Student Service Member/Veteran Engagement with University Military-Focused Student Services: A Mixed Methods Study

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Abstract

Student service member/veteran (SSM/V) university enrollment grew exponentially through the 2000s and 2010s. In response, many U.S. universities developed military-focused student services to address SSM/V campus challenges. While research suggests these services are beneficial, few recent studies have examined how often SSM/Vs engage with them across institutions or how engagement may connect to important outcomes. Using social capital theory, this mixed methods study analyzes SSM/V military-focused service engagement frequency, correlations between engagement frequency and campus belonging and institutional satisfaction, and SSM/V perspectives on why they engage and its benefits. Findings suggest SSM/Vs rarely engage, though more frequent engagement significantly associates with belonging and satisfaction. Some SSM/Vs describe how military-focused administrative expertise and social support encouraged them to engage more often, inviting a greater sense of institutional fit and satisfaction. Others, however, describe being too busy, disinterested, or alienated from SSM/Vs and the military experience to engage or see affective benefits.

Keywords Student veterans · Student services · Campus belonging · Institutional satisfaction · Social Capital

Through the 2000s and 2010s, student military service members/veterans (SSM/Vs)—defined as retired/discharged veterans, those on active U.S. military duty, or those in the Reserves or National Guard—were one of the fastest growing groups of adult undergraduates in U.S. universities (Cate et al., 2017; Radford

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et al., 2016).[1] Like veterans who enrolled in large numbers after World War II, post-9/11 SSM/Vs diversify American higher educational institutions (Remenick, 2019). Not only do they bring advanced teamwork, problem-solving, and technical skills, but they are also older, more often disabled, and more often from lower-income backgrounds (e.g., Benbow & Lee, 2025; Durdella & Kim, 2012; Sullivan & Yoon, 2020). Colleges and universities offer many SSM/Vs a smoother re-entry point into civilian life and an opportunity for upward mobility (Kleykamp, 2010). Given the substantial financial support SSM/Vs receive from GI bill expenditures, and these students' national service, their success is important.

Nevertheless, SSM/Vs often encounter health, administrative, and social difficulties on campus that separate them from other adult students. Psychological and physical impairments stemming from military service can lead to struggles with addiction, emotional detachment, and a reluctance to ask for assistance (e.g., Hodges et al., 2024). Many SSM/Vs also face mid-semester deployments, obstacles transferring military credits, complex GI benefit tasks, and academic organizations that operate under a different logic than the military (Rumann & Hamrick, 2010; Vacchi & Berger, 2013). Specifically, SSM/V social interaction on campus can be challenging. SSM/Vs often struggle with alienation and loneliness in universities, encountering socio-communicative barriers and stereotypes that portray them as mentally unstable or violent (Barry et al., 2014). For many SSM/Vs, the university environment is comparatively cold and bereft of the camaraderie and common purpose that marks their military experience (Borsari et al., 2017). This may help explain findings that suggest SSM/Vs have lower feelings of campus belonging as well as lower levels of satisfaction with their universities than civilian students (Barry et al., 2021; Benbow & Lee, 2025). These differences can be critical. Campus belonging (Hurtado & Carter, 1997) is a significant factor in the university success of marginalized students (Strayhorn, 2018), while institutional satisfaction has been linked to persistence for adult students in general (Bean & Metzner, 1985) and more positive university experiences for SSM/Vs in particular (Benbow & Lee, 2022).

In response to the post-9/11 SSM/V enrollment surge, many colleges and universities have been developing SSM/V-specific student services to address these challenges. Often backed by research (e.g., Kirchner, 2015), recent service additions have included student affairs officials, counselors, social programs, resource centers, and student lounges dedicated to SSM/Vs (McBain et al., 2012). While evidence suggests these services help students instrumentally and socially, surprisingly few recent studies have systematically or holistically examined their utilization or impact among contemporary SSM/Vs. Indeed, several important studies have focused on the scope and student perceptions of military-focused service offerings, usually at individual universities (Barmak et al., 2023; Morris et al., 2022; Oswald et al., 2019; Vest et al., 2024; Yeager & Rennie, 2021), but little work has examined post-COVID student engagement across multiple, dispersed 4-year institutions. Further, no work, to our knowledge, has measured how often SSM/Vs engage with military-focused student services, nor tested statistical correlations between engagement frequency and indicators of student success like campus belonging and institutional satisfaction (Bean & Metzner, 1985; Strayhorn,

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[1] We use the terms "adult students" and "nontraditional students" interchangeably throughout to reference university undergraduate students aged 25 years and older.

2018). There is also a lack of comprehensive investigations using a mixed methods approach to this issue, which could accomplish several important goals. Quantitatively, a mixed method approach could build knowledge both on how often SSM/Vs use military-focused services and whether there are empirical associations between engagement frequency and beneficial outcomes. Qualitatively, the approach could help us better understand quantitative findings, including how students explain the frequency with which they use these services as well as the instrumental and social benefits (or drawbacks) the services may provide.

With these gaps in mind, this study uses surveys and interviews and a social capital theoretical frame—emphasizing the importance of the social aspects of military-focused services engagement (Borsari et al., 2017)—to answer three research questions (RQs). Taking a quasi-explanatory mixed methods approach (Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2006), we first focus on military-focused service engagement frequency trends and associations among a sample of SSM/Vs ($n=531$) across four public, 4-year universities. We then utilize narratives from a subsample of SSM/Vs in science, technology, engineering, mathematics, and medical (STEMM) majors ($n=59$) to better understand resulting quantitative trends and associations. Our RQs are as follows:

RQ1. How often do SSM/Vs engage with university military-focused services?
RQ2. How, if at all, does SSM/V university military-focused services engagement frequency associate with student feelings of campus belonging and institutional satisfaction?
RQ3. How do SSM/Vs explain the frequency with which they use military-focused services and how, if at all, service use connects to feelings of campus belonging and institutional satisfaction?

Our literature review starts with an examination of factors influencing SSM/Vs in universities. This is followed by a review of the development of military-focused student services in U.S. universities. We conclude with a review of research on the influence of these services on SSM/V campus belonging and institutional satisfaction.

Background

SSM/V University Experiences

American military conflicts abroad have led to the deployment of approximately 3 million service members since 2001 (Bilmes, 2021), precipitating an expansion of state and federal higher educational benefits for returning veterans (Borsari et al., 2017). Such benefits typically pay student tuition, housing, and ancillary educational expenses, which in turn has supported a substantial influx of SSM/Vs into U. S. higher education institutions. Though recent, up-to-date national statistics on the SSM/V population are elusive, existing research suggests SSM/Vs have a median age in the early 30 s and a plurality enroll in public 4-year universities (SVA, 2021).

Because of their age, the challenges confronting SSM/Vs often mirror those encountered by other adult or "nontraditional" students, conventionally defined as learners aged 25 and above (e.g., Markle, 2015). Mature students are more often first-generation, transfer, and delayed-entry students, usually reside off-campus, and more often come from economically disadvantaged backgrounds (Dill & Henley, 1998). They are also usually financially independent and less interested in engaging socially in out-of-classroom campus activities and services than traditional students (Wyatt, 2011). Classroom interactions are key to academic and social integration for these students (Deil-Amen, 2011), though additional work and family obligations often demand a complex balancing act that takes time and focus away from studies (Bean & Metzner, 1985).

Military experience, however, brings additional difficulty for SSM/Vs, many of whom are enrolling in university and re-entering civilian life simultaneously. A wide body of scholarship centers on health issues that can hinder SSM/V academic success, including substance abuse, emotional distancing, a disinclination towards help-seeking, military sexual trauma, and physical injuries (e.g., Barry et al., 2014). Studies also point to several different kinds of administrative challenges SSM/Vs face, such as mid-semester activations among active duty, Reserve, and/or Guard members (Rumann & Hamrick, 2010); difficulties earning transfer credit for military training and education (Benbow & Lee, 2022; Vacchi & Berger, 2013); and the ambiguities and complications of GI benefit requirements (e.g., Hodges et al., 2024).

Importantly, studies have also focused on the cultural mismatches SSM/Vs encounter as they transition from the military—a conservative institution in which teamwork and camaraderie suffuse daily interactions—to the more liberal university, known for its emphasis on individualism and self-exploration (e.g., Lim et al., 2018). These incongruities often result in troubled communication between SSM/Vs and peers or faculty (DiRamio et al., 2008), stereotypes of SSM/Vs as damaged, violent, or intellectually inferior (Benbow & Lee, 2022; Motl et al., 2022), and SSM/V feelings of alienation and dissatisfaction on campus (Rumann & Hamrick, 2010). The social piece of this transition is critical for SSM/Vs, who have been found to feel less social support (Whiteman et al., 2013), less of a sense of campus belonging (Barry et al., 2021), and less institutional satisfaction (Benbow & Lee, 2025) than civilian student peers.

Military-Focused Student Services

SSM/Vs enter postsecondary education with diverse backgrounds, high-level work training and experience, and a persistent focus on their academic goals (Sullivan & Yoon, 2020). But as post-9/11 SSM/V enrollment surged through the late-2000s and early 2010s, researchers and educators began to recognize the need for additional navigational and social resources to better support SSM/Vs on campus (e.g., Barmak et al., 2023). According to a survey of several hundred higher educational institutions nationwide by McBain et al. (2012), 74% of surveyed 4-year public colleges and universities were providing veteran-specific services by 2012, a substantial increase from 2009. More institutions were also beginning to focus not only on

recruiting SSM/Vs, but also on centering them in their long-term strategic planning efforts (McBain et al., 2012).

New military-focused initiatives often grew from GI benefit processing or "certification" activities, the foundation of SSM/V support on university campuses (Hodges et al., 2024). Staff members performing this task, typically located in financial services or registrar's offices, officially endorse veteran student academic eligibility; apply for tuition, fee, and housing payments; and generally provide SSM/Vs assistance and information on the GI benefits that pay for college (Borsari et al., 2017; Kirchner, 2015). This facet of support became much more labor-intensive as SSM/V enrollment quickly expanded in the post-9/11 era (Hodges et al., 2024). At the same time, because it represented the most significant point of contact between institutional representatives and SSM/Vs, research suggested it had an outsized influence on student perceptions of, and experiences in, their university (e.g., Griffin & Gilbert, 2015).

Universities aiming to give growing numbers of SSM/Vs a more substantial institutional foothold—and take advantage of broader sentiment and governmental funding supporting veterans—soon expanded from benefit support to more in-depth, holistic SSM/V services. GI benefit certification, which before the post-9/11 surge had been a part-time task on many campuses, became a full-time job or was transferred to SSM/V-specific service staff (Kirchner, 2015). Many universities created dedicated positions for campus SSM/V service coordinators (McBain et al., 2012) to oversee benefit certification, provide faculty outreach, assist students who were unexpectedly deployed (Griffin & Gilbert, 2015; Hodges et al., 2024), connect SSM/Vs to other campus services, and organize SSM/V-oriented programming—including peer mentoring programs, campus orientation sessions, career counseling, and social gatherings (e.g., Barmak et al., 2023). Many universities have also created dedicated SSM/V-specific offices or veteran resource centers (VRCs) designed to be one-stop-shops for student information, benefit processing, and campus support (Hodges et al., 2024; Kirchner, 2015). VRCs, additionally, also began to house veteran student lounge spaces where SSM/Vs could relax with their peers (Yeager & Rennie, 2021).

Military-Focused Service Influences and Belonging and Satisfaction

Numerous studies link college engagement and social interaction with positive student outcomes (e.g., Kuh et al., 2008; Pascarella & Terenzini, 2005). Scholarship indicates contact with military-focused services can be helpful for SSM/Vs, even if previous research suggests engagement may be low (Wyatt, 2011). SSM/V interactions with college educators in general, and veteran service coordinators in particular, provide an enhanced sense of institutional support, increased educational optimism, and social belonging (Benbow & Lee, 2022; Oswald et al., 2019; Southwell et al., 2018), while dedicated and experienced certification staff can alleviate many of the burdens that come with SSM/V college finances (e.g., Norman et al., 2015, p. 708). VRCs, meanwhile, are reported to offer numerous benefits, practical and affective, from help understanding campus resources to social connection in an

unfamiliar environment (Griffin & Gilbert, 2015). Research also indicates that social and community participation can be meaningful for many SSM/Vs (Eakman et al., 2019). Though qualitative research has noted adverse experiences among some students in their engagement with university services (e.g., Vest et al., 2024), other studies have suggested that participation can increase relational support, reduce stress, and help SSM/Vs become more socially acclimated to university life (Morris et al., 2022; Yeager & Rennie, 2021). The military-oriented specificity of this new wave of services also seems to be significant, with studies suggesting that military-focused services show students and the wider community that SSM/Vs are a valued population with unique support requirements (Hodges et al., 2024; Norman et al., 2015).

Still, there are important gaps in existing research on these services. First, much research that centers on military-focused services is dated. This is problematic because data suggest current SSM/Vs differ experientially and demographically from those who attended college in the 2000s and 2010s, likely due to changes in U.S. military deployments and COVID-19-oriented disruptions (e.g., SVA, 2017, 2021). Second, though a handful of more recent studies shed light on modern military-focused services, many focus on single institutions (Barmak et al., 2023), gather data from small numbers of participants (Kappell et al., 2017), or sample GI bill-supported family members without military experience (Oswald et al., 2019). Third, and importantly, recent work in this domain has most often been either quantitative or qualitative. Quantitatively, studies have tested SSM/V campus engagement with associated outcomes (Morris et al., 2023; Southwell et al., 2018), but this work has not focused specifically on SSM/V engagement with *military-focused* student services that have been broadly implemented since the SSM/V post-9/11 enrollment surge. Interviews are a crucial exploratory tool, and it is important to include SSM/V voices in scholarship (e.g., Barmak et al., 2023; Vest et al., 2024; Yeager & Rennie, 2021), but to our knowledge no studies have used rich, SSM/V-centered qualitative data to explain quantitative links between military-focused service engagement and key SSM/V outcomes. A mixed methods approach that triangulates associational and experiential findings (Creswell & Plano Clark, 2018), looking at important predictors of SSM/V university persistence, would be valuable.

As has been noted, feelings of campus belonging and institutional satisfaction represent two such predictors. Campus belonging (Hurtado & Carter, 1997) arises from feeling valued by others at the university and offers a sense of purpose and meaning that has proven to be significant to the college persistence of marginalized students (Strayhorn, 2018). Institutional satisfaction has also been shown to be a meaningful affective predictor of student college persistence (Schreiner & Nelson, 2013). Bean and Metzner (1985) argue that institutional satisfaction is particularly significant for adult students, whose time away from formal studies, off-campus responsibilities, and preference for practical over abstract knowledge may lead to frustration and the discontinuation of their studies. Both predictors, further, relate to all-important SSM/V social experiences in the university that have been well-documented in the literature (Borsari et al., 2017; Hodges et al., 2024), so both offer informative indicators of whether and how military-focused services may be

valuable. Neither, however, has been tested as a possible outcome of SSM/V military-focused service engagement frequency.
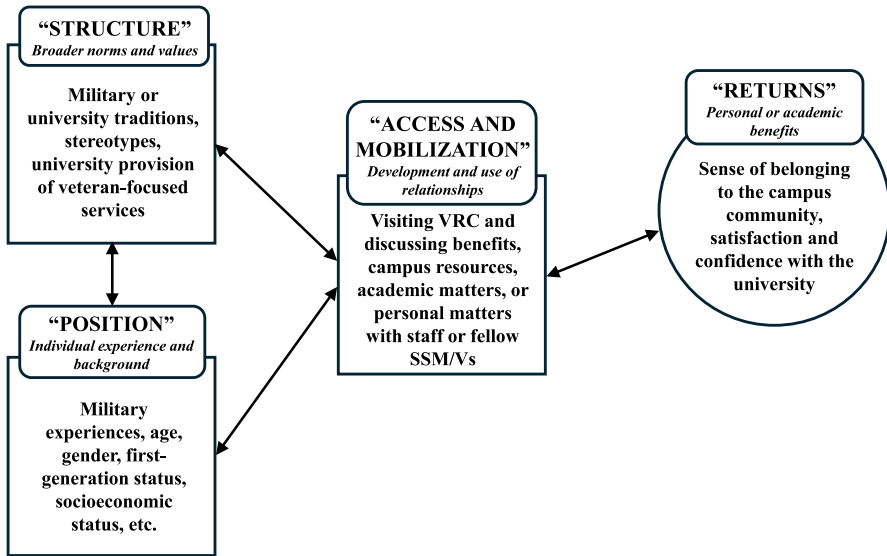
Theory

Because social support is a crucial component of SSM/V university experience—as well as a central factor in SSM/V military-focused service provision (Barry et al., 2014; Benbow & Lee, 2022; Borsari et al., 2017; Hodges et al., 2024; Vacchi & Berger, 2013)—we conceptualize SSM/V engagement with military-focused services using the theory of social capital (Lin, 2001).

Defined as valuable assets that can be accessed through social ties and networks, Lin (2001) views social capital as resources like information, advice, or emotional support that are developed within and flow through relationships. According to Lin, how much valuable support we accrue depends on a process beginning with an individual's "position," meaning their hierarchical standing in social spheres based on their background, credentials, or life experiences. One's positionality, for instance, may be based on their military service, age, gender, and other identities. Social support access also depends on "structures," or broader meso- or macro-level social systems that place normative values on people's interactions, including the military, the university, or one's academic department. Based on these positional and structural conditions, one develops (or not) "accessibility" to social capital resources through relationships that they then "mobilize" through social contact and interaction. This accessibility and mobilization can help them gain beneficial instrumental or affective "returns."

In part, this theory rests on the idea that individuals who put time and energy into engaging with others will often see returns on their investment. Importantly, however, access to beneficial social capital is not a given, as it is distributed asymmetrically according to positional and structural inequalities (Bourdieu, 1986). Further, whether the resources embedded in relationships are "valuable" depends on how they relate to the specific context and objectives of those involved. In this study, we are interested in how social capital within university-based relationships fosters (or not) a sense of campus belonging and institutional satisfaction for SSM/Vs. Following other work, we expect that more often engaging with university military-specific resources affords SSM/Vs the opportunity to build relationships of instrumental and affective value that undermine some alienating factors in the university environment (Griffin & Gilbert, 2015). This process of developing social capital, contextualized for this study, is displayed in Fig. 1.

With this model in mind, we operationalize this theory first by measuring how often SSM/Vs engage (conceived socially as "accessibility and mobilization") with several prominent military-focused service facets. This allows us to answer RQ1. Second, to answer RQ2, we test whether students' frequency of engagement with each of these service facets, as focal independent variables, statistically correlates with campus belonging and institutional satisfaction ("returns"), as dependent variables. Third, to answer RQ3, we focus on SSM/Vs' explanations as to why they use these services as often as they do as well as how, if at all, this engagement connects to feelings of campus belonging and institutional satisfaction ("returns").

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┌─────────────────────┐
│   "STRUCTURE"       │
│ Broader norms and values│
│─────────────────────│
│   Military or       │
│ university traditions,│
│   stereotypes,      │
│ university provision│
│ of veteran-focused  │
│   services          │
└─────────────────────┘

┌─────────────────────┐
│   "POSITION"        │
│ Individual experience and│
│   background        │
│─────────────────────│
│   Military          │
│ experiences, age,   │
│  gender, first-     │
│ generation status,  │
│ socioeconomic       │
│ status, etc.        │
└─────────────────────┘
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Fig. 1 SSM/V veteran-services social capital development model (Lin, 2001). The diagram shows three squares and one circle. At far left are two squares arranged vertically. Between the two boxes is a vertical, two-sided arrow. The top box is labeled, "'STRUCTURE,' Broader norms and values." In this box, it says, "Military or university traditions, stereotypes, university provision of veteran-focused services." The lower box is labeled, "'POSITION,' Individual experience and background." Within this box, it says, "Military experiences, age, gender, first-generation status, socioeconomic status, etc." Each of these boxes has a two-sided arrow pointing to a third box, positioned to their right horizontally, labeled, "'ACCESS AND MOBILIZATION,' Development and use of relationships." Within this box, it says, "Visiting VRC and discussing benefits, campus resources, academic matters, or personal matters with staff or fellow SSM/Vs." This box has a two-sided arrow pointing to a circle that is positioned to its right horizontally labeled, "'RETURNS,' Personal or academic benefits." Within this circle it says, "Sense of belonging to the campus community, satisfaction and confidence with the university."

Methods

This study uses a quasi-explanatory mixed methods approach (Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2006), based on surveys and interviews of SSM/Vs, to provide the kind of comprehensive, triangulated investigation of military-focused student service use currently missing in the literature. To answer our research questions, we collected survey and interview data concurrently, analyzed our data, then shaped the final stages of our qualitative analysis to speak to quantitative findings. Data in this study come from a larger study on the social experiences and academic pathways of SSM/Vs in STEMM fields across the U. S.

Researcher Positionality

The first author is a White man from the northern U.S. whose graduate training centered on qualitative analyses of student experiences in cross-cultural higher education settings. Though he has no military experience, his father served in the U.S.

Army in Vietnam and his work over the last several years has made him familiar with the important contemporary challenges and assets of U.S. SSM/Vs. It has also drawn him into the larger SSM/V support and research community and made him an advocate for these students and those who serve them.

The second author is an Asian man with expertise in quantitative analysis in higher education settings who served in the Republic of Korea's Army. As a full-time researcher, his interests lie in educational inequality, where he has studied student socioeconomic transitions into and through colleges and universities. Most recently he has focused on analyses of U.S. military service members and veterans to support their successful transitions into colleges and careers.

Sampling

Data were collected across four public, 4-year universities, institutions which a plurality of SSM/Vs attend in the U.S. (Cate et al., 2017; SVA, 2021). Referred to here as "University 1," "University 2," etc., universities were chosen because of their enrollment and geographic diversity and because they had veteran services directors who were willing to act as local gatekeepers. Data collection was performed in spring 2023 after the researchers received clearance from all relevant institutional review boards.

University 1, the largest university in the group, is in the Southwestern U.S. in an area with a significant military presence. It is a Hispanic Serving Institution (HSI) with a majority-minority student body and undergraduate enrollment of about 30,000 students. University 1 holds the "Doctoral University: Very High Research Activity" Carnegie designation and at the time of data collection had a large, nationally recognized VRC with 10 full-time employees and 15 student workers. University 1's VRC also hosted Department of Veteran Affairs (VA) counselors who served the institution's SSM/V community. University 1 served 946 SSM/Vs in spring 2023. University 2 is in the U.S. South. It is a predominantly white institution (PWI), with an undergraduate enrollment of about 19,000 students, and holds a "Doctoral University: High Research Activity" Carnegie designation. University 2 also had a large, well-known, and well-funded VRC with a suite of services. The University 2 VRC's nine full-time employees, one VA counselor, two part-time certifying officials, and four student workers were serving 558 SSM/Vs during data collection. University 3, situated in the U.S. Mountain West, is also an HSI. It has a majority-minority student population, enrolls approximately 16,000 students, and has the "Doctoral University: Very High Research Activity" Carnegie designation. In 2023, University 3's VRC, which offered students a variety of resources, had five full-time employees, a VA resource officer, and several student workers who served 430 SSM/Vs. University 4, situated by an active military base in the U.S. Midwest, is a regional PWI enrolling 7,000 undergraduate students. In 2023, University 4 had a remodeled VRC offering student services with an SSM/V lounge and study space. At that time, two full-time employees and one student worker served 272 SSM/Vs. University 4 is designated a "Doctoral University: High Research Activity."

We employed a purposeful, nonprobability procedure to recruit SSM/V survey participants, defined as currently enrolled undergraduate students who were retired or discharged veterans, on active US military duty, and/or in the Reserves or National Guard (e.g., Barry et al., 2014). This process began by asking veteran service directors to email all identified SSM/Vs study information and an online survey link. Survey recruitment elicited 531 survey responses (24% response rate), with each participant receiving a $20 electronic gift card. Survey participants self-reporting STEMM academic majors (see U.S. Bureau of Labor Statistics, 2023) were asked to volunteer for one-hour Zoom interviews. Fifty-nine SSM/Vs ultimately participated. Interviewees received an additional $30 gift card. Sample information is displayed in Table 1.

Surveys

Quantitative data were gathered through an online Qualtrics survey designed by the researchers. The survey included sections collecting information on SSM/V military-focused student service frequency (our focal independent variables), institution and demographic characteristics (control variables), and campus belonging and institutional satisfaction (dependent variables). After initial design, we piloted the online survey to SSM/Vs ($n = 42$) at a large, Eastern, public 4-year university before administering to Universities 1–4.

Military-Focused Student Services Engagement Frequency

This section contained original survey questions asking participants to indicate how often they had contact with specific facets of military-focused services at their universities, conceived as a behavioral dimension of service engagement (e.g., Appleton et al., 2008). To begin, we created one item for each of several service facets that were prominent in the literature, all of which were offered at all four participating institutions, and asked eight veteran service practitioners to provide feedback on the content and face validity of the items. After making suggested changes, we gave the refined items to three scholars with expertise in higher education and SSM/Vs to further gauge content validity. After incorporating these scholars' changes, we piloted the scale items. Based on a factor analysis of pilot responses, we paired back the scale for administration.

The final scale, which began with the prompt, "How often have you done the following since entering college?" asked students to indicate their frequency of engagement with five military-focused service facets on a 5-point scale from 1 = Never to 5 = Very often. The focal service facets included spending time in college student veteran lounges (Yeager & Rennie, 2021), visiting military-focused service offices and/or centers (Kirchner, 2015), participating in student military-focused service campus events and programs (McBain et al., 2012), interacting with college student veteran coordinators (Griffin & Gilbert, 2015), and interacting with university certifying officials (Hodges et al., 2024). Exploratory factor analysis (EFA) of completed responses to the final 5-item scale support a one factor

Table 1 Descriptive statistics for SSM/V survey and interview sample

Measure	Survey participants ($n=531$)		Interview participants ($n=59$)	
	N	%	N	%
Gender				
Women	145	27.4	18	31.0
Men	377	71.1	37	63.8
Transgender	5	0.9	0	0.0
Nonbinary	3	0.6	3	5.2
Race/Ethnicity				
American Indian or Alaska Native	29	5.5	4	6.9
Asian or Asian American	27	5.1	3	5.1
Black or African American	56	10.6	5	8.6
Hispanic or Latina/o	168	31.7	23	39.7
Native Hawaiian or Pacific Islander	5	0.9	0	0.0
White or Caucasian	316	59.6	30	51.7
White Students[a]	263	49.6	325	45.1
Students of Color	267	50.4	396	54.9
Undergraduate Major				
Arts and Humanities	56	10.5	0	0.0
Biological and Life Science	44	8.3	7	11.9
Business	52	9.8	7	11.9
Education	7	1.3	0	0.0
Engineering	73	13.7	14	23.7
Finance	46	8.7	0	0.0
Health	52	9.8	4	6.8
Math and Computer Science	47	8.9	6	10.2
Physical Science	12	2.3	6	10.2
Social Science	66	12.4	15	25.4
Other	72	13.6	0	0.0
Undeclared	4	0.8	0	0.0
STEMM[b]	294	55.4	59	100.0
Non-STEMM	237	44.6	0	0.0
Enrollment Status				
First Year or Freshman	50	9.4	11	18.6
Second Year or Sophomore	93	17.5	10	16.9
Third Year or Junior	153	28.8	15	25.4
Fourth Year or Senior	192	36.2	20	33.9
Fifth Year or Higher	43	8.1	3	5.1
Transfer Students	419	78.9	49	83.1
Service Status				
Discharged or Retired Veteran	371	69.9	36	61.0
In Reserves or National Guard	128	24.1	18	30.5
Active Duty	51	9.6	8	13.6

Table 1 (continued)

Measure	Survey participants ($n=531$)		Interview participants ($n=59$)	
	N	%	N	%
Military Branch				
Air Force	130	24.5	11	18.6
Army	248	46.7	25	42.4
Coast Guard	7	1.3	1	1.7
Marine Corps	68	12.8	12	20.3
Navy	88	16.6	11	18.6
Space Force	1	0.2	0	0.0
First Generation Students[c]	259	49.8	29	49.2
Impaired Students	186	35.0	28	47.5
Institution				
University 1	283	53.3	30	50.8
University 2	106	20.0	12	20.3
University 3	67	12.6	6	10.2
University 4	75	14.1	11	18.6
Mean Age	32.1 (SD=8.7)		30.8 (SD=8.1)	

[a]Students could indicate more than one race/ethnicity on the survey. In our regressions, race/ethnicity is coded as a White Students/Students of Color binary variable. "White Students," the reference category, includes students who only identified as White or Caucasian. "Students of Color" include students who identified as Mixed Race or as American Indian or Alaska Native, Asian or Asian American, Black or African American, Hispanic or Latino, or Native Hawaiian or Pacific Islander

[b]In our regressions, student academic major is coded as a STEMM/Non-STEMM binary variable. "STEMM" majors, the reference category, includes students in Biological and Life Science, Engineering, Health, Math and Computer Science, Physical Science, and Social Science majors, as well as students in majors with mathematics and/or technology-heavy courseloads (e.g., accounting, information technology management)

[c] "First Generation" students are those reporting that their parents/guardians have not obtained any kind of college degree

model with moderate internal consistency ($\alpha=0.82$). The composite variable was calculated as the mean of five focal service facets, ignoring missing values (i.e., egen, rowmean in Stata 18).

Student Institution and Demographics

Several measures controlled for demographic and experiential factors shown to influence campus belonging and institutional satisfaction. Survey questions asked for characteristics including gender, race/ethnicity, first-year college GPA, year in college, and academic major as STEMM or non-STEMM (Crisp et al., 2009; Norman et al., 2015; Pascarella & Terenzini, 2005). Items also collected age, first-generation status, impairment status, and full- or part-time enrollment status because of these attributes' salience with adult students (Bean & Metzner, 1985; Dill & Henley,

1998). Student institution, whether University 1, 2, etc., was also included as a control variable.

Campus Belonging and Institutional Satisfaction

Data measuring SSM/V campus belonging, defined as a student's cognitive assessment of their identification, affiliation, and membership in their campus community, were collected with a seminal 3-item battery (Hurtado & Carter, 1997). Using a 5-point Likert scale, participants were asked to express their level of agreement with three statements: "I see myself as part of the campus community," "I feel that I am a member of the campus community," and "I feel a sense of belonging to the campus community." We used the average score of these responses as a continuous dependent variable to represent campus belonging-oriented social capital returns (Lin, 2001). These items showed strong internal consistency ($\alpha = 0.94$).

Data measuring institutional satisfaction, defined as a student's degree of satisfaction and commitment with their university, come from a scale of three items: "How confident are you that this is the right university for you?" (Davidson et al., 2009), "Please rate your level of satisfaction with your overall experience at this university," and "Please rate your level of satisfaction with the education you have received at this university" (Boyd et al., 2022). The first item asked students to indicate their confidence on a 5-point scale with 1 = Not at all confident and 5 = Very confident. The latter two items asked for indications of satisfaction on a 5-point scale from 1 = Very dissatisfied to 5 = Very satisfied. We used the average score of these responses to represent institutional satisfaction-oriented social capital returns (Lin, 2001). The items showed moderate internal consistency ($\alpha = 0.85$).

Interviews

Using literature on SSM/Vs, military-focused student services, and higher education student engagement, we designed a semi-structured interview protocol to gather qualitative data on SSM/V social capital accessibility, mobilization, and returns (Lin, 2001). We began by asking SSM/Vs about their experiences with their university's military-focused services and personnel: "Have you been involved with the student service member and veteran community on your campus?" Follow-up questions addressed why SSM/Vs engaged as often (or as rarely) as they did as well as whether engagement with specific facets of military-focused services—including interactions with certification and coordination staff, visits to the veteran resource center or student veteran lounge, and participation in campus events or programs—influenced their feelings of belonging and institutional satisfaction. We administered the final protocol through Zoom. Interviews, which took about an hour, were audio recorded, transcribed, and loaded into NVivo 12 for analysis.

Analysis

Survey Data

Online survey data were uploaded to Stata and used, first, to develop descriptive statistics showing the frequency of student engagement with the five facets of military-focused services as well as a mean overall engagement frequency score across all five service facets. These results, displayed in Fig. 2, were used to answer RQ1. To examine the association between veteran service engagement frequency independent variables and our belonging and institutional satisfaction dependent variables, we estimated the Ordinary Least Squares (OLS) regression model of participants' sense of campus belonging and institutional satisfaction on veteran service engagement measures with covariates. Regression results, displayed in Fig. 3, are interpreted to answer RQ2.

Interview Data

We began qualitative analysis by using NVivo 12 to delineate and segment all interview statements in which SSM/Vs described their institution's military-focused services and/or their participation (or lack thereof) in these services. After collecting these segments, we went line-by-line through each, developing open codes representing different facets of interviewee perspectives on military-focused services linked both to how often they used the services and how, if at all, service use connected to their sense of belonging on campus and satisfaction with their institutions (Saldaña, 2015). We then combined open codes by similarity into larger, more extensive code categories. We named each category after the newly merged ideas from which it was constructed (Glaser & Strauss, 1967), ending with a list of 22 code categories. These categories, after being formally defined, became the study's qualitative codebook. We then applied the code categories in NVivo to the text within all segmented SSM/V statements. After studying the organization and patterns in the coded data, we further reorganized and combined the code categories, first, into categories to develop semi-discrete themes, which we formally defined. Second, based on similarity and orientation to the quantitative results, we organized these themes as subthemes into three major thematic meta-categories. Findings are displayed in Table 2 which, along with detailed descriptions of the themes and subthemes, answer RQ3.

Limitations

Findings should be interpreted with several limitations in mind. This study quantitatively measures student engagement with military-focused services by asking how often students interact with each service facet. There are other measures, however, based on duration or perceived usefulness of utilization (e.g., French & Oaks, 2004), that could also gauge SSM/V engagement. In a service context, high frequency of use may not always represent positive student experiences (e.g. Hunter-Johnson

et al., 2020). Additionally, University 1 participants represent over half the survey sample. Institution 1's context may therefore have undue influence on our results. The study's external validity may also be limited because the sample is self-selected; participants opted in, and only institutions with veteran service directors able to invest their time were included. Further, the cross-sectional and correlational nature of this study, along with the study's response rate and sample size, means that the statistical analyses here do not show causality. Results therefore cannot tell us definitively if the dependent variables were a result of the independent variables.

Findings

RQ1. SSM/V Engagement with Military-Focused Services

Figure 2 reports how often sampled SSM/Vs used the five military-focused services that we conceive as building accessibility to and mobilizing social capital (Lin, 2001).

Overall, SSM/Vs reported "rarely" using the five services (mean: 2.07 on a 1–5 scale), though students engaged with certain services more often than others. SSM/Vs most often visited veteran service offices (mean: 2.56). Interactions with veteran service coordinators and certifying officials occurred somewhat less often across the sampled SSM/Vs (means: 2.29, 2.16, respectively). SSM/Vs reported hanging out in veteran lounge spaces and participating in SSM/V campus programs or events more rarely (means: 1.84, 1.51, respectively). See full descriptive results in Online Resource 1.
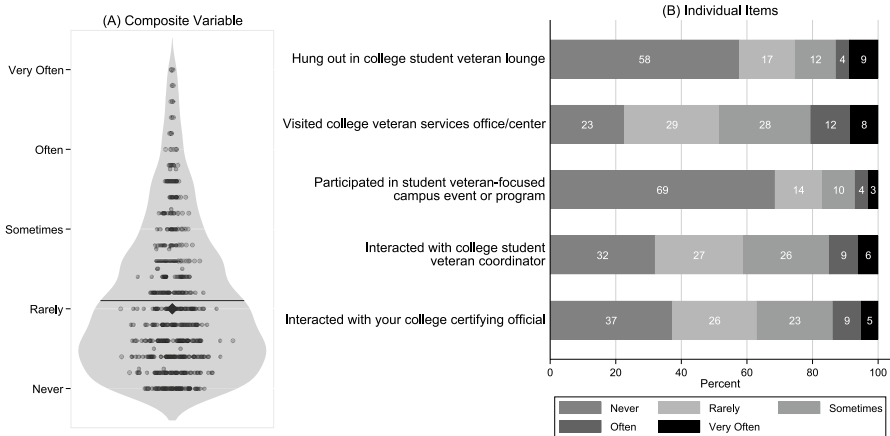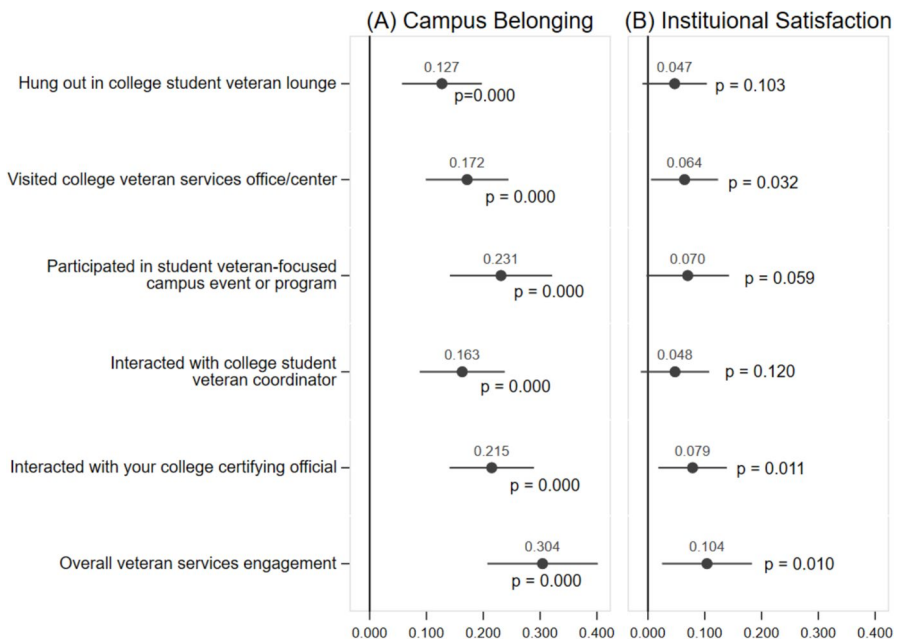

Fig. 2 Descriptive statistics on military-focused service engagement frequency items. Note: Military-focused service engagement is measured on a 5-point scale with 1 = Never and 5 = Very often. Overall veteran service engagement (composite variable) is the mean of five items, ignoring missing values (see egen, rowmean in Stata 18). **A** is a violin plot for overall veteran service engagement, along with the means (2.07, horizontal line) and median (1.8, diamond), showing a density plot in which the width of the plot indicates how frequently that value occurs in the dataset. Taken in order, the means (medians) of individual items in (**B**) are 1.84 (1.00), 2.56 (2.00), 1.51 (1.00), 2.29 (2.00), and 2.16 (2.00) respectively

RQ2. Association of Military-Focused Services Engagement with Campus Belonging and Institutional Satisfaction

Figure 3 (A) reports associations between military-focused service engagement frequency and campus belonging, a social capital return which is particularly important to the college success of marginalized students (Lin, 2001; Strayhorn, 2018). Summary findings indicate that SSM/Vs who more often engaged with each of the five military-focused service facets, as well military-focused services overall, reported significantly higher feelings of campus belonging ($p<0.001$). See full regression results in Online Resource 2.

Figure 3 (B) also reports associations between military-focused service engagement frequency and institutional satisfaction, a social capital return important to adult student retention (Bean & Metzner, 1985; Lin, 2001). The summary of regression results shows that SSM/Vs who more often engaged with military-focused services had significantly higher feelings of institutional satisfaction ($p<0.05$).

Fig. 3 Summary of regression results for campus belonging and institutional satisfaction. Note: Military-focused service engagement is measured on a 5-point scale with 1 = Never and 5 = Very often. Overall veteran service engagement is the mean of five items, ignoring missing values (see egen, rowmean in Stata 18). Each service engagement item is estimated separately in each regression model. Only the coefficient (marker), confidence interval (line), and p-value for each service engagement facet for each regression (unstandardized) is presented. **A** horizontal line at zero signifies no relationship between the engagement facet and outcome. Thus, when the confidence interval of each engagement facet is not overlapping with zero, the association between military-focused service engagement and campus belonging or institutional satisfaction appears statistically significant ($p<0.05$). Covariates include gender, race/ethnicity, first-generation status, first year college GPA, full-time/part-time status, enrollment status, impairment status, STEMM/non-STEMM major, age, and institution

Engagement frequency with individual service facets, however, differently correlated with institutional satisfaction. More often visiting college military-focused services offices/centers and interacting with certifying officials significantly correlated with institutional satisfaction ($p < 0.05$). More often hanging out in veteran lounges, participating in events, and interacting with veteran coordinators each positively correlate with institutional satisfaction, though these associations are not significant. Full regression results are in Online Resource 2.

RQ3. SSM/V Descriptions of Engagement with Military-Focused Student Services and Influences of Engagement on Campus Belonging and Institutional Satisfaction

The themes and subthemes from our inductive qualitative analysis are displayed in Table 2.

In the following passages we detail each of the three themes and their subthemes from this analysis to offer possible explanations for quantitative findings based in SSM/V experience. Student perspectives reported within Navigation, Fellowship, and Detachment speak both to decisions to engage or not engage as well as how participation influences SSM/V feelings of belonging and satisfaction and for whom.

Navigation

Most SSM/V interviewees expressed a general appreciation for the practical opportunities their local military-focused services offered, and the Navigational aspect of these services was one of the first things many students mentioned when we began our questions on these services. Navigation encompasses the subthemes of Guided Orientation, focusing on the kinds of information and administrative assistance military-focused provided, and Process Fidelity, focusing on the importance of administrators' expertise and ability.

Guided Orientation Many SSM/Vs with whom we spoke told us they visited their university's VRC primarily to receive campus information and guidance. GI benefit assistance, specifically, was typically a top priority for students. Benefit processing is essential not only because it allows SSM/Vs to attend college but because, after enrollment, the timely release of benefit checks that cover personal and school-related expenses depends on the accuracy of complicated VA-directed documentation procedures (e.g., Hodges et al., 2024). "The VRC's main goal there is to provide an outlet for understanding your military education benefits, it's kind of the main deal" one University 4 reservist explained. "Let's help you get paid." Military service officials, for their part, often used the opportunity of certification visits to get further campus information into these students' hands.

SSM/V perspectives on the importance of this kind of administrative and informational assistance generally held across institutions and demographic lines, with students suggesting these resources made them feel less burdened and more at home on campus. Interviewee narratives indicate, however, that these services were

Table 2 Military-focused service engagement themes reported by SSM/V interviewees ($n = 59$)

Theme	Subthemes	Description
Navigation	Guided Orientation	The availability of an organized VRC and military-focused service program as a hub for local guidance that offers SSM/Vs a foothold on campus, orientation to university procedures, academic and career assistance and resources, educational and professional networking, and clarity on the information with which SSM/Vs are inundated in university
	Process Fidelity	Informed, efficient, and dependable military-focused services—focused on complex bureaucratic processes SSM/Vs need to attend university—including military credit transfer, deployment assistance, and GI education benefit certification
Fellowship	Moral Support	Interactions showing that military-focused service staff understand SSM/V experiences, will have their back during difficult moments, and can be trusted—represented by staff availability, authenticity, encouragement, and advocacy that is consistent and reliable
	Community Building	Provision of VRCs, lounges, and/or study rooms with safe, comfortable, and military-friendly spaces for SSM/Vs on campus where they can unwind, study, and connect, as well as coordination of social events encouraging military student and educator fellowship, supporting SSM/V organizations, working in the university to foster understanding of SSM/V culture and experiences
Detachment	Inconvenience or Indifference	Lack of time, inconvenience of participating in events or socializing at university, or disinterest in SSM/V campus community based on educational/career perspective (e.g., college is just a job) or community or family involvement off campus
	Alienation	Feelings of separation or disillusionment, military trauma, divisions within community, and/or desire to put military service behind them that influences lack of engagement in military-focused services except when absolutely necessary (e.g., GI bill certification)

particularly important for new and incoming students as well as those who were returning to campus after deployments. Several interviewees explained that having a one-stop VRC with certification officials, service coordinators, and other staff made the often-confusing process of transitioning to campus—and receiving their benefits—less difficult. Others spoke to the importance of visiting their VRCs for short informational sessions given by staff when they first arrived. "I really liked how my university did their indoc program," one University 1 student told us. Now a sophomore, he was referring to the VRC's introductory orientation with slang for "indoctrination" programs military trainees undergo. "They just rapped with me at the right place at the right time." Indeed, many students who received GI benefits suggested that a visit to their university's VRC and certification official at the start of each semester was a regular (and necessary) habit.

Process Fidelity Interviewees across universities reported that staff efficiency was critical as well. Process Fidelity refers to the importance of office staff experience, know-how, and reliability with the numerous and complex administrative processes SSM/Vs are required to complete in college. "They helped me sign up for my GI bill," as one University 4 reservist said, "and they were really helpful because they actually knew what they were talking about."

The importance of this aspect of service to SSM/Vs is unsurprising. As students reported, their administrative experiences outside the university, often centered in large, byzantine governmental organizations, were frequently circuitous and illogical. When SSM/Vs entered the university, they worried about going through similarly difficult experiences in a new place with few people they could trust. Reliable, proficient staff expertise was therefore critical not only in applying for and certifying GI education benefits, but also in facilitating military training credit transfers, referring students to other university service units, and helping students favorably withdraw during mid-semester activations or deployments. "The Army makes everything [into] a lot of circles for no reason…it's like, 'Hey, do you have this paper? No, you need this other paper. Just kidding, fill out this 25-page form,'" one University 2 reservist said. "Just having [the VRC staff]…make sure everything's good is helpful."

Importantly, while such interactions often helped SSM/Vs feel like satisfied members of their college communities, some said staff reliability often helped them complete their paperwork very quickly. This, in turn, could often mean less frequent visits to the VRC. "I feel like they're real fluent in their work," a University 1 veteran told us. "I don't have to go to the office that much because they're so good at getting stuff done." Process Fidelity, therefore, could contribute to lower levels of military-focused service engagement.

Fellowship

Institutional military-focused infrastructure also often provided SSM/Vs with camaraderie, association, and social support. For many of the students we interviewed,

those who were interested and eventually participated in Fellowship activities came to them through Navigation experiences. Students visiting their VRC for information met staff and students, enjoyed the experience, then returned to share in staff Moral Support or Community Building through meetings, events , and veteran/service member spaces.

Moral Support SSM/Vs speaking to the subtheme of Moral Support told us that military-focused service staff offered genuine social support and recognition. These interviewees said they formed important connections with many of those who were assisting them, and that these connections typically made them want to return to see staff more often.

Many who had visited their VRCs and interacted regularly with staff told us stories illustrating different types of Moral Support. Some anecdotes showed extraordinary care on the part of VRC staff. During a particularly trying time for one University 2 student and his family, for example, VRC staff members delivered meals to the student's home during an extended medical emergency. The student lived an hour from campus. "The coordinator is always sending out resiliency emails saying if you need any help, reach out," he said. "So I reached out." Other times, Moral Support bonds were based on shared experiences. Many service staff, for instance, had military experience themselves, which helped some SSM/Vs become more comfortable seeking assistance. "Pretty much everybody at the VRC is either a spouse of a veteran or a veteran, so they understand" another University 2 student veteran said. "Just to be able to go to a place," he said, referring to the VRC, it was important to "know you have people that can relate."

More generally, SSM/Vs told us that military-focused services staff were particularly effective when they met students where they were with authentic, honest interactions; provided students information and opportunities without expectations; and treated students not with empty reverence, as they said civilians often do, but as experienced, independent adults. Such Moral Support invited trust, respect, and a greater sense from some SSM/Vs that they were in the right institution. While there were students in each university, at various enrollment levels, who expressed satisfaction and admiration based on this kind of staff recognition, several SSM/Vs, again, said that the Moral Support they received from veteran office staff had been of particular importance when they first arrived at university.

Community Building Aside from directly providing informational and emotional support themselves, SSM/V service administrators also acted as social brokers helping connect SSM/Vs to one another and to broader social groups on campus. SSM/Vs speaking to Community Building told us that the organized activities they had taken part in—including, for example, sporting events or get-togethers with fellow SSM/Vs and veteran staff—gave them access to a wide social network offering advice, people to hang out with, and, more generally, support that helped them feel like more satisfied members of the campus community. Interactions with other students with similar experiences, especially, could offer the kind of fellowship and camaraderie that many SSM/Vs often report is absent in university. "It's difficult to find the camaraderie that I had when I was in the service," a University 2 veteran

told us. It was his first semester, so he had started visiting the VRC more frequently after meeting several other SSM/Vs. Now, he said, he had real friends on campus. "Without that camaraderie," he explained, "I know I would not enjoy college at all." Others told us that the fellow SSM/Vs they had met through VRC visits or events could provide support that younger, non-veteran students could not. "I'm struggling with imposter syndrome and the fact that I'm 30 years old going to school," a University 1 active-duty student explained. "But once I'm with the veterans, we're all feeling the same."

These students often also mentioned campus veteran lounges—SSM/V-only rooms with coffee, snacks, study resources, and sometimes televisions—as spaces curated to create more comfortable, military-friendly situations. While veteran lounges helped SSM/Vs who were interested meet one another, a few interviewees also reported that such spaces gave them a feeling of safety on campus that was helpful. "It is pretty neat being able just to talk, just being able to talk to other people who had the same mindset of not giving a shit of what you say, not having to tiptoe…not having to worry about, oh, does someone hear me," a University 1 reservist said.

Detachment

Importantly, a significant portion of the SSM/Vs with whom we spoke told us that they did not visit the VRC or participate in military-focused service events because they were unable or did not care to. This narrative theme, which we term Detachment, consists of the subtheme Inconvenience or Indifference, reflected by SSM/Vs who said they were too busy to participate and/or disinterested in the social aspects of veteran services, and Alienation, reflected by those who felt estranged from the campus military community.

Inconvenience or Indifference Many interviewees spoke about the Inconvenience or Indifference they felt toward their university's military-focused services and broader community that kept them from visiting the VRC. Some of these students explained that though they might be interested, they were unable to attend SSM/V events because of scheduling conflicts with class, work, family, their commute, and/or the inconvenience of military-focused services' location on campus. "I just have not had the time when it came to classes, unfortunately," a University 2 student said. He told us he liked what was available, but did not have the opportunity to engage. Other students told us they were simply not interested in SSM/V-oriented activities because, as one University 1 student explained, school was for "taking care of business" and not for socializing. "I enjoy talking to them all in the office," one University 4 student told us. "It's just…I have a wife and a kid and a full-time job on top of school. I don't really have time for organizations."

Some students speaking to this subtheme said they were disinterested in developing Fellowship on campus because they already had social outlets *off campus*. "I feel like I've got a pretty well-established life outside of the university," one University 2 SSM/V explained. She had a group of friends and a lifestyle, she said, with which

she was comfortable. "If it happens naturally, that's one thing," she said, "but I'm not going to those events to find community." To some of these interviewees, the somewhat inorganic nature of many VRC events also turned them off. "I try to keep my military associations outside of my obligations to a minimum," one University 4 veteran told us. He likened campus SSM/V get togethers to "mandatory fun," a common military slang term for obligatory social events.

Alienation One group of interviewees told us that they did not visit the VRC or participate in events because they felt negatively towards many fellow SSM/Vs and/or the military community as a whole. There were several reasons given for these sentiments, almost all of which, notably, were voiced by students who were marginalized by intersecting gender or impairment identities. Some of these interviewees told us they did not engage with military-focused services at all; some said they only used what GI benefit assistance they needed and otherwise had no contact; and others told us they sometimes tried speaking to fellow SSM/Vs.

Many of these students felt estranged from the military-focused community on campus because, they said, they did not mesh well with fellow veterans. Many SSM/Vs, some perceived, were overly focused on their military pasts. One woman from University 1, for instance, said many SSM/Vs she met had an indefatigable focus on the military, so much so that they talked about their military experience through most conversations. "When they talk, so much of it is, 'Oh, my time in Qatar' or my time in this unit…it's the only interesting thing in their life," she said. Several students also said that they had had distressing experiences in the military that further colored their perceptions. Of these, a few sensed that they would meet resistance if they spoke too openly about their military experiences. One nonbinary identifying reservist, for instance, explained a conversation they recently had had with fellow SSM/Vs. "All the guys were like, 'Yeah, I was military and I did all these cool things' and I'm just sitting [there], my experience was completely negative," the student said. "And I can't say anything, because you guys are just going to be like it was great and awesome and [say] 'What do you mean you had a bad time?' And it's like, 'you were probably just another bad soldier.' And I was like, 'no, no, I was not.'" In many of such instances, interviewees said that spending time with other SSM/Vs made them feel more, not less, isolated on campus.

Discussion

Using a social capital theoretical frame, this quasi-explanatory mixed methods study examines how often contemporary SSM/Vs in 4-year universities engage in military-focused student services, whether their frequency of engagement associates with feelings of campus belonging and institutional satisfaction, and how students describe their reasons for engaging and its influence on belonging and satisfaction. Quantitative findings show that SSM/Vs rarely engaged in prominent facets of their

universities' military-focused student services. More often engaging, however, significantly associates with increased feelings of belonging and institutional satisfaction. Qualitative results suggest that administrative and informational assistance is a vital touchstone for many SSM/Vs that causes them to contact VRCs and military-focused staff. Efficiency and dependability, in this regard, are important to SSM/V feelings of comfort and satisfaction. Some SSM/Vs deeply appreciate dedicated events and spaces for building community with fellow SSM/Vs and staff, while others are busy or feel indifference or alienation toward military-focused services and mostly avoid SSM/V contact.

Military-Focused Service Engagement Low, but Predictive

Results both confirm and extend existing research findings. Though no studies to our knowledge have empirically measured the frequency of university military-focused service engagement among a multi-institutional SSM/V sample, previous research has suggested SSM/V participation may be low, as findings here indicate. Indeed, studies have generally suggested adult students engage less often in extracurricular activities and services (e.g., Wyatt, 2011) not only because they have less time, but also because they are less interested (Bean & Metzner, 1985). Research has also indicated that SSM/Vs are often seeking to meet their degree requirements as efficiently as possible—what Kappell and colleagues (2017) referred to as SSM/V "mission orientation" (also see DiRamio et al., 2008, p. 95)—to the detriment of out-of-class engagement. Vest et al. (2024) further note that some SSM/Vs either are not aware of military-focused services or feel alienated towards their university's veteran community because of past experiences. The qualitative portion of this study, specifically regarding our Detachment themes, provides further evidence for these explanations. Interviews also indicate, however, that low engagement frequency could be a function of Process Fidelity—otherwise busy students who are well-served have no reason to return, at least until they again need assistance with benefit certification.

Regression analyses showing significant positive associations between the frequency of military-focused service utilization and campus belonging and institutional satisfaction confirm years of research linking campus engagement and interaction to beneficial outcomes (e.g., Kuh et al., 2008; Pascarella & Terenzini, 2005). We expand this literature to recently developed student services designed for SSM/Vs. With research indicating SSM/Vs feel lower levels of social support and affiliation than civilian students (Barry et al., 2021; Whiteman et al., 2013), strong correlations between how often SSM/Vs engage in military-focused services and campus belonging indicate the possible efficacy of these services in helping those SSM/Vs who desire a stronger sense of institutional social membership. While this may in part reflect reverse causality—whereby SSM/Vs' sense of campus belonging influences their openness to engage with military-focused services—interviewee reports indicate that seeking certification assistance often acted as an antecedent to engaging more often in other facets of support (Moral Support and Community Building in particular) that made students feel more a part of their university community. This

was only true, though, for certain SSM/Vs. Newly arrived students, interviews suggest, often were more open to developing SSM/V community on campus. In these cases, military-focused services could offer a base for developing social support. Students with more negative military experiences, however—particularly those who were also marginalized by gender or impairment identities—often did not feel as welcomed or at home in these spaces. While interviewees did not speak to explicit bigotry, research has suggested that college SSM/V spaces can sometimes mirror the male-dominated norms of the military itself (e.g., DiRamio et al., 2015).

Importantly, satisfaction and confidence with one's institution entails a different outlook than campus social belonging. Results show that the frequency of military-focused services engagement significantly associates with institutional satisfaction, but the correlational pattern is not as consistent across various service facets as it was for belonging. Here, quantitative results show that veteran socially-oriented services—hanging out in the veteran lounge, participating in campus events, and interacting with veteran service coordinators—are less conducive to SSM/V institutional satisfaction than facets that are administrative/instrumental (VRC and certifying official visits). This also seems to be mirrored in our qualitative findings. There, information and administrative services, particularly benefit certification, were sacrosanct. This suggests that SSM/V institutional approval may depend more on Navigation and Process Fidelity than Fellowship, though further research is needed. Again, Detachment interview statements, in which some otherwise satisfied interviewees said they were busy or not interested in social Fellowship, give some weight to this explanation (e.g., Kappell et al., 2017).

Highlighting Military-Focused, Service-Based Social Capital

The social perspective here, of course, is critical. Interviewees are not describing military-focused service engagement—even purely instrumental engagement—as interactions with inert offices or inanimate institutions. Instead, interviewees describe exchanges with *people*, usually veteran service staff, who offer them direct help and support. In many cases, staff members proved especially knowledgeable, reliable, and well-connected, an interview theme we refer to as Process Fidelity (e.g., Kirchner, 2015). They also offered affective understanding and commiseration. This commiseration, which we call Moral Support, has been noted in previous studies (e.g., Barmak et al., 2023; Griffin & Gilbert, 2015, pp. 81–84), though it has not often been emphasized. Considering the weight given to social support and camaraderie in the research literature (Benbow & Lee, 2022; Eakman et al., 2019; Whiteman et al., 2013), it is significant that interviewee descriptions of all-important administrative interactions dovetail with the more obvious socially-oriented facets of military-focused services reflected in the Community Building subtheme.

Our use of social capital theory, for this reason, proves useful in further distinguishing this study, and the process of military-focused engagement, from previous research. Lin's (2001) social capital approach, in particular, helps us identify the ways military-focused service contexts, individual attributes and experiences, and campus interactions connect to help SSM/Vs socially accrue resources that can enhance their

college experiences. Quantitatively, this framing is straightforward: when controlling for institutional and individual characteristics, results indicate a significant correlation between SSM/Vs' frequency of engagement in various facets of military-focused services—framed conceptually as "accessibility and mobilization," or the use of available social connections (Lin, 2001)—and feelings of campus belonging and institutional satisfaction, conceptually framed as affective social capital "returns."

Interviews, however, help us further contextualize results, illustrating how varying facets of military-focused service accessibility and mobilization can foster social capital returns. Using Lin's (2001) model as a heuristic (Fig. 1), we can imagine how university "structures" create environments offering varying levels of opportunity in which, for example, certain military-focused student services are offered or not or certain SSM/Vs are eligible for certain benefits or not. Individual SSM/Vs, depending on their "positional" characteristics in larger university or military structures—including their service experiences, current off-campus responsibilities, or their gender or impairment identities—choose a certain amount of contact with military-focused services, or a certain level of access and mobilization, which supports their interests and is feasible.

With this framing, there seem to be two key pathways through which SSM/Vs develop our social capital returns of interest. In the first, interview results suggest that structural contexts lead most SSM/Vs, regardless of their positional attributes, to access and mobilize Guided Orientation support, usually by visiting their local VRC and certification official. With Process Fidelity, certifications are completed and the student receives timely financial benefits, an instrumental (but not focal) social capital "return." In some cases, the process may make the student feel more satisfied with their institution, an affective social capital return, even if the return is the result of one quick visit or interaction.

The second pathway is guided by similar structural conditions, but more specific positional conditions. It therefore demands a qualitatively different kind of access and mobilization. Here, SSM/Vs who recently arrived on campus, or who want to recreate the camaraderie of their military experience, may interact more often with veteran coordinators or certifying officials (Moral Support), hang out in their VRC or veteran lounge, or participate in social events or programs in which they meet fellow SSM/Vs (Community Building) after their Guided Orientation experience. Such interactions and relationships, which we refer to as Fellowship, seem to lead to "return" feelings of campus social fit in the institution that created the opportunities in the first place. This mirrors previous research that has spoken to the social benefits of military-focused services engagement (Barmak et al., 2023; Benbow & Lee, 2022; Oswald et al., 2019; Southwell et al., 2018), though it adds some theoretically grounded specificity. Alternatively, students with other positional attributes—including off campus jobs or family responsibilities (Inconvenience or Indifference), negative military experiences, or gender or impairment identities that are marginalized across university and military contexts (Alienation)—may choose not to be involved with the VRC or SSM/V campus events at all. While military-focused benefit certification can still offer these students certain social capital returns (Guided Orientation, Process Fidelity), they may very well be informational and not affective.

Implications and Conclusion

There are several implications here for university educators and scholars. Practically speaking, this study provides further empirical evidence of the efficacy of university investments in military-focused student services. While not all universities have the enrollment environment or capacity to offer the service facets measured here, institutions interested in providing new services may choose to take an approach to development that emphasizes continued administrative reliability but also incrementally adds valuable social support elements. This could include expanding from standalone GI benefit certification services to the provision of an SSM/V lounge space or a part-time military-focused services coordinator, in the case of lower capacity institutions, or the consolidation of existing supports into a one-stop VRC offering organized social events at institutions that already have developed several military-focused services.

Because results suggest SSM/Vs rarely use these services, however, educators also should think creatively about how to increase student engagement above and beyond GI benefit certification. There are different strategies to pursue this goal. Alternatives may include offering counseling, tutoring, and other programming on evenings, weekends, or through virtual platforms. Increasing interest in community building and social programming may be accomplished not only by accepting those who have had both positive and negative military experiences, but also by discouraging some of the more hyper-masculine aspects of military culture in campus SSM/V spaces. Those hoping to draw more students, further, may decide to integrate more academic- or career-oriented elements into their efforts, which could garner involvement from SSM/Vs who—like other adult students— are typically less interested in purely social campus events (e.g., Bean & Metzner, 1985; Kappell et al., 2017). Educators can also point SSM/Vs to local community-based peer support groups, which can offer students the opportunity to replenish or expand social connections, engage in prosocial behavior, and obtain pragmatic information on their transitions into civilian life (e.g., Drebing et al., 2018).

Results from this study also suggest opportunities for further research. Studies utilizing random institutional and student sampling would provide stronger external validity and offer findings on SSM/Vs from a more diverse array of institutions—specifically those that do not offer the service facets on which we focused here. Larger, more representative samples would allow for more robust testing of whether different variations in student military status (e.g., years served, combat experience, military branch) correlate with military-focused service engagement or the influence of engagement on university outcomes. Future research could also further explore these issues with engagement measures above and beyond frequency, including, for example, students' cognitive, emotional, or intellectual investment in military-focused services (e.g., Appleton et al., 2008). Finally, especially considering the importance of social support in the SSM/V literature, additional research could more closely focus on the social support network impacts of military-focused student service engagement, as well as on how SSM/V outcomes relate to veteran-service influenced network development.

SSM/Vs continue to be an adult population whose higher educational success diversifies universities, fulfills taxpayer GI bill investments, and delivers on the

promise of upward economic mobility for a new generation of students. While previous studies have demonstrated the importance of military-focused services for SSM/Vs, little scholarship has comprehensively focused on contemporary SSM/V engagement, how this engagement may correlate with important outcomes, or how students explain engagement's impact across multiple and diverse university contexts. Results not only add to previous empirical evidence suggesting that military-focused services can be beneficial, but also show how these services can harness the relational power and affective returns of interactions with veteran service staff and fellow SSM/Vs.

Data Availability De-identified data will be made available from the authors upon reasonable request and under strict guidance of the University of Wisconsin-Madison Social and Behavioral Sciences/Education Research Institutional Review Board.

Declarations

Competing Interests The authors have no relevant financial or non-financial interests to disclose.

Ethics Approval and Consent The study was reviewed and granted exemption by the University of Wisconsin-Madison's Education and Social/Behavioral Science Institutional Review Board (#2019-1234). The procedures used in this study adhere to the tenets of the 1964 Declaration of Helsinki. Researchers obtained informed consent from all study participants.

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