Challenges in Transitioning from Civil to Military Culture: Hyper-Selective Disclosure through ICTs

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A critical element for a successful transition is the ability to disclose, or make known, one's struggles. We explore the transition disclosure practices of Reserve Officers' Training Corps (ROTC) students who are transitioning from an individualistic culture to one that is highly collective. As ROTC students routinely evaluate their peers through a ranking system, the act of disclosure may impact a student's ability to secure limited opportunities within the military upon graduation. Through a qualitative interview study of active ROTC students (N=14) examining how they use information communication technologies (ICTs) to disclose their struggles in a hyper-competitive environment, we find they engage in a process of highly selective disclosure, choosing different groups with which to disclose based on the types of issues they face. We share implications for designing ICTs that better facilitate how ROTC students cope with personal challenges during their formative transition into the military.

CCS Concepts: • Human-centered computing → Computer supported cooperative work;

Additional Key Words and Phrases: Privacy; Disruption; ICTs; Social Media; Disclosure; Military

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1 INTRODUCTION

Moving to college or a new home, changing occupations, losing a loved one, or breaking up with a romantic partner — these are all examples of life disruptions. Life disruptions often lead to transitions, which are a process through which people move from one life phase, condition, or status to another [41].

One of the most common transitions is the shift from high school to college. In this transition, an alarming number of students experience emergent challenges that serve to disrupt their ability to be successful as a student. These challenges range from the more mundane, like learning how to enroll in courses or living alone for the first time, to those that are more in line with personal crises, such as being victims of sexual assault, relationship breakups, death in the family, and more [2, 23, 29, 38]. There exists a great need to address the challenges students face in their transitions; by some

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estimates around 30% of college students in a given year report feeling depressed in a way that is debilitating [2].

One critical element that often yields a successful transition is disclosure, which is the practice associated with making issues or struggles known while in transition [28, 36, 54]. Today, universities across the United States have reported an increase in the number of students seeking counseling services to disclose and address issues, like mental health. However, many universities are overburdened, and students are reporting long periods of time between when they seek counseling and when they are able to see a counselor. Up to 84% of college students who screen for depression never seek mental health services [20] for reasons such as the associated stigma with mental health issues [4, 14] and inadequate measures taken by universities [31].

In this paper, we explore the transition disclosure strategies of a special category of students whose college experience is much more complex — Reserve Officer's Training Corps (ROTC) students. ROTC students are unique in that not only are they transitioning to and learning what it takes to be a successful college student, but they are also learning about and becoming part of military culture. When students become members of the ROTC program, they begin military training, which could be physically and mentally taxing, and many students report the change in lifestyle as a big transition in their lives. This transition creates a fragmented identity [51] for ROTC students, leading to complexity in the transition process as the norms between civil and military cultures are strikingly different. Military culture, unlike civil society, is based on collectivist social norms which stress routinized behavior, deference to authority, and performance [13].

Moreover, unlike their counterparts who enlist, ROTC students are being trained to join the military as officers. That is, upon graduating from college, they enter the military with higher ranks, often assuming positions of leadership. As part of their formal practices as ROTC students, they routinely evaluate their peers through a ranking system, which can complicate their disclosure practices in transition.

In this paper, we expand upon the literature examining transitions through the lens of ROTC students experiencing emergent challenges. We seek to understand how students who are walking the line between two different cultures prove that they can be leaders in the military upon graduation while coping with various kinds of challenges in their lives. We also discuss how the role of Information and Communication Technologies (ICTs) facilitate their ability to disclose and navigate personal challenges.

Today, students have access to a range of ICTs, such as smartphones and social media, through which they can maintain relationships with family and friends. In addition, these tools allow for more private interactions with supporters and may help circumvent problems associated with stigma that may arise through face-to-face interactions. When experiencing emergent challenges in transition, the role of ICTs becomes increasingly important as such tools have been found to play a significant role in enabling people to navigate transitions [19, 36]. We examined the ways in which college ROTC students disclose and manage emergent challenges and the role of ICTs in facilitating their coping strategies. We focus on the following research questions:

- R1: What types of emergent challenges do ROTC students deal with? How do ROTC students cope with these challenges? And what are their privacy concerns when seeking (or not seeking) support?
- **R2**: What role do ICTs, such as mobile and social media, play in the process of seeking support? How does the level of privacy afforded by the ICTs affect the student's ability to seek help and support when coping with emergent challenges?
- **R3**: How are ROTC students transitioning as they move into military culture?

¹https://www.insidehighered.com/news/2013/04/12/counseling-center-directors-face-troubled-students-overburdened-staff

Through semi-structured interviews with 14 ROTC students at Indiana University Bloomington, we identified types of emergent challenges, and report on the various ICT and non-ICT coping mechanisms ROTC students employ. Our paper makes several contributions to our understanding of life transitions. First, we illustrate the role that different ICTs play in the lives of college students and their transition into the military community. Secondly, we share empirical evidence of ROTC students' coping practices when dealing with emergent challenges through the context of their ICT use, and how balancing between civil and military social structures affects their disclosure practices. Finally, we find that ROTC students are hyper-selective in their disclosure practices — that is, ROTC students are hyper-aware about with whom and where they disclose due to the competitive nature of the ROTC, and disclose in relation to the need to maintain a positive impression such that they will not impact their future military careers. To our knowledge, no previous work has examined how ROTC students use ICTs in their transition to military culture, and this research aims to address this gap.

2 RELATED WORK

2.1 Emergent Challenges in Transition

When people undergo a transition, they often experience crises of identity [21]. Identity, according to Goffman [27], is a social construction that is related to the phenomenon of impression management — that is, we draw on the rules and norms in our environment as a means of managing people's impressions of us. While in transition, then, crises of identity emerges from conflicting rules and norms between the former and present environment. For example, students who transition from high school to college may experience issues in transition as it relates to understanding how to present themselves in a college setting, as opposed to a high school setting [30, 31].

2.2 Managing Transitions: The Case of ROTC Students

In this paper, we are concerned with one particular transition — the transition from high school to college. College students may experience a range of emergent challenges in transition. For example, in addition to resolving crises of identity by navigating the rules and norms of the collegiate environment, they may also experience depression, lose family members, fail exams, and more [2, 23, 38].

While in transition, one important element in resolving personal crises is the connection with sympathetic others [27] for purposes of disclosure, or making issues known through the engagement with people who can help make sense of emergent challenges. In the context of transition, however, people may be unwilling to rely on others within their new environment as the act of seeking help can complicate how others perceive them.

Students may experience additional challenges when transitioning from high school to college, such as mental health. The Association for University and College Counseling Center Directors report a rise in students coming to college with significant psychological problems [37]. In 2013, approximately 42 percent of students are entering college with anxiety, 36 percent are entering with depression, and another 36 percent are starting college with relationship issues.

More specifically, we focus on a particular demographic of students — ROTC students. ROTC students are different from their non-ROTC counterparts in many ways, ranging from their demographic background, aptitudes, social environments, and sociopsychological profiles (values, interests, aspirations, attitudes) [10, 11]. ROTC students, for example, attribute significantly more favorable attitudes to their parents and friends than non-ROTC students, and values like leadership and recognition are held in higher esteem by ROTC students when compared to non-ROTC students [10]. Importantly, ROTC students, as reservists, are integrating into military social structures.

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ROTC students may experience additional complications in their transition as they learn to navigate the civil-military cultural gap [13]. That is, whereas civilian culture in the United States is highly individualistic, military culture differs in that it is collectivist — it comprises strong interpersonal relationships, where members prioritize the shared values of the community over the individual, and is centered on merit based values that put the needs of the whole above the needs of any one person. ROTC students are especially unique in that they are both civilians and members of the military, which can lead to a fragmented identity [45] — on the one hand, they are learning to be college students, whereas on the other, they are also adapting to and becoming part of military culture. This can create complications in transition as ROTC students may feel that disclosing struggles to ROTC counterparts goes against collectivist norms in military culture, while also feeling disconnected from the support networks on which they used to rely (family and friends).

Military culture differs from civil society in that it is hyper-competitive — that is, military service members must reveal themselves as being able to perform [40]. Morris suggests that a hyper-competitive culture is more likely to develop in predominantly male environments, like the military. Moreover, the hyper-competitive nature of the military is linked to masculine identity construction [43]. That is, military service members often interact in ways such that they always give the impression that they are strong and able to perform in lieu of the various obstacles they might face during military service. This is especially salient for our study of ROTC students, as they routinely evaluate their peers in relation to their performance and aptitude to lead upon graduation. This can create an environment where people may not feel like they can disclose their struggles to others, out of fear of being perceived as weak, as this can negatively impact their peer evaluations [53].

2.3 Transition Disclosure with ICTs

Scholarship in CSCW and HCI has explored the role that different ICTs, such as Facebook, email and texting, play with different types of transitions, such as those from high school to college [16, 48], breakups [36], gender transitions [28], residential moves [44, 45], homelessness [36], domestic violence [36], or job loss [8]. All of these studies examine how people use social groups to cope with their transitions, which suggests that people may be using different ICTs to manage their transitions.

In the day and age of social media, ROTC students have opportunities through which they can connect with sympathetic others outside of the face-to-face college environment. The affordances of ICTs, such as Facebook, can enable ROTC students to manage their transitions and seek appropriate spaces for disclosure. Much like how people are aware of those with whom they are interacting in collocated contexts, social media users are also aware of their audiences and engage in purposeful posting behavior as a means of controlling how they present themselves to others [5]. Marwick and boyd [34] observe how Twitter users tend to collapse multiple audiences into a single context. Thus, social media users' perceptions of their audiences can influence whether or not they choose to disclose. Researchers have identified various disclosure strategies employed by users of social media, including self-censorship [1], selective sharing/grouping [32], and not posting altogether [47]. This research suggests that people may be using various ICTs and multiple identity performances to disclose information to the appropriate audiences as they navigate their transitions.

Whereas ROTC students, during the transition from high school to college, may be disconnected from friends and family thus limiting their ability to disclose personal struggles, they may maintain these relationships from a distance. Smith et al. examined how college students often use ICTs to maintain their relationship with their parents [48]. They found that students use a variety of techniques to stay connected with their parents when they move to college, of which the most

popular methods were through phone calls and texting. College students also communicate using phone calls and emails to maintain their relationship with their high school friends [16]. This communication with high school friends and family helps college students relieve tensions during their stressful transition to college life through the connection with people who can support them.

However, the decision to disclose struggles to family members may be further complicated due to the age demographic of college students. For example, scholarship that extends Goffman's analysis of social interactions to understand how youth use social media to maintain face in their everyday lives reveals that many of the practices young adults employ are around maintaining privacy and keeping their personal lives separate from their families [6]. ROTC students commonly begin their program as teenagers and have already built complex networks that involve different types of audiences when they enter college. Teens are now more wary of the type of information they share online as once unconnected friend groups could now overlap [6]. As such, ROTC students may choose not to disclose issues to family members, or disclose struggles through online media, such as Facebook, as a means through which they can manage the impressions others have of them. Hence, the understanding of the information sharing and disclosure practices of ROTC students contributes to the literature of both impression management and privacy.

To our knowledge, little is known about the uses of ICTs amongst ROTC students in resolving emergent challenges while transitioning into the military, and this study aims to address this gap. Related work has focused on the reverse transition — that is, veterans *returning* from war into a civilian society. For example, work by Semaan and colleagues [42] explains how veterans' uses of ICTs contributed to building identity awareness, enabling veterans to connect with other veterans as a means through which they can make sense of unfamiliar rules and norms while in transition. They also find that although hyper-masculine settings negatively impact a veteran's ability to disclose information that would aid in their transition, veterans who used online platforms were able to connect with supportive resources to facilitate their transition to civil society [43].

3 METHOD

We present data that is based on a qualitative interview study with ROTC students who experienced personal crises while transitioning from high school to college. This is part of a larger research project where we are trying to uncover the ways in which people use ICTs to navigate various kinds of disruption.

3.1 Informant Recruitment

Our data draws on a qualitative interview study with 14 ROTC students who were transitioning from high school to college. Interviews were conducted from April 2016 to September 2016. Recruitment for this study included the use of several parallel methods: 1) recruitment through the ROTC office at Indiana University Bloomington; 2) sending out recruitment emails to the local ROTC student listserv; and 3) snowball sampling after each interview. The goal of this approach was to diversify our sample by starting multiple seeds through which we could recruit a range of informants.

3.2 Interviews and Participation

Informants were only allowed to participate if they were at least 18 years old and members of Indiana University Bloomington's ROTC program. Interviews ranged from 25 to 60 minutes and we transcribed each interview within 24 hours after meeting each informant. The university's institutional review board approved the study and, before conducting interviews, we collected consent forms from each informant. We compensated each informant with \$15 at the end of the interview.

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3.3 Interview Protocol

The interview protocol was semi-structured and consisted of four sections: (1) collecting demographic questions; (2) asking informants to describe their life history and motivations for joining the ROTC program; (3) asking informants to share two stories about personal crises they have experienced in the past; and (4) uncovering their uses of technology to cope with personal crises.

3.4 Data Analysis

We created an initial code book using an inductive coding approach [49]. The qualitative coding process was done simultaneously with the interviewing at the same time where the research team met weekly to discuss the findings and the code book. We used a web application tool called Dedoose to analyze the data, where we conducted iterative and inductive analysis of our interview transcripts using coding and memoing techniques. Several codes emerged, related to the kinds of personal crises ROTC students experienced in college, as well as how they used ICTs to cope with personal crises. The codes were reduced under axial coding into the themes we present in this paper. We reached a point of saturation after our interview with our seventh informant, and the remaining seven informants confirmed our identified recurring themes.

3.5 Informant Demographics

Our total data set comprised of ten informants who identified as males and four informants who identified as females. All of our informants were at least 18 years old, and they ranged from 19-22 years of age. Our informants (N=14) were all undergraduate students with diverse majors, including computer science, recreational therapy, secondary English education, human biology, and political science. All of our informants reported using at least one ICT to cope with personal crises.

While we opened our study to students of any ROTC branch, all but one of our informants enrolled in the Army ROTC program — the other informant (P6) enrolled in Air Force ROTC. While minor programmatic differences exist between the Army and the Air Force, both share a philosophy of preparing students for long-term success in their careers. The interview data we report in our results will largely stem from the perspectives of Army ROTC students.

4 RESEARCH SETTING: THE HYPER-COMPETITIVE ROTC ENVIRONMENT

The Army ROTC program at Indiana University Bloomington, describes itself as a "leadership development program that offers challenging, hands-on training to build confidence and character while developing leadership skills for future success." Students at this institution are allowed to participate in the ROTC obligation-free for the first two years of their college experience where they are introduced to basic courses in military skills and the fundamentals of leadership. Students who then opt to commit to completing the ROTC program in their remaining years at the university enter the advanced courses for small unit training (i.e., command and staff functions, laws of war, weapons, nuclear and biochemical warfare), and are further trained for military service as an Army Officer. In the latter half of the program, ROTC students are considered 'cadets' and acquire the rank of a Second Lieutenant upon their graduation. ROTC cadets are obligated to serve in the Army for a minimum of four years through either active or reserve duty.

Students express different reasons for joining the ROTC program while in college [9, 11]. Some of our informants (P10, P12, P13) were born and raised into a military family, and were thus exposed to military culture at an early age. Others sought to join the ROTC as a means of financing their college education through full-tuition scholarships and living stipends (P5, P9, P10).² Students who

²http://www.goarmy.com/rotc/scholarships.html

				Mobile	Social	Online
ID	Sex	Age	Race	Device	Media	Games
P1	F	19	White	Yes	Yes	No
P2	M	22	White	Yes	Yes	No
P3	F	_	_	Yes	Yes	No
P4	F	20	White	Yes	Yes	No
P5	M	21	White	Yes	Yes	No
P6	F	19	White	Yes	Yes	Yes
P7	M	20	White	Yes	Yes	No
P8	M	19	White	Yes	Yes	Yes
P9	M	19	White	Yes	Yes	Yes
P10	M	19	Asian	Yes	Yes	Yes
P11	M	18	White	Yes	Yes	Yes
P12	M	20	White	Yes	Yes	No
P13	M	20	White	Yes	Yes	No
P14	M	18	White	Yes	Yes	No

Table 1. Summary of Informant Demographics and ICT Use.

We withhold demographic information from P3 due to the sensitive nature of her disclosures.

engaged in civic activities prior to college, such as the Boy Scouts of America, were also inclined to use the ROTC program as a platform for serving others and giving back to their nation (P11).

The ROTC program at Indiana University Bloomington, divides its curriculum into two courses: Basic and Advanced. The Basic Course commonly takes place during a student's freshman and sophomore years in college as elective classes each semester. In their first two years, they are introduced to primary military skills and the fundamentals of leadership. They learn about the role of an officer (i.e., origins of the Army, customs and traditions, branches of the Army, operations and tactics) and the role of the Army (i.e., differences between commissioned and non-commissioned officers, code of conduct, first aid, principles of war).

ROTC students undergo multiple transitions simultaneously. Not only are they transitioning from secondary to post-secondary education, but they also are being assimilated into military culture, which orients them to collectivist routines in contrast to individualist norms in civilian society. ROTC students must undergo this transition in a specialized and physically demanding pedagogy that is on the one hand centered on team-building, and on the other hand competitive.

Every semester, ROTC students assess each other by providing a numerical ranking for each individual in their cohort (with an option to comment with additional qualitative feedback); ROTC coordinators also evaluate students on a similar ranking system. The results of their evaluations affect their eligibility to attain certain types of awards and coveted opportunities. Unlike their non-ROTC counterparts, therefore, ROTC students are constantly aware of being ranked by their fellow cadets. They are oriented to act and perform a certain way in order to do well in the ROTC program, which fosters a hyper-competitive mentality from the onset of their involvement.

P14, an 18-year-old white male enrolled in his freshman year of ROTC program, characterizes the competitive nature of the ROTC program:

"With our physical training, there's definitely like a competitiveness with that, and there's also like incentives for being ranked top cadet at the end of the semester, and having the

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top GPA... and so I would say every semester every cadet is really striving to reach those goals so that they can receive the incentives, which is like a small scholarship." (P14)

P3, shares the various opportunities ROTC students vie for in their pursuit of advancing through the program:

"We're rated on a scale. You want the number one spot or at least the top five or top 10. If you can get in those spots, it's based on your GPA, how you do in ROTC, along with other things outside of it. The higher you get on that scale, the more freedom you have with if you want active duty, if you want reserve, or what branch within the Army that you want. People want infantry or artillery, the health area, aviation. You just have a better chance at getting what you want as opposed to something that you're going to have to be stuck with. You're competing against your classmates and all the other schools in the country, or in the state at least."

P13, a 20-year-old white male, succinctly states:

"[The ROTC] is extremely competitive. It's like the most competitive thing I've ever seen in my life." (P13)

We are interested in understanding the structures that are characterized by the ROTC program (such as peer assessment), and how these structures affect ROTC students' ability and willingness to disclose and seek support that affects their standing in the eyes of their peers.

Multiple informants have described how the competitive nature instilled in the military enforces particular behaviors and inhibits others (P2, P3, P7, P13, P14). For example, actions that demonstrate strength and camaraderie are viewed positively in collectivist military settings, and outward expressions that are counter to those norms may incur consequences. In the context of peer review, ROTC students who earn respect and trust from their peers are ranked higher than those who demonstrate unruly or lackluster performance. According to P7:

"For the peer evaluations done by cadets, it's just purely subjective. You know, how do you feel this cadet ranks within your class? Of course, if you have a cadet who doesn't do anything or is highly disrespectful or anything, he gets put at the bottom, and that adversely affects his overall national ranking in the eyes of the instructor because the instructor can look at that and go, 'I wonder why this cadet is ranked so low?' Then as for the instructors, they look at PT score, they look at how you're ranked in your peer evaluations, but also performance and extracurricular activities." (P7)

Since the subjective nature of the peer rankings lacks a clear rubric for evaluation, ROTC students must constantly juggle their social standings with everyone else in their cohort to achieve an optimal ranking. P2, a 22-year-old white male, shares how even though the national ranking weighs various factors, the local peer ranking remains an important factor in their overall success:

"We are competing against our peers. There is a national ranking called the OML (Order of Merit List) which is how we rank every cadet in the nation, from number one at the top to number 6000 at the bottom. Your standing in that influences what you get, whether you go to active duty, or to the national guard, whether you get to fly a helicopter, or you're working in the kitchen in the basement. How you rank is based on your GPA, your physical fitness, your cadre's ranking of you, and so you're really competing against... there's only in a sense 25 people in the class you're competing with. They're not really competition. It's the 5975 other people that are the real competition. But one of the things that certainly goes into it is your peer ranking, how you rank each other, because at the

³Physical fitness tests consist of push-ups, sit-ups, and a two-mile run. Scoring ranges from 0-100 points for each event.

end of the semester the cadre gives us all a sheet and say 'rank each other', where do you think you guys are at?" (P2)

The ramifications for doing poorly on peer assessments are harsh. ROTC students may be removed from their program for repeatedly ranking too low on their evaluations. According to P13:

"The competitive nature, it definitely reserves yourself... there's no denial that the competitive nature does not affect your peer assessment, which is a percentage of your grade and overall portfolio that gets submitted to big Army. That's big. People have been peered out, so like people get kicked out of schools for it." (P13)

The diverse personalities within ROTC may also clash at times among peers. When conflicts go unresolved, students may be more inclined to rate certain peers lower on the evaluation based on the state of their relationship. P13 elaborates further:

"I would say the problem is that, especially in my class, we're all alpha males and you just can't put alpha males together. I think that because of the competitive nature within ROTC is that it's really hard to be professional in a competitive relationship. . . I feel that with the military, it's going to be this way my entire life. When we were talking about that peer assessment, that's where you're going to run into issues." (P13)

The hyper-competitive environment in the ROTC program perpetuates and rewards a culture of respect. Those who stay in line with traditional military roles and perform well alongside others get rewarded with promotions and scholarships. However, as we discuss next, this type of environment also discourages ROTC students from sharing any vulnerability they may have with others as it may negatively affect how their peers rank them at the end of each semester. Unlike non-ROTC college students, these professional barriers to disclosure are an added complexity for ROTC students who usually do not disclose personal weakness for stigma or privacy concerns [38].

5 FINDINGS

Just like any other type of student, ROTC students face different kinds of personal crises during their lives. In our interviews, informants shared their daily routines and how various personal challenges disrupted their routines. We also inquired about their use of ICTs prior to, during, and after their personal challenges were addressed. Based on recurring themes we observed emerging from our data, we uncovered common factors associated with how they describe a personal challenge, the issues they face in disclosing their personal challenges with others, and the coping mechanisms they develop with ICTs to help them transition into a state of normalcy following a personal challenge to their everyday routine. Our findings are centered around disclosure strategies.

5.1 Strategies for Seeking Support

Previous research on disclosure describes it as a necessary step for transition [42]. Understanding the various types of transitions ROTC students experience contextualizes the impact that personal challenges have on their routines. All of our informants (N=14) reported overcoming various personal challenges at some point in their lives. Due to the hyper-competitive nature of the ROTC program, students face unique challenges to disclose personal weaknesses with their peers. They disclose their problems selectively with different types of audiences in order to protect their image within the ROTC.

Due to the hyper-competitive nature of the ROTC, their strategies for coping with personal challenges largely depend on the context of the challenge. That is, in our study, informants indicated several coping mechanisms ranging from seeking professional assistance from the ROTC to self-management, whereby their strategies depended on the type of issue they faced in relation to how the disclosure of a given issue could impact future peer assessments. Here, we describe their ICT

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and non-ICT mediated strategies, which include: developing self-reliance, turning to formal support infrastructures, using social media, moving in and out of real identity, and relying on family and friends.

5.2 Developing self-management strategies: Towards self-reliance

Our informants, college students who were also members of the ROTC, experienced a range of issues during their respective transitions. These issues were not different from those experienced by other college students, such as relationship breakups, academic issues, death and bereavement, physical injury, mental health, and more. Several informants focused on how ROTC made them more mature and efficient in managing their challenges. P13, a 20-year-old white male said he mostly relied on himself with work-related challenges as he was responsible for his own performance:

"I understand what it means to really put in effort and work. I don't need other people because they're just going to distract me. Then when it comes to a personal life issue, maybe I'll need them, but when it comes to work, it's mine." (P13)

Also, while in ROTC students appear to adjust their baseline as to what constitutes a serious challenge. For example, P13 said that most of the challenges are temporary and less significant to the much worse situations he faced while in basic training:

"I know it's not even like it was that bad for me, but because it's been worse than any other thing I've experienced, unless I get back to that worst state, it's not that bad." (P13)

Seven of our informants expressed coping with mental health issues that took the form of depression (P7), anxiety (P2, P3), and stress (P1, P5, P8, P11). Mental health was the most common personal challenge we observed throughout our interviews, and the ongoing attention to improving the mental health of ROTC soldiers and war veterans has been a strong priority of the military. ROTC students experiencing mental health issues may not be able to fully focus on their day-to-day routines, which could lead to disruptions that negatively impact their daily performance.

P2, a 22-year-old male cadet majoring in computer science, explained how he dealt with bouts of anxiety during his injury after joining ROTC. He found it difficult to talk about his injury inside ROTC — in the presence of his ROTC peers, he tried to portray a tough, masculine disposition when talking about his physical injuries. However, with trusted non-ROTC friends and his two closest ROTC cadets, he was willing to share his feelings related to his injury more authentically:

"[Depression and anxiety] are definitely something you would probably not talk about. Last summer, I had a lot of issues with anxiety. That was just because I was on opiates at the time because of my leg injury. I was on them six to eight months at a time, and swung off, took off opiates, and then this like process that when your body gets adapted to an opiate drug, you experience withdrawal. So, I thought all these mental issues were really just a drug withdrawal." (P2)

Returning to Goffman's concept of face [26, 27], research has shown that military culture contributes to the formation of a hyper-masculine identity [43]. While some informants used support systems that helped them overcome difficult challenges in their lives, others kept their personal challenges to themselves without seeking support from others. Keeping problems private to oneself allows students to maintain face in the ROTC:

"For the classic reasons you would think of, you don't want to come across as weak... You have to have a certain mental toughness. What we do is difficult. But at the same time, you don't want to come across as being someone who is weak. So it is a fine line... this line with mental toughness, and mental illness."

(P2)

P5, a 21-year-old white male cadet, was challenged with finding a balance in maintaining his relationship with his significant other while keeping afloat with his responsibilities for different leadership roles inside and outside ROTC. When asked about his stress management, he preferred to keep his struggles to himself:

"Suck it up until it's over. It is something I am used to doing; I came into the environment that expects it. When looking for an officer, you don't want someone that will break or complain about stress because that's who everyone looks up to. As a leader in the military, you can't expect your subordinates to do their job to the best of their ability if you aren't." (P5)

Some informants indicated physical exercises such as running, riding a bike, and working out are suitable as relaxation techniques during times of challenge. P11 feels that working out and time management are two key factors in handling personal challenges:

"I found working out is an extremely effective way of dealing with stress because it is a natural phenomenon where you release endorphins and dopamine. . . If I ever felt concerned at any time I would personally go out and work out myself after football practice or after track practice. Then I would do my school work to feel less stressed. Some other good things I have learned was time management because a lot of the stressfulness that happens [is] because of your incompetence. I don't end up procrastinating and I end up doing the work early."

According to P12, a 20-year-old white male, running relieves his stress:

"I guess my biggest stress reliever when I feel stressed... I go on long runs which is kind of a meditation... It's kind of time to get out and think, it's you and just the nature." (P12)

Our informants also described using a range of ICTs, such as online video games, mobile phones, and digital calendars, as a means to develop self-management strategies. For example, to deal with personal issues, P3 distracted herself with everyday life routines to get her mind off of stress and help ameliorate her situation. She fell back on hobbies such as reading, writing, and watching movies during stressful times:

"So some source of distraction, usually when it's like a writing or when we [do physical training] in the morning, I'll take out some of my frustration through that." (P3)

Moreover, reading books on her phone provided her with a means of distraction while she went through her personal challenges:

"I love to read; it's my escape. So, a lot of times if I felt really overwhelmed, I would use my phone and I would read the books that I had on my phone, and that helped a little bit as a distraction."

(P3)

P8, a 19-year-old white male, stated that playing video games helped him relax, along with watching YouTube videos or watching news from the internet:

"I would say like, playing video games would be more useful... I think I mentioned, watching YouTube videos or like, for some reason, I don't know why I find politics so therapeutic, not just using the internet as a tool for communicating but for gathering ideas has been useful."

(P8)

Informants such as P5 and P11 have expressed that ICTs such as digital calendars play a significant role in organizing their appointments, educational priorities, and workout regiments as they go about their daily lives.

"I [lay] out everything that needs to be done, everything that's either (1) stressing me out or (2) just needs to be done. I've actually used my computer for this and I've used my

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phone a lot. Just putting on a calendar where I can easily mark [tasks] off or I always talk to people about it." (P5)

In summary, the hyper-masculine nature of the ROTC can also make its students more self-sufficient in handling their personal problems. ROTC students have, in turn, developed various ICT-mediated strategies to cope with personal problems while maintaining face in the eyes of their peers to support the enactment of favorable peer assessments.

5.3 Turning to ROTC for seeking support: Formal support infrastructures

Physical injuries are a common personal challenge for ROTC students. Six of our informants suffered various levels of injury before or after joining ROTC. Almost all of them confirmed that ROTC has strong infrastructural support to help with injuries and mental health issues faced by ROTC students. Informants told us that athletic trainers are available on-site to help students cope with physical injuries. The act of seeking help by disclosing problems to the trainers does not affect the peer evaluation of the students, which often encourages them to look for such support. According to P2, physical injuries are commonly reported among ROTC students when they arise. He sought to share his condition with peers so that they knew he was not intentionally ignoring his duties as a cadet:

"I recognize as well, if people know I'm injured, then they know why I'm not doing something. If people don't know I'm injured and they see me slacking off, then they'd think less of me. But if someone's like 'oh [P2]'s on crutches and he broke his leg', then it makes sense why I'm not performing up to a standard."

(P2)

P2 suffered multiple physical injuries and felt that the available athletic trainers understood the situation and provided necessary support:

"Regarding injuries, we already have an athletic training staff, so they are always there to help us out. They are students in School of Public Health (Indiana University Bloomington) who are working on getting their doctorates, focusing on military health care, too. They can understand the level that we do, and they understand our culture a lot so you know, they are never going to be like the kind of people who are 'oh don't worry about it, you can always just sit out'. They understand that that's the mentality so they are not going to coddle us, either."

He also felt that he made a wise decision by seeking support from the athletic trainers:

"If I had not, then I would have been in a much worse place... when people would be like 'hey, why aren't you running?', I would not have had these athletic trainers saying 'oh no, you shouldn't be'."

(P2)

Along with physical injuries, ROTC students often face issues maintaining scholarship requirements, which affect their tuition fees and how they can finance their education. Our informants utilized ICTs to stay on top of academic responsibilities. For instance, they used the internet to locate tutoring centers, coordinated peer study groups through phone calls and text messages, and visited university websites for researching student organizations that would enhance their college experience. P7 shared his experience with an ROTC-affiliated honor society:

"Oh yes, there is an honor society called Scabbard and Blade, so if you can reach a certain GPA, they invite you and you become a member. Every Sunday they have tutoring sessions where any cadet can come in, and for that hour period they can work on any kind of homework. I utilize that a lot because one of my friends who is in my class, she had taken German and I was taking German then, and she really helped me with my German homework."

P9 stated that he sought advice from one of his close ROTC peers when he was struggling to maintain a certain GPA required by his ROTC contract:

"Last year I was taking a class and we have to have a certain a GPA in ROTC. We have to continue through our junior and senior year. To get that contract, we have to have a certain GPA. A class from high school already brought my grade down. It kind of hit me—hey I need to buckle up and get this down. I told one of my best friends and then I told my mom."

(P9)

Academic issues may affect one's peer evaluation and thus such issues are likely discussed with one's close ROTC peers only.

Besides seeking professional support from the ROTC program, students also disclosed their problems with their ROTC peers. However, the content they shared depended heavily on the context of their issues. For instance, P4, a 20-year-old white female, opted to vent her personal problems pertaining to college to her ROTC friends first, as they are more aware of her current situation than her non-ROTC peers. However, in other contexts such as romantic relationship breakups, reaching out to her girl friends would be prioritized over her ROTC peers:

"It depends on the situation, because if it's a breakup I would go to girl friends first, then go to ROTC guys, just because girl-on-girl... like understanding relationships are more helpful in that sense. But mainly I would go in that procession [of reaching out to ROTC peers first] because they know me and how I've been since I've been in college. I'm sure everyone changes once they go to college... Friends back home, you don't talk to them as often, so they don't know the details of your life as much." (P4)

Our informants did not hesitate to disclose the news of the deaths of family members with their ROTC peers as it does not leave any negative impact in their peer ranking evaluation. P4 comfortably shared the news of her grandmother's passing with her ROTC roommates:

"I was at school the last week I kind of knew. So, my mom called me and told me she wasn't going to be living much longer. So, I went home the weekend before she passed away. She passed away that next week. So, I talked to my roommates [from ROTC] about it more because they knew I was going home and wanted to know why. Then after my grandma passed away, I posted a memorial about her on Facebook."

In summary, the ROTC program provides various infrastructural support systems to help its students cope with physical and academic issues. Regardless of the hyper-competitive environment, students utilize these support structures and may opt to share their issues with ROTC peers if they feel disclosure will not negatively impact their future career.

5.4 Turning to social media to share problems: From real identity to anonymity

To maintain face within military contexts, our informants appropriated ICTs, especially social media and social networking sites (SNSs) like Facebook and Yik Yak, in various ways to seek help anonymously or seek out existing solutions online. Here we present how ICTs facilitate the transition of ROTC students to a new state of normal. Empirically grounded research on bereavement shows how sharing postmortem news on social media can indicate varying levels of distress [7] and how family members are using ICTs to remember their deceased loved ones [35]. Three informants (P1, P4, P11) used ICTs to share news of the death of their loved ones with other people within their social media networks.

For example, P1 shared news of the loss of her best friend on her Facebook page. She recalled receiving an overwhelming amount of support on social media immediately after she posted a

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status update on her best friend's death. Although she was initially taken aback by the news, she was comforted by her friends who reaffirmed that she was not alone in grieving:

"I found out in the morning she passed away late at night when I got a text about it... I told my parents and then my friends because she went to a different school than I did... Through social media, a bunch of people posted on my page: 'I'm so sorry,' and so that like really helped to know I wasn't alone because it did feel like I was kind of alone. I just lost the person I talked to about everything."

(P1)

P1 still interacted with trace remnants of her deceased friend's Facebook page. As Facebook was the only active social media site she used, she sometimes reflected on past memories of her friends through the platform's memory resurfacing features (i.e., 'On This Day' Facebook notifications). She also called her deceased friend's phone number to access digital remnants from an earlier time in her life (i.e., her friend's voice and humor in the voice mail message). P1 elaborates:

"Every once in awhile, even still I'll go and like a post on her Facebook page and like it's kind of like I'm talking to her even though I know she's not there but... I don't know it's just like they deactivated their phone after 2 years so because I would like text her and like call her because she had a stupid voice mail." (P1)

While some informants sought help and support from family and friends either by directly talking with them or communicating with them over their accounts on social media, others (N=3) preferred to hide their identity (P4, P6, P7) or wished that they could. In doing so, they can post questions on anonymous message boards and seek help from online communities under the guise of an avatar not connected to their real identity. For example, P6 a 19-year-old female cadet majoring in computer science, discovered she did not meet eligibility standards to join her group in summer field training. She described her lack of participation as a struggle since she would have to watch her ROTC friends enroll in the professional officer course while she was delayed to enroll in the same program for a year. She shared her dilemma on social media:

"I read about it quite a lot just as far as others that had went through the same thing and sent me to people I could talk to in the program. I definitely did chat groups online. It is a big family and they were supportive."

(P6)

In contrast to our informants who openly bereaved over their loved ones via social media, issues shared online pertinent to academic standing were not linked to their individual identity. Academic standing may influence how ROTC cadets perceive each other and thus factor into peer assessments that could implicate future goals. When we asked P6 whether or not the group chat was anonymous, she confirmed that it was. P6 implies that she may not have shared her situation online had the group not been anonymous:

"I did like that it was anonymous because of my pride, I don't want to broadcast it." (P6)

Here, P6's pride alludes to the hyper-competitive nature of the ROTC environment. Taking peer assessments into account, anonymity shields P6 from having her identity associated with her call for help. While she stated that she used social media platforms like Facebook to maintain communication with friends, she opted to not share personal problems online:

"I had 12 different sets of friends all over the country, so it was very big to kind of keep up and I was really big at a point to recording my activities. So, I would be like 'I ran 6 miles today'. . . I tend not to post very personal things on social media but yeah for more like the actual situation I would call or so."

(P6)

While P6 benefited from using the anonymous chat group, P4, who was not able to share her secret dating life with her family and friends, wished that Yik Yak⁴ was available at that time to get others' support without having to reveal her private relationship. Yik Yak was a mobile application that allowed for anonymous posting among users co-located within a limited geographic area. Launched in 2013, Yik Yak was popularized across North American college campuses but eventually went defunct in 2017. P4 speculates:

"If there was a Yik Yak at the time, because I liked Yik Yaked about my freshmen year of college relationship, I would probably would have used that quite a bit... I would probably have used Yik Yak especially since it is anonymous no body would have known that I'm in a relationship, so I would have kept it anonymous and probably I would have ranted through that a lot more... to rant about my emotion and get support." (P4)

Some informants who did not like to post on social media preferred to observe others express their problems and solutions online. Lurking is a passive form of information gathering that allows people to read the postings of others on social media or chat rooms without making any contributions. For example, P7, a 20-year-old male cadet, gleaned through many threads on Reddit to learn how to improve his well-being and to prepare himself to start dating other people:

"I tried to find out how to improve yourself on forums like Reddit. I looked up what people preferred in partners because I wanted to start dating. No, I didn't have an account... Someone had already written about the issue so I just read it." (P7)

In summary, like most other college students, ROTC students have used social media and ICTs as a means of coping with their personal challenges. But the ways in which they share their issues on social media differs from other college students due to the hyper-competitive nature of their environment. For most general issues such as bereavement of friends and family members, they tend to turn to social media for support. For more sensitive issues such as mental health or sexual harassment, however, they seek support from anonymous social media or by reading existing online resources.

5.5 Turning to family as the ultimate support system: No fear of judgment

We found that one of the most important factors in successfully coping with personal challenges depends on access to a close family member or friend who can provide support from a distance. The trust established within these existing support systems helps ROTC students overcome different kinds of personal challenges in their lives by talking through their personal challenges. All our informants (N=14) mentioned family and friends as the most important factor that helped them overcome personal challenges. At the beginning of the transition, they do not yet know many of their peers. Thus, family becomes the most vital source for receiving support.

As face-to-face interaction becomes less feasible for family members who do not live near the university, ROTC students increasingly employ ICTs, such as mobile phones and Facebook, to communicate with their loved ones. ROTC students can rely on their families an an outlet to share their challenges without facing any repercussions that affect their performance ranking. In the words of P3:

"I talk to my family if I feel like they need to know about it. I'm not one of those people that will go on Facebook and put 'I am feeling horrible today' with a sad face. I thought it was a way of getting attention and I don't like when people pay attention to me when I'm not in a good mood. I don't cry in front of others or make a scene. I don't like to explain

⁴https://en.wikipedia.org/wiki/Yik Yak

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all of the time. If people ask if I'm not in a good mood, I will just say I am stressed or have things going on." (P3)

P8 reflected on his college admissions process, recalling his rejection letter from his top school of choice. His mother was the only person he felt he could confide in and share the unfortunate news:

"My mom knows. Anything that sort of happens to me personally I don't really tell most people because that's sort of something I've never been open about If I have emotional stuff... My mom is pretty much the only person I would tell anything to." (P8)

Informants also indicated that ICTs play a major role in overcoming physical distance while communicating with family members. According to P1:

"I usually just use [Facebook] for communication cause I'm in a bunch of pages on Facebook for different groups. I use it a lot for ROTC actually and then I use it to keep in contact with my extended family at home. I posted we just had our military ball, so I put pictures up about that. People like to know what's going on with me and my parents like to see it. They're in Germany right now, so we have no way to stay in contact other than over the internet, which is really inconvenient because they're 6 hours ahead." (P1)

Determining what ROTC students disclose to their fellow cadets may impact future leadership opportunities within the program. Cadets who do not fit certain masculine expectations, such as withholding vulnerability or upholding discretion, may lose respect from their peers. Thus, some of our ROTC students expressed being more open to sharing their personal challenges beyond their ROTC crowd. P2 reported how he felt when he was hiding his pain and why he chose to disclose his issues to friends outside his ROTC community:

"With an ROTC friend, if he asks me 'how are you doing?', I would say, 'I am fine. I'll be fine' and make a joke about it. It is lighthearted. But I might text someone else a friend from the high school and say 'it is awful and this is ruining my life right now.' I won't say that to ROTC people because again you don't want to come across that your life is falling... They know that I'm going through a tough time." (P2)

P3, a female cadet⁵, was sexually harassed during summer training by someone she worked with and trusted. Due to the nature of her case, she preferred to keep her incident a secret and deliberately chose to not talk about the sexual harassment with other cadets. She expressed numerous concerns because of the stereotypes about sexual-assault victims in the military. She also was concerned that others would not believe her and may think she would report false accusations:

"With the sexual harassment, I don't talk about that at all. It is a touchy subject in ROTC and the Army. It is taken very seriously and I don't think it's anyone's business to know about it. Most of it has that and the Army culture does not have it, I don't want to get a stereotype. My worst fear was that people are going to think I was lying or doing to get back at him. I wasn't. I tried to do what I could to not let that assumption happen." (P3)

She used her mobile phone to call and text her family members to receive support and guidance:

"When the sexual harassment happened, [I felt] stress on top of anxiety and I relied on my parents a lot through that." (P3)

She also consulted with a counselor in addition to family members:

"I talked with my dad. I didn't really want to go into it too fully with him because he's my dad and he's also a shrink, and I wanted someone who was separate from the military and my family. So they recommended I go see a counselor just to work through the anxiety portions of it. I did that for a few sessions and that helped." (P3)

⁵We withhold additional demographic information to protect P3's privacy.

In summary, among our informants, family members were the primary support system where ROTC students could disclose their problems without the fear of judgment. During the transition from high school to college, they mostly relied on family, as they found it difficult to disclose problems to new peers in a hyper-competitive environment. Through their transition into military culture, ROTC students continuously connected with their friends and family via different ICTs and social media.

6 DISCUSSION

In this paper, we described the ways in which ROTC students managed personal challenges in their transition from high school to college. We found that, much like other college students, the personal challenges they experience have a profound effect on their ability to maintain their routines. That is, personal challenges from the more mundane like buying books, to those that are more akin to personal crises, such as the loss of family members or personal injury, served to disrupt their day-to-day activities. In the sections that follow, we discuss how ROTC students experience a unique transition, and how this manifests in their disclosure practices. We then describe implications for design of ICTs to aid in transitions and future work.

6.1 Hyper-Selective Disclosure in Transition

Our study builds on other research exploring the use of technology during identity transitions. Importantly, findings have varied with respect to the role and/or value of technology in helping people manage their transitions. Haimson et al., in their study of gender transitions [28], reported that people who used Facebook while in transition found the platform to be a source of both stress and support. On the one hand, people found others who could support them in their transitions, whereas on the other hand, they were unable to connect with people who could help them make sense of their identities. Ammari and Schoenebeck studied stigmas that fathers experienced in their new roles as parents when sharing information about their children online [3]. Moreover, Morioka and colleagues, in their study exploring the use of Facebook among disadvantaged college students in transition [39], found that for the most part people did not have access to mentors who could help support them in navigating their college identities.

Our work extends the existing research in important ways. ROTC students are unique in that they straddle the boundary between civilian and military cultures. On the one hand, they are like other college students — young adults learning what it means to be an adult — that is, they are often for the first time in their lives independent and making decisions for themselves. On the other hand, they are also becoming acculturated into the military, which unlike civil society, is highly collectivist, while also competing with their peers for a limited number of coveted positions upon graduation. As we found, during the transition from civil to military culture, ROTC students often seek support from others in their network through the use of social media and ICTs to better understand military culture. Even though the hyper-competitive nature of military culture makes it hard to disclose personal issues, ICTs can play a great role in helping ROTC students cope with challenges by connecting with others, including peers, about their circumstances.

Our study reveals how military cultural norms can create barriers for disclosure, where disclosure is critical in enabling people to manage disruptions. Importantly, we observed a strong connection between the form of personal challenges they were experiencing and support-seeking behavior. We also noticed how internal reward structures and ranking systems perpetuate hyper-competitive norms as ROTC students vie for coveted military positions. Here, we forward the idea of 'hyper-selective disclosure' — whereby people are highly cognizant of the audiences with which they enact support in relation to the challenges they are facing in transition.

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Rather than rely on their fellow ROTC peers for support when experiencing personal challenges, especially when the disclosure of their challenges countered hyper-competitive norms, our informants often relied on alternative support networks comprising of family and friends. For example, informants who experienced mental health issues often relied on strong ties for support through the use of social media and ICTs. In doing so, ROTC students were able to receive feedback from their peers that validated their experiences and personal challenges.

Moreover, as a means through which they could maintain their masculine identities, our informants also engaged in new practices as a way to obtain support while experiencing personal challenges. Our ROTC informants who experienced personal injury or mental health issues, for example, also sought support through anonymous online channels, and in some cases, started lurking in online forums as a less ideal and short-term alternative to seeking support when they were not yet ready to disclose their transition challenges to others.

Research examining the uses of ICTs among veterans transitioning from civil to military society have found that veterans often seek support from other veterans [42, 43]. For example, Semaan and colleagues [42] found that veterans used social media as a means through which they could connect with other veterans to help make sense of the norms of civil society while in transition. Similarly, they found that the culture of hyper-masculinity creates barriers to disclosure in veteran transitions; however, they also found that the observation of other veterans — people who are coming from the same, hyper-masculine culture — disclosing struggles often led to people setting aside masculine norms and making their struggles known.

In our study, ROTC students are undergoing the reverse transition, which is further complicated by the fact that they are learning to maintain multiple personas and intersectional identities (i.e., as college students, as members of the ROTC, as men and women, and more), which also manifests in the ways in which they deal with personal challenges in a fragmented way. In addition, unlike veterans, ROTC students rank each other repeatedly throughout the ROTC program. Thus, ROTC students in particular find it difficult to share completely their personal problems or feelings with their ROTC peers due to the hyper-competitive nature of the program, which forces them to maintain different levels of privacy for different types of audiences.

Michel de Certeau [18], in "The Practices of Everyday Life," describes how activities such as cooking and cleaning provide people with a sense of reliability in their day to day lives. Engaging in new practices, such as lurking, can be viewed as a way in which people try to re-develop a sense of reliability through the creation of new practices that can provide a sense of comfort in lieu of the challenges they are experiencing. What this suggests is that it is important for people, when experiencing challenges, to not only find people who can help them make sense of struggles, but to also develop new routines that give them security. For example, P8 found watching YouTube videos on current political events a relaxing way to cope with stressful situations.

Giddens [24] makes an important contribution to our understanding of security and reliability. Through the concept of ontological security, he argues that people feel secure through the production and reproduction of experiences, such as routines. In the context of personal challenges, ontological security is disrupted, and thus support-seeking behavior can be viewed as a way in which people try to restore ontological security.

6.2 Implications for Design

Whereas the importance of disclosure is critical in enabling people to overcome personal challenges, our informants experienced issues limiting their ability to make their struggles known. Importantly, we found that many of the barriers to disclosure stemmed from the unique position of ROTC students as both civilians and members of the military, especially with respect to masculinity and

the hyper-competitive environment in which they were embedded. Here, we identify implications for design that could contribute to aiding ROTC students in transition.

Designing for cultural translation. We found that ROTC students experienced a disconnect between civil and military social structures, as they were situated in a space between both social worlds. New technologies could be designed to help ROTC students navigate the boundaries between social worlds on two levels. First, considering ROTC students are entering an unfamiliar social structure, new ICTs could help them translate between the norms of civil and military social structures. Moreover, whereas there exists a disconnect between military personnel and civilians, new ICTs could be used to help facilitate cultural transfer between ROTC members and other students.

As people turn to the internet to locate resources for transitioning into the military, immersive ICTs can also provide an alternative form of training. For example, ICTs that take the form of massively multiplayer online role-playing games can ease newcomers into military culture by introducing them to military-specific contexts and providing virtual simulations of combat scenarios. Such games can also help existing military members transition back into civil society.

Designing for supportive anonymity. We also found that ROTC students relied on anonymous online spaces for support. Anonymous groups or blogs can be designed just for ROTC students where they can easily communicate with other ROTC students without revealing their true identities. Prior work has shown that knowing about other veterans' struggles or by simply observing them provides motivation to fight one's own struggles [42, 43]. Thus, anonymous support groups consisting of ROTC or veteran members can help aid others in their transition to civil society.

However, research has found that anonymous online spaces may include interactions that do not allow for support — that is, with anonymity there is also an emergence of negative or anti-social behavior [12, 33]. This leads to the question of how we can design for supportive anonymity, or online spaces that are anonymous, but also civil.

Designing ICTs to improve fitness and reduce stress. Physical activity is especially important for ROTC students, as exercise routines are deeply embedded in their compulsory basic combat training. Previous research demonstrated the potential of ICTs, such as mobile applications, to display early warning signals to military users as a means of preventative intervention for high-risk behaviors [22]. Similarly, ICTs for ROTC students can take the form of wearable devices, such as a smartwatch, that can detect and notify stress levels of the user. ICTs built for ROTC students can also monitor performance benchmarks over time, coordinate peer groups to participate in recreational activities, and recommend supplementary workout activities to help users achieve personal physical fitness goals.

Prior HCI research has also looked at the integration of ICTs in recreational hobbies, such as archery [25], bird watching [15], and hunting [50]. ROTC students engage in a diverse array of outdoor activities, which may aid in reducing their overall stress and improving their mental health. Designers should take into account both the environmental factors ROTC students encounter in their fitness regimen, as well as the potential to identify and intervene during stressful situations, when designing ICTs that encourage opportunities for users to reflect on their health and wellness.

Designing for context collapse and audience selection. Prior scholarship in social media and communication literature [17, 34, 46, 52] explored how people made personal disclosures among multiple audiences in their social networks. Vitak found that people either factor in the lowest common denominator in their disclosure such that the content they shared was appropriate for all audiences or people divide their audiences into different groups and selectively share different content to each group [52].

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As ROTC students selectively disclose their problems to different groups, designing new ICTs that allow ROTC students to target specific audiences will prevent context collapse and encourage disclosure. Our interviews with informants also demonstrated context collapse within the hyperselective disclosure of ROTC students during periods of transition. New ICTs for ROTC students should be designed to support their varied types of disclosures for different audiences. For example, ROTC students seeking dating advice among their peers may not necessarily want their online posts to be shared among supervisors or archived for public viewing; likewise ROTC students sharing information about perceived personal weaknesses with friends and family may want to keep this information inaccessible to other ROTC members. Developing automated techniques that detect sensitive content within drafted social media posts in relation to the selected audience will prevent ROTC students from disclosing inappropriate information with the wrong audience.

6.3 Limitations

We conducted an exploratory qualitative analysis with a small sample size, although, given the population under study, it took considerable effort to recruit our sample. Our sample cannot be considered representative of all ROTC cadets, for which our recruitment involved a combination of advertising and snowball sampling. Our sample includes four women and ten men and so does offer a range of opinions by gender. Our sample, however, is mostly White (all but one informant, who identified as Asian) and does not represent the experience of other groups, such as African Americans and those who identify as LGBT.

There still exists a gap in literature that studies minority populations within the ROTC and veterans. While we only gained insight into one minority within military culture (women), subsequent studies may explore how different student groups (particularly those who are considered a minority in the ROTC) experience different types of transition challenges.

6.4 Future Work

A continuation of our research agenda spans a temporal analysis into the various stages of transition among military communities. While previous literature reports on how veterans transition out of active duty, our work looks at how students entering a collegiate environment opt for a structured path in the beginning of their military involvement. As social media platforms have been available to the millennial generation of incoming ROTC students, conducting a comparison study between the two populations — ROTC students and veterans — will provide interesting insights and implications for designing ICTs that ameliorate both the pre- and post-military transition experience. Also, future work may involve studying other collectivist groups in transition (such as immigrant students and student athletes) and their willingness to disclose personal challenges to others.

7 CONCLUSION

Our qualitative interview study of active ROTC students (N=14) explored how ROTC students use ICTs to cope with personal crises. We reported on the types of disruptions that affect their daily routines, barriers they face in disclosure, and how ROTC students use ICTs as a coping mechanism to adjust to a new state of normalcy. Our work extends research on ICT use during identity transitions through the context of the ROTC student experience, and we discuss the ways in which they navigate through a hyper-competitive environment to seek support when experiencing personal challenges.

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