

Student Attitudes Toward Campus Diversity at the U.S. Naval Academy: Evidence From Conjoint Survey Experiments

John Polga-Hecimovich¹, John M. Carey²
and Yusaku Horiuchi²

Armed Forces & Society

2021, Vol. 47(2) 386-409

© The Author(s) 2019

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0095327X18824665

journals.sagepub.com/home/afs



Abstract

Although the value of diversity—in terms of race, ethnicity, gender, and socioeconomic status—to the U.S. military has been subject to debate, preferences for diversity at educational institutions for the military officers are rarely examined systematically. To address this, we investigate whether midshipmen at the U.S. Naval Academy favor prioritizing diversity in student admissions and faculty recruitment using conjoint analysis, a method suited for estimating attitudes on sensitive and politicized issues. The results show strong preferences in favor of applicants from disadvantaged socioeconomic backgrounds and moderate but still positive preferences for members of traditionally underrepresented racial/ethnic groups in both admissions and faculty recruitment. Midshipmen's preferences with respect to gender are, however, less straightforward. In particular, we find a strong negative preference against gender nonbinary applicants and candidates. Our findings suggest that midshipmen's attitudes reflect both resolved and unresolved debates that resonate throughout the armed forces.

¹ U.S. Naval Academy, Annapolis, MD, USA

² Dartmouth College, Hanover, NH, USA

Corresponding Author:

John Polga-Hecimovich, U.S. Naval Academy, 121 Blake Road, Annapolis, MD 21402, USA.

Email: polgahec@usna.edu

Keywords

campus climate, diversity, inclusion, gender, faculty recruitment, student admissions, Naval Academy, service academies

The Juvenal period of life, when friendships are formed, and habits established that will stick by one; the Youth, or young men from different parts of the United States would be assembled together, and would by degrees discover that there was not that cause for those jealousies and prejudices which one part of the Union had imbibed against another part . . . What, but the mixing of people from different parts of the United States during the War rubbed off these impressions? A century in the ordinary intercourse, would not have accomplished what the Seven years association in Arms did.

—Letter from President George Washington to Alexander Hamilton

Demographic diversity is at the center of campus debates around the country. The issue is especially resonant for the military service academies because the academies are the principal educational institutions for the officers who lead military units, and the diversity of the officer corps, in turn, is widely held to affect the mission readiness of the military as a whole. The value of diversity to the U.S. military, however, is by no means a new topic for debate. In his letter to Hamilton, George Washington was preoccupied with regional divides rather than racial/ethnic or gender ones, but his logic with regard to the benefits of diversity within the military still resonates (September 1, 1796; Ellis, 2000, pp. 960, 961).

With this issue and its historical resonance in mind, we examine the following questions: Do midshipmen at the U.S. Naval Academy (hereafter, USNA or Naval Academy) favor the prioritization of diversity—in terms of race, ethnicity, gender, and socioeconomic status—in student admissions and faculty recruitment? And do preferences on these matters differ across midshipmen by race, ethnicity, gender, socioeconomic status, and political partisanship? Despite their importance, we do not yet have empirically credible answers to these questions in part because of the methodological challenges in eliciting honest opinions on hot-button issues. To address this, we use fully randomized conjoint analysis (Hainmueller, Hopkins, & Yamamoto, 2014) with a sample of midshipmen at USNA.

We are interested in the attitudes of midshipmen on these matters because they are the largest group of stakeholders at USNA. Future admitted students will become their peers and future fellow officers. Future faculty will serve as their instructors, mentors, and evaluators. Moreover, social change at USNA is a microcosm of broader social change and upheaval in the military at large (Bodnar 1999), and an understanding of midshipmen's attitudes should help inform those of military men and women beyond Annapolis.

We are also interested in student attitudes on the value of campus diversity because they are prominent in the arguments of diversity critics from both the left and the right. Berrey (2015, pp. 72, 73) argues that race-conscious admission

policies foster complacency among White students even while these policies could increase the presence of racial and ethnic minorities on campus. From the other side of the ideological spectrum, Supreme Court Justice Samuel Alito expresses skepticism as to whether campus communities, beyond a handful of administrators, even regard diversity as an asset (*Fisher v. University of Texas at Austin et al.*, 2016, pp. 15, 16). Given these conflicting views, understanding what students think about campus diversity is expected to have an important consequence for policy makers, for college administrators, and for anyone concerned about the state of higher education.

The results of our conjoint experiments show strong preferences in favor of applicants from disadvantaged socioeconomic backgrounds in undergraduate admissions. We also find moderate but still positive preferences for members of traditionally underrepresented racial/ethnic groups in both admissions and faculty recruitment. Midshipmen's preferences with respect to gender are, however, less straightforward. In particular, we find a strong negative preference against gender nonbinary applicants and candidates. Our findings suggest that midshipmen's attitudes reflect both resolved and unresolved debates that resonate throughout the armed forces.

Diversity in the Officer Corps

The Case for Diversity

The U.S. military remained racially segregated until President Truman's Executive Order 9981 of July 26, 1948. Desegregation of units followed, and by the time of the Vietnam War, the enlisted ranks were racially integrated, but the officer corps remained overwhelmingly dominated by White men.¹ The absence of minority officers contributed to racial tension, throughout the armed forces, that was widely regarded as presenting a threat to morale and military capacity (Nalty, 1986). By the 1970s, the military implemented policies to prioritize the recruitment and training of minority officers at the military service academies and through Reserve Officers' Training Corps programs, setting goals for a number of minority officers. As a result, the share of minority officers has grown substantially although the proportions of Black, Hispanic, and Native American officers remain lower than those groups' corresponding shares both in the enlisted ranks and the population at large (Becton, 2003, 2013).

By 2003, Supreme Court Justice Sandra Day O'Connor, writing for the majority in *Grutter v. Bollinger*, pointed to diversity in the military academies as evidence of a compelling national interest (U.S. Supreme Court, 2003):

High-ranking retired officers and civilian leaders of the United States military assert that, "[b]ased on [their] decades of experience," a "highly qualified, racially diverse officer corps . . . is essential to the military's ability to fulfill its principle mission to provide national security." (Brief for Julius W. Becton, Jr. et al. as Amici Curiae 27)

O'Connor went on to emphasize that, not only should the officer corps be racially diverse, but that officers should be trained "in a racially diverse setting" in order to provide all officers with valuable experience for the future command of the military's diverse enlisted ranks. Based on the examples of the service academies, and leaning on the brief from an array of high-ranking officers, O'Connor then extended the argument for a compelling societal interest in campus diversity further: "We agree that [i]t requires only a small step from this analysis to conclude that our country's other most selective institutions must remain both diverse and selective" (Becton, 2003; U.S. Supreme Court, 2003).

In one way, it may be important for the military to "keep up" with social change. Although the British military has introduced a number of policies aimed at recruiting and sustaining a more demographically diverse armed forces, including increased numbers of women (Woodward & Winter, 2004), British officials' failure to respond to societal demands for inclusion may undermine the social legitimacy of the armed forces in the United Kingdom (Basham, 2009). There is little evidence that cultural diversity weakens operational unity—at least in multinational forces (Elron, Shamir, & Ben-Ari, 1999)—and other scholarship points to military advantages that diversity may provide. Hajjar (2010), for example, argues that ameliorating cultural diversity issues within the U.S. Armed Forces helps serve the organizational mission by building "cross-cultural competence" in the military. Even in cases where diversity initiatives have fared poorly, analysts have found problems in the implementation of the policy rather than the policy itself.

In short, the diversity of the military service academies has been a linchpin in arguments that campus diversity serves broader societal goals, while diversity in the military at large may promote other worthwhile objectives. For this reason, attitudes toward diversity considerations at the service academies are of particular interest.²

Resistance to Diversity in the Military

Some, however, are resistant to the idea that diversity in the military improves organizational performance or is a desirable goal. A predominant counterargument is the so-called unit cohesion rationale, the notion that unit cohesion, performance, readiness, and morale would decline if certain minority groups were allowed to serve. This argument is based largely on the opposition of rank-and-file military personnel to the inclusion of certain identity groups into military units. The current focus has shifted from race and ethnicity to sex and gender, with opposition to women, homosexuals, and most recently, transgender individuals.

Although a sizable literature exists on the topic, there is little consensus. A number of meta-analyses show a positive relationship between unit cohesion and performance (e.g., Chiochio & Essiembre, 2009; Oliver, Harman, Hoover, Hayes, & Pandhi, 1999), although scholars acknowledge the difficulty in quantifying both the concept of "cohesion" and "performance." Still other meta-analyses specifically find that it is task cohesion, or commitment to the task, which drives this relationship

rather than social cohesion or interpersonal attraction (Beal, Cohen, Burke, & McLendon, 2003; Mullen & Copper, 1994).³ Belkin (2001) also challenges the unit cohesion rationale on the basis of studies from the fields of organizational and military theory that show that whether group members like each other has no bearing on how well organizations perform.

A related argument against integration of certain groups in the military is the medical risk they supposedly pose to group effectiveness. Until a 2016 policy change, being transgender was considered a form of mental illness making the individual unfit to serve (U.S. Department of Defense, 2010). Still another line of argument points to the values of serving military personnel as a reason to oppose service by traditionally excluded groups. The Department of Defense's Military Working Group, for example, cites soldiers' "values and beliefs . . . strongly held and not amenable to change" in opposition to President Clinton's proposal for open service of homosexuals in 1993 (U.S. Department of Defense, Office of the Secretary of Defense, 1993, p. 2).

Opposition along these lines may be prevalent at service academies, too. Like service members at large, academy students are more likely to be men and more likely to be conservative than their counterparts at civilian institutions—traits that tend to correlate with less acceptance of gay or trans rights (Kellermann, 2014). The unique context of USNA thus prompted our investigation of midshipmen's preferences for applicants and faculty candidates with diverse backgrounds.

The U.S. Naval Academy

Historical Context

Secretary of the Navy, George Bancroft, established the Naval School in Annapolis, MD, on October 10, 1845, with a class of 50 students and seven professors. It changed its name to the Naval Academy in 1850 and adopted a curriculum requiring students (referred to as midshipmen, both male and female) to study at USNA for 4 years and to train aboard ships each summer. These midshipmen are naval officers in training, and their academic curriculum consists of required and elective courses similar to those offered at civilian colleges, as well as professional military education. Midshipmen agree to a minimum 5-year active duty service obligation in exchange for their tuition, and upon graduation, most are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps.

USNA faculty is historically composed of roughly equal numbers of officers and civilians, making it unique among service institutes. This tradition dates from 1845, when three of the seven faculty members were civilian teachers (Lewis, Sturdy, & Harrison, 2015), while today about half of the approximately 600 professors are civilians. The bulk of military professors are rotational officers who possess at least a master's degree and usually spend 3 years as faculty, while a small number of officers, known as permanent military professors, possess a

doctoral degree and remain at the Academy until their statutory retirement. All career civilian faculty members possess a PhD degree and either enjoy tenure or the possibility of tenured appointment.⁴

Admissions and Demographics

All U.S. service academies, including USNA, seek diverse student bodies. This includes encouraging applications from women and underrepresented minority racial and ethnic groups, as well as geographic diversity. Women midshipmen were first admitted in 1976, and their share of the student body at USNA has grown considerably. From the class of 2008 to the class of 2021 alone, the share of women midshipmen in each class rose from 20% to 27%. Although this is considerably less than the general population share, it represents substantial increases in the past few decades, particularly in light of limitations on women in terms of combat roles.

Racial strife in the 1970s led the Department of Defense to identify as a goal for the officer corps to resemble the military, and the civilian population, as a whole. Subsequently, increasing racial and ethnic diversity became an operational priority (Dobson, 2015).⁵ Reflecting this, the share of students from underrepresented minority groups at USNA has risen significantly. In the 2008–2017 period, racial or ethnic minorities composed between 22% (2008) and 35% (2014) of each entering plebe (first year) class. However, the breakdown by ethnic group is nonrepresentative of the broader population, with overrepresentation of Hispanics and underrepresentation of African Americans and Asian Americans. The largest minority group is Hispanics, representing between 9% (2008) and 14% (2013) of each entering class, followed by African Americans (3–8% of each class from 2008 to 2017) and Asians (2–7% over the same time period). The Native American and Native Hawaiian or Pacific Islander did not exceed 2% at any point over the course of the decade. Notably, the share of participants answering “multiple response” rose from less than 0.1% in 2008 to more than 9% of all students in 2017 (see Table 1).

The faculty at the Naval Academy is even less diverse in terms of race, ethnicity, and gender than the student body and is not reflective of the broader population (see Table 1). In 2017, women made up 32% of faculty and non-Whites just 15%, of whom 8% were Asian, 3% Black, 4% Hispanic, and less than half a percent Native American.

Method

Conjoint Analysis

Many attitudinal studies of military academy students draw on the annual national Freshman Survey (Comparative Institutional Research Program, 2012; Pryor, Hurtado, Saenz, Santos, & Korn, 2007) or focus on specific issues like attitudes toward women at service academies (Drake, 2006) or acceptance of homosexuality (Ender et al., 2012; Kellermann, 2014). However, there are few service academy-specific

Table 1. U.S. Naval Academy Student and Faculty Demographics.

Category	USNA Faculty	Midshipman
Race/ethnicity		
White	84.7%	64.1%
Asian	8.0%	7.2%
Black	3.2%	6.8%
Hispanic	3.8%	12.0%
Native American	0.3%	0.6%
Multiple		9.2%
Sex		
Men	68.5%	73.1%
Women	31.5%	26.9%
N	314	4,458

Note. The number of midshipmen excludes 52 international students and 53 students that declined to respond.

studies of attitudes toward multiple types of diversity, or that address a methodological issue known as social desirability bias (Edwards, 1953, 1957; for a review, also see Krumpal, 2013). Specifically, a problem with standard surveys is that they may heighten participants’ awareness of sensitive issues, and participants may consciously or unconsciously shape their responses in a way they expect to be viewed more favorably by the researchers or to be consistent with widespread social norms.

To address these problems, we conduct randomized conjoint survey analysis. Marketing researchers have used the various methods of conjoint analysis since 1971 to measure multidimensional preferences underlying an individual’s single choice (e.g., Green & Srinivasan, 1978; Cattin & Wittink, 1982; Green, Krieger, & Wind, 2001). More recently, Hainmueller et al. (2014) integrated conjoint analysis with the potential-outcome framework for causal inference, causing a growth in its application. As a result, political scientists have adopted it to measure preferences for politicians (e.g., Carlson, 2015; Horiuchi, Smith, & Yamamoto, in press), policies (e.g., Bechtel & Scheve, 2013; Horiuchi, Smith, & Yamamoto, 2018), and politicized issues such as immigration (e.g., Hainmueller & Hopkins, 2015).

This approach is particularly suitable to understand opinions on sensitive issues such as attitudes toward diversity. This is because it allows us to conduct a survey about participants’ attitudes toward diversity without ever mentioning diversity or priming participants to focus on diversity-related attributes such as the racial/ethnic, gender, and economic backgrounds of the hypothetical profiles. Instead, we present randomly generated composite profiles made up of a bundle of different attributes—many of which are not diversity related and yet may be important to students. In doing so, we do not signal to participants which attributes and levels we expect to be the most salient and which ones we are most interested in. The specifics of our experiments are detailed below.

The Admissions and Recruitment Experiments

To understand how much some diversity-related attributes are relevant when study participants choose their preferred admissions applicants or faculty candidates, we designed two online surveys through USNA's Office of Institutional Research, Planning, and Analysis: One aimed at measuring attitudes toward student admissions (Study 1) and another aimed at attitudes toward faculty recruitment (Study 2).⁶ We sent brigade-wide (i.e., campus-wide) e-mail invitations, from January 30 to February 10, 2018, to the 4,489 midshipmen enrolled at USNA at the time of our study period.⁷ Every even-numbered participant was directed to Study 1, while every odd-numbered participant to Study 2, with the goal of producing a roughly equal number of responses for each of the two studies. There were 1,154 surveys responses, for a total response rate of 25.7%. The division by study was roughly equal, with 582 completed surveys for Study 1 and 572 for Study 2.

Each exercise began with a brief introduction that allowed the midshipmen to decide whether or not to participate in the survey experiment. Those who proceeded were exposed to eight pairs of hypothetical admissions applicants (Study 1) or faculty candidates (Study 2), each of which had 10 (Study 1) or 9 (Study 2) attributes. The order of attributes was fixed within each experiment. The attribute levels were randomly assigned for each composite profile. Figure 1 illustrates this with a screenshot from Study 1, pairing two hypothetical student applicants.⁸

Above each conjoint table, we inserted the following sentences, where wordings in brackets varied between Study 1 and Study 2: "Which [applicant/candidate] do you think should be given priority in [midshipman admissions/faculty recruitment]? Even if you are not entirely sure, please indicate which of the two you would be most likely to choose." Below the table, we asked the following question: "If you had to choose between them, which of these two [applicants/candidates] should be given priority to be [admitted as a midshipman/hired as a new faculty member] at the USNA?" Each participant then chose either "Applicant 1" or "Applicant 2" in Study 1 and "Candidate 1" or "Candidate 2" in Study 2. This exercise was then repeated seven additional times.

After these conjoint exercises, we asked each participant a series of questions about themselves and their families (see the Supplemental Materials for details). When this was completed, we invited participants to give open-ended feedback to the survey if they desired.

Statistical Analysis

We apply the most updated version of an R package "cjoint" (version 2.1.0) to estimate the average marginal component effects (AMCEs; Hainmueller et al., 2014). The AMCE tells us how much more or less likely a participant is to choose a hypothetical candidate (whether for admission or for recruitment) that includes a particular attribute level compared to a baseline category. For example, if the

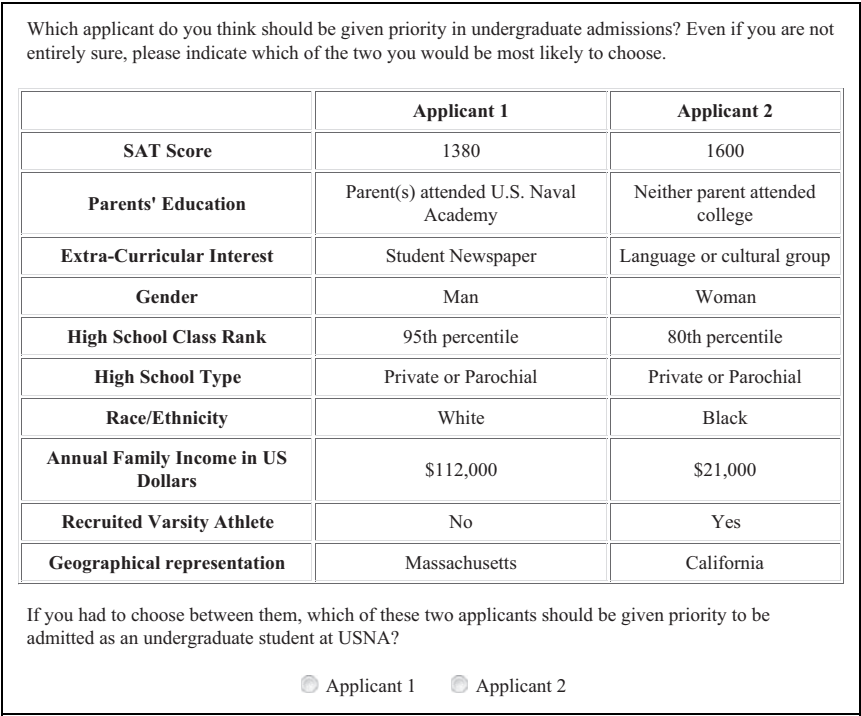


Figure 1. An example of conjoint table—student admissions.

attribute under consideration is gender, the levels are “man,” “woman,” and “nonbinary.” If we use man as our baseline, then the AMCE for woman tells us how much more (if positive) or less (if negative) likely would an admissions applicant or candidate be chosen if her gender is woman rather than man. The effects are averaged across all possible combinations of attribute levels and can be identified nonparametrically (for technical details, see Hainmueller et al., 2014).

Results

Figures 2 and 3 present the AMCEs graphically. A vertical line runs through each figure representing the baseline for each attribute. AMCE estimates are represented as dots, with a dot to the right side of the vertical line at zero indicating a greater likelihood of selection, relative to the baseline, and a dot to the left side indicating a lower likelihood. Horizontal lines intersecting the dots show the 95% confidence interval for each estimate.

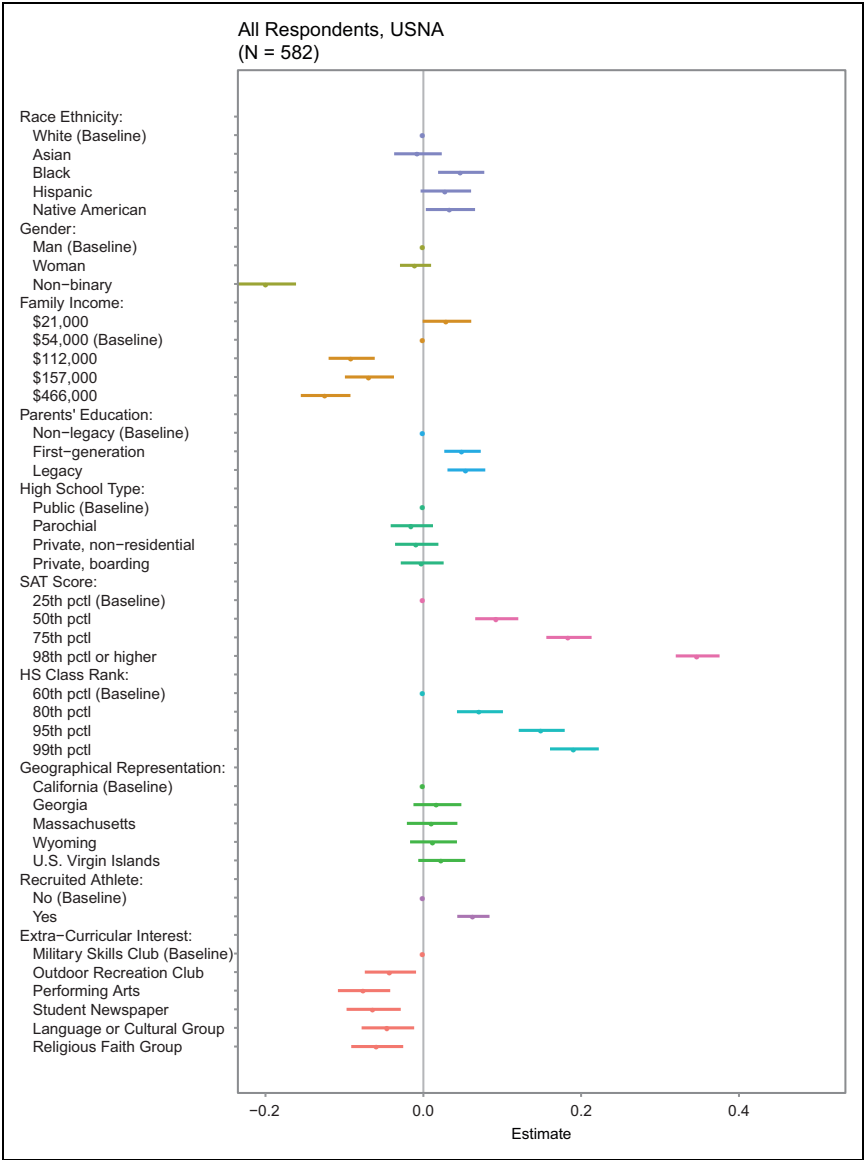


Figure 2. All respondents, U.S. Naval Academy—student admissions.

Preferences Across All Midshipmen

Figure 2 illustrates the estimated preferences across all attributes and levels (relative to the baseline level for each attribute) for all midshipmen participants in the

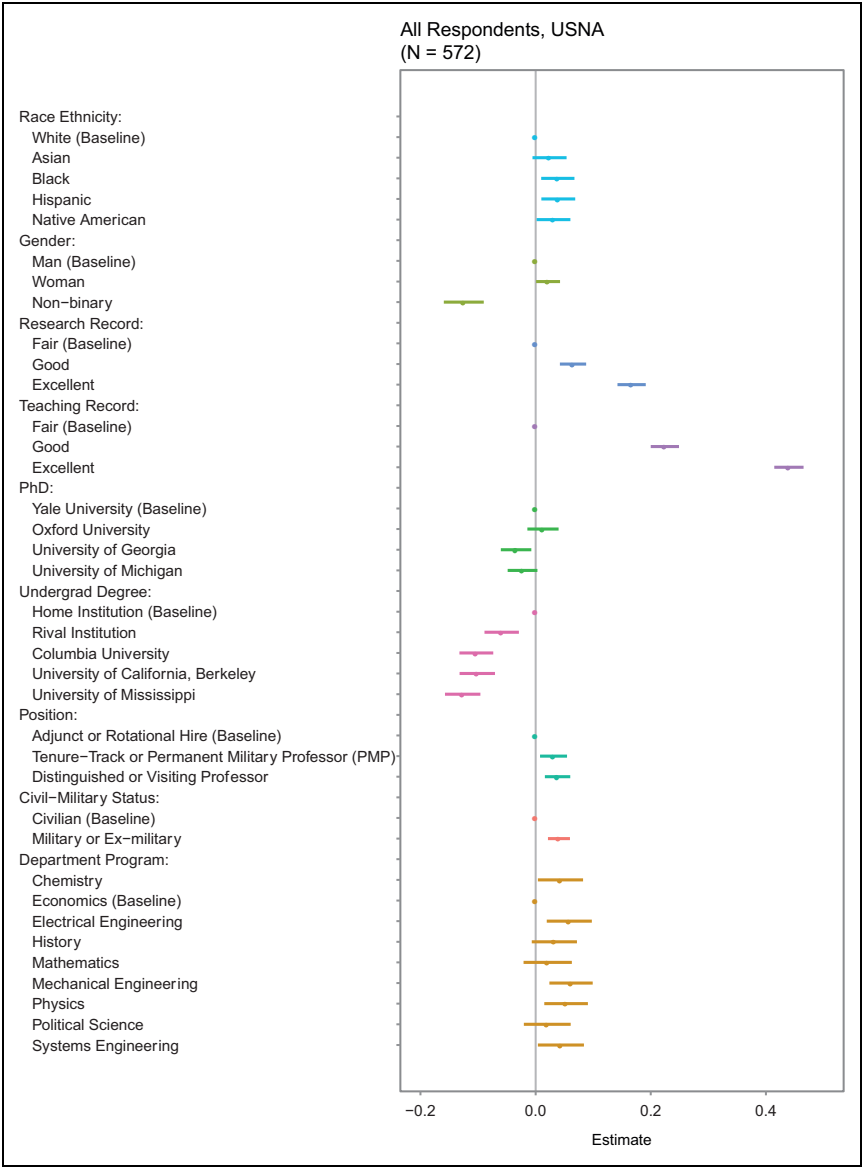


Figure 3. All respondents, U.S. Naval Academy—faculty recruitment.

admissions experiment. Estimates for race/ethnicity are illustrated at the top. Across all participants, relative to a White applicant, a Black applicant is 4.8% points and a Native American applicant is 3.4% points more likely to be selected,

with both estimate statistically significant at the .05 level. The likelihood of selection for an Asian or Hispanic applicant is statistically indiscernible from that of a White applicant.

With respect to gender, the likelihood of selection for a woman applicant is indistinguishable from that of a man, but for a gender nonbinary applicant, the likelihood plummets by 19.9% points—an enormous negative effect.⁹

Socioeconomic status also weighs heavily in midshipmen participants' preferences in admissions, with an applicant whose family's income is above the median, at the top 20, top 10, or top 1 percentile (US\$112,000, US\$157,000, and US\$466,000, respectively), 6.8–12.4% points more likely to be selected than one at the median (baseline, US\$54,000). The preference for an applicant from a family with a lower than the median income (US\$21,000) is larger compared to the baseline, but its effect falls short of statistical significance.

Midshipmen also favor first-generation applicants by 5.0% points relative to applicants whose parents had attended universities other than the Naval Academy, and they favor legacy applicants, by almost the same 5.5% point margin. Applicants' high school type does not factor systematically into preferences.

The attributes with the strongest influence on midshipmen's choices (excluding gender nonbinary status) are the direct markers of academic achievement, SAT score, and high school class rank. Shifting an applicant from the Academy's 25th percentile to its 98th percentile for SAT score increases the likelihood of selection by 34.8% points and moving the class rank from the 60th percentile to the 99th percentile by 19.1% points.

The midshipmen are, in the aggregate, indifferent to geographical region. They give admissions preference to recruited varsity athletes (6.3% points) and prefer applicants with military skills club backgrounds over all other extracurricular interests by between 4.2% and 7.5% points (statistically significant in all cases).

Figure 3 displays the corresponding set of estimated preferences from the faculty recruitment experiment. The results largely mirror those from admissions. With regard to race/ethnicity, we find moderate positive preferences (3.1–3.9% points) for Black, Hispanic, and Native American candidates relative to Whites and a slight positive preference (2.4% points, but not statistically significant) for Asian faculty candidates.

For faculty slots, women candidates are preferred to men. The magnitude of the effect is small, at 2.2% points, but it surpasses conventional statistical significance levels. More interestingly, in the faculty recruitment experiment again, we see strong negative preference toward gender nonbinary candidates, who are 12.5% points less likely to be selected than men.

In recruitment, as in admissions, the attributes with the strongest overall effects are those that reflect scholarly achievement—research quality and, especially, teaching quality. Moving from a fair to an excellent researcher increases a candidate's likelihood of selection by 16.7% points, and improving from a fair to an excellent

teacher boosts prospects by a whopping 44.0% points. Among the midshipmen, quality teaching is clearly the top priority.

Other academic bona fides matter to a faculty candidate's prospects as well, although on a smaller magnitude. Candidates who received their doctorates from Yale (baseline) are slightly more likely (by 2.3–3.4% points) to be selected than candidates from the state universities of Michigan or Georgia, and only the difference between Yale and Georgia is statistically significant. The difference between the two elite universities, Yale and Oxford, is not significant. Midshipmen also prefer undergraduate alumni of their own *alma mater* over those who earned their bachelor's degree at the Air Force Academy (i.e., a rival institution, by 5.9% points), at Columbia or Berkeley (by 10.1 or 10.3% points), or at the University of Mississippi (by 12.7% points). On the margin, they favor candidates who would be hired at higher faculty ranks over adjunct or rotational hires. And, they prefer military or ex-military candidates by 4.0% points over civilians. Finally, they exhibit overall preferences in favor of hiring faculty in science and engineering disciplines relative to the baseline category (economics).

Preferences Across Groups

In addition to estimating preferences across all midshipmen, we break out participants in our experiments into different demographic subgroups by race/ethnicity and by gender and compare preferences between them. The results are presented in the Supplemental Materials. For the most part, preferences are similar across demographic subgroups. Most subgroups have moderate preferences for racial/ethnic minorities (except Asians) and for first-generation applications.¹⁰ They have notably stronger preferences for applicants from low-income families and against applicants from the top income brackets. These differences are often statistically indistinguishable between subgroups, for example, between White and non-White midshipmen. Importantly, we find no subgroup *disfavoring* applicants and candidates from traditionally underrepresented race/ethnicity groups or disadvantaged socioeconomic backgrounds.

But, the preferences for gender diversity show noteworthy differences. Compared to non-White participants, Whites more strongly disfavor women and gender nonbinary applicants. (The corresponding differences are insignificant in the recruitment experiment.) Compared to women, men also disfavor women and gender nonbinary applicants as well as faculty candidates. Women favor applicants and candidates who are women and disfavor those who are gender nonbinary (although not as strongly as men do). These differences between men and women are statistically significant in both experiments. A pronounced finding worth highlighting is that midshipmen across all subgroups disfavor nonbinary applicants for admissions or faculty appointments.

We break midshipmen out by political partisanship (again, we include these figures in the Supplemental Materials). On admissions, both Democrats and

Republicans have nil to moderate positive preferences to diversify the demographic profiles of applicants in terms of their race/ethnicity and socioeconomic backgrounds. Both sets of partisans are statistically indifferent between men and women applicants. We do, once again, however, find a difference in attitudes toward gender nonbinary applicants. As in other breakdowns, both groups disfavor nonbinary applicants, but Republicans do so with greater fervor than Democrats.

The most striking differences by partisanship are found in the faculty recruitment experiment. Republican midshipmen are almost completely indifferent to the race/ethnicity of faculty candidates and also with respect to women as opposed to men. Democratic midshipmen, by contrast, strongly favor faculty candidates from every non-White group and women. Democrats lean against nonbinary candidates, whereas Republicans are strongly negative on nonbinary faculty. On faculty recruitment, Republican and Democratic preferences are statistically distinguishable from each other on every diversity-related characteristic.

Attitudes Toward Gender Nonconformity

On all the results described above, with one notable exception, the preferences of midshipmen line up with preferences among students at other universities (Carey, Clayton, & Horiuchi, 2018). We find overall preferences in favor of undergraduate applicants and faculty candidates underrepresented in university communities. We also see general agreement across groups broken out by demographics or by socioeconomic status but larger differences by partisanship. These patterns among midshipmen are also consistent with the findings from other institutions (Carey et al., 2018). A striking aspect of the Naval Academy results, however, is in midshipmen's far more negative attitudes toward gender nonbinary applicants and faculty candidates.

Attitudes among the midshipmen with regard to gender are of particular interest because debates over gender in the military are persistent, ranging from "don't ask, don't tell" (the former official U.S. policy on the service of homosexuals in the military) and the openness of the armed services to homosexuals, to the integration of women into combat units, to the eligibility of transgender individuals to serve at all. The stark negative preferences among midshipmen toward gender nonbinary applicants and faculty candidates invite exploration of the narrative comments from participants in our survey experiments as a source of further insight into attitudes toward gender and especially toward gender nonconformity.

After completing their conjoint tasks and the follow-up survey on personal characteristics and attitudes, participants were invited to provide open-ended comments on the experience. Of 1,151 who completed either experiment, 194 (17%) left some comment. Of those, 50 (4%) include the words, "gender," "sex," or "(non)binary." We coded these comments into one of five categories: negative toward nonbinary, rejecting the nonbinary category, uncomprehending of nonbinary, explicitly indifferent to gender, and questioning the conjoint or survey instrument.¹¹

Only a few of the comments—two from men, one from a woman—express an explicit negative preference toward nonbinary applicants/candidates: “I firmly believe that USNA should never hire anyone who claims to be so-called ‘Non-Binary’ in gender.” “When applying to a Military Institution ‘Nonbinary’ is not acceptable criteria for admission.” “I would never choose a nonbinary gendered person.”

A closely related set of responses—four in total, all from men—reject the category of gender nonbinary altogether. Although these comments do not explicitly state a position with respect to admissions or faculty recruitment, the critical edge to some of them suggests as much: “Nonbinary is NOT a thing. You are either male or female. Genetics determine gender/sex, not what you want to be that day. It is science. Feelings are not facts.” “There’s only two genders. Thinking otherwise is a mental disorder.”

Next, there are comments—3 of 41 among men, 3 of 9 among women—that indicate confusion with regard to the concept of nonbinary gender. Some of these, however, suggest that the ambiguity is driven by institutional context rather than by individual incomprehension. Some examples: “Nonbinary was hard because I do not really know if that is a thing here.” “Nonbinary poses a hard question in the admissions process to a school like this.” “If a potential applicant’s gender is nonbinary, how can s/he be recruited? That is, how can s/he be on a men or women’s team if they do not identify with one gender.”

All three of these categories—the negative, the category rejections, and the uncomprehending—together amount to only a quarter of all gender-related comments and to 1% of all participants. In the majority (26 of 50) of comments that refer to gender, by contrast, midshipmen indicate that they do not regard gender (and often not race/ethnicity or family socioeconomic background) as salient to admissions or faculty recruitment decisions. Among these, some midshipmen refer specifically to how they made their own decisions in the conjoint exercises: “As far as their race, gender, ethnicity, or any other physical component pertaining to their identity, I couldn’t care.” “I made no decision regarding priority admission based on gender or race.” “My choices were not really based on gender nor race.” Others veer more toward editorializing about whether demographic characteristics should be considered in student admissions and faculty recruitment. Those who comment on this issue uniformly believe they should not: “College background, gender and race should not be considered.” “Gender and race should be nonfactors.” “It does not matter what race, gender or ethnicity to teach here. Midshipmen want competent, honest and fair instructors that enjoy teaching and mentoring.”

Finally, the last category of comments—11 of 50, or 22%—includes critiques and suggestions about the experiments or the survey instrument itself. In some cases, comments on the instrument appear to be motivated mainly by objections on principle to the consideration of race/ethnicity and gender in admissions and faculty recruitment: “The emphasis on racial and gender attributes seemed very out of place to me when considering someone’s qualifications for a teaching position. These

characteristics really should not and do not matter/affect their ability to be a successful instructor.”

In the narrative comments overall, then, a small number of midshipmen express explicit objections to gender nonbinary applicants and candidates, but the most common theme by far is a professed commitment to race-, ethnicity-, and gender-blindness, whether as individual decision rules or as matters of policy principle. Contrary to these comments, which profess a commitment to gender-blindness, but consistent with the proposition that conjoint analysis is effective in eliciting honest opinions, our conjoint experiments reveal midshipmen’s strong *disfavor* toward gender nonbinary applicants and candidates.

Midshipmen’s Attitudes in Broader Context

Ex-Secretary of the Navy, Ray Mabus (2009–2017), said that, “a more diverse force is a stronger force” (NPR, 2015). This opinion is not unanimous, but the results of our conjoint experiments suggest that midshipmen, overall, support admissions and recruitment aimed at fostering diversity at USNA. Nevertheless, our findings also suggest that midshipmen’s attitudes toward diversity vary across attributes. The main diversity issue that challenged the military in the latter half of the 20th century was race (Kauth & Landis, 1996; Sherwood, 2007). Yet, attitudes on race and ethnicity in admissions and faculty recruitment are not highly divisive among current midshipmen. Participants in our experiments express a positive preference not only for lower socioeconomic groups but also for underrepresented racial/ethnic groups in candidate admissions and faculty recruitment. Although Blacks, Hispanics, and Native Americans (and to a somewhat lesser degree, Asians) remain underrepresented at USNA, preferences among midshipmen favor increasing representation of all these groups.

The story is more mixed with respect to gender and runs in the other direction on gender nonconformity. Specifically, there is no overall preference for women in admissions, which perhaps reflects the debate over the full integration of women into the armed services and in combat positions (Miller & Williams, 2001; Thomas & Thomas, 1996). This debate is ongoing. In December 2015, then-Secretary of Defense, Ash Carter, announced the opening of all U.S. military combat positions—including infantry, armor, reconnaissance, and some special operations units—to qualified women (Bradner, 2015). However, on the basis of a Marine Corps study that conclude that male-only units tend to exhibit higher combat effectiveness than gender-integrated units, Marine General Joseph Dunford, the chairman of the Joint Chiefs of Staff, and Marine Corps Commandant General James Amos opposed full integration (U.S. Marine Corps, 2015).¹² In light of the mixed institutional messages coming from Department of Defense, Navy, and Marine Corps leadership regarding the combat role of women, it is not entirely surprising that midshipmen express contradictory preferences toward women undergraduate applicants versus women faculty members.

There is little uncertainty, though, regarding midshipmen attitudes toward gender nonconformity. With respect to gender nonbinary applicants and faculty candidates, nearly every group for which we estimate attitudes has negative preferences that are statistically discernible from zero. This is distinctive from attitudes at other selective universities (Carey et al., 2018) and out of line with midshipmen's attitudes toward other underrepresented groups.¹³ But, midshipmen attitudes on this issue are consistent with the arguments that, with regard to unit cohesion, gender and gender nonconformity are different from race/ethnicity. Of course, arguments for gender diversity in the military are far more recent than arguments for racial integration. And, to an even greater degree than the role of women in combat positions, transgender service is at the center of an active and ongoing policy debate in the United States.

Until recently, federal guidelines banned intersex and nongender conforming individuals in the military on the basis of the supposed medical risks they posed (Department of Defense Instruction No. 6130.03, 2010).¹⁴ In June 2016, the Obama administration prohibited the armed forces from involuntarily separating people who came out as transgender.¹⁵ Yet it is unclear if this change will endure. On July 26, 2017, President Trump issued a string of tweets in which he said he was banning all transgender people from the military "after consultation with my Generals and military experts," citing the "tremendous medical costs and disruption" he believed their inclusion would cause. He then called for a return to the long-standing policy and practice on military service by transgender individuals that was in place prior to Obama's change. Notwithstanding Trump's tweets, the Marine General Joseph Dunford and the Secretary of Defense General James Mattis moved to stop any changes from taking place until a new policy is adopted. Beyond the institutional debate, it also bears mention that the concept of gender nonbinary is relatively new. As such, it is possible that preferences will change relatively quickly in the years ahead, as men's attitudes toward women midshipmen shifted after integration of USNA in 1976 (Durning 1978) and as service members' attitudes toward "don't ask, don't tell" and gays and lesbians in the military have transformed since the 1990s (Estrada & Weiss, 1999; Sinclair, 2009).

Conclusion

Based on conjoint experiments on student admissions and faculty recruitment at USNA, we have examined midshipmen's attitudes toward campus diversity. Although we maintain that the attitudes of students are of inherent interest in understanding campus diversity, we acknowledge that midshipmen do not make decisions on admissions nor on faculty recruitment. Further research, then, should explore the preferences of faculty and administrators at the Naval Academy and, if possible, at other service academies. The conjoint experiments reported on in this article would be easy to adapt for faculty and staff participants and could shed light on prospects

for, and potential obstacles to, further diversifying student and faculty populations going forward.

One might ask whether the results we present apply across the branches of the armed services. There is no reason to believe these findings are unique to USNA, since the U.S. Military Academy, the Air Force Academy, and Coast Guard Academy all draw students from the same basic pool. The possible exception may be the Air Force Academy. Given the prevalence of evangelical Christianity on campus, cadets there may reflect more conservative attitudes (Brady, 2005). Nevertheless, we do not see reason to assume that attitudes would be radically different.

Similarly, evidence from beyond the service academies suggests that student attitudes toward diversity are consistent across institutions rather than particular to specific settings. Some of the authors participated in research that conducted survey experiments analogous to those conducted at the Naval Academy at Dartmouth College, the University of California, San Diego, the University of New Mexico, the University of North Carolina at Chapel Hill, and the University of Nevada, Reno (Carey et al., 2018). The schools vary dramatically in region, student demographics, size, and selectivity, yet preferences on diversity are remarkably consistent within that set for both undergraduate admissions and faculty recruitment. And, with the exception of attitudes toward gender non-conformity, preferences related to diversity among midshipmen are similar to those in this broader set of civilian institutions. In short, the cross-institutional data we have suggests that the results presented in this article are not Naval Academy-specific.

That said, we think that attitudes of students at service academies should be examined not only in the general climate toward diversity among today's students in the United States but also in the specific context. We find that midshipmen preferences for diversity mirror debates within the U.S. Armed Forces. They appear to assimilate preferences that reflect "resolved policy disputes" (e.g., underrepresented racial and ethnic minorities) within the broader military, but with respect to identities that are currently controversial within the military, they are either more circumspect (e.g., women in combat roles) or negatively disposed (e.g., gender nonbinary). If this is the case, then midshipmen preferences may not be static. If or when military leadership sends an unambiguous policy signal, future generations of midshipmen may be inclined to "get on board," so to speak, as they have in the past.

Authors' Note

The views expressed in this article are solely those of the authors and do not represent the views of, or endorsement by, the U.S. Naval Academy, the Department of the Navy, the Department of Defense, or the U.S. government. This research is neither sponsored nor funded by any organization. The complete replication package and supplementary materials are available at the Dataverse site (<https://doi.org/10.7910/DVN/AEA4RW>).

Acknowledgments

The authors would like to thank USNA's Human Research Protection Program for their help in making these surveys possible and for Lou Cox in USNA's Institutional Research, Planning, and Analysis Office for her help in the survey web design and data collection.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Notes

1. In this subsection, we focus on the case for diversity with regard to race/ethnicity because only later did gender diversity issues in the military become politically salient. We will discuss the newer issues on gender diversity in the next subsection.
2. We discuss the broader implications of our findings from U.S. Naval Academy (USNA) in the concluding section.
3. One exception to this generally accepted finding is Wong, Kolditz, Millen, and Potter (2003), although MacCoun, Kier, and Belkin (2006) criticize that study's lack of methodological rigor, which they claim fails to meet social science standards for causal inference.
4. This contractual right distinguishes USNA from the U.S. Military Academy and U.S. Air Force Academy, which do not offer tenure, and the Air War College, which has only sporadically offered it.
5. Like other service academies, USNA also seeks geographical diversity from its student body. Admissions aim for at least one candidate from every congressional district in the United States, and only under exceptional circumstances, do incoming classes fail to represent all 50 states as well as the U.S. territories.
6. USNA Human Research Protection Program (HRPP) approved these studies on November 13, 2017 (USNA Assurance #DoD N-40052 and HRPP Approval #USNA.2017.0043-IR-EM2-A). All responses were anonymous, and data were compiled, deidentified, and stored by the Institutional Research, Planning, and Analysis Office of the Naval Academy.
7. The initial invitation was sent on January 30, 2018, and two follow-up e-mails were sent on February 3 and 7, 2018.
8. See the Supplemental Materials for a sample screenshot from Study 2.
9. We recognize that the inclusion of transgender personnel is contentious within the military, as are other debates related to gender nonconformity. We include "nonbinary" as a level for the gender in consistency with a related set of experiments some of the authors undertook at various other institutions (Carey et al., 2018).
10. We also find preferences for legacy applicants among many subgroups.

11. All 50 gender-related comments are in the Supplemental Materials.
12. The study finds that the male-only infantry units shoot more accurately, can carry more weight, and move more quickly through specific tactical movements. It also concludes that women have higher injury rates than men, including stress fractures that likely result from carrying heavy loads.
13. Midshipmen's negative attitudes toward gender nonbinary applicants and faculty candidates are also out of line with public positions on gender nonconformity taken by many military leaders, including at the level of branch commanders (Lamothe, 2017; Luna, 2018; Vanden Brook, 2017) and by six former Surgeon Generals (Eisenla, 2018), although not with attitudes expressed at the top of the chain of command, including by President Trump (Cooper & Gibbons-Neff, 2018).
14. Despite the formal ban, a 2016 study by the Rand Corporation estimated there are between 1,320 and 6,630 active transgender service members in the U.S. military (Schaefer et al., 2016).
15. The administration also repealed in 2011 the long-standing "don't ask, don't tell" policy, which prohibited gay service members from serving openly, as well as the aforementioned lifting of the ban on women serving in units in ground combat assignments in 2015.

Supplemental Material

Supplemental material for this article is available online.

References

- Basham, V. (2009). Effecting discrimination: Operational effectiveness and harassment in the British Armed Forces. *Armed Forces & Society*, 35, 728–744.
- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology*, 88, 989–1004.
- Bechtel, M. M., & Scheve, K. F. (2013). Mass support for global climate agreements depends on institutional design. *Proceedings of the National Academy of Sciences of the United States of America*, 110, 13763–13768.
- Becton, J. W. (2003). "Consolidated Brief of Lt. Gen. Julius W. Becton, Jr., et al." Amici Curiae at 7-9, Grutter (No. 02-241), Grutter v. Bollinger, 539 U.S. 244 (2003). Retrieved from WestLaw at 2003 WL 1787554.
- Becton, J. W. (2013). "Brief of Lt. Gen. Julius W. Becton, Jr., et al." Amici Curiae (No. 11-345), Fisher v. Texas, 570 U.S. (2013). Retrieved August 10, 2018, from <http://www.scotusblog.com/wp-content/uploads/2016/08/11-345-respondent-amicus-becton.pdf>
- Belkin, A. (2001). The Pentagon's gay ban is not based on military necessity. *Journal of Homosexuality*, 41, 103–119.
- Berrey, E. (2015). *The enigma of diversity: The language of race and the limits of racial justice*. Chicago, IL: University of Chicago Press.
- Bodnar, J. W. (1999). How long does it take to change a culture? Integration at the U.S. Naval Academy. *Armed Forces & Society*, 25, 289–306.

- Bradner, E. (2015, December 3). U.S. military opens combat positions to women. *CNN*. Retrieved August 10, 2018, from <http://cnn.it/1lyKSsd>
- Brady, J. (2005, June 2). Air force academy embroiled in religious controversy. *NPR*. Retrieved September 18, 2018, from <https://www.npr.org/templates/story/story.php?storyId=4676698>
- Carey, J. M., Clayton, K. P., & Horiuchi, Y. (2018). *The hidden consensus on campus diversity*. Unpublished manuscript. New York, NY: Cambridge University Press.
- Carlson, E. (2015). Ethnic voting and accountability in Africa: A choice experiment in Uganda. *World Politics*, 67, 353–385.
- Cattin, P., & Wittink, D. R. (1982). Commercial use of conjoint analysis: A survey. *Journal of Marketing*, 46, 44–53.
- Chiocchio, F., & Essiembre, H. (2009). Cohesion and performance a meta-analytic review of disparities between project teams, production teams, and service teams. *Small Group Research*, 40, 382–420.
- Comparative Institutional Research Program. (2012). The freshman survey—Participation survey. Electronic file. Retrieved August 20, 2018, from <http://heri.ucla.edu/researchers/parthist/TFS.Participation.History.pdf>
- Cooper, H., & Gibbons-Neff, T. (2018, March 24). Trump approves new limits on transgender troops in the military. *New York Times*. Retrieved August 10, 2018, from <https://nyti.ms/2uchW2K>
- Dobson, M. S. (2015). *How to get into a service academy. A step-by-step guide to getting qualified, nominated, and appointed*. Lanham, MD: Rowman and Littlefield.
- Drake, M. J. (2006). Ambivalence at the academies: Attitudes toward women in the military at the Federal Service Academies. *Social Thought & Research*, 27, 43–68.
- Durning, K. P. (1978). Women at the Naval Academy. *Armed Forces & Society*, 4, 569–588.
- Edwards, A. L. (1953). The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. *Journal of Applied Psychology*, 37, 90–93.
- Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. New York, NY: Dryden Press.
- Eisenla, K. (2018, April 25). *Six former surgeons general rebut Pentagon assertions about medical fitness of transgender troops*. Palm Center. Retrieved August 20, 2018, from <https://www.palmcenter.org/six-former-surgeons-general-%E2%80%8B8Bebut-pentagon-assertions-about-medical-fitness-of-transgender-troops/>
- Ellis, J. J. (2000). *Founding brothers: The revolutionary generation*. New York, NY: Alfred A. Knopf.
- Elron, E., Shamir, B., & Ben-Ari, E. (1999). Why don't they fight each other? Cultural diversity and operational unity in multinational forces. *Armed Forces & Society*, 26, 73–98.
- Ender, M. G., Rohall, D. E., Brennan, A. J., Matthews, M. D., Iii, I. S., & Ender, M. (2012). Civilian, ROTC, and military academy undergraduate attitudes toward homosexuals in the U.S. military: A research note. *Armed Forces & Society*, 38, 164–172.

- Estrada, A. X., & Weiss, D. J. (1999). Attitudes of military personnel toward homosexuals. *Journal of Homosexuality*, 37, 83–97.
- Fisher v. University of Texas at Austin et al., 579 U.S. (2016).
- Green, P. E., Krieger, A. M., & Wind, Y. (2001). Thirty years of conjoint analysis: Reflections and prospects. *Interfaces*, 31, S56–S73.
- Green, P. E., & Srinivasan, V. (1978). Conjoint analysis in consumer research: Issues and outlook. *Journal of Consumer Research*, 5, 103–123.
- Hainmueller, J., & Hopkins, D. J. (2015). The hidden American immigration consensus: A conjoint analysis of attitudes toward immigrants. *American Journal of Political Science*, 59, 529–548.
- Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2014). Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis*, 22, 1–30.
- Hajjar, R. M. (2010). A new angle on the U.S. military's emphasis on developing cross-cultural competence: Connecting in-ranks' cultural diversity to cross-cultural competence. *Armed Forces & Society*, 36, 247–263.
- Horiuchi, Y., Smith, D., & Yamamoto, T. (2018). Measuring voters' multidimensional policy preferences with conjoint analysis: Application to Japan's 2014 election. *Political Analysis*, 26, 190–209.
- Horiuchi, Y., Smith, D., & Yamamoto, T. (in press). Identifying voter preferences for politicians' personal attributes: A conjoint experiment in Japan. *Political Science Research and Methods*. Retrieved from <https://doi.org/10.1017/psrm.2018.26>
- Kauth, M. R., & Landis, D. (1996). Applying lessons learned from minority integration in the military. In G. M. Herek, J. B. Jobe, & R. M. Carney (Eds.), *Out of force: Sexual orientation and the military* (pp. 86–105). Chicago, IL: University of Chicago Press.
- Kellermann, M. (2014). Self-selection and opposition to gay rights among military career-seekers. *Politics, Groups, and Identities*, 2, 443–458.
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity*, 47, 2025–2047.
- Lamothe, D. (2017, September 26). Trump wants to ban transgender military troops. His top general feels differently. *The Washington Post*. Retrieved August 10, 2018, from <http://wapo.st/2xDzIIRC>
- Lewis, C. L., Sturdy, H. F., & Harrison, L. (2015). The first academic staff. In T. Cutler (Ed.), *The U.S. Naval Academy. The history* (pp. 10–31). Annapolis, MD: Naval Institute Press.
- Luna, B. (2018, June 29). After two years of open transgender service, consensus from military leadership that inclusive policy works. Palm Center. Retrieved August 10, 2018, from <https://www.palmcenter.org/after-two-years-of-open-transgender-service-consensus-from-military-leadership-that-inclusive-policy-works/>
- MacCoun, R. J., Kier, E., & Belkin, A. (2006). Does social cohesion determine motivation in combat? *Armed Forces & Society*, 32, 646–654.
- Miller, L., & Williams, J. A. (2001). Civil rights vs. combat effectiveness? Military policies on gender and sexuality. In P. D. Feaver & R. H. Kohn (Eds.), *Soldiers and civilians: The*

- civil-military gap and American National Security* (pp. 361–402). Cambridge, England: MIT Press.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115, 210–227.
- Nalty, B. C. (1986). *Strength for the fight: A history of Black Americans in the military*. New York, NY: Free Press.
- National Public Radio. (2015, September 11). Navy secretary believes combat positions should be open to qualified women. *NPR*. Retrieved August 10, 2018, from <https://www.npr.org/2015/09/11/439381272/navy-secretary-ray-mabus-takes-issue-with-marine-combat-study>.
- Oliver, L. W., Harman, J., Hoover, E., Hayes, S. M., & Pandhi, N. A. (1999). A quantitative integration of the military cohesion literature. *Military Psychology*, 11, 57–83.
- Pryor, J. H., Hurtado, S., Saenz, V. B., Santos, J. L., & Korn, W. S. (2007). *The American freshman: Forty year trends, 1966–2006*. Los Angeles: Higher Education Research Institute, University of California.
- Schaefer, A., Iyengar, R., Kadiyala, S., Kavanagh, J., Engel, C., Williams, K., & Kress, A. (2016). *Assessing the implications of allowing transgender personnel to serve openly*. Washington, DC: RAND.
- Sherwood, J. D. (2007). *Black sailor, White Navy: Racial unrest in the fleet during the Vietnam War era*. New York: New York University Press.
- Sinclair, G. D. (2009). Homosexuality and the military: A review of the literature. *Journal of Homosexuality*, 56, 701–718.
- Thomas, P. J., & Thomas, M. D. (1996). Integration of women in the military: Parallels to the progress of homosexuals? In G. M. Herek, J. B. Jobe, & R. M. Carney (Eds.), *Out of force: Sexual orientation and the military* (pp. 65–85). Chicago, IL: University of Chicago Press.
- U.S. Department of Defense. (2010). Medical standards for appointment, enlistment, or induction in the military services. Department of Defense Instruction No. 6130.03. Washington, DC.
- U.S. Department of Defense, Office of the Secretary of Defense. (1993). Summary report of the military working group. U.S. Department of Defense. Retrieved September 20, 2018, from <http://www.dtic.mil/dtic/tr/fulltext/u2/a270060.pdf>
- U.S. Marine Corps. (2015). Marine corps force integration plan: Executive summary. Memorandum. Washington, DC.
- U.S. Supreme Court. (2013). *Grutter v. Bollinger*, 539 U.S. 306 (2013).
- Vanden Brook, T. (2017, July 25). Accept transgender troops, allow them medical treatment, Adm. Mike Mullen tells Congress. *USA Today*. Retrieved August 20, 2018, from <https://usat.ly/2vXL08R>
- Wong, L., Kolditz, T. A., Millen, R. A., & Potter, T. M. (2003). *Why they fight: Combat motivation in the Iraq War*. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College.
- Woodward, R., & Winter, P. (2004). Discourses of gender in the contemporary British Army. *Armed Forces & Society*, 30, 279–301.

Author Biographies

John Polga-Hecimovich is an assistant professor of political science at the U.S. Naval Academy. His research broadly focuses on the effects of political institutions on democratic stability, policymaking, and governance, especially in Latin America.

John M. Carey is the Wentworth professor in the social sciences at Dartmouth College and a member of the American Academy of Arts and Sciences. He is the author of five books and dozens of academic articles on democratic institutions, representation, and political beliefs.

Yusaku Horiuchi is a professor of government and Mitsui professor of Japanese studies at Dartmouth College. His interests include comparative politics and quantitative social science. He published articles in *American Journal of Political Science*, *American Political Science Review*, *Journal of Politics*, *Political Analysis*, *Science Advances*, and *World Politics*, among others.