



“Stepping Out” for Military Service: Challenges Experienced by Students Serving in the Reserves or National Guard

CATHERINE MOBLEY 

SUSAN M. LORD 

JOYCE B. MAIN 

CATHERINE E. BRAWNER 

JOSEPH MURPHY

*Author affiliations can be found in the back matter of this article

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ABSTRACT

Our qualitative study explores the experiences of engineering students serving in the Reserves or National Guard (RANG) to identify the unique challenges they face when trying to fulfill their contemporaneous educational and military commitments. To expand literature on military-connect students and veterans studies, we draw from the literature on stop-out students and use a framework of precarity to understand their college experience. Our analysis of interviews of 15 RANG engineering students revealed that these students faced both financial and academic precarity. These students experienced uncertainty about their financial aid and felt academically vulnerable when registering for classes and falling behind in their college studies, particularly in a discipline such as engineering which often has rigid prerequisites. When seeking assistance on campus, respondents said they encountered conflicting policies. We introduce a term, “stepping out,” to reflect RANG students’ needs and experiences and the unique reasons for their discontinuous enrollment patterns. Research findings have implications for university staff desiring to better address RANG students’ needs, including student veterans centers. Centers that serve the interests of military-connected students can pave the way forward in campus efforts to ensure that RANG students who aspire to serve their country can do so while earning their college degree. Financial aid offices can strive to streamline information about educational benefits available to RANG students. Advisors and faculty will benefit from the nuanced information regarding RANG experiences and the importance of addressing their unique needs.

CORRESPONDING AUTHOR:

Catherine Mobley

Clemson University, US

camoble@clemson.edu

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Recruiting military-connected students (MCS) is one avenue for diversifying higher education as their service-orientation, specialized training, and unique work experiences distinguish MCS from traditional-aged college students (Johnson & Appel, 2020). To address the needs of MCS, many campuses have initiated student veteran centers and strengthened services provided by student affairs professionals and other staff, including financial aid, advising, academic support services and health-related programs.

While these efforts have supported the success of many MCS, a fuller understanding of the diverse needs within the MCS population is necessary as this group is not monolithic. It is essential that university faculty and staff distinguish among the various groups of MCS (Eagan et al., 2017; Lunceford et al., 2020), as broad policies may not effectively address these students' needs. Students serving in the Reserve Component (RC), in particular, feel that the military and higher education do not adequately address their needs (Griffith & Ben-Ari, 2020). RC personnel receive limited attention from scholars (Griffith & Ben-Ari, 2020), are often treated as an "afterthought" by policy makers (Reserve Officers Association, n.d.), and often do not receive the same support and resources as full-time military personnel or military veterans (Darwin, 2016).

Our paper aims to contribute to the field of veterans studies by filling a gap in research on MCS. We do so by highlighting the experiences of RC engineering students in the Reserves and National Guard (i.e., "RANG" students). We contend that RANG students' experiences and needs are different from student veterans, in that RANG students must move in and out of higher education for training and deployment, while student veterans generally have left military service to pursue their college degrees. Our qualitative study focuses on narratives derived from interviews of 15 RANG students attending college in the USA, with the goal of answering our primary research question: *What challenges do RANG students experience when attending college and earning their engineering degree, while also serving in the Reserves or National Guard?*

Our analysis was informed by research on student retention and attrition and about stop-outs, students who temporarily suspend their college studies for various reasons and for varying lengths of time, with the intention of returning to finish their degrees (Tinto, 1993). We posit that RANG students are not only different from other MCS, who have been described as facing stop-out challenges (Alschuler & Yarab, 2018), but also other stop-out students. Recent research highlights the need to develop a "lexicon" (Grabsch et al., 2021, p. 2) to better distinguish between the various categories of student departure and withdrawal, that would in turn inform the development of impactful

retention initiatives. We introduce a term, "stepping out," that more accurately reflects RANG student experiences, the contemporaneous nature of their educational pursuits and military service, and the their unique pattern of discontinuous enrollment patterns.

Research findings can help inform policies and initiatives that will support RANG students' retention and persistence to graduation. This study is timely and important given that the number of RANG students on college campuses is likely to increase due to expanded military recruitment efforts (Baldor & Copp, 2022) and given the increased possibilities for deployment and active duty while enrolled in school. National Guard members have recently been mobilized for natural disasters and wildfires (Kime, 2021) and throughout the COVID-19 pandemic (Deliso, 2021), including during the COVID surge in early 2022 (Hughes, 2022). Study results may also expand understanding of the challenges faced by RC students as distinct from student veterans. The literature often treats them in similar ways or uses these terms interchangeably (e.g., Rhodes, 2018). Our study reveals nuanced results pertaining to RC students that could lead to more creative resolutions to the challenges they experience when stepping away from college to fulfill their military obligations.

LITERATURE REVIEW

BACKGROUND ON RESERVE AND NATIONAL GUARD SERVICE

In the United States (US), RC personnel supplement the regular military during times of need. Reservists can serve in any of the military branches; National Guard members can serve in the Air Force or the Army. Reserve Officer Training Corps (ROTC) cadets are classified as reservists. RANG personnel are a notable force in the military; in 2019, they constituted approximately 43% of the US Military (Duffin, 2021). The RC especially experienced a shift in mobilizations with the deployment in 1991 by President George H. W. Bush of 360,000 members of the Ready Reserve for Operation Desert Storm/Desert Shield (Duncan, 1991). By nearly a decade later, the RC had shifted from being a "strategic" reserve, where soldiers are in "stand-by" mode, waiting to be called up for larger-scale operations, to an "operational" reserve, which involves a greater frequency of mobilizations to meet ongoing military readiness needs (Booker & Phillips, 2017). Universities began to respond to the needs of these students who were called to serve on a more frequent basis, as detailed in Johnson's (2009) case study of a university that expanded services to RC students after they were deployed for Operation Desert Storm/Desert Shield.

RC members generally commit to serving for a contracted amount of time, usually from three to eight years, during which they must fulfill regular training obligations that may involve attending drill weekends once a month or more extensive training on an annual basis (Bonar et al., 2015). They must be prepared to be deployed and called to active duty at any time and often with short notice (Military.com, n.d.). The purpose, timing, and length of disruption to the RANG students' educational journeys can vary widely, depending on the needs of their military branch (Bonar et al., 2015; Lunceford et al., 2020).

Many MCS personnel join the military in order to receive educational benefits (Eighmey, 2006) and RC members are no exception. The RC branches encourage their members to pursue their educational goals, including the US Army National Guard's (n.d.) "More Student, Less Debt" campaign, and the US Army Reserves (n.d.) and US Air Force Reserves (n.d.) promoting the flexibility of RC service that allows members to pursue a college degree. Educational benefits typically include tuition and fees (at the in-state rate), a housing stipend, and book and test expenses.

ACADEMIC CHALLENGES EXPERIENCED BY RANG STUDENTS

RANG members face challenges similar to other active-duty service personnel, including heightened posttraumatic stress disorder (PTSD) and reduced levels of productivity upon returning to their jobs after deployment (Sims et al., 2015). Students who are actively serving in the military while attending college have distinctly different academic experiences from student veterans who are no longer serving in the military (A. B. Johnson, 2017). Deployment patterns for RANG students are complex, often involving multiple activations and deactivations to and from active-duty status. Higgerson's (2017) research showed that National Guard students experienced difficulties with multiple deployments. Molina and Morse (2015) found that 93% of Reservists and 94% of National Guard members who were in college reported at least one circumstance associated with episodic enrollment and/or temporary withdrawal that resulted in multiple transitions into and out of higher education. Research indicates that multiple deployments lead to postponement or lack of college completion for RANG students (Rumann & Hamrick, 2010). MCS are more likely than other college students to say they are not well supported by their institutions to succeed academically, which contributes to their longer time to degree or to leaving the university altogether (Kim & Cole, 2013).

Due to RC students' uncertainty about their service (Bauman, 2009; Cook, 2017), they may be in perpetual

limbo and a state of hyper-vigilance as they try to anticipate the timing and duration of their orders, training, and deployments (Courage, 2013). Some students are mobilized for several weeks; others for two or more semesters. Training may occur at times that are out of sync with the college calendar, such as in the middle of a semester or during exams. Midterm deployments interrupt studies, leading students to have to drop classes and then add them later, thus losing valuable time toward degree completion (Johnson & Appel, 2020).

The temporary separation from higher education may not be a clean break (Bauman, 2009); RC students still must pay attention to the details associated with university attendance, such as registering for classes for a subsequent semester. The mismatch between academic calendars and multiple military engagements while attending college can result in heightened stress for RANG students. Grades can be impacted if students must leave the university after the last drop date of a term. RANG students experience numerous other challenges while attending college and fulfilling their RC obligations: their university email may be deactivated; they may lose access to facilities, such as the library; face technical challenges due to not being on campus on a regular basis; miss taking required pre-requisite courses; not have access to course materials; and have to file grade appeals or withdraw altogether (Brown & Gross, 2011; Cook, 2017; Rumann & Hamrick, 2010). These disruptions may be especially problematic for engineering students where the curriculum includes many prerequisites.

RC students often navigate the re-enrollment process and transition on their own, with minimal support from university staff, either because students may not be at a college long enough to know who can help them, or university staff may not have the knowledge about MCS students' situations to provide effective support (Cook, 2017). Financial aid can be especially complex for RANG students. For example, when they deploy, RC students' financial aid may be threatened or reduced, as they may no longer qualify for certain non-military scholarships. If they are activated after the semester has begun, they may lose money that has already been applied toward their attendance up to the deployment date.

RANG students may face challenges due to unclear military or higher education policies about how to address their unique situations (Seagren, 2013). For example, National Guard members often cannot use benefits available to other service members enrolled in college. The Higher Education Opportunity Act of 2008 extended protection to students who faced disruptions in their educational pursuits due to voluntary or involuntary military service, giving them a right to readmission to their

educational program. However, these protections were not extended to all National Guard service members due to the short duration of their military service (Seagren, 2013). As of early 2017, 21 states enacted laws to protect National Guard members' educational pursuits (W. L. Johnson, 2017). Much remains to be done, as Seagren (2013) contends:

forcing [National Guard] soldiers to choose between their military duties and their educational and professional futures when they are called upon to serve has the potential to provide a dangerous distraction to their safety and ability to complete their mission. (para.10)

THEORETICAL FRAMEWORK: STOPPING OUT AND EDUCATIONAL PRECARIETY

The literature on student persistence, retention, and attrition documents that many students experience disruptions in their educational journeys. The term “stop-out” refers to students who leave college, but who then return to the same college or a different college to complete their degrees (Astin, 1977; Tinto, 1993). Students halt their education for various reasons, including financial duress, health challenges, family issues, and academic difficulties (Jepson & Tobolowsky, 2020; Ruff, 2021). Stopping out creates vulnerabilities for students, such as delaying time to degree, impacting students' motivation to finish college, and stymying the formation of academic and social relationships (Pascarella & Terenzini, 2005; Rumann & Hamrick, 2010). As receiving financial aid promotes retention and timely graduation, for students who stop-out for various reasons, the availability and certainty of financial support is essential for their return to and progress through college (DesJardins & McCall, 2010).

Kalleberg (2009) introduced the concept of precarity to describe the tenuous nature of workplace arrangements. Within an educational setting, such uncertainty manifests in students who stop-out of college. Hart's (2019) research on these educational patterns provides a useful framework for examining RANG students' experiences. She examined two forms of insecurity in her study of community college students: institutional precarity and individual precarity. Hart argued that students have had to take on more security work in managing uncertainty, so much so that it has become “an undercurrent in students' lives” (p. 7), as institutions of higher education shift that responsibility and burden toward students.

Although stopping out leads to lack of timely progress toward degree for MCS students (Alschuler & Yarab, 2018) and although RANG students' episodic and interrupted educational journeys are analogous to the stopping out

process experienced by transfer students (Morreale, 2011); few studies focus on MCS stop-outs (Bauman, 2009; Cook, 2017) and the presence (or absence) of formal and informal policies to encourage retention of these students (Cook, 2017). RANG students are on call while serving, with one foot in the educational world and one in the military (Brown & Gross, 2011). They often exist in a hazy middle ground, not exactly stop-outs, as they may remain enrolled in college while serving. However, they could become stop-outs, or even dropouts, if the systems are not in place to support them. This is concerning as having commitments outside of college, such as a job, or in the case of RANG students, having military duties, influences persistence in college and can be a major reason for permanent withdrawal from college (Tinto, 1993; Woosley, 2003).

Many RANG students may leave college, strongly intending to return and finish their degree (Wu, 2018). Such intentions are strong predictors of returning to college after an absence (Tinto, 1993; Woosley et al., 2005). While research shows that students do not always accurately predict their successful return to the university (Woosley, 2003), RANG students are highly motivated to complete their studies as a result of their deployment experiences (Rumann & Hamrick, 2010), especially knowing that they will receive, or continue to receive, financial aid upon their return. Much of the research on stopping out and other types of educational disruptions focuses on traditional college students and not on MCS students in general or on RANG students in particular. This study fills this gap and contributes to the research on college student retention by showing how institutional policies and practices shape college disruptions for RANG students.

METHODOLOGY

STUDY DESIGN

The current study is part of a larger qualitative study, sponsored by the National Science Foundation, which included 60 in-depth interviews with MCS at four public institutions across the USA. In this paper we focus on a subset of these interviews, analyzing interviews with 15 RANG students, at three of the study universities, who were actively serving in the RC at the time of the interview. In a prior paper (Mobley et al., 2020), we focused on the RANG students' motivations for joining the military and the benefits of military service for their engineering education. In this paper, we highlight the challenges these students experienced as they attempted to balance their military and education obligations. The research team interviewed the students in 2016 and 2017. The Institutional Review Board at each institution approved our study. Participants received a \$50 gift card for their participation.

DATA COLLECTION

The project's methodology is centered around the narrative approach that focuses on the meaning that individuals attach to their experiences and that encourages storytelling (Clandinin, 2016). We used a multi-method interview strategy, triangulating the interviews by using several tools to encourage storytelling (Johnson & Weller, 2001). These elicitation techniques included timelines that featured key events in participants' lives and identity circles that focused on the relative importance of salient identities (e.g., military veteran, engineering student, etc.) to the students' educational experiences. Details of these techniques can be found in Mobley et al. (2019). The interview protocol addressed these topics: (a) rationale for joining the military, (b) reasons for selecting their major, (c) the military's influence on selecting engineering, (d) relevance of veteran identity to engineering experiences, (e) the military's influence on engineering education experiences, and (f) university efforts to serve MCS students. Students were recruited through campus staff, social media, and by posting flyers. The face-to-face interviews lasted between 45 and 90 minutes; they were recorded and then transcribed by a professional transcriber.

ANALYTIC APPROACH

The research team's analytical pathway for coding the interviews strengthened the trustworthiness of our study (Korstjens & Moser, 2018). To prepare the data for coding, we first each verified our interview transcripts and took initial notes about emergent themes. We then developed episode profiles for each interview (Maietta, 2006), which summarized key points of the interview. We then engaged in extensive memo writing (theoretical and analytical memos) during data collection and analysis (Saldaña, 2009).

To enhance the study's trustworthiness and confirmability, after analyzing the episode profiles, two of the authors engaged in a three-step coding process of the interview transcripts:

1. open coding (identifying key themes related to our research questions),
2. axial coding (categorizing the initial themes into the broader themes as they related to the experiences of the RANG students), and
3. selective coding (connecting these latter categories with one another and identifying subcategories within each; Strauss & Corbin, 1998).

The two authors reviewed each transcript independently, line by line, two times, creating spreadsheets of initial codes. The two authors then compared coding schemes, discussing points of agreement and disagreement to enhance trustworthiness of our study. To report study

results, the authors edited interview quotes for clarity, removing digressions and fillers and eliminating identifying information. A pseudonym was assigned to each student to ensure anonymity.

RESEARCHER POSITIONALITY

Reflexivity (i.e., critical reflection of oneself as a researcher) is an essential component of trustworthy qualitative research (Korstjens & Moser, 2018). Our original research team consists of five women; three identify as White, one as Latina, and one as Asian American. Of the three researchers who interviewed students for the current study, one is a sociologist, one is an engineering education professor, and one is an educational researcher. The other two researchers on the study team are an engineering professor and a sociologist. One of the co-authors identifies as African American and was an undergraduate sociology major at the time that he was involved with the project. The research team has extensive experience in engineering education research, focusing on minoritized populations in undergraduate engineering (i.e., women, transfers, first-generation, African Americans, and Latinas). None of the authors for this article is a military veteran. Nevertheless, our project's External Advisory Board (EAB), consisting of two retired high-ranking military officers, two student veterans, and two university faculty who engage in veteran research and support, provided us with important insights. Although the EAB did not participate in data analysis, their feedback on our early themes increased the trustworthiness of our results and helped us contextualize the student experiences.

PARTICIPANTS

To better assess the transferability of our study results to other contexts (Lincoln & Guba, 1985), we report below on the participants' main characteristics as they apply to this particular study. Interviewees were serving in the Army ($n = 8$) or Air Force (AF; $n = 7$) and were majoring in a diversity of engineering disciplines at one of the three public universities where we conducted interviews (see Table 1 below). Ten participants were serving in the National Guard and five were serving in the Reserves. Five were serving in the Simultaneous Membership Program (SMP), serving in both the ROTC and the National Guard or Reserves (noted by an asterisk in Table 1).

FINDINGS

The RANG students faced several obstacles resulting from their dual military and college obligations, including experiencing financial precarity and academic precarity. Although these two themes are discussed separately, they also intertwine with, and influence, one another.

PSEUDONYM	BRANCH	RC BRANCH	ENGINEERING MAJOR	SEX	RACE	YEAR IN COLLEGE
Alex *	Army	NG	Chemical (CH)	Male	White	4
Arlo *	Army	NG	Mechanical (ME)	Male	White	1
Carl	Army	NG	Mechanical (ME)	Male	White/Latino	3
Janice	AF	Res.	First-year (FY)	Female	White	2
Jayden	Army	Res.	Electrical (EE)	Male	White	3
Joel *	Army	NG	Construction (CN)	Male	White/Latino	2
Liam	AF	Res.	Mechanical (ME)	Male	Black	4
Reid	AF	NG	Industrial (IE)	Male	White	4
Sam	Army	NG	Industrial (IE)	Male	White	4
Silas	AF	Res.	Aerospace (AE)	Male	Black	2
Spencer	AF	NG	Material Sc. (MS)	Male	White	3
Theo	AF	Res.	Electrical (EE)	Male	Asian	3
Victor *	Army	NG	Agriculture (AG)	Male	White	2
Wesley *	Army	NG	Computer (CP)	Male	Asian	3
Zane	AF	NG	Mechanical (ME)	Male	White	4

Table 1 Interview Participants.

EXPERIENCING FINANCIAL PRECARITY

The Importance of Financial Aid to RANG Students

Nine of the 15 students said they joined the military specifically for the educational financial benefits. As elaborated in a prior paper on these students (Moble et al., 2020), students joined the military to carry out a family legacy and to gain professional skills. Remaining in the military was critical to their receiving financial aid benefits; thus, these students had to fulfill their training and service obligations to remain enrolled in college.

For example, Victor was acutely aware that his military service makes it possible for him to remain in college, even if he feels somewhat guilty about joining the military primarily for that reason (rather than a loftier reason, such as service to country). He chose the National Guard “because they offer—it’s horrible—again, it’s for the money. There’s an incentive for joining the National Guard if I’m already enlisted...It promises that, when you’re commissioned and you choose National Guard, you’ll get a huge pay raise.”

Reid described making a simple cost-benefit calculation when deciding to join the military, saying “adding another year of military training was not a big deal to me. Pushing back graduation one year was the cost, but then to graduate debt-free just made sense.” Arlo spent time researching how the military could cover his educational expenses: “I basically came here bought and paid for, which is super nice.”

Early in his first year, Joel (National Guard and ROTC) found it difficult to pay for college. He also found it difficult

to keep up with his course work, which negatively impacted his grades. He explored the RC as an option for meeting his financial needs:

I did a lot of research and figured out if I joined ROTC, got a scholarship there, it would help me immensely ... I figured, hey, you can still live out your dream that you initially planned to, but just differently.

Janice described how the financial burden of attending college “got real” for her in her first semester. She joined the Air Force Reserves, selecting her military job because of the bonus it offered. She was also attempting to secure a “kicker” bonus, which would provide her with a \$350 housing allowance.

While Jayden said the military benefits were essential to remain in school, he had to work at an additional job to afford school. He struggled to balance the competing commitments (i.e., academic, military, and other paid employment) necessary to be able to stay in school. In his first year, he took “one weekend a month to work for the [Army] Reserves ... another weekend out of the month to go back home and work at my summer job ... I needed the money bad.”

Financial concerns shaped deployment decisions, with students angling to be deployed to accrue enough time (i.e., 180 days of consecutive service outside of a training environment) to be eligible for Post-9/11 GI Bill educational

benefits. When Spencer was asked if he worried about being deployed, he said he wanted that to happen: “It’s definitely something I think about, mainly from a financial aspect, ‘cause a deployment means money, and more benefits.” He said that during his sophomore year, he could have asked to be “looked over” and thus delay deployment until a more convenient time. He opted to be deployed in his second year, however, mainly for the financial benefits, even if he had to leave the university for a while.

Experiencing Challenges in Receiving Financial Aid

Despite the importance of financial aid to these RANG students, a majority said it was challenging to gain timely access to benefits. Students said they lacked clear information about policies regarding what would disqualify them from financial aid or how taking temporary leave to fulfill military obligations would impact their financial aid. Sam described the financial aid process as “a hassle,” fraught with the need to let university officials know about the details of military benefits:

I tabulated all the time I had in service and I was like, “All right, I’m allocated this amount of benefits.” They did their calculations and [said], “No, you’re allocated this.” We went back and forth, and of course they won.

Spencer, who joined the military mostly for education benefits, lost his state scholarship when he attended basic training in his second year: “I had to stop school for a while. When I got back, the state [higher education commission] cheated me out of a semester’s worth of [state scholarship] funding.” He was confused about the appeals process and, at the time of the interview, was negotiating a second appeal on his own to address the financial aid challenges he experienced because of his military service.

Carl indicated that prior to leaving for training, he received grant money from the university, in addition to some loans. When he returned to his university after seven months of training, his loans were reduced and the grant money was no longer a part of his financial aid package: “It was kind of frustrating because ... I was almost breaking even with the amount of money I was getting from the Guard versus how much grant money I was getting.”

Alex said he must carefully check his benefits each semester to ensure financial aid packages are processed in time for course registration: “Every semester I’ve had to call [the university Financial Aid Office] and say, ‘This is what’s going to happen, I need you all to not drop me from classes.’” He was once charged a \$100 fee because his aid was late and was short by \$100: “That seems like it exacerbates the issue ‘cause if someone’s short on their

tuition, why would you charge them another \$100?” While any college student receiving financial aid may face such challenges, RANG students are particularly vulnerable due to the complex nature of their financial aid. Carl described the impact of delays in receiving financial aid:

Last year, I don’t think I actually got the [military benefits] until late-October [or] November. That’s kind of frustrating ‘cause you start the semester and have to pay for everything in August, but you don’t get the tuition assistance until three months later.

Alex also experienced uncertainty and mixed messages about the National Guard’s educational benefits program in the state where he was attending college. As a result, he could not plan his college finances. He described the policy as “first-come, first-served” and “hit or miss”:

From the beginning of school, I [thought] “Am I going to get this paid or not?” ... I’ve had [the aid] come in the last month or two of the semester; sometimes it comes weeks [after] the beginning of the semester. There’s really no telling. I just wish they’d be more consistent with that.

Like Carl above, Alex remarked on the burden he faces because the military benefits are what he calls a “reimbursement program”; even with military benefits, he needs enough money on hand at the start of the semester to pay tuition: “How can I go and pay the school \$5,000 a semester? I don’t have \$5,000 sitting around to pay them. I need the money because I need to be in school.”

Wesley faced challenges in getting help from his campus financial aid office about his military education benefits. He was surprised when the interviewer told him about the Veterans Affairs (VA) Certifying Official on campus. He eventually met with an assistant dean of engineering who was a military veteran, and consulted with the National Guard’s Education Office. Liam described the disjuncture between university and military financial aid policies:

I had an issue with my GI Bill this summer. I didn’t know I wasn’t considered a full-time student by the VA, even though I was considered a full-time [summer student] at my university. That [was] not advertised to me.

Thus, because his status actually had changed to part-time, according to the military, Wesley received only half of the military benefits that he expected.

Reid was frustrated with the financial aid process and lack of consistent information from the university and from

the military, saying that student experiences might differ, based on military branch:

It's hard to know what you qualify for ... that communication aspect is pretty difficult ... You enlist and you serve. But then, sometimes, it's a struggle to get what you deserve ... I say you almost have to pry some of these things out of Uncle Sam's hand.

Jayden expressed dismay with financial aid; he said he felt “hoodwinked” by the military’s promise to fund his college education, saying “the benefits are there, but you’ve got to go find them.”

EXPERIENCING ACADEMIC PRECARITY

Completing Course Registration

Each semester students must register for classes for the following semester during a specific window of time, which may also include a mandatory meeting with an academic advisor. This process assumes that students are available during that window to complete the registration process. For RANG students, this may not be the case if they are in training, deployed, or facing uncertainty about their future deployments. Sam described advising as “a little wonky,” reflecting on the challenges he faced registering, while also trying to anticipate the specific details of his Guard duties during the semester for which he was trying to register. Although Carl was proactive and sought advice from his advisor in advance of National Guard training, he faced difficulties in registering for courses. He did not have regular access to a computer during basic training and was thus unable to register on time:

I got an email from the school saying that my account was going to be deactivated ... I was getting kicked out of the school because they didn't [know] where I was. And I kept emailing my advisor, [saying] “I'm not available during business hours. Can you help me figure this out?” But she didn't really know what to do.

Carl's parents contacted the dean's office on his behalf to ensure he could enroll in his classes.

Wesley faced a similar challenge when he attended training at the time of course registration. Like Carl, Wesley did not have access to his phone or computer and thus “didn't have the ability to contact anyone.” An advisor “knew I was [at training] and that's why they said they went ahead and signed me up. They knew I wasn't coming to orientation.” However, that advisor (who was not his main advisor) enrolled him in the wrong classes; Wesley did

not discover this happened until the beginning of the next semester, after returning from training:

After the first week-and-a-half, I talked to [my main advisor]; she [said] “Yeah, you're taking all the wrong classes.” I dropped all my classes and remade my schedule the day before the drop date. So, that was also very difficult because I missed four or five classes.

Getting Behind in Class and Off-Sequence in their Curriculum

The need to attend basic training and the frequent deployments while attending college posed significant challenges for some students, since the timing of these activities is often not in sync with the academic calendar. Deployment or training were often scheduled during busy times of the term, interfering with students' studies, as Liam reflected: “Even when I was taking the introductory courses, even when I was going to drill or something like that, it would just fall at the most inconvenient times.” For Theo, military obligations spanned the end of a spring semester and the beginning of the following fall semester, causing twice the inconvenience:

It was crazy. I actually finished my exams early my freshman year spring semester 'cause I had to fly out [in late April], and my exams weren't scheduled until [early May]. So, I had to finish all of my exams early. Then, I came back to school in the fall two weeks late. So, I had to pick up everything very quickly.

In some cases, frequent absences meant that the RANG students could easily get off sequence in their curriculum, thus delaying progress toward degree even further, particularly when required courses were only offered once a year. Scheduling conflicts caused Alex to get behind in his engineering studies: “I wasn't able to take a reactors course in the fall of last year which would've allowed me to graduate in May; so now I'm here taking reactors and I graduate in December.” Liam said that there was little room for error in his course planning, expressing that it was a constant juggling act, planning around National Guard duties while also trying to optimize his financial benefits, without which he would no longer be able to attend college. He described the resulting delay in progress toward his graduation:

Knowing how much time I got left on benefits, I would have to try to maximize my semesters. Coming back to [the study institution], it was like

“Okay, you can’t take a 12-credit-hour semester. You have to take 15” ... It got a little shaky just because of how they offer certain classes ... A couple of times, I got ... pushed back another semester because I couldn’t take one course or an extra course.

Carl was worried whether non-continuous enrollment would affect his class standing, and, ultimately, his motivation to stay in college:

[The military] asked me if I wanted to [be deployed] but I was scared if I went, I wouldn’t want to go back to school ‘cause I’d still have two years left. I told them I didn’t want to go on that [deployment].

He described the need to be constantly on-call, responding to requests from his commanding officer, who once asked him: “Would you be able to show up [for training] within 24-hours and be there for three days?”

Missing classes for training, particularly early in a semester, led to adjustment issues and had a discernable impact on many students’ grades. For example, Arlo fell behind in classes when he had to be away for training from June until early in the fall. Advance planning and parental assistance made the situation manageable:

I missed the first two weeks of school. I knew it was gonna’ be a disadvantage coming in. I knew about it ahead of time, so I was able to plan. My parents talked to my professors while I was gone [who] started sending me information while I was training.

Theo said his grades suffered when he returned to school from basic training. Zane was performing poorly in his studies when he was deployed from October to April of his sophomore year; the deployment orders also further demotivated him from his studies. He cited graduating after his friends, leaving his family, and having to radically change his life as depressors. He was ultimately placed on academic probation. Carl described the challenges in transitioning back to college after training and switching mindsets to adjust to school:

When I came back [from training], I was taking statics, [the] first real engineering class. [On] the first test I didn’t do too well because ... it was a big readjustment from being pretty much active-duty-military-style to student. It took a little bit for me to adjust.

He thought of leaving college before graduating, as reflected in this statement about his peers who were

graduating on time: “In some ways I’m jealous of them ‘cause I don’t particularly like school anymore; I wanted to drop out when I got back from training and just go active duty.”

RANG students worried their military obligations would lead them to fall behind their peers in their progress toward degree. Spencer said:

The biggest impact of the military on my education is when I have to go away and do military things, it scares me coming back. I work harder ... because I know I’m behind and I’ve been away for a long time.

Speaking from experience as he faced disruptions after being deployed for a full year, Spencer continued, “It was a long period of just kind of shutting my brain off and going through the motions every day [while deployed] ... So that’s why getting back in the swing of things is a little nerve-racking.” He said that, as a result, “this semester I have to catch-up and remember everything from the beginning of my education and apply it to this [semester].” Janice described experiencing a similar challenge with calculus, a core engineering course, when she had to leave for military training.

Some RANG students were reluctant to ask for help when they experienced academic challenges. Zane delayed formal diagnosis of a self-described “learning disability,” as he said he had to wait until after his National Guard term was finished to begin taking medication for it, saying “had I stayed in the military, I never would have been able to get the help that I really needed.” He reported that the formal diagnosis and taking medication has helped him “focus a lot better in school.” Spencer indicated he needed tutoring in his engineering courses, but he did not do seek that support as he was unsure whether he would be charged for tutoring, even though it was clearly stated on the tutoring center website that services are provided free-of-charge.

Navigating Ad Hoc Policies

The RANG students said they often encountered confusing and conflicting policies when seeking assistance for their needs. In some cases, students could not access information regarding relevant policies. In other cases, staff seemed to lack knowledge about the details regarding financial aid and military service, and faculty were unfamiliar with how to handle student requests. For example, students described the ad hoc nature of policies related to class absences and other issues, making it difficult for them to make decisions about their engineering education. Alex discussed the lack of clarity

about absences considered as “excused” by the university, saying that the policy does not account for his unique situation as a RANG student:

There’s excused and unexcused absences that the university defines. Other than getting called up to active duty, [the policy] doesn’t really account for Guard and reservists who have drill, which is essentially a form of active duty. If you’re not [at training when you should be], you’re considered AWOL [Absent WithOut Leave from the military].

He continued by saying that he felt that he and other RANG students are, “Put in between a rock and a hard place. I’m going to have make someone mad, whether it’s me sacrificing my grade in this class, or making my NCO [non-commissioned officer] mad at my unit because I’m not there on time”.

Arlo faced challenges when his military training overlapped with college obligations:

I didn’t really have any support trying to get caught up. It was all on me to go to each professor, and if I didn’t, I’d most likely fail that class. It would have been nice to have some group to ... go to and say, “Hey, how do you get caught up? I’m new here. I missed the first orientation” ... Integrating would have been better if there was more structure.

Alex said he had to constantly negotiate and explain himself to his engineering instructors, multiple times, saying “In my experience, some teachers are willing to work with you and some are not.” Liam experienced issues related to course withdrawal when he had to leave for two weeks in the middle of the semester for training; his professors understood this absence. However, when he was deployed immediately upon his return, but before the semester ended, only one of his professors agreed to let him finish the course, given his extended absence.

Silas indicated that most of his professors were understanding about his military obligations and were flexible about assignments. However, he recognized this was a tenuous situation as the tacit nature of this policy meant that he may not be granted exceptions in all cases and not all RANG students were treated alike:

It’s mainly because the professor knew me ... it wasn’t because it was in the policy ... the professor always has the discretion ... But there’s no protection. If I get a professor who’s not willing to accept it, then I guess I just have to take that absence.

Several students were unable to participate in internships due to the inflexibility and uncertainty surrounding their military obligations. This can be problematic for engineering majors as internships make them more competitive in the job market. Alex felt less qualified than his peers because he could not complete an internship due to his military duties:

I know many other engineering students are using their summers to do internships ... In that sense, I didn’t have the experience when I went to this career fair to say, “Yeah, I’ve got manufacturing experience, or I’ve got experience working for this company or that company.”

Students faced challenges in balancing competing demands. Jayden multi-tasked during drill weekends to keep up with his studies:

I had my books and my laptop at drill and while we’re doing all this stuff, I’m trying to study on my phone. It’s a task ... especially when we have to go to the field and you don’t have your phone.

Carl described trying to study while fulfilling his military obligations:

For me I’d say the hardest thing is probably losing the weekend every month ... mostly just because I’m in a difficult major ... I would be able to take study material with me for when we’re not doing anything, or at night when we’re technically off-duty, but we’re still there. It’s kind of hard in that environment.

DISCUSSION AND IMPLICATIONS

Our qualitative study investigated the experiences of an MCS subpopulation that has received little attention from researchers. Our focus on RC students’ perceptions of their experiences and the challenges posed by their contemporaneous, and often conflicting, educational and military obligations extends prior research on MCS in higher education. On one hand, RANG students are similar to the typical college student in that they generally begin college with a clear purpose in mind. Like other students, the RANG students were heavily invested in, and committed to, completing their college education; this confirms our prior study (Mobley et al., 2020) on these RANG students that described their academic assets, including their attention to detail and ability to make direct, real-time connections between their engineering studies and their military service.

However, they are different due to their fragmented educational journeys that are punctuated by training and deployment obligations. Unlike many students who stop-out, RANG students are often still actively enrolled when they must step out of school for training and deployment. These students had to traverse between their military and educational commitments in ways that are different from other students who may be balancing work and education obligations. In terms of getting behind in class and off-sequence in their curriculum, for example, students who participate in cooperative education programs also experience similar challenges transitioning back into college education after their predetermined time working in industry (Main et al., 2020; Ramirez et al., 2016). However, there are often student support programs to guide cooperative education program students during this transition because these often occur at the start of the semester. In contrast, RANG students' schedules related to military service and educational pursuits are more uncertain. Our current study indicates that RANG students face numerous challenges in doing so. They often leave the university for their military obligations with little knowledge about the duration of their absence from their classes, making it more difficult for them to plan their academic curriculum. As documented in prior research, RANG students may not fully consider how disruptions may influence their academic pursuits (Johnson, 2009). Some students felt like "lone RANGers," trying to figure it all out; others relied on parents or friends to resolve challenges.

IMPLICATIONS FOR PRACTICE

Institutional practices and programs shape students' decisions to re-enroll and persist to graduation (Tinto, 1993). Research indicates that student affairs professionals are essential advocates for MCS and play a critical role in MCS success (Lunceford et al., 2020); faculty and advisors can influence MCS' perceptions of the university environment and their expectations regarding degree completion (Southwell et al., 2018). However, military-education policies are complex. In our study, faculty and staff had varying levels of knowledge about relevant policies and varying levels of preparedness to address RANG student needs. Amongst the interviewees, there was a perceived unevenness and lack of clarity in how policies are applied, making it difficult for students to decide about their engineering education. Confirming prior research (Williams-Klotz & Gansemer-Topf, 2017), these RANG students had to be proactive in informing professors or rely on other intermediaries to intervene on their behalf. Faculty and staff may not have the information necessary to provide effective and accurate advice to students. As military-friendly policies contribute to these students'

academic success (Massie, 2016), it would be beneficial to provide training to faculty and staff about the nature of RANG military service (Cook, 2017; Doenges, 2011). As described below, several specific implications for policy and practice emerged from our study, pertaining to financial and academic concerns.

Addressing Financial Precarity of RANG Students

Our study results about financial aid challenges confirm Schmella's (2019) study of student veterans in which US Department of Veterans Affairs (VA) educational benefits were the dominant narrative theme. Financial aid was forefront in our study participants' minds; many were strategic in how they navigated the financial aid process. Financial aid for RANG students is complex in that different aid packages impact enrollment and re-enrollment decisions, with institutional scholarships having the highest positive impact on persistence and student loans the lowest (DesJardins et al., 2006). As VA support is comparable to a government scholarship, a consistent interpretation and application of financial aid policies is necessary. Students said the financial aid process was confusing, unpredictable, and time consuming. Qualifying for and receiving financial aid was fraught with uncertainty and caused significant stress for these students due to incomplete information, a reimbursement model, and staff members' incomplete of understanding of military financial aid.

Our study confirms prior research about the need to clarify and streamline financial aid policies so students can more fully focus on their academic studies (Braxton et al., 2014). Considering that many military personnel join the military primarily to access educational benefits (Bauman, 2009; Mobley et al., 2020) and given that military-provided educational benefits are an "opportunity engine" (Schmella, 2019, p. 302) that influences academic persistence, it is essential to provide MCS with careful guidance in the area of financial aid. For some students, receiving financial aid is a solution to academic precarity. As benefits for RANG students differ from those for the typical student veteran, institutions are advised to clarify policies related to tuition and fee refunds in the case of military-related withdrawals and for personnel to have a comprehensive understanding of government policies related to financial aid for MCS (Wilson et al., 2016), including about the differences in funding structure between the National Guard (a state-controlled service branch) and the Reserves (a part of the federal armed forces) is essential.

Addressing Academic Precarity of RANG Students

As military service can motivate MCS to succeed in college (Mobley et al., 2020), we posit that RANG students are likely to have high levels of educational and institutional

commitment. Research shows that students with positive impressions of their university and a firm commitment to complete their degree program are more likely to return to complete their degree (Woosley et al., 2005). However, the RANG students in our study were concerned that frequent absences would cause them to lose motivation to finish their college studies. Creating policies that make it easier for students to re-enroll, or continue programs of study while away, will secure their commitment to finishing their program of study (Woosley et al., 2005). Indeed, many programs provided virtual options for their classes as a direct result of the covid pandemic, and these virtual options can be potentially continued to support the needs of RANG and other students.

Upon returning to the university, RANG students must often navigate a bureaucratic maze of unclear and inconsistently applied policies, within and across departments, regarding issues such as receiving accommodations for military-related absences and negotiating continuous enrollment and reenrollment. Although federal law is designed to protect military personnel who experience disruptions in their education, RANG students may not be protected due to the short duration of their active-military service (Johnson, 2017). Our study demonstrated that RANG students require more flexibility with advising and course registration. Confirming prior research (Ackerman, et al., 2009), some RANG students struggled with catching up on work and other challenges of re-entry, such as declining grades and poorer performance upon their return. As a result, some RANG students felt behind their peers in their progress toward degree, confirming prior research (Rumann & Hamrick, 2010).

Our study uncovered the uncertain nature of course attendance and absentee policies, confirming research about ad hoc versus strategic approaches to serving MCS (Brown & Gross, 2011). Due to inconsistent and unclear policies regarding RANG-related absences, RANG students face an inordinate burden to figure out how to receive accommodations so they can fulfill their military and education commitments. They must often negotiate with professors, one-by-one, to explain their absences from class or request additional time on assignments. While it is important for any college student to be proactive, the lack of explicit policies regarding absences and other issues may make it less likely that RANG students will engage in the intense emotional labor required to receive help or ask for an exception to the rule to attend training or be deployed, making their situation more precarious.

To manage this financial and academic precarity, RANG students engage in security work, similar to that described in Hart's (2019) study of community college students. RANG students often bear the emotional burden of navigating an often-confusing system (Bauman, 2009). These challenges

were documented in a prior study of disabled student veterans who experienced a lack of coordination between campus entities striving to meet these students' needs (Wagner & Long, 2020). For several of the RANG students in our study, the policies were instructor dependent. Institutions may want to consider a formal "military absence policy" (Blackwell-Starnes, 2018), such as the one at Clemson University (2021). However, even these policies may not address the "one weekend a month" training and service obligation for RANG students, which may cause them to miss a day or two of class intermittently, leaving them at the mercy of their instructors for consideration. Institutions should clarify student and instructor obligations in these situations.

Universities can do much to ensure smooth transitions as RANG students move back and forth between various roles and identities. This is especially important for RANG students who lack the infrastructure provided to other MCS, such as that provided by a military base; they also do not experience the same continuity with their military experience as other active-duty soldiers (Sripada et al., 2018). Positive reinforcement from faculty and advisors can strengthen their identity as college students, enhancing the chances they will remain in college and eventually graduate (Schmella, 2019). Research shows that RC personnel, in particular NG personnel, desire and will use support services, especially related to VA benefits and education and employment services (Sayer et al., 2010). Campus-based student veteran centers can play a powerful role in advocating for RANG students, within the center itself and across campus with other university staff (Azpeitia & Emerson, 2022); our study's focus on RANG students adds to the literature on student veteran centers, which tends to focus on student veterans who have left the military altogether (e.g., Moore, 2017). In addition to strengthening existing student veteran services on campus, universities may want to collaborate with the military to provide the best tailored services for RANG students. For example, the National Guard's Yellow Ribbon Reintegration Program is designed to facilitate a smooth transition for RANG personnel back into civilian life after deployment.

IMPLICATIONS FOR THEORY DEVELOPMENT

The decision to stop-out is complex and multidimensional (Tinto, 1993). We agree with Bauman (2009) that RANG students are not like the typical stop-out student. RANG students leave school for distinctly different reasons and thus constitute a separate category of departure and reenrollment. Departures, or the possibility of departure, are built into students' educational plans and are integral to their decision-making about college enrollment and joining the military. Our study showed that RANG students maintain a strong desire to remain enrolled and complete

their degrees, despite having to leave school temporarily to meet their military obligations.

The RANG students in our study did not experience a clean break from the university when they departed campus, as other stop-out students may. Rather, RANG students straddle two worlds, juggling academic responsibilities while attending training or while deployed. The term “stepping out” more accurately reflects these students’ frequent transitions between student, active-duty service member, and veteran statuses, transitions which may have negative consequences (Darwin, 2016). “Stepping out” may be more appropriate and more accurately reflect RANG students’ intentions than “stopping out” and other terms used in research on student departure (Grabsch et al., 2021).

“Stopping out” may unintentionally communicate a finality, or deficit approach, to their departure, whereas “stepping out” makes it clearer that many RANG students may remain enrolled when leaving school. The use of such terminology responds to calls for language that better distinguishes between stop-out students’ intentions to return to college to complete their degree (Woosley et al., 2005); such language can also assist in efforts to more carefully delineate between the diverse transitions experienced by MCS as suggested by Schultz and colleagues (2022). As institutions address the factors uncovered in our study, RANG students may face less financial and academic precarity and may ultimately feel a stronger sense of fit with their school, a factor associated with returning to college after stopping out (Woosley, 2003; Woosley, et al., 2005).

LIMITATIONS

Although our qualitative study fills a gap in MCS research, it is not without limitations. As we focus on students attending three universities, the findings are not directly transferable to other institutions. Though the study highlights challenges for students in engineering, a discipline with rigid curricular requirements, the results may not be directly transferable to RANG students in other majors. Our study does not include students who faced insurmountable challenges and switched out of engineering or left college. Our study includes narratives from 15 students. Future studies could include a larger number of and strive for more women participants and students from all races/ethnicities. Despite these limitations, our qualitative study has theoretical and practical implications for addressing the needs of RANG students to support their persistence to graduation. Results can also be used to think about student departure decisions, for all students, in more creative ways as students seek to engage and re-engage upon their return.

CONCLUSION

Our qualitative study adds to research on MCS, focusing on engineering students serving in the Reserves and National Guard. The contemporaneous nature of their military service and educational pursuits makes them a unique population. Conflating RANG students with other MCS ultimately does RANG students a disservice. Our data indicate that RANG students experience different challenges than student veterans. RANG students straddle two worlds, trying to commit to two intensive endeavors—earning their college degree and serving in the military. They are motivated to succeed, despite having to step away from their educational pursuits. Institutions should strive to ensure that their temporary departures are not detrimental to the quality of their service or to their goals of earning a degree, due to stresses faced in juggling competing demands, worrying about financial aid or falling behind their peers. Attention to their unique needs can ensure that their stepping out does not transform into a permanent stop-out, or drop-out, from college. Designing policies, programs, and services around the discourse of stepping out, as opposed to stopping out, may better address the needs of MCS and RANG students in particular, who sacrifice so much to serve our country.

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The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Catherine Mobley  orcid.org/0000-0002-3133-8317
Clemson University, US

Susan M. Lord  orcid.org/0000-0002-2675-5626
University of San Diego, US

Joyce B. Main  orcid.org/0000-0002-3984-533X
Purdue University, US

Catherine E. Brawner  orcid.org/0000-0002-8172-7599
Research Triangle Education Consultants, US

Joseph Murphy
University of California, Los Angeles, US

REFERENCES

- Ackerman, R., DiRamio, D., & Garza Mitchell, R. L.** (2009). Transitions: Combat veterans as college students. *New Directions for Student Services*, 126, 5–14. DOI: <https://doi.org/10.1002/ss.311>
- Alschuler, M., & Yarab, J.** (2018). Preventing student veteran attrition: What more can we do? *Journal of College Student Retention: Research, Theory & Practice*, 20(1), 47–66. DOI: <https://doi.org/10.1177/1521025116646382>
- Astin, A.** (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. Jossey-Bass.
- Azpeitia, E., & Emerson, S.** (2022). Assessing veteran services and success in higher education: Cal Poly Pomona's Veterans Resource Center case study. *Journal of Veterans Studies*, 8(1), 29–40. DOI: <https://doi.org/10.21061/jvs.v8i1.238>
- Baldor, L. C., & Copp, T.** (2022, October 10). Army to expand recruiting programs, investments to fill ranks. *Military.com*. <https://www.military.com/daily-news/2022/10/10/army-expand-recruiting-programs-investment-fill-ranks.html>
- Bauman, M.** (2009). The mobilization and return of undergraduate students serving in the National Guard and Reserves. *New Directions for Student Services*, 126, 15–23. DOI: <https://doi.org/10.1002/ss.312>
- Blackwell-Starnes, K.** (2018). At ease: Developing veterans' sense of belonging in the college classroom. *Journal of Veterans Studies*, 3(1), 18–36. DOI: <https://doi.org/10.21061/jvs.2>
- Bonar, E. E., Bohnert, K. M., Walters, H. M., Ganoczy, D., & Valenstein, M.** (2015). Student and nonstudent National Guard service members/veterans and their use of services for mental health symptoms. *Journal of American College Health*, 63(7), 437–446. DOI: <https://doi.org/10.1080/07448481.2014.975718>
- Booker, B., & Phillips, J.** (2017). A clarified purpose and mission: Defining the role of the Reserve Component using an ends/means/ways framework. *The Officer*, 41–45. https://cdn.ymaws.com/www.roa.org/resource/collection/024B5E77-8874-4279-9FFD-0459A162E72D/2017_Winter.pdf
- Braxton, J. M., Doyle, W. R., Hartley, H. V., Hirschy, A. S., Jones, W. A., & McLendon, M. K.** (2014). *Rethinking college student retention*. Jossey-Bass.
- Brown, P. A., & Gross, C.** (2011). Serving those who have served: Managing veteran and military student best practices. *Journal of Continuing Higher Education*, 59(1), 45–49. DOI: <https://doi.org/10.1080/07377363.2011.544982>
- Clandinin, D. J.** (2016). *Engaging in narrative inquiry*. Routledge. DOI: <https://doi.org/10.4324/9781315429618>
- Clemson University.** (2021). *Students called to active duty*. <https://www.clemson.edu/registrar/veterans/veteran-call-duty.html>
- Cook, J. S.** (2017). *The female veterans' voice: Their challenges when faced by stop out enrollment* (Publication No. 10273594) [Doctoral dissertation, Holy Family University]. ProQuest Dissertations and Theses Global.
- Courage, C.** (2013). Army National Guard warriors: A part-time job becomes a full-time life. In R. M. Scurfield & K. T. Platoni (Eds.), *War trauma and its wake: Expanding the circle of healing* (pp. 53–68). Routledge.
- Darwin, J.** (2016). Unique challenges of National Guard and Reserve service members. In N. D. Ainspak, C. Bryan, & W. E. Penk (Eds.), *Handbook of psychosocial interventions for veterans and service members: A guide for the non-military mental health clinician* (pp. 30–35). Oxford University Press. DOI: <https://doi.org/10.1093/med:psych/9780199353996.003.0003>
- Deliso, M.** (2021, September 12). How National Guard members are helping hospitals on the brink during the delta surge. *ABC News*. <https://abcnews.go.com/US/national-guard-members-helping-hospitals-brink-delta-surge/story?id=79951204>
- DesJardins, S. L., Ahlburg, D. A., & McCall, B. P.** (2006). The effects of interrupted enrollment on graduation from college: Racial, income, and ability differences. *Economics of Education Review*, 25(6), 575–590. DOI: <https://doi.org/10.1016/j.econedurev.2005.06.002>
- DesJardins, S. L., & McCall, B. P.** (2010). Simulating the effects of financial aid packages on college student stopout, reenrollment spells, and graduation chances. *The Review of Higher Education*, 33(4), 513–541. DOI: <https://doi.org/10.1353/rhe.0.0169>
- Doenges, T. J.** (2011). *Calling and meaningful work among student military veterans: Impact on well-being and experiences on campus* (Publication No. 2568765) [Doctoral dissertation, Colorado State University]. ProQuest Dissertations and Theses Global.
- Duncan, S. M.** (1991). *Gulf War was a test of Reserve Components and they passed*. ROA National Security Report. The United States Naval War College. <https://www.globalsecurity.org/military/library/report/1995/p162.pdf>
- Duffin, E.** (2021). Active and reserve US military force personnel numbers by service branch and reserve component, 2019. *Statista*. <https://www.statista.com/statistics/232330/us-military-force-numbers-by-service-branch-and-reserve-component>
- Eagan, K., McBain, L., & Jones, K. C.** (2017). Editors' notes. *New Directions for Institutional Research*, 171, 7–9. DOI: <https://doi.org/10.1002/ir.20198>
- Eighmey, J.** (2006). Why do youth enlist?: Identification of underlying themes. *Armed Forces & Society*, 32(2), 307–328. DOI: <https://doi.org/10.1177/0095327X05281017>
- Griffith, J., & Ben-Ari, E.** (2020). Reserve military service: A social constructionist perspective. *Armed Forces & Society*, 47(4), 635–660. DOI: <https://doi.org/10.1177/0095327X20917165>
- Grabsch, D. K., O'Brien, L. S., Kirschner, C., Chinnam, D., Waddell, Z., Leibowitz, R., & Madsen, M.** (2021).

- Characterizing nonreturning college students and their departure intentions. *Journal of College Student Retention: Research, Theory & Practice*, 1–22. DOI: <https://doi.org/10.1177/15210251211056296>
- Hart, B. A.** (2019). Hanging in, stopping out, dropping out: Community college students in an era of precarity. *Teachers College Record*, 121(1), 1–30. DOI: <https://doi.org/10.1177/016146811912100105>
- Higgerson, P. R.** (2017). *Student veterans and their transition to becoming a college student* [Doctoral dissertation, Eastern Illinois University]. Eastern Illinois University Institutional Repository. <https://thekeep.eiu.edu/theses/3219/>
- Hughes, B.** (2022, January 6). Maryland National Guard activated for COVID-19 emergency. *National Guard News*. <https://www.nationalguard.mil/News/Article/2889967/maryland-national-guard-activated-for-covid-19-emergency>
- Jepson, J. A., & Tobolowsky, B. F.** (2020). From delay to degree: The postsecondary experiences of six nontraditional students. *Journal of College Student Retention: Research, Theory & Practice*, 22(1), 27–48. DOI: <https://doi.org/10.1177/1521025117724347>
- Johnson, A. B.** (2017). *Military-connected students in online learning programs: Students' perceptions of personal academic perseverance* (Publication No. 10690068) [Doctoral dissertation, Drexel University]. ProQuest Dissertations and Theses Global.
- Johnson, G., & Appel, S.** (2020). Military-connected students in higher education. *Change: The Magazine of Higher Learning*, 52(1), 30–36. DOI: <https://doi.org/10.1080/00091383.2020.1693821>
- Johnson, J. C., & Weller, S. C.** (2001). Elicitation techniques for interviewing. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: Context & method* (pp. 491–514). Sage. DOI: <https://doi.org/10.4135/9781412973588.n30>
- Johnson, T. J.** (2009). Ensuring the success of deploying students: A campus view. *New Directions for Student Services*, 126, 55–60. DOI: <https://doi.org/10.1002/ss.316>
- Johnson, W. L.** (2017, March 20). *Federal and state laws protect military students on orders*. Reserve Officers Association. <https://www.roa.org/blogpost/1434064/271141/Federal-and-State-Laws-Protect-Military-Students-on-Orders>
- Kalleberg, A. L.** (2009). Precarious work, insecure workers: Employment relations in transition. *American Sociological Review*, 74(1), 1–22. DOI: <https://doi.org/10.1177/000312240907400101>
- Kim, Y. M., & Cole, J. S.** (2013). *Student veterans/service members' engagement in college and university life and education*. American Council on Education Center for Policy Research and Strategy/National Survey of Student Engagement. <https://www.acenet.edu/news-room/Documents/Student-Veterans-Service-Members-Engagement.pdf>
- Kime, P.** (2021, September 1). National Guard surging to Louisiana for hurricane relief, California to combat fires. *Military.com*. <https://www.military.com/daily-news/2021/09/01/national-guard-surging-louisiana-hurricane-relief-california-combat-fires.html>
- Korstjens, I., & Moser, A.** (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice*, 24(1), 120–124. DOI: <https://doi.org/10.1080/13814788.2017.1375092>
- Lincoln, S. Y., & Guba, E. G.** (1985). *Naturalistic inquiry*. Sage. DOI: [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Lunceford, C. J., Buetikofer, E., & Roberts, G.** (2020). Our turn to serve: Assessing military-connected students. *New Directions for Student Services*, 169, 53–63. DOI: <https://doi.org/10.1002/ss.20344>
- Maietta, R. C.** (2006). State of the art: Integrating software with qualitative analysis. In L. Curry, R. Shield, & T. Wetle (Eds.), *Improving aging and public health research: Qualitative and mixed methods* (pp. 117–139). American Public Health Association and the Gerontological Society of America.
- Main, J. B., Johnson, B., Ramirez, N., Ebrahiminejad, H., Ohland, M. W., & Groll, E.** (2020). A Case for Disaggregating Engineering Disciplines in Engineering Education Research: The Relationship between Co-Op Participation and Student Academic Outcomes. *International Journal of Engineering Education*, 36(1A), 170–185.
- Massie, M.** (2016). *Active duty military students' perceptions of factors related to academic persistence at the collegiate level within the US* (Publication No. 10092248) [Doctoral dissertation, Northcentral University]. ProQuest Dissertations and Theses Global.
- Military.com*. (n.d.). *Everything you need to know about joining the Guard and Reserve*. <https://www.military.com/join-armed-forces/guard-and-reserve-faqs.html>
- Mobley, C., Brawner, C., Lord, S., Main, J., & Camacho, M.** (2019). Digging deeper: Qualitative research methods for eliciting narratives and counter-narratives from student veterans.” *International Journal of Qualitative Studies in Education*, 32(10), 1210–1228. DOI: <https://doi.org/10.1080/09518398.2019.1659440>
- Mobley, C., Murphy, J., Main, J., Lord, S., & Brawner, C.** (2020). The engineering education experiences of engineering students serving in the National Guard and Reserves. *Proceedings of the 2020 Annual Conference of the American Society for Engineering Education*. DOI: <https://doi.org/10.18260/1-2--35316>
- Molina, D., & Morse, A.** (2015). *Military-connected undergraduates: Exploring differences between National Guard, Reserve, active duty, and veterans in higher education*. American Council on Education. <https://www.acenet.edu/Documents/Military-Connected-Undergraduates.pdf>

- Moore, T. T.** (2017). *Evaluation of a community college veteran center and student veteran success*. (Publication No. 10637560) [Doctoral Dissertation, Wingate University]. ProQuest Dissertations and Theses Global.
- Morreale, C.** (2011). *Academic motivation and academic self-concept: Military veteran students in higher education* (Publication No. 3460783) [Doctoral Dissertation, State University of New York at Buffalo]. ProQuest Dissertations and Theses Global.
- Pascarella, E. T., & Terenzini, P. T.** (2005). *How college affects students: A third decade of research* (2nd ed). Jossey-Bass.
- Ramirez, N., Smith, S., Smith, C., Berg, T., Strubel, B., Ohland, M. W. & Main, J. B.** (2016). From interest to decision: A comparative exploration of student attitudes and pathways to co-op programs in the United States and the United Kingdom. *International Journal of Engineering Education*, 32(5A), 1867–1878.
- Reserve Officers Association.** (n.d.). *What ROA is doing for you: Advocacy*. <https://www.roa.org>
- Rhodes, D.** (2018). Military connected student perspectives of a large public university's veteran career development program. *Journal of Veterans Studies*, 3(1), 51–66. DOI: <https://doi.org/10.21061/jvs.4>
- Ruff, L.** (2021). *Examining the experiences of social belonging and campus integration for parenting undergraduates* (Publication No. 28322467) [Doctoral dissertation, Capella University]. ProQuest Dissertations and Global.
- Rumann, C. B., & Hamrick, F. A.** (2010). Student veterans in transition: Re-enrolling after war zone deployments. *The Journal of Higher Education*, 81(4), 431–458. DOI: <https://doi.org/10.1353/jhe.0.0103>
- Saldaña, J.** (2009). *The coding manual for qualitative researchers*. Sage.
- Sayer, N. A., Noorbaloochi, S., Frazier, P., Carlson, K., Gravely, A., & Murdoch, M.** (2010). Reintegration problems and treatment interests among Iraq and Afghanistan combat veterans receiving VA medical care. *Psychiatric Services*, 61(6), 589–597. DOI: <https://doi.org/10.1176/ps.2010.61.6.589>
- Schmella, S. T.** (2019). *Transition of role and identity: A multiple-case study of student veteran academic persistence and retention* (Publication No. 27541308) [Doctoral dissertation, Grand Canyon University]. ProQuest Dissertations and Global.
- Schultz, K. M., Caterino, A., Fox Garrity, B. K., & Daly, D. D.** (2022). Seven connotations of the word “transition” in student veteran literature. *Journal of Veterans Studies*, 8(1), 15–28. DOI: <https://doi.org/10.21061/jvs.v8i1.273>
- Seagren, R. W.** (2013, June 15). *The call to serve and the classroom: Issues facing National Guard Service members attending secondary and graduate schools*. American Bar Association. https://www.americanbar.org/groups/legal_services/publications/dialogue/volume/17/fall-2013/the-call-to-serve-and-the-classroom--issues-facing-national-guar/
- Sims, C. S., Vaughan, C. A., Theologis, H., Boal, A., & Osilla, K. C.** (2015). Navigating the road to reintegration: Status and continuing support of the US Air Force's Wounded Warriors. RAND Corporation. https://www.rand.org/pubs/research_reports/RR599.html. DOI: <https://doi.org/10.7249/RR1474>
- Southwell, K. H., Whiteman, S. D., MacDermid Wadsworth, S. M., & Barry, A. E.** (2018). The use of university services and student retention: Differential links for student service members or veterans and civilian students. *Journal of College Student Retention: Research, Theory & Practice*, 19(4), 394–412. DOI: <https://doi.org/10.1177/1521025116636133>
- Sripada, R. K., Walters, H., Forman, J., Levine, D. S., Pfeiffer, P. N., Bohnert, K. M., Emerson, L., & Valenstein, M.** (2018). National guard service member reintegration experiences: The transition back home. *Military Behavioral Health*, 6(3), 243–251. DOI: <https://doi.org/10.1080/21635781.2017.1412841>
- Strauss, A. L., & Corbin, J. M.** (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage.
- Tinto, V.** (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). The University of Chicago Press. DOI: <https://doi.org/10.7208/chicago/9780226922461.001.0001>
- US Air Force Reserve.** (n.d.). *Benefits*. <https://afreserve.com/benefits>
- US Army National Guard.** (n.d.). *Education*. <https://www.nationalguard.com/education>
- US Army Reserve.** (n.d.). *Army reserve education benefits*. <https://m.goarmy.com/reserve/benefits/education.m.html>
- Wagner, B. A., & Long, R. N.** (2020). From start to finish: What factors inhibit student veterans completion? *Journal of College Student Retention: Research, Theory & Practice* 0(0) 1–19. DOI: <https://doi.org/10.1177/1521025120935118>
- Williams-Klotz, D. N., & Gansemer-Topf, A. M.** (2017). Military-connected student academic success at 4-year institutions: A multi-institution study. *Journal of College Student Development*, 58(7), 967–982. DOI: <https://doi.org/10.1353/csd.2017.0078>
- Wilson, C., Sour, A., Miller, L., Saygbay-Hallie, M., Miller, C., & Daniels, R.** (2016). A standardized tool for measuring military friendliness of colleges and universities. *Sage Open*, 6(2), 1–13. DOI: <https://doi.org/10.1177/2158244016644009>
- Woosley, S.** (2003). Stop-out or drop-out? An examination of college withdrawals and re-enrollments. *Journal of College Student Retention*, 5(3), 293–303. DOI: <https://doi.org/10.2190/6NW2-FUJ4-4ATU-EKHC>

Woosley, S., Slabaugh, K., Sadler, A. E., & Mason, G. W. (2005). The mystery of stop-outs: Do commitment and intentions predict reenrollment? *NASPA Journal*, 42(2), 188–201. DOI: <https://doi.org/10.2202/1949-6605.1472>

Wu, A. T. (2018). *Stop-out students' on-leave experiences: How interactions affect institutional commitment and re-enrollment* (Publication No. 10837182) [Doctoral dissertation, Northeastern University]. ProQuest Dissertations and Theses Global.

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