were you assigned at birth (i.e., what sex is on your birth certificate)? (male or female)." A second item asked: "What is your gender identity? (male, female, transgender male/trans man, transgender female/trans woman, genderqueer/gender non-conforming, or gender identity not listed)." For analysis, gender identity was coded as a binary variable (transgender or cisgender), with the reference group set as cisgender. Age was determined by asking their age in years (continuous). Participants were asked to select their primary racial and ethnic identity. Racial and ethnic identity response options included: Black or African American, Latino or Hispanic, White or Caucasian, Native American or Alaska Native, Asian or Pacific Islander, multiracial, and some other race. Due to few participants who indicated Native American, Alaska Native, Asian, Pacific Islander, multiracial, or some other race, these options were combined into a single "other race" category.

Military characteristics

Participants were asked to indicate in which of the four U.S. military service branches they were currently

Table 1. Intra-class correlations of seed group random effects in generalized linear mixed models.

Dependent variable (Not Adj. for other Fixed Effects)	Variance ratio Seed group in numerator (comparable to ICC)
Length of service	0.11
Gender	0.62
Sexual orientation	0.02
Race	0.18
Branch of service	0.43
Officer status	0.69
Age	0.16
Support trans service	0.02
Trans acceptance	0.18
LGB acceptance	0.06
Female acceptance	0.08
Black acceptance	0.09
Hispanic acceptance	0.03

serving (Air Force, Army, Marine Corps, or Navy). Participants provided their current pay grade, which was used to determine their rank for a binary officer variable (reference group: enlisted). Respondents also reported the number of years they had been serving in the military to the nearest year (continuous).

Minority acceptance

All participants were asked to rate how they perceived acceptance of different groups of people in the military on a 100-point scale where 100 indicated the highest level of perceived acceptance and 0 represented the lowest level of perceived acceptance. Groupings were female; Black or African American; Latino; other racial and ethnic minority; lesbian, gay, and bisexual; and transgender service members.

Transgender acceptance

Due to the ongoing policy debate about transgender service, an additional measure of transgender acceptance was included. Transgender acceptance was measured based on a single question: "Do you support transgender people serving in the United States military?" Responses were dichotomous (yes or no). Transgender participants were not asked this question because their responses were assumed to be affirmative.

Data analysis

To overcome obstacles when analyzing RDS data, we first formed hard-cluster groups to be used as group-level random effects; that is, we traced all individuals to their respective ancestral seed using referral codes and classified them as belonging to a seed-specific cluster group (Gile et al., 2018). The normally distributed random effects allowed us to adjust for possible recruitment dependence at the recruitment-chain level. We used a simple exchangeable covariance structure with common variance for the cluster-group random effect. The cluster group random effects estimate the within- and between-group heterogeneity of the cluster groups, a model-based analogue to design-based inference for cluster samples (Malec & Sedransk, 1985).

Although the data were collected with a RDS procedure, there are two reasons we use a model-based approach instead of a design-based approach for our estimates. First, due to the peer-to-peer nature of RDS, the resulting sample composition may depend critically on the initial recruitment seeds, the respondents' social network, and intraclass correlation. The required conditions for design-based estimates are not likely met, possibly leading to high design effects. Second, our research questions fit in a mixed effects regression context, investigating subgroup differences of perceived minority acceptance. For each of our variables, we computed unadjusted intraclass correlations (Nakagawa et al., 2017) for generalized linear mixed models and observed that the seed-group random effects are not negligible, e.g. 0.62 for gender in table (Table 1). Including random effects allow for partial pooling of information where the variance of our estimates is controlled by the variation among respondents within and between seed groups. The resulting regression coefficients have a conditional interpretation for a typical cluster group; in other words, they are not population averaged (Gile et al., 2018).

We computed model-based estimates of regression relationships in a Bayesian framework, combining information from the sample data and our prior beliefs. This approach reduces computational challenges when several adjustment covariates may lead to problematic separation in logistic regression (Gelman et al., 2008). Moreover, using weak Bayesian priors allows the incorporation of information that rules out unrealistic parameter values. Using Bayesian mixed-effects cumulative logit regression models, we focused on the regression coefficients that describe the relationship between majority or minority status and the minority acceptance measure (Bürkner & Vuorre, 2018).

With this strategy in mind, we placed Cauchy priors with mean 0 and standard deviation 10 on the intercept terms, Cauchy priors with mean 0 and standard deviation 2.5 on the slope parameters, and half-t distributed priors with mean 0, variance 100, and three degrees of freedom on the standard deviation parameters (Gelman et al., 2008). All Bayesian models were fit using the "brms" (Bürkner, 2017) and

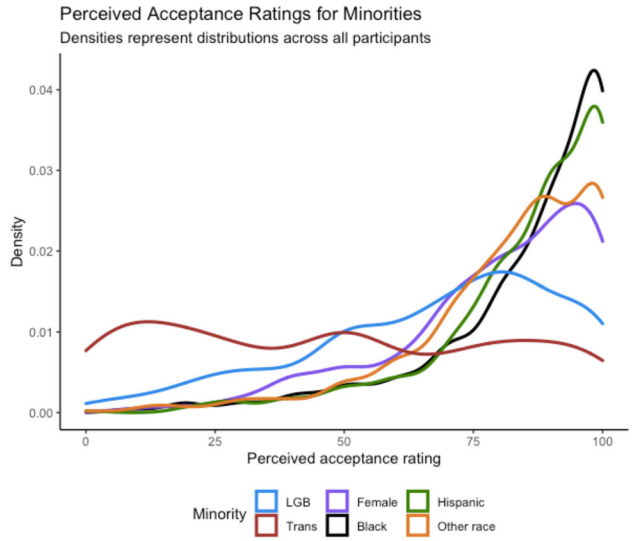

Figure 1. Distribution of perceived acceptance of minority service members among United States active duty military personnel.

"Stan" (Carpenter et al., 2017) packages in R. It should be noted that the proportional odds assumption, necessary for cumulative logit regression modeling, was tested using likelihood ratio tests and deemed appropriate for these data. All models included covariates for gender identity, sexual orientation, age, race, officer status, military branch, length of service, and normally distributed random effects for the RDS clusters.

Members of the majority group (non-Hispanic White, heterosexual, male) were compared with those in minority groups (non-White, Hispanic, female, LGBT) on responses to the minority acceptance measures. The specific reference groups used in each analysis are stated in the results section. The densities of all continuous responses from all participants representing perception of acceptance of each minority group were partitioned into three ordinal groups (Figure 1). The density of the perception of transgender acceptance was naturally trimodal and assigned categories: 0–30 (poorly accepted), 30–70 (sometimes accepted), and 70–100 (well accepted). The other five densities were left-skewed and assigned categories with higher thresholds: 0–60 (poorly accepted), 60–80 (sometimes accepted), and 80–100 (well accepted). In the case of the transgender model, we also included an additional binary covariate, support for open transgender service, and split the transgender category further into trans men and trans women. We had relatively few missing values. Marginally, race had three, support for transgender groups had 18, and length of service had 35 respondents with missing values. To use the complete dataset ($N = 544$), we assumed the missing values were missing at random and used multiple imputation by chained equations via the R package "mice" for all six models (van Buuren & Groothuis-Oudshoorn, 2011). In the Bayesian framework, we summarized our results using posterior means for point estimates and 95% posterior credible intervals to highlight odds ratios that excluded 1.

Results

The following section highlights noteworthy findings from this study that yield 95% Bayesian credible intervals (CIs) that do not contain 1. Results are further presented in Tables 2–5 and Figures 1 and 2. Sample demographics are presented in Table 2. Table 3 presents results from acceptance measures by descriptive characteristic. Tables 4 and 5 present perceptions of acceptance by descriptive and military characteristics respectively. Figure 1 aims to compare and contrast the distributions of perceived acceptance ratings for each of the minority groups, whereas Figure 2 displays a visual representation of Tables 4 and 5.

Perception of female acceptance

Cisgender heterosexual female service members were about 2.3 (95% CI: 1.5–3.5) times more likely to perceive their own acceptance as at least one category less accepted compared with cisgender heterosexual male service members. In addition, transgender female service members were about 2.8 (95% CI: 1.5–5.3) times more likely than cisgender heterosexual male service members to perceive cisgender heterosexual women as at least one category less accepted. LGB service members were about 1.7 (95% CI: 1.1–2.6) times more likely than cisgender heterosexual service members to perceive cisgender heterosexual female service members as at least one category less accepted. Service members in the Marines were about 2.5 (95% CI: 1.2–5.2) times more likely than those in the Army to perceive cisgender heterosexual female service members as at least one category less accepted. For every additional year of service, the odds of perceiving female service members as at least one category more accepted increased by about 7.5% (95% CI: 0.8–14.9%).

Perception of black and other race acceptance

Service members of Black, Hispanic, and other racial and ethnic backgrounds were about 2.2 (95% CI: 1.2–4.0), 2.0 (95% CI: 1.0–3.8), and 2.3 (95% CI: 1.2–4.1) times more likely than White service

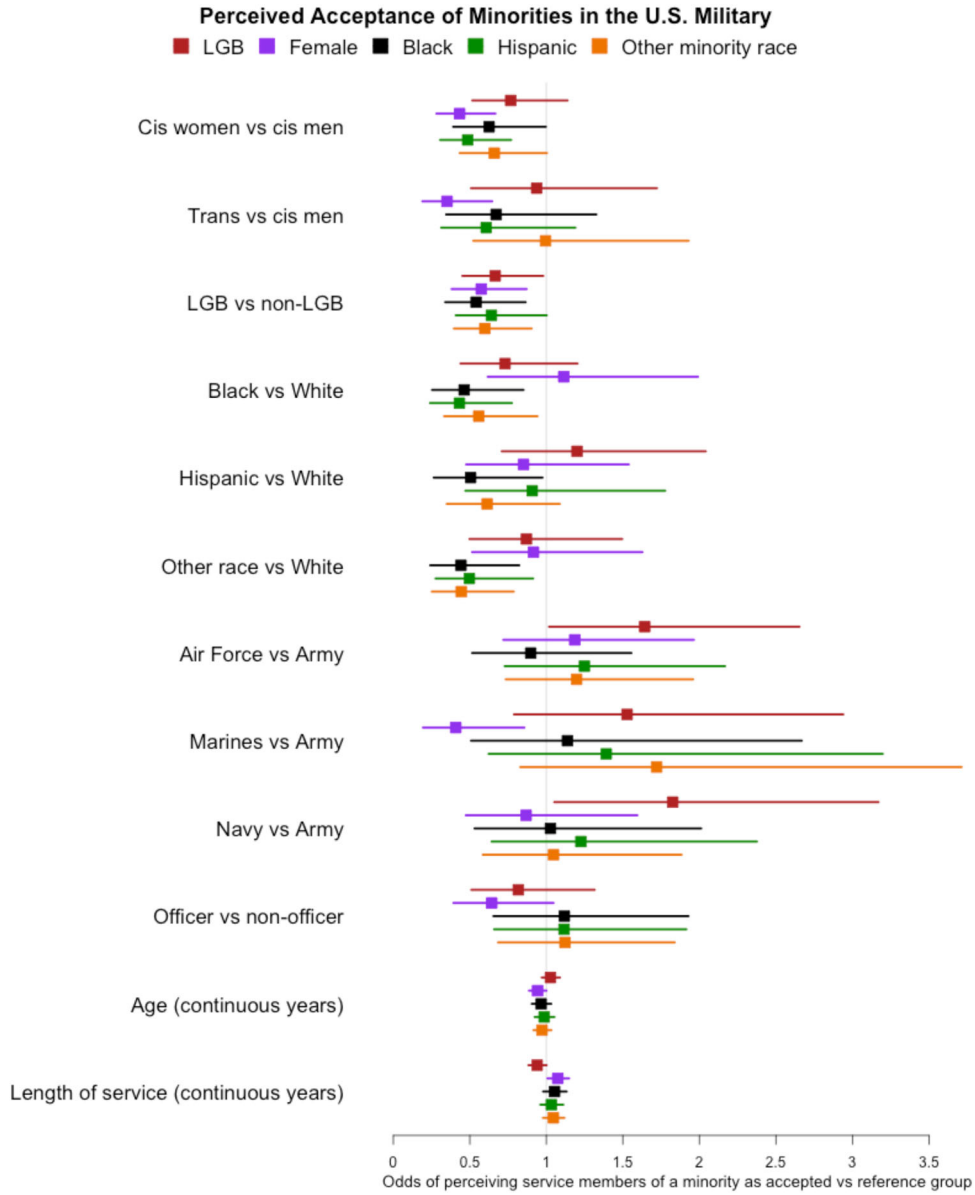

Figure 2. Forest plot of perceived acceptance of minority service members among United States active duty military personnel.

members to perceive Black service members as at least one category less accepted, respectively. Furthermore, cisgender heterosexual female service members were about 1.6 (95% CI: 1.0–2.6) times more likely than cisgender heterosexual male service members to perceive Black service members as at least one category less accepted. LGB service members were about 1.8 (95% CI: 1.2–2.9) and 1.7 (95% CI: 1.1–2.5) times more likely than cisgender heterosexual service members to perceive Black and servicemembers of other minority races as at least one category less accepted, respectively. Black service members and service members of other minority races were about 1.8 (95% CI: 1.1–3.0) and 2.3 (95% CI: 1.3–4.0) times more likely than White service members to perceive service members of other minority races as at least one category less accepted, respectively.

Perception of Hispanic acceptance

Interestingly, Hispanic service members did not perceive their own acceptance to be significantly worse than did White service members. However, Black service members and service members of other races were about 2.3 (95% CI: 1.3–4.2) and 2.0 (95% CI: 1.1–3.6) times more likely than White service members to perceive Hispanic service members as at least one category less accepted, respectively. Cisgender heterosexual female service members were about 2.1

Table 2. Demographics (N = 544).

	Count	Percentage
Gender		
Male	324	59.6
Female	162	29.8
Trans male	32	05.9
Trans female	26	04.8
Sexual orientation		
Heterosexual	316	58.1
LGB	228	41.9
Race		
White	316	58.1
Black	91	16.7
Hispanic	73	13.4
Other	61	11.2
NA	3	0.60
Branch		
Army	226	41.5
Air Force	182	33.5
Marines	52	09.6
Navy	84	15.4
Officer status		
Enlisted	359	66.0
Officer	185	34.0
Support trans service		
Do not support	146	26.8
Support	380	69.9
NA	18	03.3
Age	Mean 27.7, median 26.0, IQR 23–31	
Length of service	Mean 6.2, median 5.0, IQR 2–8, 35 NAs	

(95% CI: 1.3–3.3) times more likely than cisgender heterosexual male service members to perceive Hispanic service members as at least one category less accepted.

Perception of LGB acceptance

Cisgender LGB service members were about 1.5 (95% CI: 1.0–2.2) times more likely than cisgender heterosexual service members to perceive their own acceptance as at least one category less accepted compared with cisgender heterosexual service members. Service members in the Air Force and Navy were about 1.6 (95% CI: 1.0–2.7) and 1.8 (95% CI: 1.1–3.2) times more likely than those in the Army to perceive LGB service members as at least one category more accepted, respectively.

Perception of transgender acceptance

Trans men were 2.3 (95% CI: 1.0–5.1) times more likely to perceive their own acceptance as at least one category less accepted compared with cisgender men; interestingly, there was no significant difference between the perceptions of trans women and cisgender men. However, cisgender female service members were about 1.9 (95% CI: 1.2–3.0) times more likely than cisgender male service members to perceive transgender service members as at least one category less accepted. Cisgender LGB service members were about 3.0 (95% CI: 1.9–4.8) times more likely than cisgender heterosexual service members to perceive transgender service members as at least one category less accepted. For every additional year of service, the odds of perceiving transgender service members as at least one category more accepted decreased by about 8.3% (95% CI: 1.3–16.1%). Most notably, those who supported open transgender service were about 4.3 (95% CI: 2.7–6.9) times more likely to perceive transgender service members as at least one category more accepted compared with those who did not support open transgender service.

Discussion

This study aimed to explore perceptions of acceptance among racial, sexual, and gender minorities serving in the U.S. military. Specifically, based on previous literature, we hypothesized individuals from majority groups (White, cisgender male, and heterosexual) would perceive greater acceptance of minority groups than minority group members perceived themselves. Indeed, results show members of minority groups tended to perceive acceptance of both their minority group and other minority groups as lower compared with perceptions of acceptance among majority groups.

Cisgender heterosexual women reported less perceived acceptance toward their group compared to cisgender heterosexual men, which may be influenced by the number of women currently serving in the armed forces. As of 2018, women accounted for 17% of active-duty personnel, compared with 47% of the civilian workforce (Kamarck, 2015). Additionally, women accounted for approximately 20% of officer positions and less than 10% of the highest leadership positions in the armed forces. The proportion of women in leadership roles may be affected by previous restrictions on women in direct-combat positions (Kamarck, 2015), likely influencing perceptions of acceptance. LGB and transgender service members also perceived women to be less accepted compared with perceptions of women's acceptance by cisgender heterosexual men. Additionally, results suggest perceptions of acceptance for female service members improved as length of service increased. This finding is consistent with previous work on intergroup contact, which posited more interaction time is associated with reduced prejudice (Hewstone & Swart, 2011).

Table 3. Perception of acceptance of minorities in the U.S. military among United States active duty military personnel (N = 544).[1]

	Transgender*		LGB		Female		Black		Hispanic		Other races	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	47.58	50	67.72	71	78.79	82.5	85.17	90	84.94	90	81.78	86
Poorly accepted	[0,30]	210 (38.6%)	[0, 60]	197 (36.2%)	[0, 60]	97 (17.8%)	[0, 60]	57 (10.5%)	[0, 60]	54 (9.9%)	[0, 60]	69 (12.7%)
Sometimes accepted	(30,70]	172 (31.6%)	(60, 80]	163 (30.0%)	(60, 80]	160 (29.4%)	(60, 80]	100 (18.4%)	(60, 80]	117 (21.5%)	(60, 80]	149 (27.4%)
Well-accepted	(70, 100]	162 (29.8%)	(80, 100]	184 (33.8%)	(80, 100]	287 (52.8%)	(80, 100]	387 (71.1%)	(80, 100]	373 (68.6%)	(80, 100]	326 (59.9%)

[1]Method: Bayesian mixed effects cumulative logit models.
*Has different cutoff thresholds; response distribution is trimodal.

Table 4. Perception of acceptance of minorities in the U.S. military by demographic characteristics of United States active duty military personnel (N = 544).

	Transgender*		LGB		Female		Black		Hispanic		Other races	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Age	1.043	(0.982, 1.109)	1.027	(0.970, 1.089)	0.943	(0.887, 1.001)	0.966	(0.905, 1.032)	0.986	(0.924, 1.053)	0.972	(0.916, 1.033)
Gender (Female)	**0.523**	**(0.334, 0.814)**	0.767	(0.516, 1.139)	**0.433**	**(0.282, 0.667)**	**0.626**	**(0.391, 0.997)**	**0.486**	**(0.306, 0.770)**	0.66	(0.434, 1.004)
Gender (Trans)	NA	NA	0.937	(0.508, 1.723)	**0.351**	**(0.190, 0.646)**	0.672	(0.345, 1.327)	0.607	(0.313, 1.190)	0.995	(0.523, 1.930)
Trans men	**0.44**	**(0.195, 0.987)**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trans women	1.394	(0.568, 3.408)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sexual orientation (LGB)	**0.328**	**(0.207, 0.520)**	**0.666**	**(0.451, 0.980)**	**0.575**	**(0.381, 0.871)**	**0.541**	**(0.339, 0.865)**	0.641	(0.408, 1.003)	**0.598**	**(0.396, 0.904)**
Race (Black)	0.679	(0.384, 1.213)	0.73	(0.439, 1.204)	1.114	(0.617, 1.991)	**0.463**	**(0.253, 0.851)**	**0.432**	**(0.240, 0.775)**	**0.558**	**(0.332, 0.942)**
Race/Ethnicity (Hispanic)	1.122	(0.622, 2.019)	1.201	(0.709, 2.042)	0.851	(0.476, 1.539)	**0.505**	**(0.264, 0.975)**	0.908	(0.471, 1.777)	0.613	(0.349, 1.088)
Race (Other)	0.938	(0.515, 1.703)	0.87	(0.498, 1.496)	0.916	(0.515, 1.628)	**0.442**	**(0.241, 0.823)**	**0.497**	**(0.276, 0.914)**	**0.444**	**(0.252, 0.787)**

[1]Method: Bayesian mixed effects cumulative logit models.
*Has different cutoff thresholds; response distribution is trimodal.
Note: Bold values signify $p \leq 0.05$

Table 5. Perception of acceptance of minorities in the U.S. military by military characteristics of Unites States active duty military personnel (N = 544).

	Transgender*		LGB		Female		Black		Hispanic		Other races	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Branch (Air Force)	1.231	(0.723, 2.096)	**1.643**	**(1.018, 2.654)**	1.186	(0.719, 1.964)	0.898	(0.515, 1.556)	1.249	(0.728, 2.168)	1.198	(0.735, 1.959)
Branch (Marines)	1.061	(0.506, 2.242)	1.528	(0.789, 2.940)	**0.408**	**(0.194, 0.856)**	1.138	(0.508, 2.669)	1.392	(0.623, 3.198)	1.721	(0.830, 3.713)
Branch (Navy)	1.319	(0.696, 2.518)	**1.826**	**(1.052, 3.170)**	0.868	(0.474, 1.595)	1.027	(0.531, 2.012)	1.226	(0.643, 2.376)	1.047	(0.585, 1.884)
Officer status (officer)	0.645	(0.384, 1.080)	0.817	(0.510, 1.316)	0.643	(0.393, 1.047)	1.118	(0.654, 1.929)	1.116	(0.659, 1.915)	1.122	(0.685, 1.839)
Length of service	**0.923**	**(0.861, 0.987)**	0.94	(0.883, 1.002)	**1.075**	**(1.008, 1.149)**	1.054	(0.979, 1.133)	1.033	(0.961, 1.111)	1.046	(0.978, 1.118)
Support trans service	**4.308**	**(2.715, 6.866)**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1]Method: Bayesian mixed effects cumulative logit models.
*Has different cutoff thresholds; response distribution is trimodal.
Note: Bold values signify $p \leq 0.05$.

Black service members and those from other races perceived their own acceptance and the acceptance of Hispanic service members as lower than that perceived by White heterosexual men. Additionally, female and LGB service members perceived Black service members as less accepted than that perceived by White heterosexual men, whereas women also perceived less acceptance for Hispanics compared with White heterosexual men. Interestingly, Hispanic service members did not perceive their own acceptance as lesser than that perceived by White heterosexual men. One explanation of this may be past racial policies that targeted Blacks and other races including Asians. Historically, Hispanic service members were considered White and drafted into White unit assignments, whereas Black and some Asian service members were segregated (Kamarck, 2015).

LGB service members perceived their own acceptance as lesser than that perceived by White heterosexual men. However, other minority groups did not perceive LGB service members' acceptance as less than that perceived by White heterosexual men. The military does not collect information on sexual orientation of service members, so it is unclear how many LGB services members openly identify as LGB (Aford & Lee, 2016). LGB people sometimes conceal their sexual orientation, especially in contexts perceived to be unsupportive, which may limit other groups' exposure to LGB people and in turn, affect perceptions of acceptance. Further, our results suggest that differences in perceptions of transgender acceptance were also dissimilar. Most notably, those who supported open transgender service were more likely to report higher perception of acceptance of transgender service members compared with those who did not support transgender service. Given the recruitment period closely followed political statements by the Trump administration seeking to bar future enlistment of transgender individuals, results must be viewed in the context of policy ambiguity.

Overall, our results are consistent regarding perceptions of acceptance in other populations wherein minority groups have been shown to perceive less acceptance compared with majority groups (Sommers & Norton, 2006). Explanations for these differences in perceptions of acceptance are difficult to determine but may result from issues with the integration of minority groups in the U.S. military, differing definitions of acceptance, and minority group members' experiences of stigma and discrimination.

How acceptance is defined may affect perceptions of acceptance. For example, members of majority

groups tend to view acceptance as representation (Chen & Hamilton, 2015). If this is the case for this study's majority groups, it could be presumed that higher perceptions of acceptance may be linked to the increased representation of minority groups in the military experienced during the past decade (Office of the Deputy Assistant Secretary of Defense for Military Community & Family Policy, 2017). Conversely, minority groups tend to view acceptance as inclusion (Chen & Hamilton, 2015), or the belief that individuals or groups are treated equally and encouraged to contribute fairly. Therefore, findings that minority groups perceive themselves as less accepted may highlight issues of fair treatment and collaboration. McNamara et al. (2020) identified the strongest indicator of acceptance in the military may be being selected for promotion. Indeed, lower rates of promotion among minority individuals may mean that members of minority groups feel less valued and therefore, perceive themselves to be less accepted than relative to perceptions by the majority group.

Experiences of stigma and discrimination may also influence perceptions of acceptance. Stigma and discrimination can be detrimental to well-being (Hatzenbuehler et al., 2013). Therefore, past and present treatment of minority groups in the military may help explain these differences. Individuals who have experienced stigma and discrimination tend to be more aware of the presence of social stigma than majority group members who have not directly experienced its effects (Sommers & Norton, 2006). For example, White Americans tend to perceive less racism in American society compared to Black Americans (Pew Research Center, 2016). One explanation for this difference may be a lack of awareness among White Americans of the past and present extent of systemic racism in the United States (Nelson et al., 2013). Based on this explanation, past military policies that institutionalized discrimination toward women, racial and ethnic minorities, and LGBT service members may have long-lasting effects that influence perceptions of acceptance despite more recent policies aimed at increasing diversity and inclusion.

Limitations

This study is not without limitations. First, the data were collected online via self-report, potentially affecting the validity of our results. To minimize participant fatigue and eliminate rote responses to the survey, attention-control measures and encouragement were used (Meade & Craig, 2012). In addition, we assured participants that responses were voluntary and would not be linked with any personal identifying information, which may have curtailed social desirability bias. Due to the sampling strategy, our findings cannot be assumed to be generalizable. Although recruiting hard-to-reach participants by an RDS procedure may favor cost effectiveness, analyzing and generalizing results to the intended target population is difficult. Of the extensive procedures overviewed by Gile et al. (2018), analysts typically must choose between performing network-based weighting adjustments for design-based estimates or fitting dependence structure terms for model-based estimates. Both strategies make critical assumptions about the data's ability to represent the peer-to-peer correlation of the sample recruitment process and how it relates to the target population. We chose the model-based approach based primarily on our research questions and the data limitations previously described. Our results assume the normally distributed random effects adequately adjust for the within-between recruitment chain structure of the data collected via RDS. Our results are conditional for individuals in a typical sampled cluster; they do not have population-averaged interpretations. We used a simple covariance structure for the random effect, whereas more complex structures may better capture correlation within and between recruitment chains. These data were also collected while the Trump administration was publicly disseminating information about reversing previously established policy promoting transgender acceptance in the U.S. military via Twitter and other public sources. These historical events may have contributed to a particularly stressful social environment for transgender and other minority service members, which may have influenced their responses to our survey. All data are cross-sectional, which prevented us from making any causal assertions regarding the drivers of perceived acceptance. Finally, due to limitations of statistical power and a decreased ease in interpretability, individuals with multiple minority identities (e.g., service members who are both Black and transgender) were not exclusively analyzed, which meant we could not account for issues of intersectionality. Future research in this area should consider oversampling individuals with multiple minority identities to explore the relationship between intersectionality and acceptance.

Conclusions

Despite its limitations, our study has important implications for both the military and organizational research focused on promoting diversity in the

workplace. These findings highlight a discrepancy in intergroup perceptions of acceptance in the military. Specifically, members of majority groups (White, heterosexual, and cisgender male) tend to perceive acceptance of minority groups as higher than perceptions of minority group members themselves. These differences highlight issues with the integration of minority groups in the military, varying definitions of acceptance, and the role of stigma and discrimination in perception of acceptance.

Research has shown greater productivity and job satisfaction of a workforce in which all members perceive themselves and their group as accepted (Chrobot-Mason & Aramovich, 2013; Saxena, 2014). Additionally, acceptance has been linked to improved mental health outcomes, including lower rates of posttraumatic stress among former combat personnel (Kintzle et al., 2018). Although the military continues to take steps to improve diversity and inclusion, results from this study suggest additional work is warranted to improve the well-being of service members, particularly those from socially marginalized groups. Recruitment and retention of minority individuals, specifically in leadership positions, is critical because inclusive practices often start with the highest levels of the organization (Sabharwal, 2014; Sessler Bernstein & Bilimoria, 2013). For example, as of 2014, 23% of second lieutenants in the U.S. military were racial and ethnic minorities, with representation declining as rank increased. This trend is similar for female second lieutenants, who make up 17% with declining representation as rank increases (Lim et al., 2014). Including minority group members in decision making (Mor Barak & Daya, 2014), intergroup collaboration (Shore et al., 2011), and robust compliance practices and policies (Shore et al., 2018) are additional strategies shown to promote inclusion and acceptance. These strategies may ultimately contribute to a more cohesive, effective, and healthy military.

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