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Assessing Graduate Student Needs and Structures of Support at Virginia Commonwealth University

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by

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"For I know the plans I have for you," declares the Lord, "plans to prosper you and not to harm you, plans to give you hope and a future." - Jeremiah 29:1

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"Go confidently in the direction of your dreams, live the life you have imagined." - Henry David Thoreau

Tameka Fitzgerald Burroughs

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Abstract

The purpose of this multi-case study was to explore how the institutional landscape is designed to support graduate student success at Virginia Commonwealth University (VCU), a large, public, urban, R1 research university. The study included review of existing literature on the various factors that contribute to or limit graduate student success at institutions across the country. A major aim of this study was to collect qualitative data from participants with a key stake in this issue, including enrolled graduate students, and faculty/staff supporting graduate (master's and doctoral) programs at VCU. Participants included 39 graduate students and 23 institutional stakeholders. All graduate students were invited to participate by email, with 39 final graduate students participating in seven, 60-90 minute focus groups of 6-8 students via Zoom with two members of the research team. Institutional stakeholders, with roles as full-time faculty or staff members at the university, were identified through institutional mapping and website review and invited via email, participated in 60-minute, one-on-one interviews via Zoom with one member of the research team. The study resulted in data coalescing around larger themes of graduate student support, factors promoting graduate student success, and challenges and barriers to success. A benchmarking comparison of VCU alongside peer institutions related to standards for graduate studies further identified areas of interest in 1) Programs and Services for Student Success, 2) Social Justice and Accessibility, 3) Collaboration, and 4) Assessment and Strategic Planning. Findings from the study indicated that, although VCU students appear to excel academically, there are challenges to graduate students balancing the demands of academic rigor with other obligations including, familial support, mental health and wellbeing needs, financial obligations, and social engagement. VCU students will continue to need increased support for funding, social connections, and referrals to appropriate resources. These findings

have significant implications for structuring support for graduate students both at Virginia

Commonwealth University and could influence institutions similarly situated across the country.

Keywords: graduate students, student success, social justice, inclusion, multi-case study

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Chapter I: Introduction

Choosing whether or not to pursue a graduate degree is a difficult decision for many college students, with many factors weighing in the balance. A national longitudinal study found that students self-select to pursue graduate education for a variety of reasons including the motivation to better understand an academic field, the desire to conduct research, the preparation to teach, and to create benefits for others through their work (Anderson & Swayze, 1998). Since Anderson and Swayze's early work, a number of studies indicate that students' motivation to help others is more likely to be held by women and minorities as reasons to pursue graduate study (Solem, et al., 2009; Spalter-Roth & Erskine, 2007). Students have also cited the credibility and prestige of graduate degree attainment as a motivation for pursuing post-baccalaureate education (Rudolph, 1990; Sanders & Landrum, 2012). While earnings are significantly higher (Baum & Steele, 2017) on average for those with advanced degrees vs. those with bachelor's degrees (23% for master's holders and 63% for doctorate holders), those with graduate degrees at the master's level are more likely to value their community leadership status over financial wellbeing. Similarly, those with graduate degrees at the doctoral level are more likely to report valuing being an authority in their field over financial gain (Hilmer & Hilmer, 2012).

The number of graduate degrees at both the master's and doctoral level that have been conferred in the United States has steadily increased over the last ten years. Roughly nine percent of the total population earned a Masters or Doctoral degree in 2021 (Irwin et al., 2022). Those students identifying as female earned a Masters and Doctoral degree at a higher rate (12%) than their male counterparts (7%) (Irwin et al., 2022). However, not all students who elect to pursue graduate degrees end up finishing their program. A recent study at Virginia Commonwealth

University (VCU) found that 30% of doctoral students in the Humanities and Sciences did not complete their degree (Bearden & Keel, 2020) and a national comparative study demonstrated rates of doctoral attrition as high as 50% (Nelson & Lovitts, 2001). While faculty have largely attributed graduate attrition to poor academic performance, graduate students themselves have instead cited a variety of barriers to completion, including finances, family concerns, exclusive learning environments, and lack of mentoring (Golde & Dore, 2001).

Persistence and degree completion are central to discussions on graduate student success. A number of factors contributing to positive outcomes in these areas have been cited, including the role of faculty mentorship and advising, financial support, inclusive culture and connected communities, and professional development opportunities (Offstein, et al., 2004; Bain, et al., 2011; Duranczyk, et al., 2015). The Council of Graduate Schools (CGS) provides statistical reports on graduate experience, persistence, and completion. Specifically, CGS, an organization composed mostly of graduate school deans and faculty, is largely focused on best practices for issues related more to the academic and administrative domains of graduate education rather than student development and services (Shepard & Perry, 2022). Consequently, this may widen the divide between academic affairs and student affairs as they relate to graduate students. Collaboration and formal partnerships across these two domains will help to accurately identify, and subsequently meet, the needs of today's graduate students. Moreover, institutional self-studies focused on the unique needs and challenges of their respective graduate populations will provide valuable benchmark data with which to formulate strategies for success.

Problem Statement

Student programming and support services at institutions of higher education are often primarily designed to target and support the undergraduate student population. However,

students enrolled in graduate programs often have different needs that require more targeted resources and support than what is designed and available for many students at the undergraduate level (Woolston, 2019). As such, there is a lack of research exclusively dedicated to exploring the non-academic needs of students enrolled in graduate programs across the country. This dearth of research is especially pronounced for graduate students with identities that have been historically marginalized (Burt, et al., 2018), and those with risk factors for mental health issues (Charles et al., 2022). Additionally, there is little data available to practitioners within higher education on the factors most likely to amplify or inhibit graduate student success. While there are distinct issues facing graduate students especially related to financial security, accessing basic needs, mental health and well-being, and relationships with faculty, additional research is needed to examine the issue from the perspectives of both graduate students and practitioners within higher education who hold roles designed to support graduate student success. Additionally, research should further examine how individual roles and identities are situated within the institutional environment.

As more students seek to obtain graduate degrees and new graduate programs are added by university academic departments, it is imperative that these same institutions dedicate resources to ensuring the success of graduate students. Similarly, additional research is needed to identify risk and protective factors facilitating graduate student success and to further identify best practices to equitably support graduate students pursuing degrees within institutions of higher education.

Study Purpose and Research Questions

The purpose of this study is to explore the existing institutional landscape of graduate student support and how current policies, programs, and resources contribute to graduate student

success at VCU. We anticipate results will lead to recommendations for innovative, high-impact practices designed to increase institutional capacity for recognizing and responding to the unique and diverse needs of the graduate student population at VCU. This study will attempt to answer the following questions:

1. How does the campus infrastructure, such as organizational structures, policies, and/or practices impact graduate student success?

2. What are the primary self-reported needs or challenges impacting graduate students' success at VCU?

3. How do self-reported needs or challenges vary across graduate students' discipline, identities, and other sociodemographic characteristics?

4. What personal characteristics and strengths do graduate students at VCU primarily identify that influence their overall success?

Nature of the Study

Graduate students account for a large and valuable portion of the field of higher education within the United States and around the world. "In fall 2019, some 3.1 million students were enrolled in post-baccalaureate degree programs in the United States" (Shepard & Perry, 2022, p. 3). In the last few decades, the graduate student population has evolved and seen an increase in diversity in respect to race and ethnicity, income, and many other identity factors. This study is designed to identify success factors among graduate students at Virginia Commonwealth University (VCU). In addition, this study seeks to provide a better understanding of the nature of the university's graduate student affairs endeavors while informing processes of change at the institutional level. Specifically, this study is intended to focus solely on the graduate student population at VCU, and is not intended to be widely generalized.

Conceptual Framework

Understanding the complexities associated with graduate student success extends beyond the experiences of each individual student at an institution. Any attempt to identify factors promoting or inhibiting success must take into account the characteristics of the students choosing to pursue graduate education, the nature of the relationships they form with their cohorts, faculty, and staff, as well as the characteristics of the environment and institutional structures where they study. Any solution proposing changes that supposedly better support graduate student success needs to also assess all of the individual, relational, and structural components that contribute to the issue.

The emergent needs among students pursuing graduate degrees at postsecondary institutions should be explored and articulated across the distinct levels that all play a demonstrable role in student success: individual, relational, institutional, and societal. The National Association of Student Personnel Administrators (NASPA) (2004) identified ways that an ecological approach could be used to inform models of student success by exploring the interplay of health, academics, and the overall campus environment. A social ecological model shown in Figure 1, and adapted from Bronfenbrenner's (1981) social ecological theory of development, and later Ostrom's socio-ecological systems framework (Partelow, 2017) shows how a concept such as graduate student success is related to more than just the personality traits of an individual student. The individual student and their ability to succeed is impacted by the relationships they form and mentorship they receive, the institutional policies, requirements, and support dictated by the university, and the broader issues impacting the world in which they live. The social ecological framework is adaptable, allowing researchers to construct emergent themes and variables across each level to better understand how both risk and protective factors create a

complex social and environmental interplay impacting individuals and groups within a setting (Partelow, 2017). This framework has also been adapted to better understand students within the context of higher education, and especially to guide research related to physical health, mental health, and well-being (NASPA, 2004; Eriksson et al., 2018). Research on graduate student success should take into account theories and factors across each level that might either hinder or promote success, since change in only one area without corresponding change in another is less likely to yield results over time.

Figure 1

Adapted Social Ecological Model to Assess Graduate Students
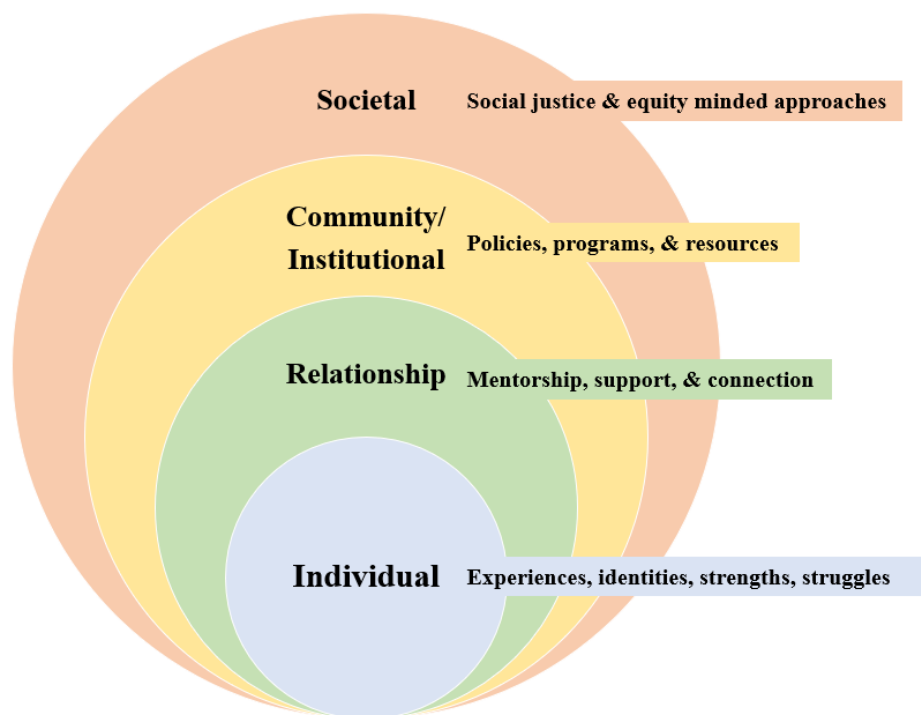
Individual

Understanding that there is still a large proportion of graduate students who begin but might not complete their degrees, additional emphasis should be placed on what prompts an

individual student to leave an institution or stop out of a graduate program. Often, research on student retention and departure has focused primarily on undergraduate students, and typically these conversations about student success are framed using a deficit-oriented approach. Vincent Tinto (1988), a renowned scholar in the field of college student retention, focused on what institutions could do to better support students through the liminal transition to university. Tinto (1988) noted that students who did not feel a sense of belonging or connection to an institution early on were more likely to struggle to adapt to the key transition period which ultimately might lead to their departure. Tinto (1988) also observed that older learners or transfer students also had similar struggles with adaptation and assimilation, but their needs were also potentially different from students closer to high-school age. Later, in subsequent works, Tinto (2017) identified three key factors in persistence: 1) self-efficacy, 2) sense of belonging, and 3) the value of the curriculum. In reflecting on his work, Tinto (2017) also emphasized the importance of better supporting students from lower income and historically marginalized groups.

These similar constructs are echoed in research on the factors promoting thriving within individuals. Martin Seligman (2011) is often cited as the founder of positive psychology in his focus on what creates conditions in which individuals can flourish or attain optimal well-being. These domains, since labeled as PERMA as noted in Figure 2, are similar to Tinto's (2017) findings and can guide research in identifying positive trends and strengths that make individuals more likely to succeed in graduate school.

Figure 2

Seligman's (2011) PERMA Model of Well-Being
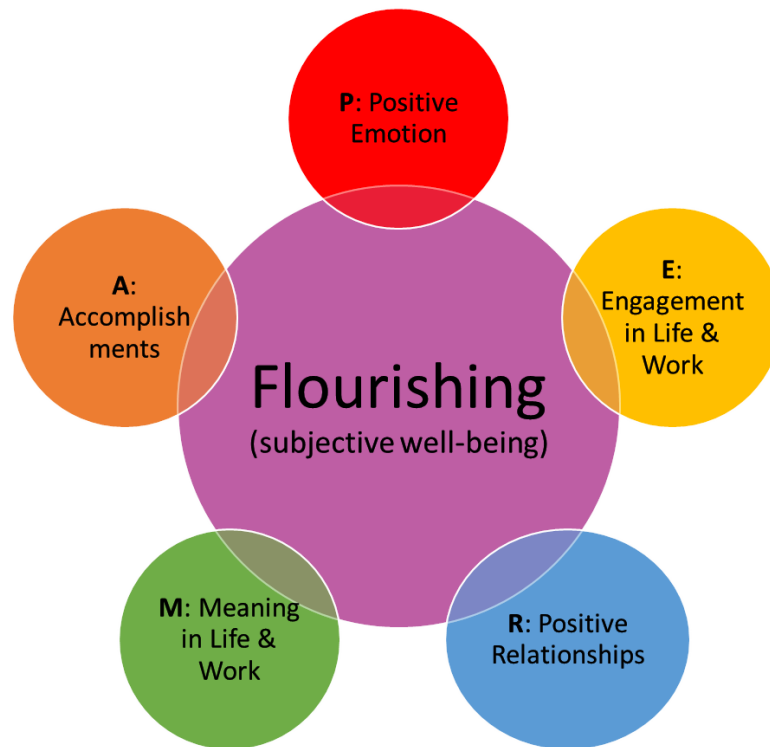
Tinto's (1988; 2017) and Seligman's (2011) theories can serve as a guide to identify how individual graduate students might be set up to succeed in their programs. Similarly, it is important to understand what developmental and life-stage challenges potentially prompt a different approach to supporting graduate students within an institution. However, research solely focused on these individual models of success often ignore what Bronfenbrenner (1981) and others recognized- that individuals are often acted upon by other structural, environmental, and relational forces that are outside of their individual control. Research focused on student success should expand beyond individual factors to explore what other conditions also promote or hinder collective success of the entire population of graduate students at an institution.

Relationship

Social exchange theory (SET) provides a framework through which we can analyze the mentor/mentee relationship, a dynamic that is frequently referenced in the literature related to graduate success. SET proposes that individuals will seek out relationships that are likely to result in desired positive outcomes, typically in the form of rewards (Homans, 1961; Blau, 1964). In an optimal and equitable relational exchange between a mentor and mentee, both parties comprehend how one another will benefit from the exchange. Graduate students are likely to benefit from mentors in the form of academic and personal guidance, professional development, emotional and psychological support, networking, and critical feedback. Benefits to faculty mentors might include assistance with work/projects, validation and satisfaction with mentees' accomplishments, affirmation of professional competence, and an increased sense of power and importance (Thomas, et al., 2007). However, SET, as it is historically defined, may not fully encompass the unique challenges faced by underrepresented students and those that have historically been excluded from institutions of higher education. Nor does SET address the implicit power dynamic in mentor/mentee relationships, and the ways in which that dynamic influences cross-cultural or cross-gender mentoring relationships, for example. Consequently, we propose an adapted model of mentor/mentee relationships incorporating an intersectionality framework (Chafetz, 1997; Choo & Ferree, 2010; Collins, 2000, 2004; Crenshaw, 1989, 1991; Few, 2007) to consider how gender, race, and other multiple overlapping identities and categories may influence the experiences of graduate students and their relationships with mentors.

Institutional

The Council for Advancement of Standards in Higher Education (CAS) published the 10the Edition of *Professional Standards for Higher Education* (Wells & Henry-Darwish, 2019) outlines in Chapter 23 (p. 264-276) a framework for best practice for programs and services within an institution serving graduate (and professional) students. CAS also recognizes the interplay between individuals and their environments, and outlines both individual characteristics and the types of environments institutions should strive to create in order to best support graduate students. The focus of CAS goes beyond academic support, to explore programs, services, and resources that also support the "personal and professional growth and development" (p. 267) of students enrolled in graduate programs. CAS draws upon key research to outline domains that are instrumental in assessing the needs of graduate students and the capacity within institutions to best respond to those needs. Most notable are the domains of Student Advocacy (ensuring students' needs are centered and students are equitably represented in decision making), Student Success (including providing support for students' emotional and social growth and development), Access, Equity, Diversity, & Inclusion (ensuring that all students can learn in culturally responsive environments and that oppressive structures within the institution are dismantled), and Collaboration & Communication (maximizing resources and modeling relationship building through interdisciplinary and cross-institution partnership).

Societal

One of the most pervasive issues impacting our society over the last few years has been the ongoing COVID-19 global pandemic. Studies on the impact of the COVID-19 pandemic on graduate students has been scarce. One study including graduate student respondents showed an increase in isolation, stress, anxiety, and a decrease in peer/cohort socialization (Browning et al.,

2021). Additional studies on undergraduate students (the potential pipeline of incoming graduate students) indicate that students in general have experienced profound psychological distress over the past two years. Among the most documented impacts are higher levels of stress, anxiety, and financial distress, often more adversely impacting students who identify within historically marginalized groups (Fruehwirth et al., 2021; Lee et al., 2021; Lederer et al., 2021). Even as university operations return to full capacity, any current or future research on the success of graduate students must also take into account the long-term impacts that the global COVID-19 pandemic has had on students, including recognizing the potential disruption in progress toward degree, and disruption in the overall pipeline of who is attending graduate school now and in the future as a result, especially among students with historically marginalized identities.

Significance of the Study

Much of the existing research on student success focuses primarily on the undergraduate student population (graduation rates, amount of time to degree completion, attrition, etc.) Graduate needs and mechanisms of support pose an understudied area of inquiry for both educational scholars and higher education practitioners alike. The global disruption resulting from COVID-19, a divided political climate, and the changing funding model of public higher education are factors that underlie student needs and can confound campus success initiatives. This study aims to assess gaps in existing literature on graduate success while focusing on student needs and structures of support at a large urban public R1 university with a diverse graduate population. Of particular interest are the ways in which institutions operationalize success through existing resources and support tools that benefit graduate students, as well as the reasons universities may miss opportunities for improvement. This study will contribute to existing literature, summarize and synthesize existing research and scholarship, and develop a

theoretical framework that assesses the various layers involved in graduate student success, while also identifying areas of opportunity and recommendations for improvement.

Operational Definitions

Graduate Student refers to any student, whether part-time or full-time, pursuing a post-baccalaureate degree at the Masters or Doctoral level.

BIPOC refers to Black, Indigenous, People of Color.

Underserved and Underrepresented Student is defined by Bowers et al. (2019) as " any student who is first generation (parents' level of education are high school graduate or below), minority (any student not white/Caucasian or unknown), or [was] Pell-eligible (as indicated by ISIR as of the award year)."

R1 University refers to a doctoral-granting institution with very high research activity, as defined by the Carnegie Classification of Institutions of Higher Education (2022).

Organization of the Study

This study is organized into five chapters. Chapter I outlines the broad scope and aim of the study. This chapter also explores guiding theories and frameworks that inform the research orientation and approach for this study. Chapter II reviews and synthesizes the extant literature on the various aspects of graduate student success, including identifying current gaps in research. Chapter III details the specific population included in this study, the methods of data collection, and acknowledges the potential biases of the researchers and trustworthiness of the qualitative methods included in data collection. Chapter IV explores the different results of the research obtained across all layers of the study. Chapter V discusses the implications of these findings and their potential impact on the campus, including recommendations for practitioners and future research on this topic.

Chapter II: Review of Literature

Colleges and universities throughout the United States have increasingly expanded their programming by developing and implementing graduate programs at their institutions since the 1900s. In response to the increased demand for professional graduate programs, leaders and faculty at institutions have been required to adjust their focus to accommodate offering advanced degrees at the masters and doctoral levels. Beyond campus complexity, resources, and course content, institutional leaders have had to gain a greater understanding of the students and their needs in seeking and obtaining graduate degrees. As the needs of students have expanded across the US based on a variety of factors, graduate students are collectively seeking more from colleges and universities than an educational experience in pursuit of a degree. To address the growing needs of graduate students while providing high-quality programs and awarding advanced degrees, institutions of higher education must be willing to commit to learning and understanding the multidimensional nature of the graduate student experience.

This literature review focuses on the expansion of graduate level academic programming at colleges and universities across the United States, while bringing attention to the challenges implicit in improving the graduate student experience at institutions of higher education. Much of the research conducted reflects a disconnect between the development of programs versus the development of the graduate student experience. There is an overall lack of research that has been conducted to address graduate student needs at America's colleges and universities.

Graduate Education in the United States

For several decades since the 1900s, institutions of higher education across the United States have expanded their educational offerings to include graduate level degree programs. In February of 1900, fourteen United States university presidents who all had received advanced

education from universities abroad, established the American Association of Universities (AAU) and set out to unify and improve the standards for the award of higher degrees at American universities (Nerad et al., 1997). Through the establishment of the AAU, the university presidents sought to develop an organization devoted to "matters of common interest relating to graduate study," (Slate, 1994). Eighty years later, graduate education in American universities would be a highly pursued commodity that students from countries all over the world would seek (Nerad et al., 1997). As the number of students pursuing advanced studies increased, more graduate schools at institutions offered a larger variety of programs and conferred more graduate degrees (Nerad et al., 1997). The development of graduate programs at American universities required the development of new administrative structures, curricula, and responses to multiple challenges faced by institutions offering graduate degrees (Nerad et al., 1997).

Institution Types

Public and private US institutions have added advanced degree programs at both the masters and doctoral level for students to earn graduate degrees across a diverse range of academic disciplines. Graduate programs vary widely on many dimensions including size, complexity, resource needs, extent of online course content, type of degrees offered, and budget (Wiener & Peterson, 2019). The Council of Graduate Schools (CGS) states that a university must have a sufficient number of faculty members to administer each program and that the graduate school has the responsibility to determine graduate faculty status and must also specify the various responsibilities relating to students (Siegel et al., 2004). The quality of an academic program can be judged by the quality of its faculty;

A high-quality program has faculty who have:

- Completed their doctoral training under the guidance of recognized scholars at highly regarded research universities,

- Are actively engaged in research and publication (frequently as measured by numbers of publications and citation counts),

- Have secured external funding to support their research programs, and are recognized nationally by their peers as able and productive scholars (Haworth & Conrad, 1996).

A high-quality program is multidimensional and provides evidence of that quality across key dimensions of excellence (Haworth & Conrad, 1996).

Academic Programs and Enrollment

The demand for professional graduate programs across institutions of higher education has increased rapidly throughout the United States since the 1980s. To meet the demand for programming in areas that provide prospective graduate students with the structure they need to pursue the graduate degrees of interest to them, colleges and universities have had to design their programs to meet the instructional needs of their students. To accommodate working professionals seeking graduate degrees, many graduate programs are being offered in both in-person, online, and blended formats. Degree programs are also being offered as cohort based, discipline focused, and coherently structured formats (Friesen & Jacobsen, 2021). The innovative approach to graduate program design was guided by institutional commitments to research informed and research active learning experiences that afford students the opportunity to develop expertise, draw upon evidence, and act with integrity as they progress in developing their knowledge, skills, and abilities (Friesen & Jacobsen, 2021). The specialized format of program delivery for graduate students should optimally provide access to the learning resources required to obtain their degrees while students also manage the personal and unique demands of their

lives as learners. The overall redesign of graduate programs throughout colleges and universities has improved results in student satisfaction, time to completion, increased retention, and yielded high completion rates for professional students (Friesen & Jacobsen, 2021).

Overall, graduate student enrollment at postsecondary institutions has fluctuated since the 2010s. Over time, institutions have experienced increases and decreases in their enrollment of graduate student populations. Providing a variety of program delivery options for graduate level degree seeking students did not necessarily lead to an increase of enrollment. There was a decline in graduate student enrollment in spite of the increased variety of program delivery options (Chessman et al., 2016). The decrease in graduate student enrollment became a concern for the workforce at this time due to the projected number of jobs that will require graduate degrees in twenty years (Chessman et al., 2016).

Developing an accurate understanding of current enrollment trends as well as the factors that influence enrollment decisions on the part of prospective graduate students is essential for researchers and practitioners serving in roles that support graduate student success (Kranzow, 2019). Having an understanding of the current landscape of graduate enrollment and the factors that prospective students take into account in their consideration of graduate programs will better assist institutions with meeting the needs of their students (Kranzow, 2019). A focus on prospective students and their interests when seeking admission into graduate programs should be a top priority for institutions.

The Graduate Student Experience

Over time, graduate student education has evolved; the number of adults ages 25 and older receiving graduate degrees has increased from 8% in 1995 to 12% in 2015. Meanwhile, master's degrees accounted for more than 73% of advanced degrees in 2015 (Baum & Steele

2017). One can assume that, as the graduate student population grows, so do the needs of graduate students. Completion rates vary across departments and disciplines, the graduate experience is likely impacted by budget and financial constraints, and studies show that today's graduate student is increasingly experiencing dissatisfaction in their graduate education program (Offstein et al., 2004). Understanding the graduate student experience through the lens of the student may provide insight into better understanding the factors that lead to graduate student success. On the other hand, the perception among graduate program administrators and professionals provides another perspective in understanding how to foster a healthy, productive graduate student population.

Underserved and Underrepresented Student Populations

To further explore the influence of social, ethnic, and other identities on the graduate student experience, it is important to understand the complexity of graduate student demographics, especially among underrepresented and underserved populations. For example, in a 2004 study of graduate students, minority students were more likely to indicate their race had a negative impact on their graduate career than their white student colleagues. While the same study confirmed that burnout was common among all graduate students, additional research is needed to explore the relationship between distress and race/ethnicity (Dyrbye, et al., 2007). Other studies have investigated the experiences of students of color and other historically marginalized populations while making connections between these students and the resources available to them. The Virginia Community College System (VCCS) defines underserved and underrepresented populations as including "any student who is first generation (both mother's and father's educationare high school graduate or below), minority (any student not

white/Caucasian or unknown), or Pell-eligible (as indicated by ISIR as of the award year)" (Bowers, et al., 2019).

Among both undergraduate and graduate students, those who are underserved and underrepresented are most likely to experience factors that impede progress. While some students are underprepared for graduate level work, others experience difficulty in navigating the higher education system in general. As aforementioned, other primary causes of attrition include financial constraints, poor mental or emotional wellbeing, and physical life disruptions. Additionally, many of these students may underutilize resources available to them because they are intimidated by the number of resources available to them or they fear a negative stigma that may be associated with their attempts to seek help (Bowers, et al., 2019). Alternatively, others may not be fully aware of the range of services available at their institution. Addressing the needs of underserved and underrepresented graduate students is a key factor in meeting enrollment and completion goals at nearly any institution across the country. There is significant research on the populations of graduate students with the highest risk of degree incompletion, which has spurred the development of mentoring programs, financial support workshops, food pantries, mental health and wellness programs, and professional development opportunities (Bowers, et al., 2019).

Graduate Student Mental Health and Well-Being

Mental health and well-being among graduate students is a growing concern for institutions of higher education. The rate with which graduate students are experiencing distress and issues with mental health has been labeled as a "crisis" by experts in the field (Flaherty, 2018). The onset for many mental health issues occurs between ages 18-24 (Williams et al., 2021), an age span historically overlapping with enrollment in undergraduate and graduate

programs. While many studies focus on the academic indicators of persistence, there have been fewer studies documenting how maintaining positive overall mental health and well-being can better support student success at the graduate level (Allen et al., 2022). Both perceived and actual support from friends, family, faculty, mentors, and from institutions as a whole is linked to a decrease in experiences of stress and an increase in overall well-being (Charles et al., 2022).

Due to the complex stressors and pressures facing graduate students within higher education, this population of students is at higher risk for developing mental health issues (Flaherty, 2018), including being at higher risk for suicide (Charles et al., 2022). Studies of burnout among graduate students (Dunn et al., 2008) have shown that this population in particular is highly susceptible to developing burnout and other pervasive mental health issues such as depression (Barreira & Bolotnyy, 2022) and substance use (Allen et al., 2022) that could also contribute to attrition or delays to graduation. Meanwhile, institutions are not always positioned to best support the mental health and well-being needs of their graduate student population.

Results from the American College Health Association National College Health Assessment III (ACHA NCHA III) administered to 13,600 graduate students around the United States in Spring 2022, just over half of graduate student participants (53.5%) agreed with the statement: "I feel that students' health and well-being is a priority at my university," and 57% of graduate students surveyed agreed with the statement: "At my college/university, I feel that the campus climate encourages free and open discussion of students' health and well-being" (American College Health Association, 2022). Other variables of note from the ACHA-NCHA III 2022 National Reference Group related to graduate student health and mental health showed that 35% of graduate students experienced low or very low food security according to the USDA

US Household Food Security Survey Module: Six-Item Short Form. 36% of graduate students reported receiving psychological or mental health services within the last 12 months, with just over a third of those students receiving services directly from their campus health or counseling center. The most commonly experienced issues that also had the largest health related self-reported impacts to graduate student academic performance (defined as "negatively impacting their performance in a class or delaying progress towards their degree") were procrastination, stress, anxiety, depression, sleep difficulties, career, and finances. Other issues that were less prevalent among the population, but still had an enormous negative impact on students' ability to progress in their academic careers were ADHD, PTSD, discrimination, hazing, and interactions/relationships with faculty (American College Health Association, 2022). These findings mirror other studies that reference primary sources of distress for graduate students as financial concerns, discrimination, and relational issues with faculty/advisors (Charles et al., 2022).

Financial Stability

While many graduate students face challenges with mental health and wellbeing, many findings indicate that graduate students all face financial obstacles. Graduate students need more financial support and aid and they would benefit from more affordable tuition rates. Furthermore, graduate students tend to experience financial stress as a result of having other commitments such as working, parenting, needing funds for life expenses, etc. When trying to control these stressors, graduate students also tend to struggle academically. Students who reduce their course loads are more likely to work part- or full-time and the never ending cycle of needing additional funds can often lead to academic disruption (Bain et al., 2011). Graduate students are also more likely to utilize loans, enroll in part-time studies, and need assistance with cash management and

budgeting. Establishing programs that provide financial education and counseling services to graduate students will provide them with tools to better manage their finances during their career and develop a more comprehensive degree completion plan with a defined end date (Joo, et al., 2008).

Students may not fully understand the costs associated with a graduate degree; therefore, schools should develop programs that provide students with information before matriculation or acceptance so they can make informed decisions about funding their education. This will also allow them to develop a plan that accounts for their academic and financial needs. Being able to understand the balance between course hours and work hours will be a key component in graduate student success (Joo, et al., 2008). These factors will be more clearly understood when schools can consider graduate student demographics, the individual needs of students, and the need to remediate problems from the institution's perspective. Thus, it is important that each institution research and understand its own culture and complexity to better consider the factors that will improve graduate success (Erichsen & Bolliger, 2011).

Personal and Professional Development

Mentoring and advising programs are found to be crucial components of the graduate student experiences, impacting the lives of these future professionals. Therefore, it is important that administrators and faculty understand their role in their students' career development and overall success. Strong advising and mentoring programs require interactions both in and out of the classroom, prioritizing the success and inclusion of students (Duranczyk, 2015). A 2012 study on graduate students' perceptions of master's-level advising found that students appreciate faculty who are "on the front line of preparing the workforce of the future" (Duranczyk, 2015, p. 151). The study included several recommendations as priorities for institutions and their faculty:

- Make connections with students.

- Track career outcomes and job placement information for graduate students.

- Connect graduate students with graduate alumni.

- Broaden the focus of graduate education to include development of professional skills (Duranczyk, 2015, p. 151).

Faculty advisers are responsible for facilitating their students' progress towards graduation. Research shows that additional responsibilities should include identifying professional development opportunities for students, supporting students' memberships in professional organizations, increasing networking opportunities, and supporting students' publications (Duranczyk, 2015). The study also revealed that graduate students have a strong interest in professional development, such as conferences, training, and workshops. Additionally, graduate mentorship and advising appears primarily focused on career preparation for a narrow set of specific jobs, overlooking other graduate student needs and contributing to the current decline of mental health among those students. Shepard et al. (2018) found that a majority of graduate students do not feel their advisors are beneficial to their careers and are not committed to their overall wellbeing. There is an increased need to assist students in achieving both their academic and professional goals (Duranczyk, 2015). While there is existing research on the effectiveness of academic advising and mentorship, there is still a need for effective models of advising for graduate students of color and other underrepresented or underserved populations. There is an additional need to explore the epistemological, theoretical, methodological, or substantive approaches among marginalized students (Brunsma et al., 2017).

Graduate Student Affairs

Historically, student affairs initiatives have largely been concerned with undergraduate populations. Research on graduate students remains relatively sparse despite the fact that approximately 3.1 million students were enrolled in post-baccalaureate programs as of fall 2019 according to the National Center on Education Statistics (NCES). Some studies focus on connecting graduate orientation and onboarding with retention rates (Cusworth, 2001). A number of other studies cite mentoring as a key component of graduate student success (Pfund et al., 2014). However, there is also significant evidence that faculty and graduate program leaders have very different views of student success, optimal career outcomes, and reasons for attrition than do graduate students themselves (Golde & Dore, 2001). Moreover, while there has been some additional study of graduate education at the macro or national level, it has mostly been concerned with workforce needs and the US economy, positioning graduate students who complete their degrees as economic outputs (Hall-Hertel et al., 2022).

There is significant opportunity within the profession of student affairs to provide a more nuanced perspective on graduate education, shifting the current economy-centered approach to a more student-centered enterprise. There are a number of avenues by which to accomplish that shift, and the Council for the Advancement of Standards in Higher Education (CAS) provides a helpful framework through which student affairs leaders and professionals can meet the needs of our graduate student population. CAS outlines a number of areas of support related to graduate education that overlap with the work of student affairs: admissions, orientation, transition, personal development, student advocacy, and campus engagement all fall under the CAS Program and Services standard. Academic socialization, holistic support, and professional development are key components of the Student Learning, Development, and Success standard.

And the CAS Access, Equity, Diversity, and Inclusion standard provides guidelines for ensuring inclusive working and learning environments, best practices for advocacy, and strategies for implementation within institutions of higher education. Below, we discuss a number of areas in which student affairs can support graduate student success in alignment with the CAS framework.

Populations of Priority

As graduate student enrollment continues to become more diverse, it is incumbent upon student affairs professionals, program staff, faculty, and educational leaders to address the needs of their post-baccalaureate populations in more strategic and nuanced ways in order to provide equitable mechanisms to support student success (Okahana, et al., 2020). In efforts to meet the unique needs of diverse populations, university stakeholders must understand the challenges and barriers to success experienced by particular student groups or sub-populations within their respective institutions. Graduate and student affairs professionals will benefit these groups most effectively by considering needs and challenges that overlap among them but also those that are mutually exclusive to specific sub-populations. These sub-populations may include commuter and distance learning students, students who are parents or who support families, international and/or undocumented students, students from historically underrepresented groups such as first-generation, BIPOC, LGBTQ+, differently-abled students, and those whose lived experiences intersect with multiple identities.

Graduate education in the United States was significantly influenced by the European model of post-baccalaureate academic training, the practice of which functioned to maintain and reinforce exclusivity rather than expanding access and inclusion (Omotola McGee, 2020). Students from minoritized ethnic and racial groups that are historically underrepresented in the

US are enrolling in graduate education at increasingly higher rates, with Black, Indigenous, Persons of Color (BIPOC) students comprising 25% of the non-international graduate population as of fall 2019 (Okahana et al., 2020). Despite this growth in enrollment, BIPOC students remain an underrepresented group in graduate education, particularly in science, technology, engineering, and mathematics (STEM) programs (Burt, et al., 2019; Okahana & Zhou, 2019). In addition to a relative dearth of student programming and services specifically developed for BIPOC groups, students from this population experience both direct and indirect instances of racism in academia (Brunsma et al., 2017; Truong et al., 2016). Consequently, racism is correlated to identity-related stress, feelings of isolation, and exacerbation of the mental health challenges experienced by the majority of all graduate students (Verschelden, 2017). Student affairs professionals in collaboration with academic staff, educators, and leadership should consider a variety of interventions and initiatives in efforts to provide a supportive and empowering environment. This includes cultural representation (mirrored in faculty and staff diversity), specialized services that connect students within their own communities, mentoring, and curricular/co-curricular frameworks that promote equity and anti-racism. In order to be most effective, it is critical that this environment is structured around the full "life-cycle" of the graduate student, from recruitment through graduation (Effland & Hays, 2018; Felder & St. John, 2014; Gordon et al., 2016).

Graduate students who identify as LGBTQ+ face similar challenges to establishing community and a sense of belonging in academia, particularly when considering intersectional identities (Couillard & Higbee, 2018). Additionally, students from this population experience homophobia and transphobia, microaggressions, harassment, and even violence (Vaccaro, 2012). Incidence of sexual harassment has been documented among LGBTQ+ students with 14.5% of

transgender women and men, nonbinary/genderqueer, gender questioning, or gender not listed (TGQN) graduate and professional students reporting nonconsensual sexual contact. Over 30% of the perpetrators were identified by survivors as being faculty or an instructor, and 20% as coworkers (Cantor et al., 2020). These most basic concerns over student safety must be prioritized and addressed before any campus initiatives focused on graduate student flourishing will be successful.

Research has demonstrated that first-generation students are less likely to enroll in graduate school, overall, with a markedly lower likelihood of enrolling in first-professional and doctoral programs (Choy, 2001; Engle, 2007; Nunez & Cuccaro-Alamin, 1998). The majority of first-generation college students come from low-income and minority backgrounds (Engle, 2007, Roksa et al, 2018). As a result, they are likely to experience challenges navigating a graduate program, accessing the information, tools, and support mechanisms to succeed, funding their advanced education, and building a network of support consisting of peers and family members that they can rely upon (Lunceford, 2011). As reported in other studies on intersectionality and student success, the challenges faced by first-generation students in college are exacerbated for those students from underrepresented racial/ethnic and gender backgrounds (Holley & Gardner, 2012). Cultural expectations and obligations toward family members can contribute to these challenges (Lester Leyva, 2011; Martinez, 2018; Willison & Gibson, 2011). Student affairs professionals can assist in addressing these challenges through peer community-building and programs and activities that focus on cultivating mentor-mentee relationships and a sense of belonging (Gardner, 2013; Martinez, 2018; Piatt et al., 2019). Collaborative efforts with academic units and departments such as summer institutes, bridge programs, and research

opportunities are also likely to benefit first-generation graduate students (Winkle-Wagner & McCoy, 2016).

International students face many similar, if not the same, challenges in navigating a campus environment and establishing for themselves a sense of belonging, compounded by the fact that these students are frequently attempting to position themselves also within a new country and/or culture. International students have reported feelings of liminality, or of experiencing a state of belonging neither here nor there (Phelps, 2016). And while acculturation and interaction with US students may provide internationals with some sense of belonging, these interactions are most common for international students who already share cultural commonalities with their US counterparts, i.e. western European students, students with English language fluency, etc. (Trice, 2004). With over half of international students coming from China and India, mere interaction with their US counterparts or with professors is likely not enough for them to establish a sense of belonging on their campus. International students may also encounter xenophobia, forms of discrimination, and visa challenges (Bang & Montgomery, 2013) that exacerbate the stresses of navigating a new and unfamiliar environment.

Students with disabilities and those who may need learning accommodations are another graduate population that should be given priority consideration. Disclosure of a disability is central to the discussion of belonging for students from these populations (Kerschbaum et al, 2017). With studies on the topic emphasizing the fact that disclosure is a continual process of evaluation, adaptation, and negotiation (Stewart & Collins, 2014; Verdinelli & Kutner 2016), during which many students with disabilities make choices whether to disclose, or even which programs to apply for, based on their perception of how their disabilities will be received (Pearson & Boskovich, 2019). Graduate enrollment of students with disabilities is increasing,

with this population making up over 12% of the overall graduate cohort in the US (National Center for Educational Statistics, 2016). Unfortunately, spreading awareness about the availability of equitable learning accommodations for graduate populations may be less common than at the undergraduate level. One study concluded that only 18% of graduate teaching faculty reported announcing that arrangements are available for students with disabilities or including this information on their syllabi (Bruder & Mogro-Wilson, 2010). With this in mind, student affairs professionals can be instrumental in streamlining assistance and raising awareness about support mechanisms for this group, especially through collaborative partnerships with academic units and access services offices.

Orientation and Onboarding

Historically, student affairs has largely been concerned with undergraduate students as a population of immediate priority (Shepard & Perry, 2022). Orientation and onboarding of newly-admitted undergraduate students signals a key benchmark in their transition between secondary and postsecondary education. During this process, undergraduates, along with their parents, guardians, or other family members, are introduced to the campus, connected with student support services such as Financial Aid, Advising, and Library Services. This is also an opportunity for students to be linked with student organizations, informed about high-impact experiential learning opportunities, and many other introductions to their new institution. However, the time and resources allocated to undergraduate orientation significantly outpace those committed to graduate students, despite the fact that anxiety and stress are major contributors to graduate attrition (Hullinger & Hogan, 2014). In addition, orientation models have demonstrated increased retention and persistence in graduate programs (Poock, 2004). While the engagement needs of graduate students differ from those of their undergraduate

counterparts, it is clear that an intentionally structured orientation and onboarding process will benefit newly enrolled students at the graduate level.

A variety of graduate-focused orientation services and onboarding support mechanisms should be considered by student affairs professionals, but any holistic program should include three core objectives: (1) foster a sense of belonging with the university and within the program; (2) address necessary onboarding logistics; and (3) ensure graduate students are equipped with tools for academic and professional success (Spratling & Valdovinos, 2022). It is common for graduate students to engage with department-level or program-specific orientation as part of their onboarding process, and this engagement can enhance a sense of belonging for new cohorts. Student affairs offices can collaborate in this process, developing "plug-in" campus-wide programming that complements more program-specific activities. Some examples might include creation of a formal near-peer mentor program that matches newly admitted graduate students with those farther along in their degree work, offering community-building and affinity focused programming for students from specific groups (LGBTQ+, students with children, or those with assistantships, for example), and linking students with pre-existing student organizations or professional development opportunities beyond their academic department. Working with academic units and the university graduate school to identify gaps or opportunities for expanded support is a logical first step in building a campus-wide system of support.

A collaborative orientation and onboarding process might well begin with a planning committee consisting of graduate success stakeholders from multiple academic and student success units. A formal committee establishes ownership of graduate student success as an initiative, the realization of which can be evaluated over time through distributed workloads and resources alongside measurable and achievable tasks and goals (University of Washington,

2020). Formal collaboration across stakeholder groups can assist in identifying which units are directly responsible for specific onboarding logistics and processes such as acquiring a campus ID and authentication credentials, and signing up for graduate health insurance. Additionally, a structured plan on how those units can best align for seamless and continuous engagement should be facilitated by unit leaders. Intentionality around how, and by whom, orientation content is delivered is equally important. Some information and processes can likely be delivered via video or an online learning management system, whereas others are best held in person or via direct contact. Accessibility, budget and staffing necessities, virtual onboarding options, and special considerations for high-need groups, are all key components toward the intentional creation of a graduate orientation toolkit that positions students to be successful (Spratling & Valdovinos, 2022). The University of Washington, in particular, has received national recognition for best practices in this area. Pre- and post- orientation models that assist new students in setting realistic expectations and reinforcing their decisions to attend have demonstrated success in retention and fostering belonging (Taub & Komives, 1998). This also includes extended orientation models like those employed at Claremont Graduate University that help graduate students navigate the micro-transitions between newly admitted student onward to student scholar and postdoc (Dykema, et al., 2022). While many of these orientation and onboarding components may be similar across different colleges and universities, it is important that each institution take into account the unique needs of their graduate population when designing their own model.

Engagement and Holistic Support

A growing body of literature and case studies (Shepard & Perry, 2022) outline the benefits of collaborative efforts between offices of student and academic affairs for graduate

students (Nesheim et al., 2007). Thus, the majority of articles related to graduate student needs focus on particular concerns such as retention (Bain et al., 2011; Di Pierro, 2012), academic writing (Jimenez y West et al., 2011; Walter & Stouck, 2020), online efficacies (King, 2014), importance of faculty mentoring (Lechuga, 2011; Lunsford et al., 2017), or student development in a specified academic discipline, like nursing (Gazza & Hunker, 2014), engineering (Crede & Borrego, 2014), and social work (Fakunmoju et al., 2016). A student-centered, holistic model or approach to graduate student development has yet to emerge within the field. While it may be relatively straightforward for student affairs units to acquire demographic data, such as race/ethnicity and gender, on their graduate student population, disaggregating data across more nuanced variables is less common. For example, it requires more work to discern how many graduate students at a given university are undocumented, or work full-time, or struggle with insecure housing, or have limited access to nutritional food. The answers to these types of questions require an intentional focus on holistic student support and development as well as a commitment to sustainable data collection, disaggregation, and analysis.

Mental and emotional health challenges are increasing significantly among graduate students as a population (ACHA, 2019; Woolston, 2019). Graduate students report suffering from extreme mental health concerns at a rate six times that of the general population with approximately 40% showing moderate to severe anxiety and moderate to severe depression (Evans et al., 2018). Any graduate student success initiative focused on holistic support must prioritize mental wellness alongside physical wellness and academic success. There are a variety of mechanisms by which to address students' mental wellness; university counseling centers, graduate student support groups, interdepartmental partnerships with students in clinical practice, and virtual therapy options all provide mechanisms of support in the interest of advancing

students' emotional wellbeing. While most student affairs offices, alone, may lack the resources or clinical staff to lead an institution-wide wellness effort, most are well-positioned to proactively address mental health through co-curricula focused on flourishing, mindfulness practice, positive psychology, yoga, outdoor recreation, and other non-clinical approaches to student stress and anxiety (Fredrickson, 2001; Sheldon & King, 2001). Facilitators for formal and informal workshops and group sessions can be drawn from a number of partner student support units, creating a climate of care on campus that is both seen and felt by graduate students.

Academic Socialization and Support

Academic socialization is a central component of graduate education and is especially instrumental in the transition from student to professional, particularly if students plan for a career in academia (Austin, 2002). Socialization is a process that involves listening, observing, and interacting with faculty, peers, and other members of the university community. As such, the socialization process is intrinsically linked to graduate students' sense of belonging which is directly related to their success within their programs (O'Meara et al., 2017; Weidman et al., 2001) and commitment to an academic career (O'Meara et al., 2017; Ostrove et al., 2011; Ülkü-Steiner et al., 2000). Unfortunately, most students report having no relationship with faculty mentors (Austin, 2002) and traditional models of graduate socialization can reinforce outdated practices that marginalize students from minoritized and underrepresented groups (Strayhorn, 2012) potentially excluding them from other normal practices in academia (Gildersleeve, et al., 2011). Based on the early work of Thornton and Nardi (1975), Weidman et al. (2001) segment the socialization process into four stages: anticipatory, formal, informal, and personal. Each stage represents a distinct level of comprehension and commitment to graduate students' roles, both

within the institution and in preparation for a professional career. Subsequently, each role has its own set of behavioral, attitudinal, and cognitive expectations that students must navigate.

This socialization process of role and identity formation is not without its challenges, and graduate students frequently struggle during their developmental transitions. There can be significant variance between roles, which can destabilize graduate students' sense of stability and belonging (Discenna, 2017). Individual roles can also be characterized by dualistic expectations, where graduate students are expected to function simultaneously as students and employees (Sharnoff, 1993). This is particularly relevant for those students who are working as teaching assistants. One study found that approximately half of all graduate teaching assistants are responsible for one or more courses (Benjamin, 2002). As mentioned elsewhere in this paper, both formal and informal mentor/mentee relationships can be significantly impactful in role and identity formation for graduate students (Austin, 2002; Curtin et al., 2013; Damiani & Harbour, 2015; Glass et al., 2015), and those supportive relationships are even more influential for students of color (Young & Brooks, 2008).

Peer mentoring can be an effective way to enhance socialization through engagement, continued learning, and community-building (Bemker & Leibold, 2018). These peer-to-peer relationships provide emotional support (Geesa, et al., 2018). They also demonstrate positive impacts on leadership development, academic success, and retention at the graduate level (Alcocer & Martinez, 2017; McConnell et al., 2019). Student affairs professionals can facilitate peer mentoring and graduate community-building through a variety of programming. Graduate organizations, associations, and fraternity/sorority chapters provide community-based opportunities for students related to scholarships, awards, service-learning, professional development, funding resources, and leadership development, but they also signify spaces where

graduate students can unpack and discuss the frequently challenging stages of academic socialization and identity formation (Gardner & Barnes, 2007; Strayhorn, 2012). Similarly, graduate student governments and unions provide a campus space for the elevation of graduate voices, activism, and advocacy in campus life (Patel, 2019) as well as a governance structure that has the power to address issues of justice, equity, and fairness that may arise throughout the academic socialization process.

Success Factors

There are several factors that impact the graduate student experience; to determine student success, the context of the graduate or doctoral program should be defined. For example, a successful graduate program could be defined as producing effective scholars or practitioners in a given field or providing mechanisms that reduce attrition rates (Bagaka et al., 2015). Additionally, program attributes that contribute to student completion or persistence are factors to student success. Persistence is a key factor in graduate retention and program completion. Academic success, attrition, and completion can all be connected to the persistence of the student, increasing their ability to overcome obstacles throughout their academic pursuit.

Building Persistence

Persistence also contributes to graduate student success as they begin to experience an academic life that includes more independence than their undergraduate education experience. Graduate student persistence often depends upon factors such as physical and mental wellbeing, financial constraints, employment, care of loved ones, and more (Shepard & Perry, 2022). Graduate students also experience stress from feelings of loneliness, world events, issues within their department or university, and time management. These external factors can bring graduate students to a breaking point (Oswalt & Riddock, 2007). This is especially true for BIPOC (Black,

Indigenous, Persons of Color) students; BIPOC students represent a population of students growing at a faster rate than white students. Although BIPOC students are among the fastest growing student populations, they still experience identity-related stress, challenges with mental health, and feelings of isolation that prevent persistence in their academic careers (Shepard & Perry, 2022). Educators should attempt to equitably reach all students, considering their individual needs and the intersectionality of their identities.

All graduate students could benefit from increasing stress-reduction strategies and recreational activities. Oswalt and Riddock (2007) found that students expressed a desire for affordable health insurance, indicating that most student health centers are adequate, but several students experience financial barriers in receiving treatment from those centers. Offering physical and mental health services during non-traditional hours would also be helpful as many graduate students have issues with time-management or scheduling constraints. Additionally, many graduate students also indicated a need for additional stipends for graduate assistantships or exemption from certain university fees, reducing their financial obligations to the institution (Oswalt & Riddock, 2007). Shifting their focus from various stressors allows graduate students to better prioritize their academic responsibilities and dedicate more time to degree completion. Diverse faculty recruitment, anti-racism frameworks, thorough equity training for students, faculty, and staff, and curriculum redesign are all examples of equitably supporting persistence in the graduate experience (Shepard & Perry, 2022).

Assessment

Persistence and student success can also be defined through assessment - considering the needs of the individual student and having a better understanding of whether the program is meeting its established goals. Assessment allows for improvement and change by using data and

evaluation at the institutional level (Shepard & Perry, 2022). This also includes an assessment of services, programs, and operations, guiding institutional practice. This differs from evaluation, which refers to "the process of determining the value, merit, or worth of something" (Shepard & Perry, 2022, p. 186). Assessment is merely about inquiry; it can be as simple as understanding whether a program is accomplishing its goals or mission. One may ask, "is this program meeting this specific student need?" Although this appears a simple question, many practitioners may be confused on where to start. Creating an assessment framework is one way to begin the process. Figure 3 shows a four-part cycle as a method to help organize assessment and consider how the assessment will relate to institutional and program goals.

Figure 3

Shepard & Perry's (2022) Example Assessment Cycle
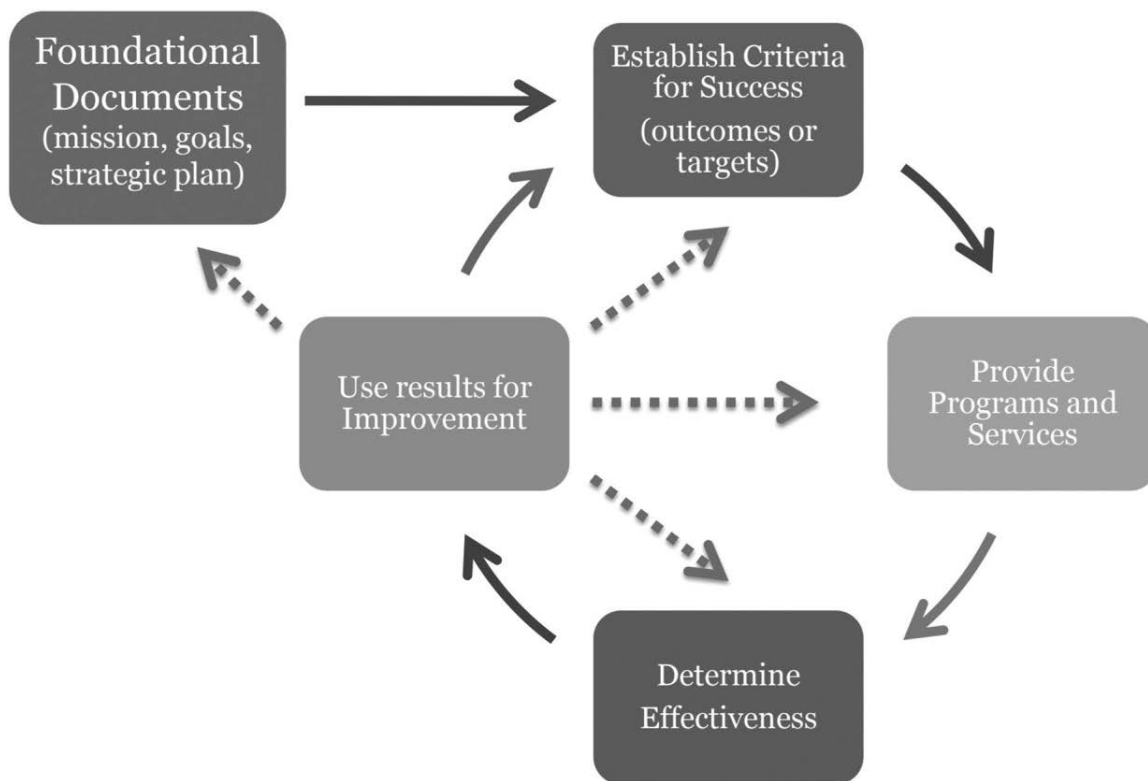
One assessment goal may be to improve learning outcomes; thus, the data may identify areas of strength or opportunities for growth where learning can be improved. Assessments can also be used to understand the equity of graduate programs. When asked, "Are all graduate students equally successful in all aspects of the graduate program?" the response is likely to be, "No." Assessments provide support in developing tools to support marginalized students and develop constructive measures that improve graduate student success. Assessment data can also be used to advocate for additional resources. In one study that assessed students' career readiness, the data found that additional staffing was needed. The final report included a request to hire more staff, arguing that students were at risk of being underprepared to start their post-graduate careers (Shepard & Perry, 2022). Having the additional assessment data assists in this type of request.

Career Preparation

Career readiness is another significant factor of graduate student success. Historically, the graduate student experience has been centered around linear paths - professional careers for law, business, or medicine and academia for PhD students. However, graduate students are increasingly opting for more diverse professional pathways (Shepard & Perry, 2022). This creates limitations for graduate staff who may not fully understand the career opportunities available to graduate students or the avenues by which to access them. Many institutions believe that "Universities, graduate leaders, and faculty are on the front line of preparing the workforce of the future" (Duranczyk, et al., 2015, p. 151). Faculty mentorship and advising, along with dedicated staff, can better prepare graduates for careers after graduation. These relationships can increase the student's self-confidence and self-efficacy, increasing the likelihood of professional success. Mentorship provides the mentee with exposure within a professional setting or network,

socialization and guidance towards a career path, and a role model for professional behavior (Bagaka, et al., 2015).

Finding Postdoctoral Position

Doctoral student success is defined to include " not only completion and retention rates, but also the ability of the program to produce effective scholars in the field" (Bagaka, et al., 2015, p. 1). The academic career of doctoral students requires an extensive amount of independence, which can be disorienting for doctoral students (Bagaka, et al., 2015). Some argue that a lack of socialization contributes to doctoral student attrition and the inability to identify a postdoctoral career path. As aforementioned, programs tend to connect doctoral students with careers in academia, neglecting to assist them in identifying non-academic career paths. Doctoral program activities focus on "sustainable scholarship:" research engagement, introduction into the academic discipline or field, and the formation of scholars (Bagaka, et al., 2015).

Factors Impacting Career and Professional Development

Graduate programs tend to focus on academic career paths, failing to be inclusive of other professional opportunities that are available to the diverse body of students. Institutions should develop career services and resources that are more inclusive of career exploration opportunities and fully understand the needs of diverse student populations. Institutions also need to develop new methods of assessing career readiness and success for doctoral students (Shepard & Perry, 2022). Institutions could implement policies and programs that incentivize faculty and external employers as partners, fostering professional development experiences that potentially improve student success. Faculty can also partner with student affairs practitioners for a more holistic student experience. Perez et al. (2017) found that students are more likely to make decisions about career paths when student and academic affairs are closely aligned. The

graduate experience should also provide new perspectives and opportunities to explore new skills and professional interests; career centers should include community partners, not just career specialists (Shepard & Perry, 2022). They should help students explore different options, develop personal success stories, and focus on the development of their career identity.

Chapter III: Methodology

A thorough review of the literature indicates that the growing population of students enrolled at institutions of higher education at the Masters and Doctoral levels is diverse in both demographic characteristics and in the need for support. Extant literature on graduate student needs, mechanisms for support, and best practices to promote success and persistence is limited or often discipline specific. Similarly, research conducted prior to 2020 might not be as widely applicable given the subsequent disruptions and impacts of the COVID-19 pandemic on student retention and success at the graduate level (Barreira & Bolotnyy, 2022). Thus, research designed to better understand the factors across the individual, relational, and institutional level that promote or inhibit graduate student success requires a multi-dimensional, multi-modal approach. Similarly, assessing institutional alignment with practices promoting social justice are critical to ensuring that graduate students from historically marginalized groups receive equitable access to resources and support.

Statement of Purpose and Research Questions

This study was designed to better understand the needs and the factors promoting and inhibiting success among graduate students at one large, public, R1 designated urban research university, meaning the institution has a very high level of research activity at the Doctoral level (Carnegie Classifications of Institutions of Higher Education, 2022). Additionally, the study sought to identify how existing mechanisms of support at the institution align with current standards of practice for practitioners supporting graduate students within higher education. We used the following questions to guide our research:

1. How does the campus infrastructure, such as organizational structures, policies, and/or practices impact graduate student success?

2. What are the primary self-reported needs or challenges impacting graduate students' success at VCU?

3. How do self-reported needs or challenges vary across graduate students' discipline, identities, and other sociodemographic characteristics?

4. What personal characteristics and strengths do graduate students at VCU primarily identify that influence their overall success?

Theoretical Framework

Using an adapted social ecological framework to better understand all of the various levers contributing to the overall issue of graduate student success meant that we had to construct a model for our study that allowed us to collect and synthesize data across multiple domains. The social ecological theoretical framework informed the development of the research instruments that were used in data collection, and informed the coding structure that was created to analyze the results of our qualitative data.

Scope and Delimitations

The current study included participants from among all graduate students enrolled at the time of data collection in a Masters or Doctoral program at Virginia Commonwealth University (VCU), regardless of program modality (online, in-person, etc.). VCU is an R1, urban, research university on the east coast of the United States. Additional participants included full-time faculty and staff who had at the time of data collection either direct involvement in a role or program serving graduate students, or indirect involvement in a role or program responsible for ensuring graduate student success at VCU.

The study excluded graduate or post-baccalaureate non-degree or certificate seeking students, and students obtaining post-baccalaureate degrees within first professional degree

programs in the health sciences (ie. MD, DDS). Part-time staff, adjunct faculty, faculty with responsibility solely related to teaching graduate students, and VCU Health System employees with roles focused primarily on first professional degree programs were also not included in the study.

Research Design

This study utilized a qualitative, multi-case study research design that included several layers of data collection to answer the research questions and to gain a deeper understanding of the individual, relational, and structural factors impacting graduate student success at the institution. A qualitative, case study design was most indicated for this study to allow researchers to better understand how the key population or other key stakeholders within this specific time and setting established contextual meaning of the issue of graduate student success (Billups, 2021). While a case study design focuses primarily on examining data within a situation or context (Billups, 2021), case study was also used to help our team uncover how the individuals within the institution were impacted or acted upon by other factors (Creswell & Poth, 2018). Similarly, in this case study approach, we used more than one source of data to better understand various aspects of the issue or research problem (Billups, 2021). Since the study team was composed of multiple researchers, we approached data collection and analysis based on principles of Consensual Qualitative Research (CQR) first developed by Hill et al. (1995) to control for situations where more than one person was involved in gathering, analyzing, and interpreting data. This involved scheduling meetings with the researchers in which everyone involved discussed biases and their interpretations of the data, with the goal of reaching a consensus of the results and the meaning of those findings.

Within this study, researchers analyzed existing data on graduate students that had already been collected across the institution, as well as examined artifacts and documents, such as website content, outlining current policies, programs, and services available to graduate students at the institution. As Bryk et al. (2017) noted, this multi-layered, systems-level approach to data collection is important when seeking to better understand or implement necessary changes that impact individuals within as large and complex of an organization as an institution of higher education. Finally, the study was constructed to both internally and externally benchmark best practices and alignment with existing institutional priorities as outlined in the VCU Quest 2028: One VCU Together We Transform (Virginia Commonwealth University, 2022c) strategic plan, especially with regard to student success and promoting social justice and equity at the institutional level. Benchmarking within this study was an important assessment tool, recommended to help better understand how the institution as a whole is best positioned to promote and embrace diversity as a foundational principle (Cox, 2001).

Setting and Study Population

The study was conducted at VCU, an institution that was founded in 1838 and is classified as a large, public, R1 research institution located in the city of Richmond, Virginia. At the time of the study, VCU had a current total enrollment of 28,919 (Virginia Commonwealth University, 2022a). Of those students enrolled at VCU, 5,695 were pursuing graduate degrees (Masters or Doctoral) at the time of data collection. VCU considers itself to be committed to "diversity and access" (Virginia Commonwealth University, 2022), and was named a "Diversity Champion" by *INSIGHT into Diversity* magazine.

In Fall 2022, VCU had a total of 68 Masters Degree and 44 Doctoral Degree programs spread across several colleges and schools, including online (Virginia Commonwealth

University, 2022b). Figure 4 shows the distribution of graduate degrees grouped within the larger school/college in which the sponsoring department is located. The VCU School of Medicine had the most Masters and Doctoral Degree programs, offering 14 different Master's programs and 11 Doctoral programs.

Figure 4

Distribution of Masters and Doctoral Degrees at VCU
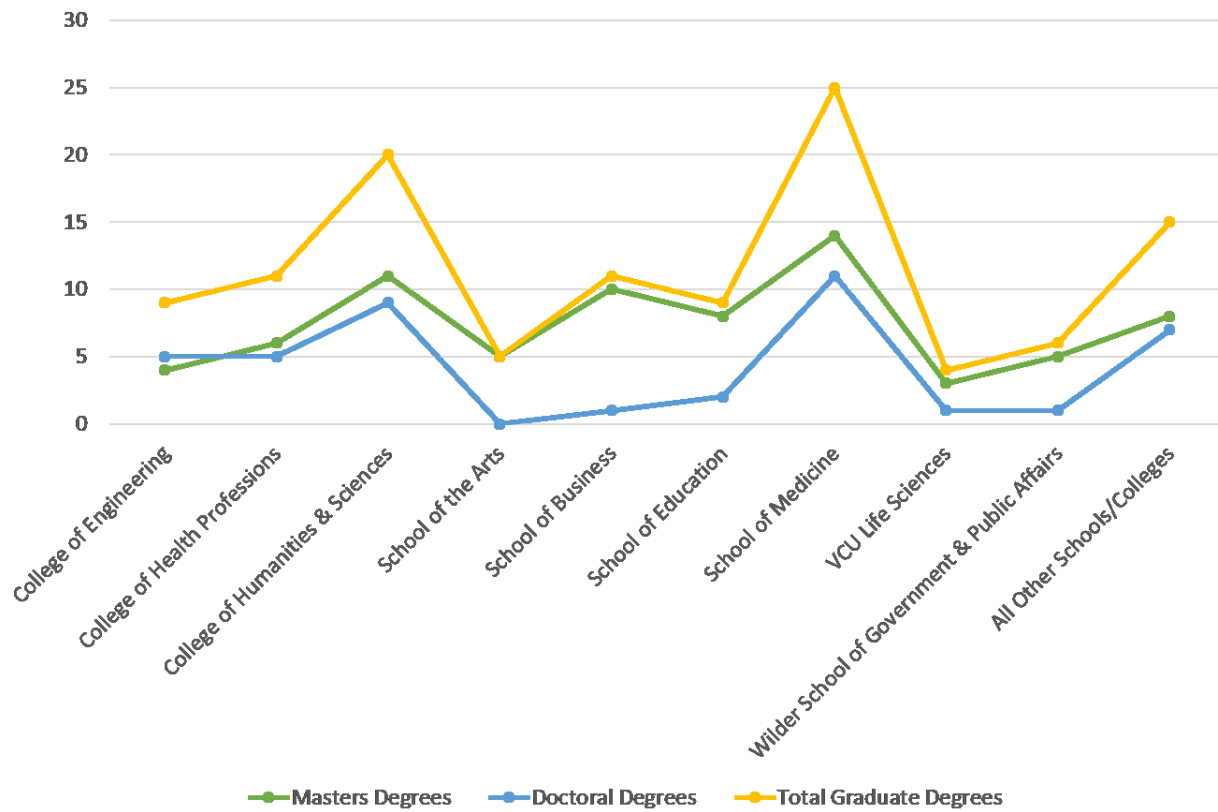
About 1,794 degrees at the Masters and Doctoral (excluding Doctoral professional practice) levels were conferred by the institution in 2021-2022, the most recent year for which data are available (VCU Institutional Research and Decision Support, 2022b). This number was slightly increased from the preceding 2020-2021 academic year, in which 1,652 Masters and Doctoral degrees were conferred. This dip in degree attainment during the 2020-2021 academic

year could be due in some part to the onset of the COVID-19 global pandemic causing delays to graduation as predicted by some researchers (Jones et al., 2021).

VCU employs approximately 6,230 full-time faculty and staff (not including VCU Health System staff without dual roles) (VCU Institutional Research and Decision Support, 2022c). Nearly half of the full-time employees (3,006) fall within the category of University and Academic Professionals, a classification for professionals in non-faculty roles that are not primarily focused on teaching or research (VCU Human Resources, 2023). These roles span everything from executive level to administrative or program specific support roles, and also range across job families and types. Not all of these roles are considered student-facing or have direct contact with graduate students at VCU.

While available institutional data on faculty and staff demographics does not identify roles primarily supporting graduate students, the data has been disaggregated by the institution at the primary job level (teaching & research faculty, university & academic professionals, & classified staff). This demographic information for faculty and staff overall was reported by VCU for the 2021-2022 academic year (VCU Institutional Research and Decision Support, 2022c). Table 1 shows the most recent demographic characteristics of full-time VCU faculty and staff employed by the institution. Part-time staff are excluded in the available data. These positions include graduate assistants, adjunct faculty, and other hourly positions, making it difficult to obtain a more thorough understanding of those graduate students most likely to be financially supported or employed by the institution.

Table 1

VCU Faculty and Staff Demographic Characteristics

Demographic characteristics	VCU Teaching & Research Faculty, n= 2,441		VCU University & Academic Professionals, n= 3,006		VCU Classified Staff, n= 593	
	n	% of total	n	% of total	n	% of total
Gender						
Female	1,139	46.70	1,891	62.94	404	68.26
Male	1,293	53.01	1,108	36.86	179	30.19
Not reported	7	0.29	46	1.55	9	1.55
Race/Ethnicity						
Amer. Indian/Alaskan Native	3	0.16	12	0.43	2	0.40
Asian	351	14.38	149	4.96	36	6.06
Black/African American	183	7.50	646	21.46	89	15.05
Hawaiian/Pac. Islander	1	0.04	1	0.03	1	0.03
Hispanic/Latino	85	3.48	135	4.46	10	1.67
International	84	3.28	46	1.56	1	0.06
Two or more races	21	0.90	77	2.56	6	1.26
Unknown	14	0.61	17	0.57	41	6.87
White	1699	69.64	1,923	63.97	407	68.60

Note: VCU did not report demographic characteristics for the category "research professional and housestaff" listed under full-time employees.

Data Collection

Prior to conducting research, this study was submitted to the VCU Institutional Review Board (IRB) for approval to ensure that all data collection methods were in compliance with federal, state, and institutional guidelines for the protection of human subjects. All investigators involved in this research completed basic training through the Collaborative Institutional Training Initiative (CITI). The VCU IRB approved the study prior to data collection, VCU IRB Protocol Number: HM20026003.

The methods of data collection included 1) Focus Group Interviews with currently enrolled graduate students at VCU across departments and School/College affiliations, 2) Individual interviews with key full-time employees at the institution who were responsible for

supporting graduate student success in their respective roles, 3) Quantitative data analysis of already existing secondary data on VCU graduate students' needs and well-being, and 4) Benchmarking of existing programs and services. Additionally, institutional data were collected and used to further inform research methods and as comparison against data collected as part of the study. Institutional data were reported in this chapter as part of the *Setting and Study Population* section.

Focus Group Interviews

To gain perspective on the experiences and needs of graduate students, we conducted seven, 60-90-minute focus group interviews with currently enrolled graduate students at the institution.

Recruitment

To ensure broad representation, email invitations to participate in focus groups interviews (see Appendix A) were sent through the VCU Graduate School to all currently enrolled graduate students. We also sent a request to disseminate the email invitation to the officers of key graduate student organizations such as the Graduate Student Association, Black Graduate Student Association, and the Latinx Graduate Student Association. We aimed to recruit up to 50 student participants in the study. Instructions about adequate sampling in qualitative research vary, so we chose sampling guided more by the saturation of data as opposed to focusing on a specific number of participants (Tucket, 2004). However, since graduate students span many different departments, schools and colleges at VCU, recruiting a larger sample at the outset was necessary to ensure widespread representation across as many programs, levels, and identities as possible.

The study team worked with key stakeholders to offer a $25 gift card as compensation for their time to each final participant in the focus groups. The study team also created additional advertisements (see Appendix B) to boost study recruitment through the VCU TelegRam, other departmental listservs, and to VCU Axis Television slides that information disseminated throughout departments with graduate programs. However, due to the initial interest generated by the email invitations, no further advertising was necessary.

Selection

Potential participants were asked to complete an interest form, noting availability for several sessions. Within the first 24 hours of sending out the initial recruitment emails, we received a large number of responses on the form. Since the study team was unable to accommodate all of the students who were interested, initial study participants were selected based on availability for each session on a first-come basis. Selected participants were emailed instructions for participation, as well the Study Participant Information (see Appendix D).

Interview Protocol

All study personnel were trained to conduct sessions using the standardized Focus Group Prompts (see Appendix C) and procedures based on established principles for moderating focus groups for qualitative research (Billups, 2021). Before the focus group began, all participants in focus group interviews were emailed detailed instructions on what to expect, how to join the focus group, and the Study Participant Information (see Appendix D) outlining the nature and scope of the research being conducted, as well as its intended use. Prior to joining the focus group sessions, all participants were asked to choose a pseudonym or unique, anonymous identifier. Participants were informed that the use of pseudonyms both during the focus group sessions further helped to maintain the confidentiality of all research participants. Furthermore,

after data collection was finalized, any references made to participants were done using this self-selected pseudonym or unique identifier. Participants were informed that their demographic or other employment information would only be reported if participants cannot be identified in any way. Otherwise, participant data would be reported in aggregate. All selected participants were also given the option to decline to participate at that time by not attending their scheduled focus group session.

All focus group interviews were conducted using the VCU Zoom platform. Virtual (synchronous) sessions were chosen over in-person sessions based on participant interest and the geographic proximity of both students and research investigators to the physical campuses. At the time of data collection, VCU graduate programs were situated across two main campuses, as well as offering at nearly 20 Masters and Doctoral level degree programs that were advertised as "entirely online" (Virginia Commonwealth University Online, 2022). To decrease barriers to participation in research and to ensure that focus group participants were representative of the various graduate degree programs at VCU, it was imperative that researchers offered virtual (synchronous) participation options to students. Similarly, implementing only one standard method of data collection across all focus group interviews allowed the study team more control in ensuring the internal consistency and validity of the results.

Once participants joined the focus group session, the Study Participant Information (see Appendix D) was reviewed, participants were reminded to change their screen names to their pseudonym or identifier if they hadn't already done so, and participants were informed that the session would be recorded once informed consent was given. By choosing to remain in the session, all participants acknowledged that they were voluntarily consenting to participate and be recorded. All final participants were also asked to fill out a voluntary, supplementary

demographic questionnaire (see Appendix E) to help the study team better understand the final sample distribution.

Data Collection and Analysis

Transcripts for the focus group interview sessions were generated using the VCU Zoom platform, and reviewed and edited if necessary by the researchers to correct any errors in the auto-generated transcripts. The final transcript for each focus group session was uploaded into the Atlas.ti software system, purchased individually by each member of the study team. This software was chosen because it was also available and supported by VCU Technology Services.

All focus group interviews were initially coded by members of the research team using both a deductive coding process based around the prompts generated by the study theoretical framework, and an inductive process based on emergent ideas in the data. Additional codes were generated in-vivo as necessary to capture all focus group interview participant data. Once the initial coding was completed, a second researcher reviewed the codes for accuracy and inter-rater reliability, and researchers met to discuss and review (Hill et al., 1995).

Once the data were coded and reviewed, a thematic analysis was conducted to assist the researchers with making connections and identifying relationships across such a large data set with multiple participants (Nowell et al., 2017). The study team met to review and triangulate individually generated research findings. Researchers incorporated these redundant coding and analysis processes throughout each step of the coding and thematic generation to ensure the trustworthiness of the analysis and findings.

Individual Interviews

The study team conducted a series of individual interviews with full-time VCU staff members identified through the initial institutional mapping and website review as responsible

for providing programs, services, or resources supporting graduate students or overall graduate student success at the institution.

Recruitment

The initial participants invited to participate in the individual interviews were primarily identified by a thorough review of the VCU website and initial conversations with key stakeholders. The website review focused on staff, and faculty if applicable, who had, at the time of data collection, a primary role with direct or indirect responsibility for programs, services, and resources serving graduate students at VCU. The initial interview participant invitations were sent via email (see Appendix F) to a diverse cross-section of individuals from across the various Masters and Doctoral programs at VCU and from auxiliary departments within the Division of Student Affairs and other VCU Divisions tasked with providing support to graduate students. Participant emails were obtained through the VCU Directory or directly from departmental websites. Participants were asked to participate in a one-hour interview with one member of the study team via Zoom based on their scheduling preference. Any individual who responded from the initial participants who were invited was scheduled for an interview with one of the study team. Individual interviews self-selected to volunteer to participate. Those who chose not to participate were able to decline an interview or not respond to the email invitation to participate.

Interview Protocol

All study personnel who conducted the individual interviews were trained to conduct sessions using the standardized Interview Prompts (see Appendix G) and procedures based on established principles for conducting interviews for qualitative research (Billups, 2021). All final participants selected their interview times and were given a unique link to join the interview using the VCU Zoom platform.

In the same email, all final interested participants were also emailed a copy of the Study Participant Information (see Appendix D) outlining the nature and scope of the research being conducted, as well as its intended use. Participants could also elect not to participate after learning more about the study by not joining the scheduled interview session or declining at that time.

Once participants joined the scheduled interview session, the interviewer once again explained the nature and scope of the study, confidentiality, as well as the intended purpose of the individual interviews. Before the recording of the interview, the interviewer also collected voluntary demographic data (see Appendix H) from participants, and asked them to self-select a pseudonym or unique identifier. This pseudonym was documented by the research team and kept in a spreadsheet only accessible by the research team.

Participants were informed that their identity would remain confidential, and any reference to a participant in the research would be done using the pseudonym or unique identifier. Additionally, they were informed that participant demographic or other employment information would only be shared if participants could not be identified. Otherwise, participant data would be reported in aggregate. Once participants provided verbal consent and any questions about the nature of the study and confidentiality were answered, the interviewer informed participants that the session was being recorded and the interview commenced.

Data Collection and Analysis

For consistency, the individual interviews were transcribed and analyzed using the same process as the focus group interviews. Transcripts for each individual interview were generated via the VCU Zoom platform and uploaded into the Atlas.ti software platform for analysis. Since there were so many separate interviews, each member of the study team was assigned a certain

number of individual interviews to initially code. Once the initial coding was completed, other members of the study team spot-checked the individual interviews to ensure accuracy and inter-rater reliability of the codes that were generated.

Once the data were coded and reviewed, a separate thematic analysis was conducted for the individual interviews, with both separate and overlapping themes identified for both focus group interviews and individual interviews. The study team met to review and triangulate individually generated research findings. Researchers incorporated these redundant coding and analysis processes throughout each step of the coding and thematic generation to ensure the trustworthiness of the analysis and findings.

Survey Analysis

The study team gathered and reviewed the most recent extant data that had already been collected on graduate students at the institution, performing additional analyses as indicated by the available data. These data sources include institutional data on student enrollment and demographics, raw data from the National College Health Assessment administered to students in Spring, 2020 (American College Health Association, 2020a) and covered under VCU IRB # HM2214, and results from an online survey administered to graduate students by the Graduate Student Association (GSA) at the institution in Spring 2022.

Since the other surveys such as the GSA Spring 2022 survey were proprietary and raw data were not publicly available for secondary analysis, the main data source used for additional qualitative analysis was the American College Health Association, National College Health Assessment III (ACHA-NCHA III). The ACHA-NCHA III was administered at Virginia Commonwealth University in 2020 just prior to the onset of the COVID-19 global pandemic to a random sample of 5,000 part-time and full-time students enrolled at the institution at that time.

The final participant sample included graduate students at VCU, and provided information on health behaviors, academic challenges, basic needs access, and overall indicators of mental health and well-being (American College Health Association, 2020a). Results from the survey were also benchmarked with national data for all graduate students who participated in the survey during the same administration period, and available through the American College Health Association (2020b).

Once the data file for the The ACHA-NCHA III was requested and received, the data file was imported into the SPSS 28 statistical software and filtered to include only results from students who selected answer options six (Master's) or seven (Doctoral) to question N3Q72: What is your year in school? The resulting sample size for further analysis included 96 participants. A basic frequency analysis was conducted on the questions indicated by the literature review to be most relevant to graduate student success; University climate, key factors impacting academic success, help-seeking behaviors, food security, caregiving, flourishing, and other demographic variables such as first-generation status, parent/caregiver status, gender identity, and racial or ethnic identity. The small sample size precluded more in-depth comparison analysis between groups in the sample.

VCU results were further compared with both VCU Institutional Data and the ACHA-NCHA II Graduate Student National Reference Group (GSNRG)(American College Health Association, 2020b). Only results from institutions using the same web-based random sampling survey administration that were included in the final sample, collected from 51 institutions across the United States.

Institutional Mapping

The study team reviewed several existing sources of information obtainable publicly through the main VCU website and other departmental websites, to create a thorough structural map of the institution in order to identify as much as possible how and where across the VCU graduate student programs were situated, levels of institutional support, and rates of graduation. The mapping considered the school/college, departmental, types of programming for graduate students at the institutional level, and available resources and support specific to graduate students. This information was used to further compare data collected through the study with the most current data available from the institution.

Benchmarking

The study team reviewed institutional policies and procedures governing graduate student processes at the institution, as well as compared available institutional data with comparable peer institutions. VCU Peer Institutions were identified through VCU Institutional Research and Decision Support (2022b) as peer or aspirational institutions, and other R1 or Virginia peer institutions that VCU considers when benchmarking programs. The study team also considered the current VCU strategic plan, Quest 2028: One VCU Together We Transform (Virginia Commonwealth University, 2022c), and The Council for Advancement of Standards in Higher Education (CAS) 10th Edition of *Professional Standards for Higher Education* (Wells & Henry-Darwish, 2019) when reviewing peer institutions and benchmarking how VCU was currently aligned with the strategic goals and best practice for graduate student support and success at the time of data collection.

Bias and Trustworthiness

There are several limitations to qualitative research that the study team attempted to account for throughout the process. Qualitative research is rooted in constructivist and interpretivist models, with researchers potentially introducing their own subjective biases into the research process (Creswell & Poth, 2018). Researchers on our study team were also all currently enrolled graduate students at VCU during the time of data collection, so therefore also identified from within the study population and had a potential stake in the outcome of the results. This potential conflict of interest was acknowledged to all study participants prior to data collection. Two of our research team were also current employees of VCU at the time of data collection, a dual-role that was also acknowledged during the individual interview process. Similarly, researchers who were also VCU employees and who may have had existing prior working relationships with any of the individual interview participants were not selected as the interviewer in those cases.

Using a multi-case study design ensured that data was triangulated through the use of more than one source. Similarly, approaching the data collection and analysis with the tenets of CQR in mind, the study team was able to work together to further check biases and come to a consensus on emergent domains and themes uncovered through data collection and analysis (Hill et al., 1995). Both the muti-researcher design and the multi-layered approach to data collection and analysis helped our team view the issue from multiple perspectives, potentially helping to corroborate findings and adjust for any subjective biases that might have emerged. To further assist with ensuring the trustworthiness of this study, the researchers used techniques such as process documentation, a shared coding framework, coding review, continuous debriefing

meetings, checking in with participants to ensure accuracy, and data triangulation using several sources (Nowell et al., 2017; Tomaszewski et al., 2020).

Summary

This study employed a qualitative, multi-case study design to better understand the different aspects of the graduate student experience at VCU, as well as the ways in which the institutional structures impact graduate student success. A multi-dimensional data collection method using focus group interviews with students, individual interviews with key institutional stakeholders, survey analysis, and benchmarking/artifact analysis was used to understand this issue from multiple perspectives. Emphasis was placed on recruiting participants using methods that ideally represent both the student and stakeholder perspectives across the many departments, programs, and constituent groups with an investment in this issue. Triangulation across multiple data sources and methods of data collection and analysis helped ensure the trustworthiness of the findings. Data were analyzed based on the type of data and using a blend of content analysis, thematic coding, and other comparative techniques that draw from critical social justice and equity perspectives.

Chapter IV: Results

This chapter reports the findings of the data collection and analyses that were conducted between December 2022 and February 2023. The research was conducted to gain a deeper understanding of the individual, relational, and structural factors impacting graduate student success at Virginia Commonwealth University (VCU). The data collection methods for this multi-case study included focus group interviews, individual campus stakeholder interviews, quantitative analysis of secondary institutional data, and benchmarking of VCU's graduate student education compared to practices at recognized peer institutions. The research design was guided by the following research questions, using several types of data to examine the issue of graduate student success from multiple perspectives: 1) How does the campus infrastructure, such as organizational structures, policies, and/or practices impact graduate student success? The individual stakeholder interviews and benchmarking data explored both perceptions of VCU full-time employees engaged in supporting graduate students and graduate studies, while the benchmarking analysis provided contextual information available publicly through institutional artifacts such as websites or handbooks. These data were triangulated with the findings from the focus group interviews of students themselves to highlight how departmental and institutional policies and procedures interacted with students' self-perceptions of success. 2) What are the primary self-reported needs or challenges impacting graduate students' success at VCU? The focus group interviews and the quantitative data from the VCU ACHA-NCHA III provided a more in-depth examination of how students identified their needs and what challenges they felt most impacted their success. 3) How do self-reported needs or challenges vary across graduate students' discipline, identities, and other sociodemographic characteristics? Analysis of the focus group interviews was conducted using students' self-reported identities and intersections of

identities as a guide to better understand if and how sociodemographics interact with students'

self-perceptions of their graduate student experience. 4) What personal characteristics and

strengths do graduate students at VCU primarily identify that influence their overall success?

Finally, analysis of both the focus group interviews and the VCU ACHA-NCHA III data was

conducted to ascertain what self-reported factors, if any, might exist that potentially mediate

challenges to promote success among graduate students. The results are reported separately for

each type of data collected throughout the study, highlighting the key themes that emerged

throughout each separate analysis.

Focus Group Interviews

A total of seven focus group interviews were conducted in January 2023 with 39 graduate

students who were currently enrolled either part-time or full-time in a Master's or Doctoral

program at VCU at the time of data collection. Of the final 71 graduate students who were

invited to attend a focus group interview, 39 showed up for their scheduled interview. The

consort diagram in Figure 5 details the recruitment process and the selection for the final

participant sample for the Focus Group Interviews.

Figure 5

Consort Diagram of Focus Group Interview Recruitment
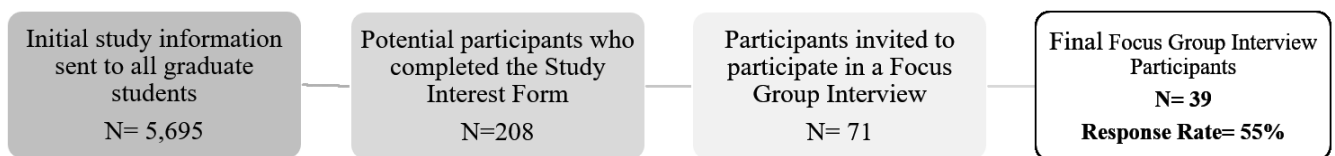
Sample Characteristics

All focus group participants were asked to complete a voluntary demographic

questionnaire (see Appendix E), which asked additional questions related to their individual

identities and other key characteristics. Our aim was to ensure that the final sample for the focus group interviews were representative of the diverse graduate student population at VCU, and distributed as closely as possible throughout the many graduate programs offered at the institution.

Overall, participation was fairly evenly distributed across graduate programs. Participation in the final sample was slightly skewed to overrepresent programs within the VCU School of Education. Figure 6 details the sample distribution by major VCU School/College alongside the overall graduate student enrollment reported within these Schools/Colleges at the time of data collection.

Figure 6

Focus Group Sample Distribution
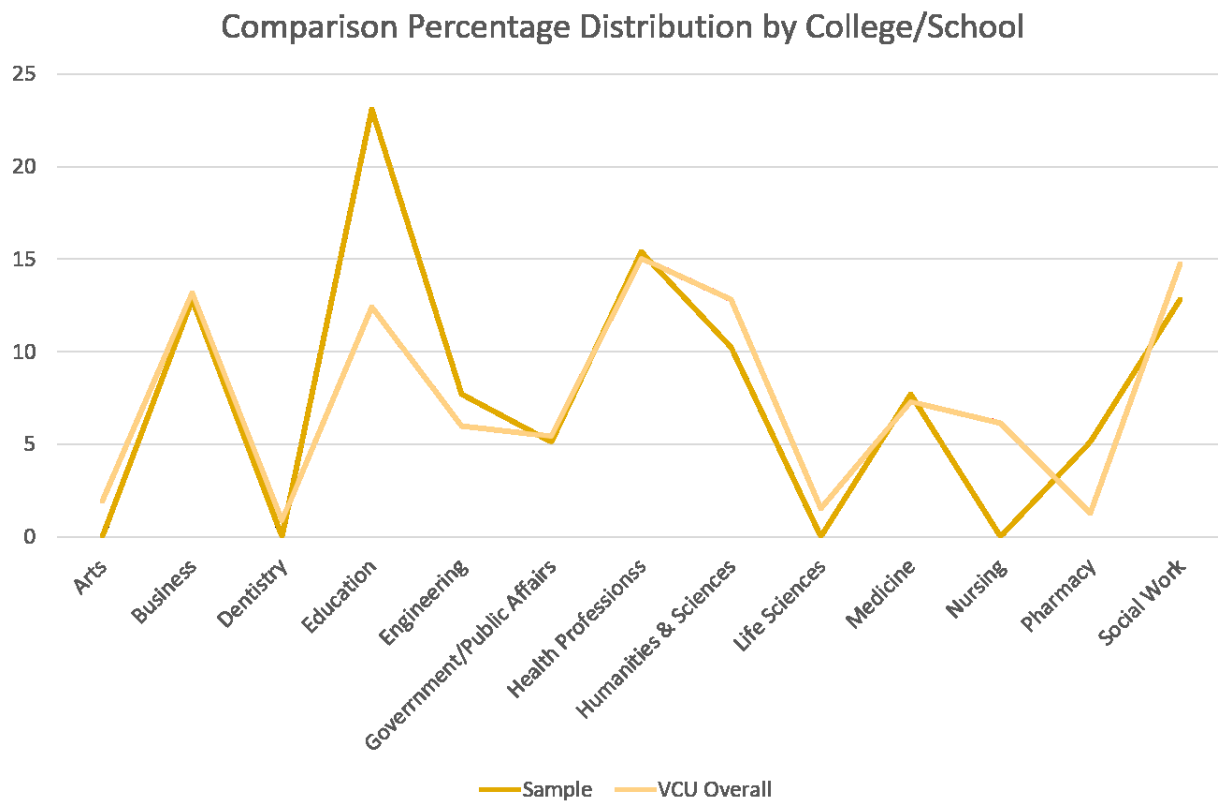
At the time of data collection, 77% of enrolled graduate students at VCU were considered full-time. However, 64% of participants in our sample reported being a full-time graduate student. Twenty-four focus group participants were current doctoral students, and 15 were current master's students. However, we were unable to find data related to the number of currently enrolled students in either Master's or Doctoral programs at VCU to compare with the final focus group sample. Other demographic variables of interest that were collected included self-reported gender and race/ethnicity. Figures 7 and 8 show the self-reported gender and racial/ethnic identities of the focus group participants alongside available institutional data for graduate students at the time of the study, respectively. Gender identity was difficult to compare since many graduate students at VCU do not report their gender identity. While VCU collects biological sex assigned at birth for all students, reporting gender identity is optional, with a large percentage of students not reporting. Similarly, VCU reported "International Student" as a category embedded in the reporting of students' racial or ethnic identity. While at least 3 of our participants self-identified within the focus groups interviews as international students, this category wasn't explicitly captured on the optional demographic questionnaire administered to participants. The final focus group participant sample overrepresented students identifying as White or as having More Than One identity.

Figure 7

Percentage Sample Comparison by Gender Identity
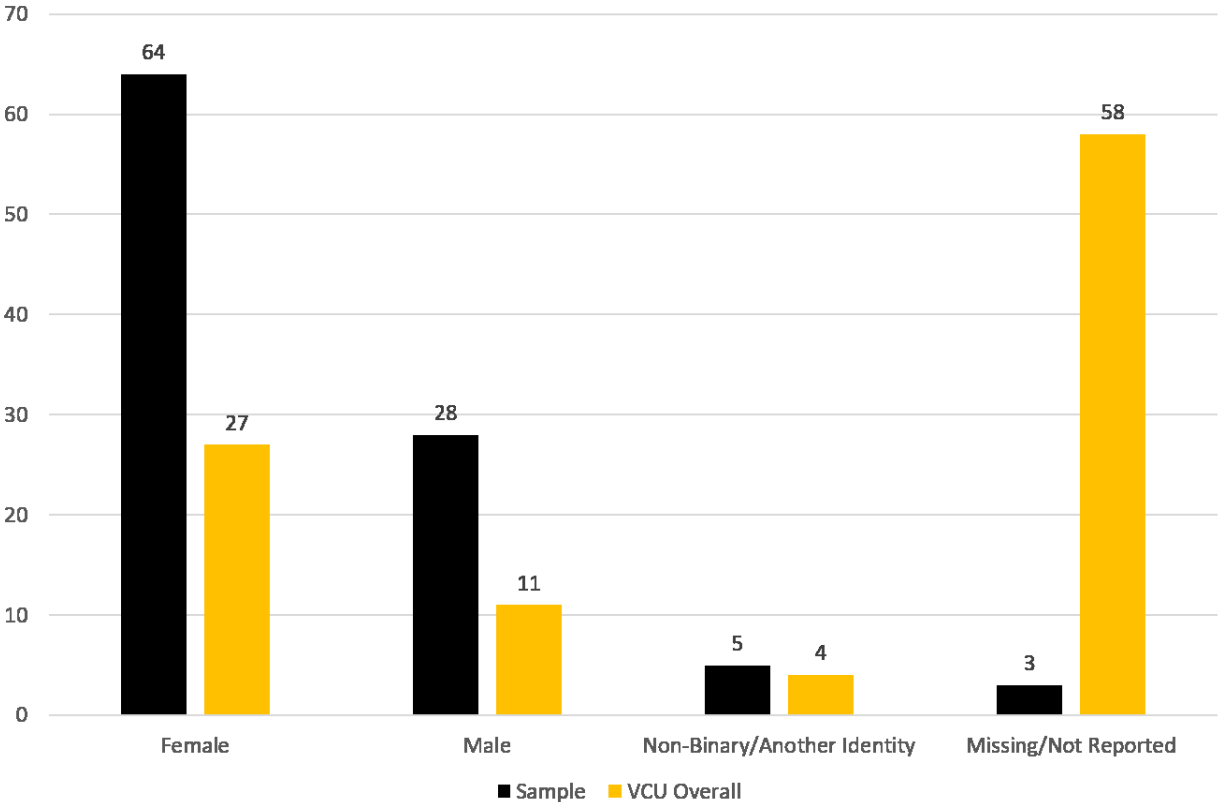
Figure 8

Percentage Sample Comparison by Race/Ethnicity
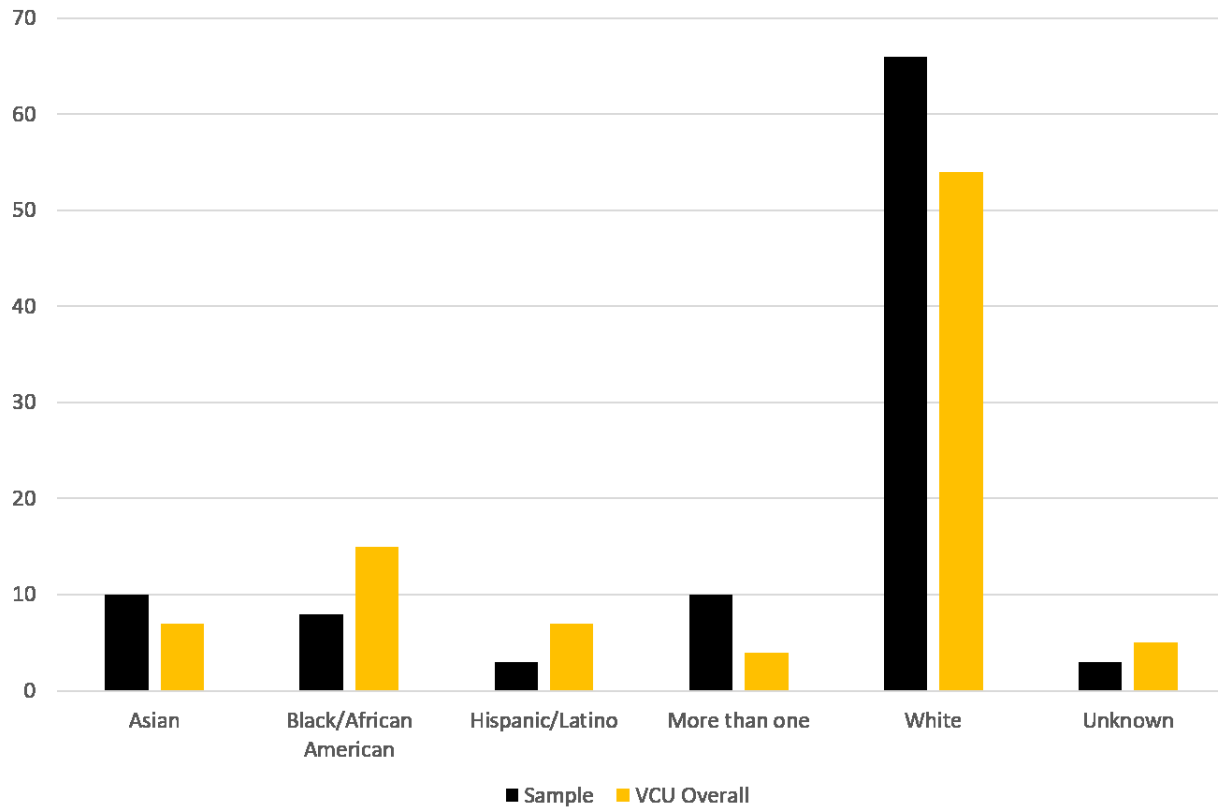
Themes

Several key themes emerged from the analysis across all seven focus groups. A total of 414 statements were coded into 53 codes, with some statements receiving two or more codes. Codes were generated through both a deductive and inductive process, with new codes generated in-vivo as indicated by the transcript statements. For analysis, codes with lower frequencies were grouped and transformed post hoc to best capture the resulting theme. Table 2 shows the final breakdown and distribution of the emergent themes from the related codes.

Table 2

Focus Group Interviews Thematic Distribution

Themes and codes	Frequency and % of total, n= 946	
	n	%
Graduate Student Support	**634**	**67**
received support	118	12.4
lack of support	213	22.5
needs were met	69	7.2
needs were unmet	131	13.8
larger need expressed	103	7.7
Challenges	**174**	**18.3**
individual	18	1.9
relational	22	2.3
departmental	19	2.2
institutional/structural	115	10.3
Factors Promoting Success	**138**	**14.5**
individual	21	2.2
relational	10	1.0
departmental	29	3.0
reasons chose VCU	78	8.2

Graduate Student Support

      Any graduate student statement indicating a mechanism of support or a perceived lack of support was captured in this broader theme. Similarly, the codes generated when students

expressed that they had a need that had been met or unmet, either by their peers, faculty/staff, the department, or the institution as a whole were placed into this category as well. Finally, further outstanding needs that related to students more globally were captured within this theme. While the codes were grouped in analysis based on whether they indicated the presence or lack of support, or a met/unmet needs, these codes were further broken down based on the location or focus of the support, ie. peer/cohort, faculty/staff/mentor, program/department, and at the institution level.

Sources of support.

Participants identified several ways in which they felt supported, either by their peers/cohort, faculty, staff, or other mentors, their academic program or department, and other institutional resources. The code frequencies for codes related to receiving support or having needs met was the second highest group and accounted for 19.6% of the overall total codes used. The institution-wide resources that students most mentioned as providing helpful sources of support were VCU Libraries, University Student Health Services, Student Accessibility and Educational Opportunity (SAEO), and the Global Education Office. Table 3 provides example quotes that best illustrate the various sources of support articulated by participants across the focus groups.

Table 3

Graduate Student Sources of Support
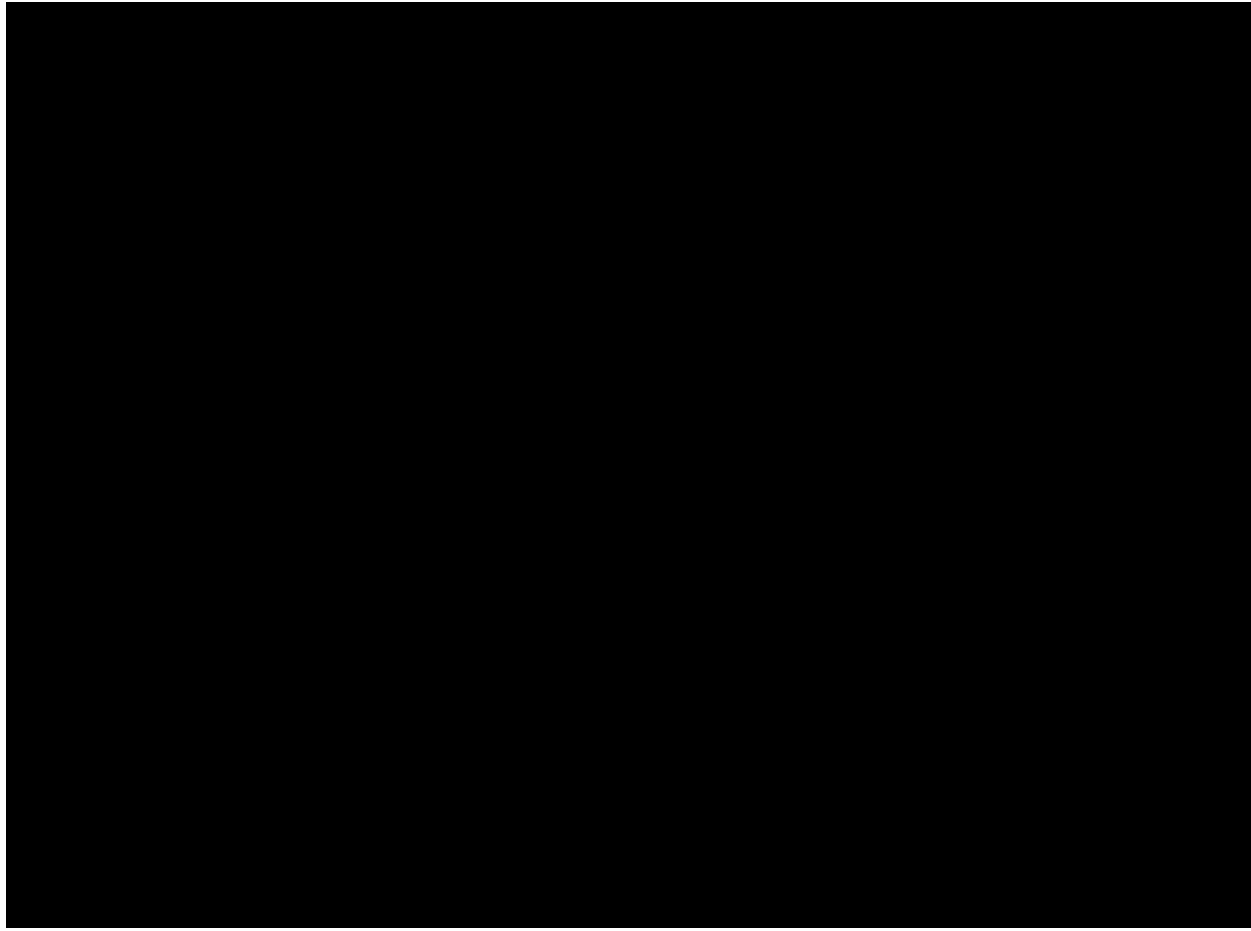
Graduate students identified specific support provided and ways that their needs were met by their program or department.	"For the past like year and a half now, my program has not only offered health insurance that we could purchase, but also has been paying for it for us, which has been really really great, and that's like, I started going to therapy because I could now afford therapy which has been really amazing. So that was a need that has been met now." (Ang)
	"I love being able to take classes virtually. I could not work full time and then attend class. It opens up a wide range of opportunities. I wouldn't be able to do it, and I travel for work a lot. So being in a hotel room, in Raleigh, and you know, having to miss Class versus being able to just jump on a zoom." (Graduate Student)
	"One thing that helps me in my program is that the professors are actively in the field, and they also understand the kind of field placement process, and from the way the curriculum goes. There's a couple of classes that actually bring up with your field placement, so especially in those classes, is helpful that professors first off know that time is a big thing when you're in fields, and they can understand, you know, needing more time for a certain assignment, or even logging on for the synchronous class sessions." (Jerome)

Gaps in support.

While questions were asked during focus groups to help explore support/met needs and gaps in support/unmet needs, participants in the focus groups were almost twice as likely to identify and articulate gaps in support and unmet needs. The codes indicating gaps in support or unmet needs tended to organize around a few key subthemes such as the individual identities of the participant, lack of support from peers/cohort or from faculty or other mentors, lack of consistency across programs/departments in the level of support provided, and overall lack of resources institutionally. Based on the participant responses, support varied highly by program/department, especially related to funding, flexibility in leave/time off or how other policies are implemented, and faculty/staff support. Two participants summarized this perceived inconsistency both across and even within departments by saying, "your experience as a graduate student really depends on the lab culture and your advisor. Like your PI or your mentor, because they sort of set a lot of lab culture and how you're operating day to day," and "But I would say that, like there's a caveat to that where it's sort of night and day, based on the professor."

The codes related to this theme that had the highest frequencies of use (n=105) were ones that captured perceived gaps in support at the program/departmental level, and (n=68) indicated that the program/department had not adequately met the needs of the graduate student. Statements about lack of support or unmet needs (n=67) relating to faculty within the department were similar and often intertwined with how faculty enforced larger departmental or institutional

policies. Table 4 provides examples of quotes from participants related to the specific faculty or departmental subthemes.

Table 4

Gaps in Support for Graduate Students

Support subthemes	Example quote	frequency, n
Perceived lack of support/unmet needs		**344**
Graduate students identified areas where they perceived gaps in the support they received or that they had unmet needs from their faculty/mentors or within their program/department.	"Yeah, we had a situation where our in our department there was like one of the faculty. I think took on too much responsibility or something like that to where, like our classes, were affected, so multiple classes were being canceled, they weren't being made up there wasn't much like guidance instruction. So by the end of the semester. It was like everyone was really confused, and we no one felt like they really learned anything or got anything out of it." (Bill Smith)	
	"Since I am in a a Phd program like we're kind of all being trained to like pursue Academia research. and I know a lot of people in my cohort maybe want to do like clinical work or go into industry, and it seems like there's maybe not as much support or internship around, like, if you want to branch out and do that later on." (Bridget)	
	"...we're getting you ready for academia. And that traditional path which typically comes with a little bit of baby hazing of like this is what we all had to do to get our degrees, but they don't really prepare us for the process of the degree, like the academic stuff that comes along with like the the lingo and just the the patterns and the different ways. People behave in Phd. Programs." (Bryn)	
	"And there's not very good digital cataloging, or like listing of services that are available within our department in terms of like technical core facilities that we do have access to hypothetically. So I think a lot of people learn about those types of things by word of mouth by being on the Monroe Park campus, but we're in a different building than most of the other people. So it's really hard." (Elaine)	

Some of the main concerns that were captured through these codes had to do with course offerings or lack of transparent or easily accessible information or resources shared at the departmental level. Participants also cited electives that were advertised but never offered, reductions in the amount or frequency of courses being offered each semester, not being able to take additional courses outside of their department due to scheduling conflicts with required courses, or similar issues that potentially interfered with the completion of required courses or even caused a delay in graduation for some participants. Attendance and grading policies were

cited several times as not being flexible enough to accommodate students during critical times or in the face of unexpected life events such as an injury, illness, or death of a loved one. Julian Ricky shared:

> How they manage personal trauma has [sic], I think people need a lot more time off. I think they need more flexibility, and when they are going to offer like, if you have to miss it like a month of school, they should offer flexibility, and when you can retake those
>
> classes.

The individual identities of graduate student participants also played a role in how support was perceived, both at the departmental level and from the institution as a whole. Students who also self-identified as non-binary, international students, parents (especially single parents/lactating parents), as having a disability or chronic illness, or who identified as Black/African American or Latiné all described additional challenges or lack of support that centered around their identities. Ang, who used she/they pronouns during the focus group, indicated:

> One challenge that came up for me as I was listening to other people speak is that I've recently noticed a lot of people struggling with pronouns in my department, which has been hard for me because I came out as non-binary throughout my like Ph. D journey.

One participant, a lactating parent, recounted the experience of having to pump in the back of a bathroom with no access to sinks. Another participant, Paige, shared that, "being a disabled graduate graduate student or graduate student with disabilities has been rough. The program has been supportive, but is clearly not designed to support students with disabilities." Similarly,

Kate, one participant who shared more about the lack of support related to managing a chronic illness as a graduate student, said:

> There's not a lot of flexibility, and like missing course work, while also being able to manage my health. And that's something that I've like really really had to advocate for, and it's frustrating that even when I have the accommodations in place that like almost my character ends up being questioned by professors like for missing class.

The additional statements (n=70) comprising the gaps in support or unmet needs subtheme focused on gaps in support at the institutional level or (n=34) among at the peer/cohort level. These results often were related or tied into statements that characterized much larger or population-level unmet needs for graduate students overall. Findings from this subtheme are captured separately.

Larger Unmet Needs

Through the review of the collective responses of focus group participants and their self-reported responses aligning with our research question identifying the needs or challenges impacting their success at VCU, the following sub-themes were most prevalent across participants: funding, mentorship, transitioning, and socialization. Those four theme codes displayed the highest frequencies among the participants' responses across all focus group interview sessions. The code displaying the highest frequency was funding (n=54), followed by socialization (n=22), then mentorship (n=19), and the code displaying the lowest frequency for unmet needs was transitioning (n=13). The appearance of code frequency under the theme of larger unmet needs is reflected in Figure 9.

Figure 9

Larger Unmet Needs

Funding

Mentorship

Transitioning

Socialization

- Funding
  n=54
- Socialization
  n=22
- Mentorship
  n=19
- Transitioning
  n=13
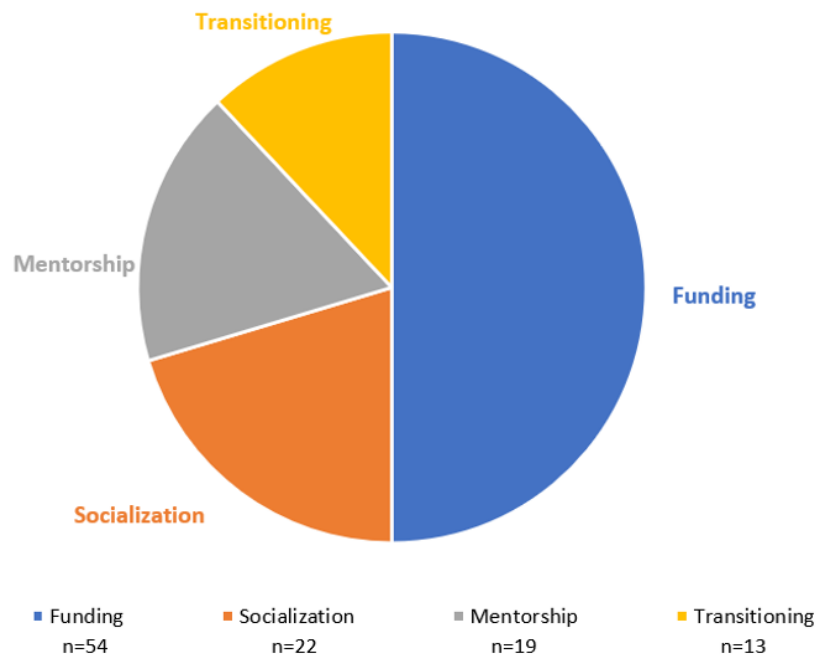
Funding.

Participants identifying funding as an unmet need occurred at the highest frequency (n=54). Several of the participant responses related to funding were specific to gaps in covering living expenses either limited by student stipend amounts or limitations to hours that students can work based on their degree programs and/or enrollment status. A participant shared "our stipend as PhD students isn't very high, and it hasn't increased at all since I started the program, even with rising rates of like rent." Some participants simultaneously agreed with one student who stated "you're only allowed to work 20 hours a week and then work as a full-time student. And so, it's just like, really?!" Participants also expressed concerns about health care costs and the need for funding to support graduate students having adequate health care provider options. A PhD student shared:

When I joined the program we didn't have student health insurance. And again, this is like my full-time gig. And so a lot of us had to just go like on the marketplace for health care. And so I think that was just like wasting a lot of time and energy and resources. Because those things weren't provided to us.

Socialization.

The second highest frequency (n=22) was in the subtheme area, socialization. Participants conveyed overall unmet needs with socialization in their programs, on campus and because of the COVID-19 pandemic. This need for increased social outlets and opportunities to connect with others also resulted in feelings of isolation being reported as one of the largest challenges for students. One participant referenced their program stating, "I feel like my connection to the like enterprise of my doctoral program is really really weak." Ang with agreement from other participants in their group shared:

I started my program in fall of 2020, and so it was like pretty much in the midst of Covid, and so there was a lot of like isolation. I didn't really get to know my cohort as well as like some previous cohorts had got to like spend social time together and things like that. I had to do my whole first year online of classes, which was hard.

Mentorship.

The larger unmet need of mentorship among focus group participants appeared at a frequency of (n=19). Participants collectively expressed needs for mentorship within their programs and among the faculty within their departments. A part-time doctoral student shared, "I was not aware that the person who serves as my adviser was conducting research that is along the lines of my stated research interests until after I completed my comprehensive exams." Another participant addressed needs for mentorship within their department stating:

I want someone who has my best interests genuinely at heart to give me harsh feedback, not coming from a place of like just being a jerk and wanting to tear you down, but someone who actually wants to give you really tough feedback specifically because they want to help you improve and I have gotten that, but not from like the structure of my department.

Orientation/Transition.

Needing additional support to orient and transition to both the university and the rigor of graduate studies was a larger need identified by focus group participants. Participants discussed unmet needs with transition within their departments and programs due to lacking or insufficient attention spent on orientation, program handbooks, and adjusting to being a graduate level student. In response to gaps with orientation, a participant stated:

So I started the fall of 2020, and so ours was virtual, and I think it was only like 45 min long and it was just very like This is the campus. This is like 3 resources and that was kind of it. It was very hands off, very like you got this. You'll be fine, and I didn't really think anything of it.

Several participants mentioned missing information or gaps with program handbooks and mutually agreed with comments expressed by a participant saying, "My department has not thought that way. I think they've just expected that you'll either be prepared somewhat when you get here, and you'll figure out the rest, or it's in the handbook. Good luck and it's not always in the handbook." Difficulty with the transition to being a graduate level student whether it was coming from undergrad or out of the country as an international student was conveyed. An international student stated, "So, being an international graduate student. So I face some

difficulty adjusting here, because, being a new environment, everything being new, so that it's something I had to cope with in my first year of program."

Under the theme larger unmet needs, funding, socialization, mentorship and transitioning were the codes displaying the highest frequencies at a total occurrence of (n=108) among participant responses across all focus group interview sessions conducted.

Challenges

Statements relating to challenges that graduate student participants faced impacting their overall success or experience at VCU accounted for just over 18% of the total codes used. These challenges correlated with the theme of larger unmet needs, especially related to funding and socialization. Challenges expressed by participants were coded mostly in vivo, and then grouped into categories depending on where the challenge originated (ie. at the individual level, the relational level, the departmental/program level, or the institutional/structural level). Institutional/Structural level challenges accounted for the majority of the codes under this theme.

Graduate Student Well-Being

Maintaining overall well-being and handling struggles with mental health were included in many of the participant statements within the focus group interviews. One participant was transparent about their difficulties as a graduate student with a chronic illness sharing, "attending with a chronic illness, and even like having the support of, like the Academic Success Office, there's not a lot of flexibility, and like missing coursework, while also being able to manage my health." Participants also collaboratively shared challenges with balancing everyday life affecting their overall well-being. A few participants provided follow up input to the comment, "besides the challenge of you know, balancing everyday life, and a new, very demanding job and

other things having to kind of go back and relearn how to be a student has been a challenge for me." Another participant's comment summarized the challenging subtheme stating:

For me. Personally, I work full time, and I'm a part time student. So a lot of it can really just kind of be like time management and like keeping up with everything because a lot of our professors, like while like they seem like super understanding that a lot of us are working full time, they still do have the expectation that, like this is our like full commitment.

Isolation

Feelings of isolation, being alone or disengaged, or being unable to connect to others was one of the biggest challenges students articulated throughout the focus group interviews. One participant addressed feeling disconnected sharing:

To be able to find time to socialize and hang out. I think the course expectations can make that really difficult and I think that social support is really really important. I think it's really odd that, like there's this idea that grad students and doc students that it should be this like lonely thing.

Participants also shared some relational difficulty with faculty. A doctoral student shared:

Baby hazing of like this is what we all had to do to get our degrees, but they don't really prepare us for the process of the degree, like the academic stuff that comes along with like the the lingo and just the the patterns and the different ways people behave in PhD Programs. They just suspect that you're gonna get that by the time you end up in a teaching faculty track which not all of us do.

Transparency and Consistency

Various participants expressed some concerns as graduate students with some of the procedures and expectations within their departments. One student referenced different policies between faculty in their program stating:

A lot of the professor's kind of have different policies in terms of late work. It would kind of be nice if it was kind of a program-wide policy rather than having one class. Be like, okay, you have a 5-day window for all of your assignments and then the next class the exception no late work whatsoever. And then the next class it's like you can have like a 3-day window for this assignment, this assignment, and this assignment.

In collectively sharing concerns with expectations among their departments, many participants agreed when a doctoral student stated:

I can agree with that too, because I have the expectation to do an internship which I would have loved to have done with my superintendent, but the requirement is to do it at another workplace, and it's like, it's the exact same. If I were to do it with my superintendent, but I have to do it in another school division which just didn't really make sense to me.

Structural/Institutional Challenges

During focus group interviews, participants addressed structural and institutional challenges that have impacted them as graduate students. Several participants discussed the limitations with accessing necessary resources stating:

Going off the challenges that I have with the culture around work and expectations for working weekends, evenings, etc. [...]. Being a parent, me and my partner decided to have our first child this past year, so I have an infant and it's been really challenging sort

of not necessarily with my mentor but knowing that the culture [...] is not so friendly towards parents and needing to leave at a certain time during the day. It means that you're not as productive with producing data during the week if you can't stay all hours of the night and come in over the weekend to continue experiments. I've had the experience within my department, [...] of hearing from other students and other mentors' interviews of people coming into their labs and them explicitly asking people whether or not they're planning to have children during the course of their degree, which makes me feel very unwelcome as a parent in general. Thankfully, my mentor has not reflected that, but it is definitely the culture within my department.

Other students addressed needs for support with housing, as one participant shared:

I have seen people struggling, like some international students coming in were struggling in the first semester with finding accommodations and like initial housing with these rent spikes. They are like kind of struggling with meeting up with these expenses. So maybe put out more resources where they can like access some resources, but I mean having some more active participation in that sense so that a new student could be more comfortable coming to the US and the new environment here.

One graduate student being transparent highlighted challenges with responses to difficult situations stating:

The way the administration responds to harassment, sexual harassment and abuse that kind of thing, it was really disappointing. It just did not match what I had thought the school was like.

Policies and procedures

The COVID-19 pandemic also presented as a challenge for graduate students due to impacts on some policies and procedures given the pandemic. During one of the focus group interviews, a graduate student that started their program prior to the pandemic shared:

> I joined in Fall 2019 and then spring 2020 was Covid. I guess the biggest challenge I've had is like my advisor is really strict, and so I like research full time in the lab and they expect me to be working pretty much all the time and is like always sending emails and text messages, so I guess like setting boundaries while still working hard has been difficult.

Another participant mentioned adjusting to COVID-19 policies as a challenge sharing, "there were a little bit of challenges with the Covid policies, particularly regarding attendance."

Diversity, equity and inclusion

Challenges that focus group participants face as graduate students surrounding diversity, equity and inclusion were identified across several focus group interviews. A graduate student who shared that they were also an international student said:

> I have one more issue, and it's not like a issue, but it's like a complaint. So in mostly all the surveys even the form you sent to the beginning of this meeting, when there is like the question, what is your ethnicity? There's always like underrepresentation of the Middle Eastern region. and I know a lot of people, including me from the Middle Eastern region, like the Arabic ethnicity. So, we have to choose like other, or sometimes there's even no option for others. I have to choose something else, so I feel like way underrepresented, because there's no choice to choose that you are Middle Eastern Arabic ethnicity.

Other difficulties identified regarding inclusion and access, addressed challenges faced by a graduate student identifying as having a disability. The student shared:

> The other thing that sticks out in my mind is how inaccessible VCU is for students with disabilities whether that's physical or invisible disabilities. Visible or invisible, just like we've had fire alarms go off in buildings where there's no mechanism, there's no procedure in place for students in wheelchairs even though they are on like the third or fourth floor, they just sit there and wait for someone to bring them down, it's awful.

Factors Promoting Success

The focus group interviews concluded with participants sharing factors that promoted their success at VCU. Participants accredited VCU for inclusivity, employee tuition incentives and the academic experiences. A graduate student expressed their appreciation for inclusivity at VCU stating:

> One thing that immediately came to mind for me were bathroom policies, so I am really lucky that there is a gender inclusive bathroom in the building where my program is and where our doctoral offices are. If that weren't the case that would make my life a lot harder and make it a lot harder for me to work from campus. So I'm really fortunate that VCU has inclusive bathrooms and that it's available in this building although I recognize that it's not every building a VCU has this option

A participant that is a VCU employee benefiting from the tuition incentive program sharing:

> It is such a gift to be valued for pursuing a higher degree by your employers, and by extension getting it for free as a tuition benefit as an employee benefit so there's a real value in that, and that in itself is a support.

Many participants conveyed their appreciation for their academic experience at VCU with one graduate student acknowledging their success stating:

> The academic experience has been excellent. I really appreciate that class sizes are small. I know that other universities have much larger class sizes and all the instructors have been really good that I have experienced.

Additionally, graduate student participants were able to cite individual or personal characteristics that helped them either initially seek out or continue pursuing graduate students. These characteristics ranged from being partnered or having family support, both for emotional support and for the additional financial support that having a partner provided. Participants who were also VCU employees or who had other full-time employment tended to have less of a financial burden or impact related to their graduate studies as other participants. Participants also referenced that having previous job experience before coming to graduate school enabled them to better navigate and understand the actual academic content presented in their classes. A few participants recognized that they have been able to have their needs met through continually advocating for themselves. Finally, some participants identified positive mindsets as further contributing to their success as graduate students.

Reasons for choosing VCU

The location, cost, ranking, and faculty of the graduate degree programs were the top stated reasons for graduate students' choice of VCU as their graduate school. Several focus group participants expressed the cost of attending VCU was more affordable in comparison to other universities. One participant stated, "I chose VCU because of the cost, the public university versus the other private institutions." Another participant shared their choice for VCU was due to the ranking of their program nationally stating, "My degree program offered by VCU is one of

the top in the State." A doctoral student shared their choice for VCU was due to a faculty member sharing, "For me, it was my academic advisor. My Ph.D. advisor was pretty much the sole reason why I chose to come to VCU."

Individual Stakeholder Interviews

Several of the themes captured across the focus group interviews were further echoed or represented in different ways throughout many of the individual stakeholder interviews. Interview invitations were extended to 39 individuals identified as campus stakeholders in graduate student success, a group comprised of student affairs professionals (13% of sample) as well as academic faculty and administrators (30%), staff (22%) and departmental program directors (35%) representing multiple disciplines and units as indicated by Figure 10. A total of 23 interviews were conducted with campus stakeholders between December 2022 and January 2023.

Figure 10

Units Represented by Campus Stakeholders
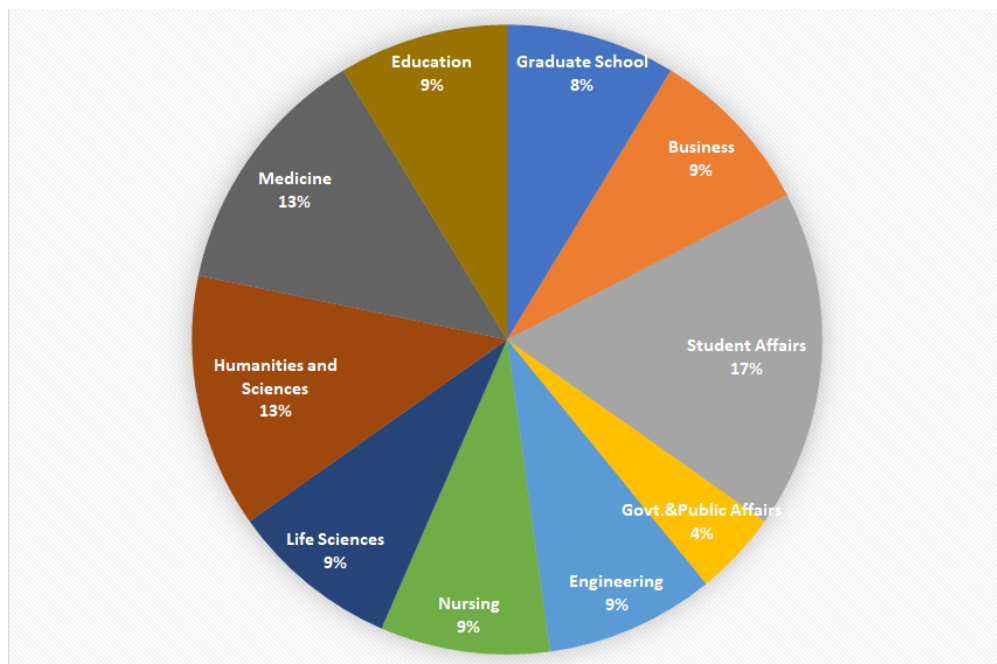
In addition to diverse stakeholder representation across units and disciplines, our cohort sample demonstrated a range of demographic characteristics across gender and race/ethnicity as indicated in Figure 11.

Figure 11

Campus Stakeholder Gender and Race/Ethnicity
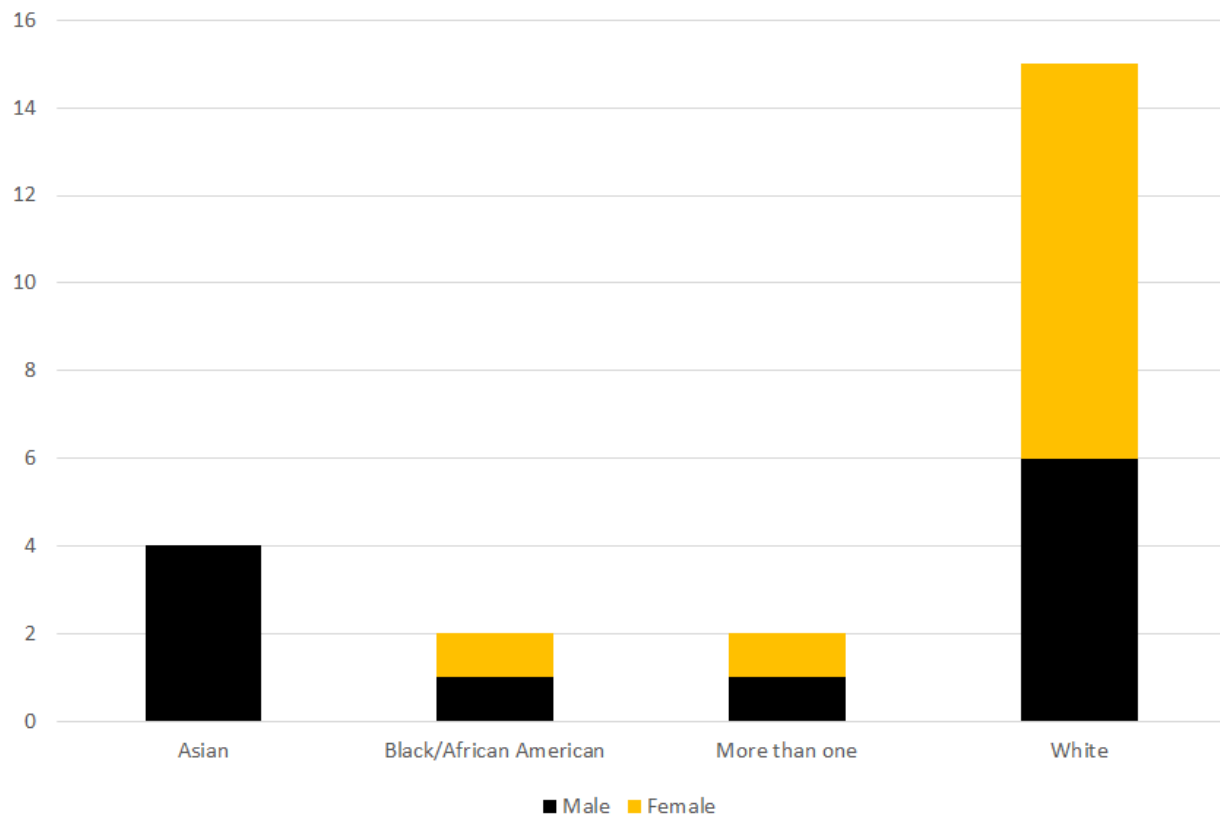
Graduate Student Support

Descriptions and frequency of these codes are presented in Table 5

Table 5

Graduate Support Subthemes and Frequencies

Subthemes and codes	Frequency and % of total, n= 394

	n	%
Department/Program Support	**127**	**32.2**
Faculty Support	68	17.3
Stakeholder Professional Role Support	**65**	**16.5**
Guiding Frameworks/ Organizations	73	18.5
Institutional Support	**33**	**8.4**
External Collaboration Support	6	1.5
Support of Student Organizations	**10**	**2.5**
Peer Mentorship Support	12	3.1

Department/Program and Faculty Support

Academic program design and the engagement of quality faculty both in and out of the classroom play a significant role in graduate success (Duranczyk, 2015; Siegel et al., 2004). Within the broad theme of graduate student support, stakeholder participants identified ways in which their respective departments, academic degree programs, and program faculty contribute to the success of their students across multiple domains. With 143 comments captured across interviews, program and departmental support constituted the largest of the graduate support subthemes. Table 6 provides additional data on other subthemes.

Table 6

Department/Program and Faculty Support

Support Subthemes	Example Quote	frequency, n
Department and Program Support	"Their first fall semester the new students will take a class with me. It's like a welcome to grad school, welcome to our program course that gets them oriented." (Scott, Program Director and Faculty).	**143**
	"We support graduate students by offering a flexible option that occurs on weekends where they do not have to leave their full time job, because our classes start on Friday afternoons, and then 3 quarters of the day on Saturday." (Samuel, Program Director and Faculty).	
	"Our program is pretty nurturing. We pretty much hand feed as much as possible to them, because we want them to succeed when they leave. So our discipline is very applied. Our mission is to prepare them for a job working cases, and we have a 99% placement rate for the past 20 years. But to get there, you know, it requires a lot of management. We have program meetings with each of the class cohorts every semester to talk about where they're going and what they're doing and job placements. So it's very hands-on." (Shannon, Program Director).	
	"We require a pretty writing-intensive assignment early in the semester so that we can identify students that we think need help with writing because we think those communication skills are so important. So it was created so that we could early-on identify and not figure it out when they're almost done and then they still don't have that. So we put that into place to support those that maybe do need slight upskilling in some either academic or professional skills." (Cathy, Administrator and Faculty).	
	"Yeah. I think we have 30 states represented or something like that. Yeah, they're coming from all over. We offer a specialized tuition rate, so it's the same in and out-of-state. That does help with recruitment for out-of-state students. Then we usually have probably five to seven international students in our program at any one time." (Cathy, Administrator and Faculty).	
	"We've really put in things to say (to struggling students) 'You need to get this done by this date'. And we're letting the students know much earlier so that they're not 4 years into the program and told they're not going to get a doctorate. That's a terrible outcome. So we're trying to let (unviable) students know by the end of 3 semesters that this isn't working and you're going to need to stop. So I think that's actually better for them than the alternative." (Sandy, Administrator and Faculty).	
	"We run a lot of reports trying to see if we can notice a weird pattern. So that we can then say to program directors, I you need to check in with the student, something doesn't seem quite right. So for us, it's not just the reaction. It's trying to be preventative as well." (Srinisar, Administrator and Faculty).	

Faculty Support	"A lot of the emphasis is finding the right fit so for graduate work, you know that that fit of mutual interest by the student and the faculty advisor really has to be there." (Scott, Program Director).
	"He has massively struggled here. But, wow! Do I admire him. He's taking his family to the level of graduate education in one generation which is incredible. We paired him with the most gentle mentor in our faculty. You have to intentionally do something like that to help a student like that, because we did not realize that that's what we were getting (with the student). There's no screening for that. You know it's not a type of student I had ever interacted with before." (Amy, Program Director).
	"My primary job is to teach our students. And we have wonderful faculty here who are great at teaching. But in our program, that's just where it starts. You have to be good at teaching, but you also have to support the program and its success through its students and all these other ways." (Cathy, Admin and Faculty).
	"And a lot of what we do is with our faculty and staff because they are an intricate part of their programs. And we want our students, and we tell them at orientation and every chance we get they're not just a number to us there. Our faculty, our staff really need to know who they are, so that they can also come to us when they've got questions or concerns or problems." (Srinisar, Admin and Faculty).

Data collected from stakeholder interviews revealed evidence of intentionally designed graduate support mechanisms, at least within specific programs and departments. Administrators, program directors, and faculty described support for graduate orientation embedded in curricula, regular and timely use of data to track student progress and academic standing, frequent student surveying for program improvement, career preparation and assistance with job placement, specialized tuition models for inclusive recruitment, and remedial programming for newly admitted students who may be less academically prepared than their peers. Comments related to faculty support (68 in total) emphasize the importance of faculty engagement beyond instructional duties to include informal socialization, mentoring, and intentional matching of students with research advisors. In their interviews, program directors Shannon and Amy specifically mentioned alumni engagement with currently enrolled students as a mechanism for professional development and job placement.

Professional Role Support and Guiding Frameworks

Stakeholder professional role support captures the specific responsibilities, duties, frameworks, and practices within a stakeholder's professional role that contribute to graduate

student success. Responses from our participants demonstrated a wide variety of ways that stakeholders support graduate students through their professional role, with a total of 65 comments captured related to this subtheme. Additionally, participants mentioned specific personal or professional frameworks that inform their practice on 73 occasions during interviews, see Table 7 below for additional details.

Table 7

Professional Role Support and Guiding Frameworks

Support Sub-Themes	Example Quote	frequency, n
Stakeholder Professional Role Support	"Their first point of contact is typically their graduate program director. And I work very closely with the graduate program directors. And so we're in communication all the time about how do we find and identify resources, connect students with those resources as they need them? They also have access to me to help in general ways. When there are issues to be solved in a course that you interact with the course directors as well as advisors. We do the work of figuring out what resources are available and then connect the students on the back end." (Morgan, Administrator).	65
	"We have a lot of interactions with the students prior to admission throughout the admission process, post admission, orientation, onboarding." (Tom, Staff Support).	
	"So we're there from Point A to Point B. We're there from time of admission and first enrollment all the way through. We support over 40 programs. We work with recruiting and admissions, and then we handle the operational side of admissions. So the actual physical processing of applications, assisting applicants who have questions. We're sort of the conduit between central admissions and the individual programs." (Sarah, Dir. Graduate Programs).	
	"It is the PI who takes care of research training, however, all the problems with the academics, and between what is happening in the lab, that comes back to me, and I solve all the problems which need to be solved. My chair is there to protect the PIs. I'm there to protect the students. Sometimes we have medical problems with the students, so most of the PIs are accommodating, but sometimes they need a push from my chair or from me to accommodate the needs of the students, so it's very hard to predict. But this is the toughest part of the job, because there is this gray area." (Corey, Program Director).	

| Guiding Frameworks | "I get on a soapbox, I just think we need to care about people, but there's a lot of students who leave VCU and probably don't think a single person there cared about them. Our students are in a cohort. So they come in and leave together. We try really hard to build that cohort experience so that they're each other's first network. And so as part of that, our commitment really is to be super, super student focused, providing them with almost whatever they need. As long as it still allows them to develop their own competencies." (Cathy, Admin and Faculty). |

"Part of it is, I want to get to know them, and I want them to be able to know me. And if I do my job correctly, then when students have their own specific issues, I hope that they come to me, which they do! You know, trying to cultivate that they're comfortable enough with me to be able to raise their individual concerns so that I can help deal with the specifics of individual issues." (Scott, Program Director).

"I really relied a lot on local institutional data to inform my work. And so looking at a lot of department, divisional, and institutional assessments, but then also relying on professional associations such as NASPA and SACS. I really tried to use a case-management lens of looking at it from a system or policy standpoint, but often from the individuals lived experiences and needs and how they interacted with the larger university environment." (Gabriel, Student Affairs).

"If we're just looking at compliance, you know. What do we have to provide a student based on what the law tells us? Then we're only always doing the bare minimum. There's been an increased push to move away from a compliance-based approach more towards student services." (Brian, Staff support/Accommodations).

Participant responses demonstrated the multifaceted nature of their roles. Stakeholders identified end-to-end task-oriented responsibilities focused on the areas of admission, orientation & onboarding, program progression, and preparation for graduation. In addition to task-oriented workflows, stakeholders also fulfilled general advising roles for students who may be experiencing academic or emotional challenges and resource needs, as well as mediator roles for students experiencing conflict with their research principal investigators (PIs) or professors. When prompted about specific frameworks or organizations that guide stakeholders' work, nearly every participant emphasized centering the student as an individual and providing an environment of care. Participants also pointed to specific organizations that guided their approaches such as the National Association of Student Personnel Administrators and the Southern Association of Colleges and Schools.

Institutional Support and External Collaboration

Participant responses indicated a number of institution-level supports for graduate students. Stakeholders pointed to institutional support mechanisms on 33 occasions across qualitative responses. Instances when participants noted examples of external collaboration were much less frequent, totalling 6 comments overall.

Table 8

Institutional Support and Professional Collaboration

Support Subthemes	Example Quote	frequency, n
Institutional Support	"The Graduate School provides funding support and assistantships to graduate students across disciplines. In addition to working on policies that affect graduate students we make sure policies are used properly. And we also promote any kind of services that we can for students who want to be in the faculty role, we have a program for that. We have a role in solving student problems. I would say by the time students reach us, there are bigger problems than at the department level." (Anonymous Administrator).	**33**
	"So the Dean of Students Office is designed to remove barriers to retention, persistence, and students' success. It is not specific to any academic discipline, to school or college or even campus. And so it really serves as a third party to students that may have issues, concerns, and complaints regarding their academic experience. So some of the concerns we experienced were academic-related, but some were also financial related and included extenuating circumstances, personal life issues and crises, and trying to find a pathway for students to get back on track." (Anonymous Administrator).	
	"So connecting students to institutional offices like the writing center, health and wellness services, who to talk to in the registrar, really just connecting people to resources." (Ellen, Program Staff Support).	
	"So in thinking specifically about graduate students, you know, we offer learning accommodations and a learning support program which can address things like time, management, study skills. more of the generic skills that you need to be successful at a university. Not so much the course content specific skills, that's the area of the programs." (Anonymous Staff).	
	"VCU now has implemented a health insurance policy and plan, it has been a significant positive for a large number of students, and we've heard them." (Devin, Administrator).	

External Collaboration	"We have a really good relationship with career placement with external agencies. We have professionals in the field come in and talk to the students during their orientation and in the fall of their second year, when they're building their resumes and cover letters and everything." (Shannon, Program Director).	6
	"I've also brought in entrepreneurs from the local community to collaborate on projects., retired high tech CEOs, for example, to share their perspective. I partnered with a local organization where entrepreneurs who are residents there collaborate with our students who then present their projects at the end of the semester." (Samuel, Program Director and Faculty).	
	"So, having internship opportunities, having better connections with local regional companies that hire masters and doctoral students. Yeah, those are really important relationships, with government agencies, foundations, etc. Yeah, that's really important for career preparation." (Sandy, Administrator).	

Examples of institutional support centered on funding opportunities through financial aid, graduate assistantships (research and teaching), and scholarships (merit and need-based), mental and physical health support through campus offices (student clinics, wellness and counseling offices, student health insurance), academic support (university libraries, writing centers, tutoring, student accommodations), and career preparation (internships, career services offices, faculty preparation programs). Examples of institutional external collaboration, though mentioned relatively infrequently, were primarily centered on bridging graduate education with career preparation and job placement upon graduation, but were largely confined to individual departments and programs and specific to disciplinary skills.

Support for Student Organizations and Peer Mentorship

Support for graduate engagement with student organizations and peer mentorship varied across participant responses. Within some departments and programs, student organizations were both encouraged and facilitated by program directors and faculty advisors, whereas in other programs organizations were initiated and led by students and peer leaders. Similarly, peer mentoring was either intentionally embedded within a program or course, or was not an activity that program directors were directly involved in. Regarding the latter, participant responses may be limited to their direct knowledge of such student groups and activities within their own

programs, and thus not accurately representative of what opportunities for student engagement are actually present therein.

Table 9

Support of Student Organizations and Peer Mentorship

Support Subthemes	Example Quote	frequency, n
Support of Student Engagement and Organizations	"We have students from Central and South America, as well as Spain, Portugal, those kinds of countries. We encourage our international graduate students, 'Hey, look for these clubs because they're going to be a great source of support for you as you move forward.'" (Lisa, Staff Support).	**44**
	"Well, how can we get students to engage? So engagement right now is the hardest thing. Trying to understand what they want. Do they know what they want? And if I provide you with what you want? Are you going to come?" (Kelly, Administrator).	
	"What we're really talking about is the support systems that are critical to graduate students' success. And so that's an important piece. And not to assume that graduate students don't want to be integrated into the larger campus community, right? And so the ways that we look at that, again, just have to come through the lens of the lived experience of a graduate student who may have other identities such as an adult student, a post-traditional learner, a parent, they may have other responsibilities. And so really taking a look at that lens and integrating them into the community to make sure that they have a sense of belonging, a support system." (Gabriel, Administrator).	
	"There are maybe 10% or 20% of our (Health Sciences) students who see themselves as being part of this larger graduate training landscape. And they take advantage of the programming that's available on the Monroe Park campus." (Morgan, Administrator).	
	"I would say the biggest impact on that, especially during the pandemic, was our graduate student org. They were tremendous. Right now they haven't been doing very much, but the more that they are active and drawing the community into some shared events, the better. They created a discord server during the pandemic. They had times where you could just drive by and pick up a sandwich and say, Hi! For 5 min if you wanted. But, I think comes and goes with cohorts of leadership in the student org." (Amy, Program Director).	
Peer Mentorship	"We have feedback and a team peer rating of each student. So students are asked to rate their peers, and then they're asked to rate the program in that semester." (Samuel, Program Director and Faculty).	**12**
	"We have our own student organization that's run just by the students. So we have a weekly seminar where the students sign up and they host the seminar themselves. So as a program director, I typically go there at the beginning for like the first 5 minutes or so, to field any questions or concerns before they proceed with their meeting." (Samuel, Program Director and Faculty).	
	"The international students are coming in. Somehow they find their support groups, because you know that in a new country with a new culture, it can be very challenging." (Corey, Program Director).	

Though not included in the table above, two administrator stakeholders expressed their direct engagement as liaisons or advisors to groups such as the Graduate Student Government and Graduate Student Association, respectively, working with students to address issues at an institutional level. Of particular note in this section, were stakeholders' concerns about a lack of student engagement, especially post-COVID. Stakeholders expressed wariness of spending limited personnel time and resources on continued attempts to facilitate student organizations and engagement after a lack of success doing so after the pandemic. Increased constraints on resources, both personnel and financial, were identified as significant factors in the support gaps faced by graduate students at VCU as evidenced in the following section.

Gaps in Graduate Student Support

In interview responses, stakeholder participants identified a variety of gaps in graduate student support. Under the broad theme of support gaps, a priori sub themes were developed for use in stakeholder interviews, outlining specific examples of graduate student support gaps evidenced in the graduate students' department and/or program, and across the institution more broadly. For data organization purposes, the broad support gap theme was divided into Consistency Gaps and Awareness Gaps. Subsequently, additional sub themes that emerged during interviews were organized into in vivo subcodes under our a priori "gaps in graduate support" code. These subthemes include lack of institutional and/or program resources, lack of consistency in support across programs and student groups, lack of faculty incentive for mentorship, lack of institutional awareness, and lack of awareness of the graduate experience. Descriptions and frequency of these codes are presented in Table 10.

Table 10

Graduate Support Gaps Subthemes and Frequencies

Subthemes and codes	Frequency and % of total, n= 137	
	n	%
Consistency Gaps	**114**	**83.2**
Lack of Institutional/Program Resources	50	36.5
Lack of Consistency in Program Support	35	25.6
Lack of Consistency Doc. VS Masters Students	25	18.2
Lack of Incentive for Faculty Mentorship	4	3.0
Awareness Gaps	**23**	**16.8**
Lack of Institutional Awareness	12	8.8
Lack of Awareness of Graduate Experience	11	8.0

Consistency Gaps

Responses captured from our qualitative interviews with stakeholders demonstrated inconsistent levels of support across departments, programs, faculty engagement, and student types. For example, some academic units have their own dedicated offices of student success, career services, and student wellness whereas other units have no such dedicated offices and instead rely on a campus-wide office that also serves VCU's large undergraduate population. Additionally, lower resourced units and departments have staff members, program directors, and/or faculty fulfilling multiple roles in efforts to meet student needs.

Table 11

Consistency Gaps

Consistency Gap Subthemes	Example Quote	frequency, n
Lack of Institutional/ Program Resources	"And this is a larger conversation just about graduate study and the reduced price labor that comes with graduate students. What is offered in terms of salary or stipend is supposed to be a livable wage, which 9 times out of 10 is not a livable wage. The level to which students have to navigate, to pay for their own housing, you know. So the rising housing costs, you know, just inflation in general, and the graduate assistantship stipends not matching that or even at a level to which there is any funding at all for some students." (Kelly, Administrator).	50
	"And so the amount of graduate assistantships that you used to see, which are gone, which are not being offered anymore. They're now coming from departments' budgets." (Ram, Administrator).	
	"But it was hard sometimes with university counseling because they would only see as students so many times before they would refer them out. Well, if they don't have insurance to cover the cost for external care, that was always a huge issue or if somewhere else doesn't take their insurance, they stopped going. And that's a problem." (Lisa, Staff Support).	
	"I think internal funding for students is always an issue and can be extremely stressful, not just for the students but also for faculty. If a faculty member's grant is ending and they still have a student who hasn't finished. It's extremely stressful for the faculty member of how do I get the money? Where does the money come from?" (Srinisar, Administrator and Faculty).	
Lack of Incentive for Faculty Mentorship	"We really need a little bit more professional development for faculty on the best ways to mentor students. Trying to figure out ways to compensate faculty for participating in some of these programs, which are kinda above and beyond what they normally do, but yet are really important." (Gwen, Administrator and Faculty).	4
	"A lot of that would need to come, I think at a departmental level, and I know our faculty are stretched too thin. I'm sure other faculty are as well. So I don't know how you could do that more centrally." (Gwen, Administrator and Faculty).	
Lack of Consistency in Program Support	"We're in an offshoot building down by the Capitol building, a ten-minute walk. But I think there's also this feeling that you're not part of the campus - either campus. Maybe for some students, that's fine. But I think there's again, a disconnect like you're part of a community when the only people you see day to day are the three other programs that happened to be in our building." (Ellen, Support Staff).	35
	"I would say that I think the approach that we're taking works for us because we're small (in terms of enrollment). We can do that like really hands-on stuff. Let's help every student be better. I know that's not the case for every program." (Cathy, Administrator and Faculty).	
	"Every graduate program, every school is completely different in their format. They might have a coordinator, some person who does everything, it's a challenge to try and look at other schools and say, "Well, what's the best practice in this situation? Because I'm understaffed, so it's just survival mode right now." (June, Program Director).	

Doc. VS Masters Students	"Master's degree students are not coming with funding. We don't provide any support for them. They are self funded. In terms of finances, we are encouraged to admit as many masters students as possible, because that obviously brings money. So, to be honest, if they meet the minimum criteria which we have set, they're in." (Corey, Program Director).	25
	"The Graduate School hasn't decreased their assistantship funds, yet now no master's students are funded. Like what I've heard is happening a lot is that (units) are using it instead to support their PhD students as opposed to the master's students." (Gwen (Administrator and Faculty).	

Participants commented on a lack of institutional and program resources on 50 occasions, however, it's important to note that all responses within the Consistency Gap subtheme (n=114) were either directly or indirectly related to inadequate resources, either in the form of personnel, work bandwidth, or available funding support. Multiple stakeholders noted the decreasing funds to support graduate assistantships, most specifically for master's students, instead identifying those students as revenue producers for programs via tuition dollars while also pointing to a simultaneous negative enrollment trend for master's students at VCU, possibly due to increased costs of education. Participants also described the cascading effects of depleted graduate assistantship funds. Gwen commented on struggles faced by faculty and PIs seeking to continue support for their doctoral advisees via grant funds and how those pressures get passed along to students, "Because their, you know, their faculty mentors are under pressure. So, they're putting their students under pressure." There also appeared to be a lack of clarity around how available funds were being allocated and dispersed across programs, suggesting that the broader institutional impact of these resource gaps is not yet fully understood by the campus community. What is clear is that programs are prioritizing doctoral funding support over master's students, a significant disparity which may pose future pipeline challenges for doctoral enrollment down the road.

Awareness Gaps

In this section of the study, awareness gaps point to a lack of understanding on the part of stakeholders about what is happening at the institution related to graduate student support as well as about the graduate student experience, overall. While these gaps were much lower than gaps in consistency (16.8% of total support gap responses versus 83.2%, respectively), a lack of institutional awareness is likely to negatively affect communication around potential solutions and mitigative responses to problems as well as collaborative opportunities for alignment in order to address gaps in graduate support.

Table 12

Awareness Gaps

Awareness Gap Subthemes	Example Quote	frequency, n
Lack of Institutional Awareness	"I would say that I sit in on meetings with all grad program directors. And I don't, like if you asked me what is the Graduate School's function here, I'm not totally sure. Like, I know they do support us when we have questions about a special action or an omission or something like that. Beyond that, like maybe they're providing resources we don't know about. But I do think there could probably be a better centralization of some resources for grad students." (Cathy, Administrator and Faculty).	12
	"I'm not sure what happened, because he did get awarded funding from the graduate school. He was funded under that for awhile. And I'm not sure what their selection process is, but it didn't get continued for him." (Amy, Program Director).	
	"I need to educate myself a little bit more about what is now available that wasn't available before because I know there's something new and I haven't…I just need to contact the right person to set up an orientation for some of us, but I haven't heard them going out and providing orientation for graduate program directors or anything." (Gwen, Administrator and Faculty).	
	"If you were to just listen, you would think that every graduate program at VCU is on the medical campus. They get priority." (Alvin, Administrator).	
	"I think that's one of the most important things that I might not even be aware of a resource. And then a student will let us know that they need something. Then we have to spend time figuring out what resources are available and then connect the students on the back end." (Morgan, Administrator).	

Lack of Awareness Graduate Experience	"We need to find out more about what our students want. But, it's challenging to know what students want, because by the time we get the surveys and do the focus groups and all that. We've got another group of students coming in." (June, Program Director).
	"Just this past year the graduate students started to have to have health insurance, and this started with the international students who really weren't told ahead of time that they were going to have to pay for this. It was communicated in a pretty clunky way, and I don't know if communications went out through the Global Education Office that I don't see as a program director. But I had students in my office in August like oh my God, we have this new fee we have to pay! Can you help me decide if this insurance is worth it?" (Amy, Program Director).
	"So really we're catering to those students (who want to work as academics) actually most students are not doing that. And also the mentality of faculty who want their students to go on to the professoriate. But the student may have different ideas, most of them don't go into the professoriate." (Gwen, Administrator and Faculty).

Participant responses demonstrated inconsistent understanding of the role of the Graduate School on campus, lack of a standardized or campus-wide orientation around graduate support systems, knowledge gaps around available resources to support graduate success including how eligibility for those resources is determined. Stakeholders also noted perceived disparities in institutional prioritization of programs (i.e. those in the Health Sciences versus others). With regard to the overall graduate student experience, participants voiced a lack of knowledge about what graduate students want and commented on the ineffectiveness of current approaches to determining those needs. Other comments in this sub theme pointed out inconsistent or ineffective communication or training from the university to program directors and faculty on institutional changes in policy or practice that affect students, leaving personnel underprepared to provide accurate guidance. Additionally, stakeholders noted outdated programming or advising for doctoral students, the majority of whom are opting for positions and careers outside of academia according to stakeholders.

Policies and Practices

Campus stakeholders identified policies and practices at VCU that impact graduate students in ways that were either adverse or beneficial, or in ways that lacked consistency. Under

the broad theme of policies and practices, a number of additional subthemes emerged during interviews, constituting in vivo subcodes under our a priori "policies and practices" code. The largest of these subthemes was comprised of policies and practices related to admission, all of which were communicated by participants as either adverse, beneficial, or neutral depending on the factors involved. Additional in-vivo subthemes around beneficial policies and practices included socially just and equitable examples and engagement of students in determining policy and practice. While the remaining emergent subthemes all fell under adverse policies and practices to include lack of support for international students, lack of communication, lack of transparency in outcomes, absent or insufficient stipends, and lack of program review, though these in-vivo adverse subthemes were comparatively few in number. Descriptions and frequency of these codes are presented in Table 13.

Table 13

Policies and Practices Subthemes and Frequencies

Subthemes and codes	Frequency and % of total, n= 322	
	n	%
Policies and Practices - Beneficial	**86**	**26.8**
Socially Just and Equitable	25	7.8
Student Engagement in Policy/Practice	19	6
Policies and Practices - Adverse	**73**	**23**
Lack of Support for International Students	8	2.5
Lack of Communication	7	2.2
Lack of Transparency of Outcomes	5	1.5
Insufficient or Absent Stipend	5	1.5

Lack of Program Review	3	1
Policies and Practices - Lack Consistency	**47**	**15**
Policies and Practices - Admission	**44**	**14**

Beneficial and Adverse Policies and Practices

Examples of both beneficial and adverse policies and practices provided in stakeholder interviews were wide-ranging. Some participant comments reemphasized supportive practices or policies already in place within programs and units, while others identified aspirational practices or specific policies that were currently under review. Aspirational practices were withheld from this section, coded as practices that lack consistency across units and programs, and reserved for inclusion in the following section. Policies under review were included in the data table below in order to demonstrate features of the campus conversation around their respective issues.

Table 14

Beneficial and Adverse Policies and Practices

Policies and Practices Subthemes	Example Quote	frequency, n
Beneficial Policies and Practices	"Our focus is on graduate student assistants, in terms of how we're providing space for them to be evaluated in their roles, but also evaluating their supervisors. So that we could say, "hey, you know this person probably shouldn't have a graduate assistant again". Or thinking about the policies on how many graduate students get assigned to a faculty mentor." (Kelly, Administrator).	86
	"There's one that we're working hard to try and get through all of the hurdles for approval. It's basically a graduate course historical repeat policy so that they can repeat a course then the previous grade doesn't count. But right now for graduate students, if you repeat a course, both grades count, which harms their academic standing." (Gwen, Administrator and Faculty).	

Socially Just and Equitable	"We have lactation rooms available for mothers. We've coordinated hand-offs when a parent has to come with their child, because classes start at 8 and breakfast is at 7:30, so sometimes the parent will meet for a swap to pick up the child during a class." (Samuel, Program Director and Faculty).	25
Student Engagement in Policy and Practice	"Looking at it through that lens, asking students, "well, how can we improve" is unfair. It's very much unfair because these are policies and procedures that are created by us and are maintained by us. Which also means that they can be deconstructed by us and that's our responsibility. So I think there needs to be a space for students at the table." (Gabriel, Administrator).	19
Adverse Policies and Practices	"It's almost impossible to establish residency and get in-state tuition." (Carwin, Administrator). "The Financial Aid office. I really wish they could get rid of this. There's a satisfactory academic progress "Hold". So if you are above 150% of your required credits, and they put a hold on you because they say you're just taking classes, but not actually making degree progress. And so the problem is for doctoral students that are doing research for their dissertation and don't know how long they're going to be here. The students ARE making progress but they're still getting flagged every single time. Every semester which holds up the registration and their financial aid support." (Scott, Program Director and Faculty).	73
Lack of Support for International Students	"We require all international students, regardless of where they come from to take English Language Exams. There's no reason for us to be requiring students from English-speaking schools to take those exams. It's $250. Why are we doing that?" (Amy, Program Director). "Because our unit needs to pay international tuition, if we admit international students. There was a pressure to limit the amount of international students. So right now, maybe a maximum of 10% of our students are international. It used to be at least 30%." (Corey, Program Director).	8
Lack of Communication	"We try to take that information about scholarships, funded research opportunities, about policy changes or whatever it may be. And it becomes our responsibility to send that down to graduate program directors with the expectation that graduate program directors are going to share that with appropriate students and faculty. But I'm not 100% certain that's happening." (Devin, Administrator).	7
Lack of Transparency of Outcomes	"The programs which find significant demand from the market should be promoted more. And the programs which have no demand or very little demand, should not be promoted. And that really goes back to student welfare is what I think in that respect. Education is expensive, very expensive. If you go to graduate school taking on debt, then you better have a career path which makes it sustainable for you to pay off that debt and have a good living beyond that." (Ram, Administrator).	5
Insufficient or Absent Stipend	"So the largest area of need is still funding, funding their education through assistantships and scholarships." (Ram, Administrator).	5
Lack of Program Review	"But some are sort of insisting on, you know, it's just a certain historical way of training students that may not be what today's times call for." (Gwen, Administrator and Faculty).	3

The historical repeat policy for graduate students was mentioned multiple times by stakeholders with confidence that it would be approved, being that a very similar policy has

already been approved for undergraduate students. However, other stakeholders communicated that the policy might not be applicable for all graduate students, indicating that the university conversation around this issue has not yet concluded (see Table 15 below, in the Policies and Practices - Lack Consistency section). The Financial Aid "Hold" was noted by multiple participants as an example of a policy that creates challenges for graduate students (and program directors), particularly for doctoral students who must register for additional credits beyond those required for their degree as their dissertation proceeds. Other adverse policies and practices touched upon outdated approaches to graduate-level training and overdue program reviews, gaps in data on program outcomes like job placements and lifetime earnings, inadequate communication strategies, and the recurrent theme of insufficient funding support for graduate students. Conversely, among beneficial policies and practices participants identified the importance of engaging students in revising adverse policies and practices, strategically addressing issues with problematic faculty mentors/advisors, and providing services that meet the needs of graduate students where they are today.

Policies and Practices - Lack Consistency

Questions related to policy and practice elicited responses indicating a lack of consistency across units and respective programs, as well as gaps in centralized university resources, n=47. Responses in this section emphasized the lack of centralized efforts in support of graduate students at VCU, connecting these practices with an overall trend of inconsistency in aligned institutional commitment to graduate success. As one administrator remarked, "I feel in some ways, institutionally, we're only half-in. But that doesn't serve students well." Worth noting is the recurrence of the yet-implemented historical repeat policy, noted in the previous section as exemplifying a beneficial campus policy. Below, however, the policy is identified as

one likely to be optional for units to adopt, thereby reinforcing the decentralization of practice around graduate support.

Table 15

Policies and Practices - Lack Consistency

Policies and Practices Subthemes	Example Quote	frequency, n
Policies and Practices - Lack Consistency	"So I think that's something that will be helpful (historical repeat policy). Now it is, I believe, going to be a policy that's going to be up to the individual units, whether they want to allow it for their students, because there was a fair amount of pushback in some programs." (Devin, Administrator).	47
	"I think some kind of onboarding on how to be a graduate student and that transition from an undergraduate mindset. What mindset? I don't know exactly what that content would look like, but I think something along those lines would be helpful to students." (Morgan, Administrator).	
	"in the Division of Student Affairs at VCU and the Dean of Students Office. There were pockets of shared responsibility for graduate students. The graduate student experience at VCU, I think a lot of the alignment for what that looked like was campus-based rather than class-standing based. And so I think the tricky part was that the systems were currently aligned based on campus, which had implied responsibilities for graduate students, which is also a false assumption - When there are some undergrads on the MCV campus. And so there's some indirect lines that I think just need a little bit of tweaking because there are folks across the division of student affairs that have responsibility over that student's experience. But making sure that it's a coordinated effort in the Division of Student Affairs is an opportunity for improvement." (Gabriel, Administrator).	
	"I think part of the challenge at VCU is there are a lot of things that are decentralized. It's a lot more hit or miss based on a particular school, a particular department. And I think the role of the graduate school has varied. It has varied, based on who the dean of that school has been or who the staff are that are involved." (Carwin, Administrator).	

In addition to comments on inconsistent institutional policies and program-specific differences in supportive practices, participants identified Student Affairs and the Graduate School as campus-wide units where, historically, practices in support of graduate success have been inconsistent due to a variety of factors. One administrator noted the varying role of the Graduate School over time while another administrator pointed to a disconnect between campuses as a specific cause of incoordination across Student Affairs efforts. While not included in the table above, at least six participants mentioned either currently or recently undergoing an academic program review:

I think we have a real sense of 'this is the way it's always been. Let's not change it. And sometimes that's fine. But I think there needs to be an exploration of what some of our policies are. We are actually going through the academic program review process right now with the Provost's Office.

Another program director noted that the program review process might be even more effective if analysis of current curricula was more thorough:

The academic program review being run out of the Provost's Office. A 360 degree view of the program, its graduates, what's working, what's not. That is paying dividends, but I don't know that there's enough emphasis on the curricula themselves. It's a great idea, but I think it should be a little more focused on the curriculum.

Overall, participant remarks indicated that some form of increased centralization of supportive policy and practice would lead to greater institutional alignment around graduate success.

Policies and Practices - Admission

The topic of admission emerged frequently in stakeholder responses to questions about policy and practice, n=44, and demonstrated a range of differing perspectives. Some stakeholders emphasized the accessibility of their master's level graduate programs as a positive "transformative" practice with regards to admission, but also noted that a more selective approach would clash with the university budget model, one which strongly encourages units to produce their own revenue through student tuition. Others noted that the internal cost of supporting doctoral students via stipends and assistantships has increased their selectivity when considering graduate applicants, in some cases potentially penalizing specific communities of prospective students. See Table 16 for selections from our data on this topic.

Table 16

Policies and Practices - Admission

Policies and Practices Subthemes	Example Quote	frequency, n
Policies and Practices – Admission	"So if you have the academics and the demonstrated motivation in the things that you submit towards doing this, we let you do it (Master's program). We're not selective in any way. We can talk about the financial reasons why we're not selective, but we'll take most students who have an undergraduate STEM degree." (Amy, Program Director and Faculty).	44
	"So the reality is the admission level for the international students, the bar is set much higher than for domestic students. So if they (international students) are admitted, they are very good." (Corey, Program Director).	
	"Enrollment in doctoral programs is gonna depend on factors such as what's the stipend? Do you have to pay fees? What's the health care fee? Is there a a provision for child leave. And the graduate students occupy this very unusual place where they're both a student and an employee. I think that is certainly an issue, and I think VCU has to, and at the department level often does, recognize that the students that we need to attract are like our undergraduates, often sort of diamonds in the rough, but we also need to attract international students, and that's a particular population of student. And so they have certain needs." (Sandy, Administrator and Faculty).	
	"The other thing we also want to talk about when we do admissions is to teach them how to evaluate different graduate education paths as a lifetime potential. Yes, we all want to chase our dreams and we should. But we should also be mindful of where the market demands are, right?" (Ram, Administrator).	

Also present in responses related to admission was the seeming liminality of graduate students' role within the university as both students and employees, as well as the role Admissions should play in allowing students to enroll in particular programs when lacking strong evidence of those programs' respective career outcomes. While not present in the table above, some participants noted application fee policies as detrimental to student recruitment and admission:

The application fee, that is the policy that I've heard the most. We're excluding people from certain backgrounds. But, we have to have those fees, or else we're gonna have to raise that money somewhere else, or we're not able to administer the programs. It has stood in the way of students applying, and therefore ever getting started in a program.

Respondents pointed to the fact that relief of any student fee-based policies and practices would simply result in moving that cost "somewhere else" to be remunerated.

Graduate Student Needs

Responses from campus stakeholders identified a wide range of graduate needs and the ways in which those needs were being met or remained unaddressed by the university. Graduate needs comprised the largest domain of participant remarks at 55.7% of total comments recorded in this section, whereas graduate needs met made up one of the relatively smaller themes at 14%. Participants also indicated a number of assumptions about graduate-level students that university administrators, faculty, and staff should question more critically, n=109. Additionally, stakeholders identified a widely diverse set of areas for cross collaboration in efforts to partner together to meet graduate needs, n=103.

Table 17

Graduate Needs Themes and Frequencies

Subthemes and codes	Frequency and % of total, n= 699	
	n	%
Graduate Needs	**389**	**55.7**
Academic	87	12.4
Funding	80	11.4
Advocacy/Stakeholder Support	72	10.3
Career Development	40	5.7
Mental Health Support	40	5.7
Faculty Mentorship/Support	31	4.4
Transition/Orientation	20	2.9
Physical/Medical Wellness	19	2.7

Assumptions Questioned	**109**	**15.6**
Student Identity	48	6.7
Student Socialization	28	4.0
Level of Support	20	2.9
Preparation for Admission	13	1.9
Graduate Needs Met	**98**	**14.0**
Met by Department/Program	55	7.9
Met by Institution	43	6.2
Cross Collaboration Efforts	**103**	**14.7**

Graduate Needs

Graduate needs comprised the largest proportion of comments from stakeholders in this section, n=389, across eight different areas or subthemes. Of these subthemes, approximately 34% of participant responses focused on academic needs, funding needs, and institutional advocacy on students' behalf from campus stakeholders of graduate success. We can characterize these as the top three areas of priority to address graduate needs, as defined by our campus stakeholder cohort. Second order priority was given to career development, mental health support, and faculty mentorship, approximately 16% of participant responses. Third order priority was given to transition/orientation and physical/medical wellness, or approximately 5.5% of responses.

Table 18

Graduate Needs

Graduate Needs Subthemes	Example Quote	frequency, n
Academic	"I mean a lot of the same things that that we think about for undergraduates we should also think about for graduate education. About training students in other ways. Other than what's happening directly in the lab with research." (Sandy, Administrator). "It is always academic problems. This semester. I have a student who had to repeat a course, and he failed it again. And it looks like there is no path to graduation at this point. We have others who are strong in STEM but when it's time to write their thesis and graduate…we've had some students just disappear. They never did complete. They needed more help to finish." (Corey, Program Director). "So you think about graduate level writing or critical thinking. Just, I think how folks may run a course, you know. Is it going to be something more like a seminar? Are you lecturing? You know. What does that look like in terms of their learning needs? And so I would say, there probably needs to be some more consistency in that." (Kelly, Administrator).	87
Funding	"We really need more, you know, funded graduate internships and graduate assistantships to give graduate students both financial support and real life experience. That will make them much more marketable down the road. They'll make more money." (Alvin, Administrator). "Well, I think we need to find ways to make higher ed more affordable." (Cathy, Administrator and Faculty). "I'm absolutely sure that funding is gonna get cut in half or something this year, because of all the budget talks, and that's all we have, you know. If there's a needy student, I'm sure that the financial pressures contribute negatively to mental health, and that if you talk to students, I would guess the financial stress of graduate school is their number one stress, if not academics." (Amy, Program Director).	80
Advocacy – Stakeholder Support	"In graduate study we could do better in being more upfront about what they need to do or how we're shaping folks. I also think that level of graduate autonomy is kind of a double edged sword. Nobody has the same experience, and some folks will say 'that's what graduate study is for', and then other folks will say, 'Well, we need to help people get in and out'. So do we want to create a holistic experience? Or are we doing this for the money?" (Kelly, Support Staff). "We need to help graduate students understand what their rights are so they can assert themselves." (Ram, Administrator). "And so how do we manage interpersonal relationships with graduate students and faculty and researcher advisors who are scholars in their field, who are potential letters of reference? The relationship is so intimate that being able to manage a faculty student relationship and what are the rights and responsibilities and expectations of the student in that? And then also what are the support systems around them to make sure that they're protected as students as well." (Gabriel, Administrator).	72

Faculty Mentorship - Support	"I think guidance or just this idea of what an advisor versus a mentorship relationship looks like. I think just level setting of expectations of what folks are supposed to do, and the level of responsibility the advisor or mentors take in helping someone to navigate their learning experience". (Kelly, Administrator).	**31**
	"Here's some things for you to go back and talk to your pi about to make sure that you're on the same page, you know, to to really force them to kind of engage in a deeper level with that communication and expectation. And, like all that type of stuff from early on." (Scott, Program Director and Faculty).	
Career Development	"I think that it's that part that is really hard for programs to give up these cherished, long-term efforts that they have to train students. But I think, you know, the average, at least for doctoral students or doctoral degree earners. They change jobs something like five to seven times in their career on average. And we need to prepare them. " (Morgan, Administrator).	**40**
	"And do we have the capacity to prepare them for some specific careers? I think we're lacking career preparation programming outside of a faculty career." (Gwen, Administrator and Faculty).	
Mental Health Support	"I think we will probably never be able as a university to have all the mental health services that we would really need. And I think our folks in that arena do a really good job of handling the crises. But they just don't have the bandwidth to do a longer-term treatment. And I think that's what's needed." (Amy, Program Director).	**40**
	"She couldn't afford to go outside the university for counseling. And I would keep reiterating, keep going, keep going. But there's only so many times they can go. So part of our role is listening to them to see what we can do to help them. Referring them to counseling services is great, but that will only go so far. And so sometimes for us it's the backup of having chocolate snacks in the drawer and things like that for when they just have that mental breakdown, especially when they're getting ready to defend their dissertation or something like that. And they just need to come in and have a good cry. We're prepped and ready for that kind of stuff. So almost in some ways taking on a case management roles." (Lisa, Staff Support).	
Transition - Orientation	"You know, we try to inform incoming doctoral students about the transition from absorbing information and being a consumer of information to being someone who generates information. The expectations that they will generate new information, new theories, ideas, data, whatever. And it's just, it's something that's easier to recognize than it is to define. And we could certainly do a better job with that. That is a major challenge for our students. " (Morgan, Administrator).	**20**
	"It's teaching the graduate students about mentoring and teaching the graduate students about teaching in general without just throwing them in as TAs or GAs." (Gwen, Administrator and Faculty).	
Physical – Medical Wellness	"So students are finding that because of a disability or medical issue, that there are barriers to participation in programs or opportunities offered at the university, or there are access issues around campus, whether that's physical access or access in terms of their engagement with the learning environment." (Brian, Staff Support).	**19**
	"Sometimes we have medical problems of the students, so most of the PIs are accommodating, but sometimes they need a push from my chair or from me to accommodate the needs of the students, so it's very hard to predict. But this is the toughest part of the job, because there is this gray area." (Corey, Program Director).	

In the area of academic needs, respondents indicated that the same level of intentionality around undergraduate academics and learning should be given to graduate education, emphasizing fundamental skill-building in writing and critical thinking, with multiple participants sharing examples of graduate attrition due to inadequate preparation in these areas. Curricular redesign was also emphasized as a positive practice within this subtheme. Career preparation was similarly identified as an area where updated approaches should be implemented, with stakeholders pointing to an outdated and mostly faculty preparation-oriented model within many programs. Participants noted the systemic challenges in meeting mental health needs at an institution as large as VCU, while recognizing that the university has made many endeavors to do so and that stakeholders do what they can to establish a caring culture at the program level.

Questioning Assumptions about Graduate Students

Participants identified a range of assumptions (n=109) that should be questioned by institutional leaders and stakeholders invested in graduate student success. The highest comment frequency focused on assumptions about student identity. While the two comments included in the table below focus on disciplinary affiliation, race/ethnicity, gender, and ability status, a wide range of identity characteristics emerged in participant interviews. Frequently emphasized was the importance of regular collection, disaggregation, and analysis of accurate data on subgroups within our broader student population in order to best address the needs and challenges of specific groups of students. As one participant noted, "I don't know that we can have an institution-wide focus on graduate student equity if we don't have all the data at play, right?"

Table 19

Questioning Assumptions about Graduate Students

Assumptions Subthemes	Example Quote	frequency, n
Student Identity	"Do we have an equivalent of an early alert system for graduate students? And that requires us to know who our entering graduate students. We may need to look at it by discipline. So, have we looked at it from a STEM versus non-STEM? Have we looked at our black men in STEM specifically, like what does the data tell us about who our students are? Not make assumptions based on what we think students need, but really use the data to drive what we know about our students at VCU?" (Gabriel, Administrator).	**48**
	"If we take that social justice approach which basically says universities were not built with the disabled student in mind. If we start looking at the university, and how do we change policies, procedures, institutions? We're not saying to a student, 'we're fixing the fact that you're disabled'. We're approaching it from 'we're fixing a system that was not built with you in mind'." (Brian, Staff Support).	
Student Socialization	"The hidden curriculum about what does it mean to be a professional. What does it mean to be a practitioner? We have more Gen. Z. And latter Millennials and even you know the generation that comes after them entering into graduate education. There are a lot of assumptions around what they know and how information is transmitted. It can be like playing a game of telephone for them, you know, well such and such, said this but I also heard…" (Kelly, Administrator).	**28**
	"And so that's an important piece. And not to assume that graduate students don't want to be integrated into the larger campus community, right? And so the ways that we look at that, again, just have to come through the lens of the lived experience of a graduate student who may have other identities such as an adult student, a post-traditional learner. They also may be a parent, they may have other responsibilities. And so really taking a look at that lens and integrating them into the community to make sure that they have a sense of belonging on their terms while also creating space for socialization." (Ram, Administrator).	
Level of Support	"I think one of the biggest assumptions is that these are high achieving students, and they got good grades as an undergrad, and they go straight to masters or straight to a PhD program, and that's what the graduate students look like." (Scott, Program Director and Faculty).	**20**
	"I think we tend to assume that students are older and therefore more mature, self-starters, capable. They already have done undergrad, so they sort of know the deal when it comes to higher ed. And, as a result, it can become harder for grad students to access some of that information. Because, you know, as an undergrad, you're really holding their hand through everything. I think for grad students in general that's not happening. So I think that we're just making assumptions about maturity and understanding." (Cathy, Administrator and Faculty).	

Admission	"Just thinking about how admission works. We need to be mindful of where people are applying from, what countries they're applying from when we're evaluating transcripts. We want a diverse group of students. We want a lot of different types of people who come through our program and to succeed in our program. And we want to set it up so that when we do bring in people who are not from the US or have different upbringings. How are we setting them up to succeed?" (Ellen, Program Staff Support).
	"I think a lot of effort has gone into thinking about how to onboard undergraduate students but not graduate students. There is not a lot of attention paid to how they're admitted and oriented. The model is the model that everybody goes by and we don't think about that. We just kind of keep repeating it." (Sandy, Administrator and Faculty).

Comments on socialization also touched on the issue of identity, but specifically as it relates to the heterogeneous demographics of graduate students today as well as the intentions informing those students' pursuit of graduate study. Participants noted that traditional approaches to socialization of graduate students into academia with a monolithic focus on creating future faculty are outdated, emphasizing that most students, even at the doctoral level, are opting for careers outside of the academy. Comments falling within the level of support subtheme overwhelmingly characterized assumptions that graduate students need less support than undergraduates as inaccurate. Participants also noted that admissions, like socialization, is an area where historical practices and assumptions need to be revised to meet today's graduate applicants both where and who they are.

Graduate Needs Met

While demonstrating the smallest proportion of responses within the broad graduate needs theme (14% of total section comments), stakeholders indicated a variety of needs that are being met either at the program/department level or the institutional level. With that said, it is difficult to determine to what degree these needs are being met, overall. Many responses reinforced areas of support within particular programs, or how those programs made use of institutional resources for some, if not all, of their students. Subsequently, it is safe to infer that

broader graduate needs are not being met consistently across the institution as a whole. See Table 20 for additional details.

Table 20

Graduate Needs Met

Needs Met Subthemes	Example Quote	frequency, n
Met by Dept. - Program	"We do one-on-one advising around professional competencies. What I would probably call professional development advising sessions. Faculty advising sessions are more around that type of thing and prep for the workforce than they are around like what classes should you take?." (Cathy, Administrator and Faculty).	55
	"So we do a lot of events to get our students out of the lab to socialize. Because we also feel that siloing yourself in your lab is not good for your mental health. So we tried to do a lot of different events throughout the semester just to kinda get them out and socializing a little bit." (Lisa, Staff Support).	
	"Our faculty right now are revamping the whole curriculum, undergrad and grad, embedding social justice, looking at health disparities and health inequities is part of the plan, and it's going to be embedded in all the coursework." (Molly, Administrator).	
	"So we have both an anonymous exit survey that our graduate students take as they're graduating, but we also have an in-person interview. Any themes that we see in that we take very seriously and make changes. So we added some electives for one concentration. We added an additional advanced course for 2 additional concentrations that they had asked for." (Shannon, Program Director).	
Met by Institution	" We're able to find funding for about 85% of our students every year. It's a struggle, but it's between faculty research funding and some faculty put RA's in their grants which will cover stipend and tuition. We always can use one or two people in the department for hourly work. But the biggest thing that's been a great improvement this year is that grad students are now eligible for work study funding and that costs us nothing. So I can create positions in research labs and the faculty have a research student for free and the student has a paid position." (Shannon, Program Director).	43
	"We know that you have to have health insurance, but we want to give you as much flexibility in choosing the appropriate health insurance for you as possible, so we'll just get more money into your pocket. We're not going to cover the health insurance premium directly. But if we give you more money, then we will let you choose which one you want." (Scott, Program Director and Faculty).	

"And so I just stress the institution-wide focus on this is because so much leverage happens at a localized level. And what also comes with that is a lot of rich information that is not brought up to the surface to be able to look at equity across departments and disciplines, programs, that sort of thing. And so I really do think that SEMSS (Strategic Enrollment Management and Student Success) and DSA (Division of Student Affairs) have a responsibility to graduate students, to look at the matriculation of students from point of enrollment through the Student Affairs life cycle, all the way to other retention and graduation factors and present institution-wide data in order to engage in what I hope would be healthy and productive discourse about the nuances between each program." (Gabriel, Administrator).

"Funded assistantships are three different things: the research assistants which are RAs. So that's money that's on Grants mostly, and some from Office of Research. Then, of course there are the graduate teaching assistants, which are the the GTAs, who get a financial package that includes a type of stipend and a tuition coverage. And then there are what we currently call a EXTAs, which are mostly master's students who get a stipend for doing some university service. In most cases it's teaching a lab in biology or forensic science, or whatever." (Devin, Administrator).

Departmental and program examples of needs being met included work focused on student career preparation, socialization and student engagement, and curriculum development or redesign in response to graduate input and feedback. The particular unit that is redesigning their entire curriculum with a focus on equity, inclusion, and social justice received a significant external grant to do so. Examples of institution-level needs being met include leveraging of federal work study to support graduate assistantships (typically $3k per academic year per student), internally supported assistantships for graduate teaching and research assistants, and flexible arrangements for graduate health insurance.

Cross Collaboration Efforts

Participants identified a variety of ways in which their unit, department, or program has partnered with other campus offices in order to meet graduate needs. Examples provided by stakeholders include both formal and informal partnerships, easy "plug-in" programming provided by central support offices, and tailored or discipline-specific programming developed in collaboration with partners. Examples of frequently mentioned central support offices include the Graduate School, Student Affairs divisions (on both campuses), the Global Education Office,

student health clinics and counseling services, the Writing Center, multiple Career Services

offices, and the Office of Research and Innovation.

Table 21

Cross Collaboration Efforts

Collaboration Subthemes	Example Quote	frequency, n
Cross Collaboration	"Our program is an example of multiple programs working together to try to do something rather than just counting butts in seats and creating courses that are identical to another units course, just so we can call it ours and collect the tuition. So I would say our partners are, biology, computer science, human genetics and biostats, and especially the graduate program directors of those programs." (Amy, Program Director).	**103**
	"And then from the VPs office, the Division of Student Engagement and Impact, Jorge Piocuda. I think he has, like many people, has multiple jobs. And Roy Roach is the other one out of the VPs office." (Morgan, Administrator).	
	"I think there's enough people at VCU. If we spread our resources, we should be able to help all the students at least a little bit. So I think part of it's really identification. And then after that, I mean, we're lucky to be at VCU. Like almost every resource you could need is here somewhere. You just have to find it. So I think whether it's a faculty member taking their time to do tutoring sessions or older grad students doing them, or going across campus to get the help you need with writing. Like, there's rarely an issue that there's not someone on campus that can help with yeah.." (Cathy, Administrator and Faculty).	
	"So see like the College of Humanities and Sciences is a major partner for us, even though we're in a completely separate academic unit." (Scott, Program Director and Faculty).	
	"Career services. They run a series of professional workshops to help students navigate career pivots. Interviewing for their next role, exploring industry switches, whatever the case may be." (Samuel, Program Director and Faculty).	
	"The relationship with the graduate school continues to be key. I think it has been key in the past and that cultivating that relationship is really important. Number one, it serves as a central point of communication with graduate program directors. It serves as leverage. Academic Affairs is another major partner." (Gabriel, Administrator).	
	"The Global Education Office, because we have such a large population of international students, making sure they're connected. They're not only there for visa stuff and making sure they're following the rules, but just because they have more capacity to handle some of the things." (Ellen, Staff Support).	
	"So yes, we've sent a lot students to the Writing Center." (Cathy, Administrator and Faculty).	
	"The Office of Research is a big one (collaborator)." (Gwen, Administrator).	

It is worth noting that stakeholders in individual departments and programs found ways

to partner with other departments outside of their own respective academic units in order to place

graduate students in funded assistantships or to fulfill cross-disciplinary curricular needs. This is

of particular interest in light of Amy's comment in the table, indicating the ways in which the university budget model creates challenges for cross-departmental collaboration due to its emphasis on allotting a significant portion of student tuition revenue to the unit that teaches the classes. Also emergent across subthemes was the sentiment that there is significant opportunity to meet graduate needs if individual units and programs are intentional around alignment toward this goal. In other words, while resources in the form of funding and adequate personnel may be increasingly scarce, participants communicated their sense that we can meet graduate needs as an institution through collaboration and alignment on shared goals.

Institutional Survey Findings

There have been several institutional surveys conducted at VCU that have provided broader insight into the needs of graduate students. Access to the raw data from the most recent Spring 2020 administration of the ACHA-NCHA III was included as part of the IRB submission for this study (American College Health Association, 2020a). The data request included key demographic variables to better understand the representation of the sample and to graduate student mental health and well-being at VCU, an area of need expressed by participants in both the focus group and individual interviews.

The dataset was obtained in December, 2022 and analyzed using SPSS 28 statistical software. Ninety-six of the 656 total responses within the random sample were students who selected either the Masters or Doctoral response options as their year in school. Further analysis was conducted on these 96 responses. Any further testing comparing means between groups with different sociodemographic characteristics was limited due to the small sample size. However, basic frequencies and mean scores were calculated and compared at face value with the graduate

student national reference group (GSNRG) obtained for Spring 2020 through the American

College Health Association (2020b).

Sample Distribution

Table 22 captures the demographic characteristics of participants in comparison to the

VCU institutional data from the 2020 enrollment reporting period (Virginia Commonwealth

University Institutional Research and Decision Support, 2020) .

Table 22

Demographic Characteristics Comparison Table

Participant characteristics	Spring 2020, VCU participants (n=96)		Spring 2020, VCU graduate data (n=5,554	
	n	%	n	%
Year in school				
Master's	76	79	nr	nr
Doctorate	20	21	nr	nr
Enrollment status				
Part-Time	19	21	2,165	39
Full-Time	76	79	3,389	61
Gender				
Female	74	77	3,674	66
Male	21	22	1,847	33
Non-Binary	1	1	nr	nr
Race/Ethnicity				
Asian/Asian Amer.	8	8.3	388	6.9
Black/Afr.Amer.	13	13.5	826	14.8
Hispanic/Latino/a/x	5	5.2	286	5.1
Middle Eastern/Arab	1	1	nr	nr
Hawaiian/Pac.Islander	1	1	1	0
White	66	68.8	3,122	56.2
Bi/Multi-racial	7	7.3	195	3.5
Another Identity	4	4.2	nr	nr

Note: NR means that the institution did not report data in the same way or data were not available.

Other sociodemographic characteristics were analyzed to better understand the VCU specific population. Among VCU graduate students in the sample, almost 12% of graduate students had minor dependents and 21% of graduate students worked at least 30 hours or more per week in addition to being a student. Compared to other graduate students nationally in the GSNRG, a few differences of VCU graduate students included that 22% of graduate students at VCU were considered first-generation, compared to only 18% nationally, and only 1% of VCU graduate students lived in university supported housing, compared to nearly 11% of graduate students in the GSNRG (American College Health Association, 2020b). Over 26% of VCU graduate students reported spending time caregiving compared to 22% of the GSNRG.

Mental Health

The ACHA-NCHA III survey used several externally validated instruments to assess domains related to mental health such as psychological distress, loneliness, and risk for suicide. Additional scales to measure psychological well-being and resilience were also included. Mean scores were calculated for VCU graduate students for the Kessler 6 (K6) scale measuring psychological distress, the UCLA Loneliness Scale, the Revised Suicide Behaviors Questionnaire (SBQ-R), the Diener Flourishing Scale (PWB), and the Connor-Davidson Scale (CD-RISC2) (American College Health Association, 2020a). The mean scores for each scale were further compared to the graduate student national reference group scores in these areas. Table 23 shows the comparative mean, median, and standard deviations for these scales.

Table 23

Mental Health Screening Instrument Score Comparison

Mental health screening instrument	VCU graduate students, n=96			GSNRG, n=9,451		
	mean	median	sd	mean	median	sd
K6	7.59	7.00	4.380	6.86	6.00	4.73
UCLA Loneliness	5.43	5.00	1.902	5.00	5.00	1.79
SBQ-R	5.30	4.00	3.037	4.68	3.00	2.58
PWB	47.35	48.00	6.922	46.72	48.00	7.83
CD-RISC2	6.32	6.00	1.446	6.16	6.00	1.48

Both the UCLA Loneliness scale and the SBQ-R scores were categorized into percentages of students who screened either "positive" or "negative" for loneliness and risk for suicide, respectively. Forty-seven percent of VCU graduate students in the sample were positive for loneliness, compared to only 41% in the GSNRG. Similarly, 25% of VCU graduate students were positive for suicide risk, compared to 19% in the GSNRG (American College Health Association, 2020b). VCU graduate students also reported higher mean scores for psychological distress (K6).

However, at the same time, VCU students scored slightly higher on the measures of resilience (CD-RISC2) and flourishing (PWB), potentially indicating the presence of mediating influences that might balance out the longer-term negative risks associated with mental health related issues.

Access to Basic Needs

The ACHA-NCHA III also includes the USDA Food Security 6-item Short Scale (American College Health Association, 2020a). Among the VCU graduate student participants, 40% were classified as having "low or very low" food security, compared to 30% from the GSRNG graduate reference group for Spring 2020 (American College Health Association, 2020b).

Issues Impacting Academic Success.

The question series 47a-c on the survey first asked participants which issues they may have found challenging within the last 12 months, "Within the last 12 months, have you had problems or challenges with any of the following…" (American College Health Association, 2022a). Participants who reported having challenges in each area were then asked to what extent these issues caused distress, and then to what extent these issues negatively affected their academic performance, characterized as a lower grade in a class or delayed progress to degree completion. Similarly, question series 66 asks about other specific issues related to physical and mental health and the subsequent impact experiencing these issues had on academic performance. Table 24 shows the highest frequencies from the survey questions 47a-c and 66 that were experienced by the most number of students and were reported as causing the most distress and/or having the largest impact on academic performance among those who experienced the issue.

Table 24

Issues Negatively Impacting VCU Graduate Students

Challenge or issue experienced by graduate students	Graduate students who experienced challenge or issue		Experience with issue caused some level of distress	Experience with issue negatively impacted academics
	n	% of total	% of graduate students who reported experiencing issue	% of graduate students who reported experiencing issue
Academics	44	45.8	100	-
Career	37	38.5	97.2	45.9
Finances	65	67.7	95.3	24.6
Faculty	20	20.8	100	55
Peers	23	24.0	95.6	26
Microaggression	24	25.0	95.8	20.8
Discrimination	11	11.5	100	27.2
Anxiety	69	69.8	-	49.2
Depression	47	49	-	40.4
Stress	81	84.4	-	44.4

Note: Impact to academic performance was not measured for the Academics domain. Similarly, the extent of distress was not measured for the mental health indicators, anxiety, depression, and stress.

While a secondary dataset was used for these results, the information discovered provided additional insight into the unique needs and challenges of VCU students, especially when triangulated with the primary qualitative and benchmarking data collected through this study.

Benchmarking

Review of VCU's services, programs, and support was measured in comparison to several of VCU's Quest 2025 peer institutions reported through Virginia Commonwealth University's Institutional Research and Decision Support (2022b): University of Alabama at Birmingham (UAB), University of Louisville (UofL), University of South Carolina (SC), and

University of South Florida (USF). Using the Council for Advancement of Standards in Higher Education (CAS) 10th Edition of *Professional Standards for Higher Education* (Wells & Henry-Darwish, 2019) as a baseline, the benchmarking review explored how data available for VCU's graduate programs and education aligns with best practices for graduate success. Tables 25-28 capture the best practices of VCU's compared with the identified peer institutions as established by CAS guidelines and expectations across the key domains: Graduate Student Support, Assessment and Strategic Planning, Social Justice and Accessibility, and Collaboration and Partnership.

Table 25

Comparison of Graduate Student Support

CAS Standard	Peer Institutions	VCU
Assist students in adjusting to the academic demands of graduate or professional study by providing resources that inform student decisions about academic work	Graduate academic support and advising varies vastly for graduate students than the services offered more broadly at the graduate level. UAB, UofL, and SC all emphasize academic support services widely for undergraduate students. Across peer institutions, academic advising is decentralized at the graduate level, placing ownership for support within individual schools of enrollment and academic departments.	Like its peers, there is little mention of graduate advising on VCU's website. While the Campus Learning Center and Writing Center offer tutoring and coaching services, neither specify support for graduate students. The Office for Strategic Enrollment Management and Student Success appears to offer academic advising services primarily to undergraduate students. Academic support and advising is mostly provided to graduate students by their academic department or program (Virginia Commonwealth University, 2022h).
Offer access to resources that improve graduate student careers and professional development	All peer institutions provide a centrally funded career center on campus. The career centers offer resources to both graduate and undergraduate populations, with institutions like UAB and USF also providing career support specifically to graduate students. UAB's PhD Careers program helps students plan for a career after program completion. Graduate schools at peer institutions tend to also offer support at the program level for graduate students.	VCU Career Services uses Handshake to connect students and alumni directly with employers and opportunities, along with career advisors and career-related events and workshops. Career services has a strategic plan for 2022-26. One goal in the plan is to increase access for graduate students to experiential learning, including a specific focus on funded or paid opportunities. Other parts of the plan are more general, not specific to graduate students (Virginia Commonwealth University, 2022g).

Provide health and wellbeing services to students, including graduate students, enrolled at the institution	Most peer institutions provide primary care and mental health services, sexual and reproductive health services, and recreation and wellness programs to students enrolled full-time at the institution. UAB also offers an app to students that tracks all mental health resources in one place (includes customizable self-care plan, wellness tracker, events, etc.); no other peer institution appears to offer an app specific to health and wellness.	Like many of its peer institutions, VCU provides primary care and mental health services to VCU students. VCU also offers traditional counseling services and student virtual student support groups. The VCU Counseling Center is a short-term, focused treatment agency that primarily offers brief therapy and group therapy, expressive psychotherapy with a psychiatry resident. The center also lists external resources for stress, eating disorders, depression, grief & loss, substance abuse, etc. RecWell is a VCU collaboration of recreational sports and health promotion and wellbeing (Virginia Commonwealth University, 2022f).

Table 26

Comparison of Assessment And Strategic Planning

CAS Standard	Peer Institutions	VCU
Establish a culture of assessment, gathering evidence, and creating plans that include activities for assessment	Peer institutions use various methods to gather evidence for self-assessment. UAB created an interactive dashboard to measure success and display at-a-glance information on specific actions that measure achievement of the objectives in the four pillars of the strategic plan. UofL and USF's strategic plans are relatively new, so the schools have not yet defined reports that show progress towards goals and metrics.	Quest 2028 is the VCU Strategic plan. The university conducted a survey and townhall meetings to collect feedback on its previous strategic plan from faculty, staff and student shared governance groups, external community stakeholders and deans. These efforts lead to four primary goals for the university (Virginia Commonwealth University, 2022c).
Create strategic plans that include an ongoing cycle of assessment activities and collaborate with departments to develop activities that are consistent with these plans	All peer institutions have developed a strategic plan within the last five years that serve as a blueprint for growth towards specific goals and outcomes. While UAB's plan is nearing completion in 2023, UofL and USF's strategic plans are relatively new, being developed within the last two years.	VCU Quest 2025: Together We Transform, is VCU's previous strategic plan. On July 1, 2021, VCU entered the first two-year phase of a university-wide, six-year One VCU Research Strategic Priorities Plan, making an initial investment to advance public impact research priorities and expand its infrastructure. Quest 2028 is VCU's latest strategic plan, which is not considered a complete overhaul of Quest 2025 and provides strategic direction for all departments (Virginia Commonwealth University, 2022c).

Table 27

Comparison of Social Justice and Accessibility

CAS Standard	Peer Institutions	VCU
Advocate for accessible facilities and culturally responsive environments while addressing concerns that impede access	Peer institutions appear to need improvements for accessible facilities and safe environments. UofL offers expanded hours at recreation centers and after-hours on-call numbers for student emergencies. UAB has received complaints from students and staff indicating buildings are not easily accessible, safety issues with parking, and general concerns from students around accessibility. Complaints also confirm a belief that UAB does little more than meet compliance for accessibility. Also, UAB's service hours are not viewed as accessible.	VCU gyms offer extended hours until 11pm; there is an accessible ramp entrance on Linden Street. Other accessibility features include automatic doors, an elevator, pool lift, and adaptive fitness equipment. Counseling services have traditional 8am-5pm hours (Virginia Commonwealth University, 2022f). An after-hours emergency number is available for counseling services. Complaints also confirm a belief that VCU does not exceed standard compliance regulations.
Promoting an inclusive campus that does not foster discrimination and/or barriers to success.	While each institution has limited resources for promoting inclusive campuses and environments, several institutions demonstrate some commitment to diversity, equity, inclusion, and belonging in its strategic plan. The UAB student affairs strategic plan mentions diversity and inclusiveness as one of the core guiding principles and UAB is one of only 16 colleges in the nation to be recognized as a Diversity Champion by INSIGHT into Diversity magazine. While UofL's strategic plan mentions "diversity" at least six times, the plan does not clearly define how UofL supports diversity. UofL's student affairs office has a core value, "We value diversity," which is shown through department offerings (dedicated Cultural and Equity Center, LGBT Center, Muhammad Ali Institute for Peace and Social Justice, and the Women's center).	VCU offers workshops, presentations and courses that enhance an understanding of diversity, in addition to mentoring, seminars and groups. In 2019, VCU's Division for Inclusive Excellence underwent an internal reorganization, which resulted in a stronger infrastructure to support university strategic planning and implementation. This reorganization also created a greater alignment between the unit's organizational capabilities and intended impact. The unit has made a decided shift from an activities-based model to a service-impact model that allows VCU to accurately locate tipping points for transformational change (Virginia Commonwealth University, 2022e). Diversity Drives Excellence is one of the key themes in the 2028 Strategic Plan (Virginia Commonwealth University, 2022c).

Table 28

Comparison of Collaboration and Partnership

CAS Standard	Peer Institutions	VCU
Collaborate with the graduate school to ensure representation of graduate students on policymaking, programs/service, governance, etc. Empower students to advocate for themselves.	Each peer institution has a strategic plan geared towards the next several years of development. Unfortunately, the level of student engagement in peer strategic plans vary. For example, UofL does not demonstrate any engagement with student or community leaders. UAB only mentions a strategic planning council that includes stakeholder groups but does not mention engagement of student groups or organizations.	The VCU strategic plan was influenced by feedback from leaders, team members, faculty, staff, and student shared governance groups, alumni, and external community stakeholders. Engagement was through townhalls and surveys beginning in November 2021. The Office of Student Engagement aspires to provide students with spaces to build communities for their peers, but this office focuses primarily on health sciences, with no specific mention of graduate students (Virginia Commonwealth University, 2022c).
Partner with individuals, groups, and communities to establish effective relations, gather support and additional resources, and engage diverse populations to enhance the graduate program.	Community engagement is a pillar in the UAB strategic plan that focuses on encouraging community partnerships that advance the quality of life locally and around the world. UofL's goal is to work with various community partners to improve the education, health, wellness, and social status of individuals and families who live in UofL's urban core. SC's strategic plan includes a commitment to creating partnerships to integrate student living/learning and community service with the private and public sectors. USF's strategic plan demonstrates inclusion through community engagement and service.	VCU's Office of Community Engagement (CEnR) provides youth summer programs and community-engaged research to address critical community-identified needs. CEnR increases representation among first generation, Pell-eligible and underrepresented students, along with junior and underrepresented faculty and community partners as co-researchers. VCU's Quest 2028 plan lists "thriving communities" as one of its four primary goals; this goal establishes community partnership as an expectation (Virginia Commonwealth University, 2022d).

Collaborate and consult with other university leaders and departments to ensure graduate student success in graduate programs.	USF's strategic plan includes a commitment to collaboration, viewpoint diversity, and the open exchange of ideas and establishes a goal of increasing cross-collaboration between colleges. SC's plan does not demonstrate a commitment to cross collaboration among university leaders or departments. The UAB strategic planning council includes representation from all campus stakeholder groups.	Through the stakeholder engagement sessions and survey, individuals often reaffirmed VCU's mission and identified the need to have an impactful way to bring the stakeholders together when challenges, conflicting priorities and questions of purpose arise. Thus, the One VCU Charge was developed (Virginia Commonwealth University, 2022c).

Institutional Opportunities

Figure 12 is a fishbone diagram of the primary factors found throughout the benchmarking process that have the potential to most negatively impact graduate student success (Bryk et al., 2017). The diagram defines limitations at VCU that are not conducive to improving graduate student success. Finances, equity and access, student success, and communication are identified as key themes where stakeholders and students believe VCU is not meeting expectations defined in either its Quest 2025 or 2028 strategic plans or national standards defined by CAS (2019).

Figure 12

Barriers to Graduate Student Success at VCU

Finances

Funding

Lack of funding for graduate
programs & services that support
student success.

Financial Aid

Lack of clear and transparent policies
for financial aid or funding for students
experiencing financial hardships.

Equity & Access

Accessibility

Inadequate accessibility to buildings
& safety across the campus.

Equity & Inclusion

Limited culturally responsive
environments or inclusive
services.

Professional Development

Limitations around
appropriateness of program and
career or aspirational goals.

Policies & Guidelines

Existing policies perpetuate
systems of privilege and create
harm for students.

Cross Collaboration

A lack of communication across
departments creates barriers to
success academically & financially.

Student Engagement

Students are not consistently
engaged for feedback and/or
decision-making.

Student Success

Communication

Graduate
Student
Success

Chapter V: Discussion

The original aim of this study was to conduct an in-depth exploration of the unique institutional environment of Virginia Commonwealth University (VCU) to gain a better understanding of how current policies, programs, and resources interact to either support or hinder graduate student success. The secondary aim was to use the findings to recommend opportunities for change that would position the institution to achieve its own stated strategic goal of attracting, retaining, and providing quality education for graduate students at VCU (Virginia Commonwealth University, 2022c).

To best understand how an issue as complex as graduate student success was impacted, it was necessary to examine factors at all levels of the institutional ecosystem. A multi-case study approach was used to collect and triangulate data across multiple sources, including qualitative, quantitative, and other artifacts. Data were collected and analyzed from focus group interviews with currently enrolled graduate students at the Master's and Doctoral levels, individual interviews with full-time faculty and staff responsible for providing graduate education or support services, a previous institutional survey that included a graduate student sample, other institutional data, and artifacts from websites or documents related to graduate education at both VCU and identified peer institutions.

Chapter IV reported the results of findings from the multi-case study. These results were organized based on the method of data collection and the types of data involved. Findings were captured that represented key themes and subthemes focused around supporting graduate students, especially at the departmental and institutional level, and exploring the challenges and larger unmet needs of students as related to the institution. This chapter explores the implications of those research findings, synthesizing the larger themes that emerged across all of the various

sources of data, and identifying further recommendations for changes that might better situate this and potentially other similar institutions of higher education to better support graduate student success. Limitations of the study and suggestions for future research in this area are provided.

Supporting Graduate Students

The findings from this study coalesced around several key themes. The most prominent was the need to provide additional support for graduate students in order for them to be successful as individuals, remain in their programs, and graduate on-time. While reviewing previous studies on graduate student needs, the literature indicated that faculty and other stakeholders of graduate success frequently identify different needs, indicators of success, and reasons for attrition than do graduate students themselves (Golde & Dore, 2001). In our study, however, campus stakeholders and graduate students were largely in agreement on the areas of graduate need at VCU, as well as the necessary structures of support required to amplify student success at the graduate level. Those graduate student participants in focus group interviews who expressed that they felt supported in some way, either financially, by their faculty, by the department, the institution or resources provided by the institution, tended to have more favorable perceptions about their experiences as a graduate student compared to their peers. Additionally, the notion of support was not experienced or expressed in uniform ways- the data suggested that there are different outcomes depending on where within the institution a student or program is situated, which faculty are involved, and what identities the students in the study held.

The findings also suggested that the notion of support is multi-layered, including personal sources of support, developing relationships with peer/cohort and faculty/mentors, and receiving

support from the department/program and institution as a whole. When even one of those was missing or lacking, the graduate student participants reported experiencing challenges that impacted their ability to succeed in their programs in some way. Additional support was identified as most needed at the departmental/programmatic level and tailored to the unique, specific needs of graduate students related to funding, socialization, well-being/balance, and coherent/consistent policies/procedures that go beyond what is standard for all students (including undergraduate).

Department/Program Support

Responses from both student participants and campus stakeholders suggest that support was perceived most demonstratively at the department or program level, whether that support was academic in nature, provided through relationships with faculty and staff or via experiential assistantships with accomplished mentors, or in the form of assistance identifying university resources and navigating policies, processes, and the overall graduate experience. However, responses from both cohorts also indicated that the degree of support lacked consistency across programs and even across specific labs, courses, and other learning spaces, and that the areas of unmet need were largely greater than areas where needs were being met, according to frequency of responses (see Table 2 for student response frequencies and Table 17 for stakeholder response frequencies). The examples of program and faculty support identified as being in place by stakeholder participants and students do align with multiple best practices for facilitating student success found in the literature (Duranczyk, 2015; Lechuga, 2011; Lunsford et al., 2017; Shepard & Perry, 2022; Siegel et al., 2004). But, there was some difference in the degree to which students vs. stakeholders prioritized support and graduate need at the program level, with frequency of student responses indicating funding, socialization, and mentoring as their top three

needs and stakeholder response frequency indicating academic support, funding, and stakeholder advocacy as the top three areas of graduate need.

Institutional Support

Based on participant responses, there may be some misunderstanding by students of where funding for departmental assistantships originates, with the majority of student respondents associating funding as a support mechanism within their respective programs. This is a perfectly natural inference to make based on the primacy of their interaction with faculty, stakeholders, and departmental discussions at the program level. However, the majority of funding for graduate assistantships is allocated at the institutional level and disbursed centrally via the Graduate School while decisions on how those funds will be individually allocated are made at the department or program level. Comparatively, stakeholders primarily pointed to institutional funding gaps as the source of inadequate graduate support through paid assistantships, although there was disagreement about this point across administrators. Funding mechanisms and financial stability (Joo, et al., 2008), are widely cited in the literature as necessary components of graduate success, but responses indicated that VCU simply does not have the fiscal resources to adequately support their graduate population, overall, in the form of assistantships and therefore primarily prioritizes support in this form for doctoral students (rather than Master's students) whose work is contributing significantly to the research and teaching enterprise of the institution.

Support of Graduate Student Organizations

Graduate student organizations, whether formal or informal, provide community-based spaces through which students can share information and resources, develop relationships with their peers, express affinity with one another, and process together the challenges and successes

of their educational experiences (Gardner & Barnes, 2007; Strayhorn, 2012). Student organizations and, especially, government bodies can also function as empowering collectives whereby students can address institutional concerns, gaps in support, and issues related to just treatment (Patel, 2019). Stakeholder responses related to support for student organizations and facilitation of peer mentorship were relatively infrequent, (n=10 and n=12, respectively). Two stakeholders did mention direct engagement as formal liaisons with organizations like the Graduate Student Association and the Graduate Student Government, the former of which was instrumental in collecting and sharing data used in this study, demonstrating the role in institutional advocacy such organizations can play. Peer mentoring was cited in the literature as an effective means to enhance socialization through engagement, continued learning, and community-building (Bemker & Leibold, 2018), while also providing emotional support (Geesa, et al., 2018), two areas where student participants reported high levels of need. Consequently, increased formal support and facilitation of peer mentoring and student organizing at the graduate level may help mitigate gaps in graduate success, especially when those students are directly and meaningfully involved with collaborative university efforts in this domain.

Implications for Future Practice

Several layers of data were used to understand the factors across the institutional landscape that either supported or limited success among graduate students at VCU, including a comparison of offerings at peer institutions and an analysis of best practices nationally. The findings from the benchmarking, and supported by the other findings in this study, indicate that institutional leaders and stakeholders in graduate education or who support graduate students at VCU have several areas of opportunity to address currently unmet needs. These current needs and opportunities for future growth coalesced into four major categories; Programs and Services

for Student Success, Social Justice and Accessibility, Collaboration, and Assessment and Strategic Planning.

Programs and Services for Graduate Student Success

Graduate students often need to balance the needs of life with demands for their academic success. Our analysis shows that central academic advising is limited at the graduate level at VCU; the Office for Strategic Enrollment Management and Student Success focuses primarily on undergraduate student success. VCU's decentralized academic advising and support aligns with that of its peer institutions, placing ownership for support within individual schools of enrollment and academic departments. Graduate students are often expected to seek academic support and advising directly from their academic department or program. While this self-advocacy appears to be more an expectation at the graduate level than undergraduate, graduate students experience barriers to academic support because of the various challenges departments face supporting their students' academic success. Faculty engagement appears to be one of the most consistent barriers to success at VCU; some faculty are viewed as not supporting their students' overall academic progress in the program. One staff member in a program support role, Scott, details their thoughts on students needing more support from faculty:

> It's not really the student [struggling on their own]. It's the student having to interact with the faculty and the faculty not knowing how to appropriately deal with certain things [which] leaves the student in a position where they don't know if there's a path forward here.

Graduate student success involves factors other than academic achievement; graduate students need various support and programs to become successful. While academic support is decentralized at the graduate level, so is overall student support and success. Program

administrators and faculty provide varying degrees of support to graduate students, depending on the academic program. Cathy, who provides academic support in another department at VCU defines how her department involves faculty members and program administrators in their students' success:

> We basically think that for students to have a positive experience, they need to be positively connected to at least one person in the program beyond their own classmates. And so we give them multiple people that can become that for them. A faculty member calls them when they're admitted. They also work logistically with our Academic Coordinator. When they get to the program, they meet with the faculty individually to see who they feel most connected to so they don't feel like [they] only have to work with one person. We have one social event a month for all of our students, [including] our distance learners. All of our faculty and staff are required to [attend] so that [they] can get to know students beyond the classroom. We try to circle everyone around [the students] so that by the time they [graduate], they [feel] cared for by someone in the program, if not multiple people.

Cathy's words point to the notion that the level of support graduate students receive varies by department and/or program. While some departments have made great strides in supporting graduate student success, others face challenges in engaging faculty and building relationships with students outside of the classroom or have a limited understanding of how to address issues graduate students face. Mental health and wellbeing is another factor that has received increased attention as influencing graduate student success. Like many of its peer institutions, VCU provides primary care and mental health services to VCU students; however, faculty and staff

believe the offerings are limited. Morgan who supports PhD students, shares their thoughts on primary care and mental health services at VCU:

> I think we will probably never be able, as a university, to have all the mental health services that we would really need. And I think our folks in that arena do a really good job of handling crises. But they just don't have the bandwidth to do a longer-term treatment. And I think that's what's needed.

Many, like Morgan, believe the university should provide more mental health and wellbeing services to all students, especially those in graduate programs. Counseling centers and other support services often refer students to community resources. For example, Brian says:

> If you're looking for actual intervention, actual therapeutic support, we do not do that here, we'll refer you to [the] counseling center. We will connect you with people in the community to make sure that you're getting the services that you need, because we are not the best option for you, and it would be unethical for us to even pretend like we were.

It is worth noting that, at the time of this study, the Division of Student Affairs had recently invested in a virtual health and well-being platform with a range of mental and emotional support services designed for students and offered free of cost (McNeil, 2023).

Social Justice and Accessibility

The comparison of VCU and its peer institutions also included an analysis of social justice and accessibility at the graduate level. Specifically, the research sought to determine how VCU promotes an inclusive campus and culturally responsive environment. Several study participants confirmed that graduate students are facing barriers to success because of inaccessibility. Brian, a male staff member, confirms:

Students who have a disability, a mental health, or medical issue, [are finding] that there are barriers to participation in programs or opportunities offered at the university, or there are [accessibility] issues around campus, whether that's physical access or access in terms of their engagement with the learning environment.

Brian further expanded upon his thoughts around the intersection of disability and accessibility with graduate student success at the university:

I make the argument that Student Accessibility and Educational Opportunity (SAEO) is the most interconnected office on VCU's campus and that if a disability services or an accessibility office is doing their job well, that's going to be true of any campus anywhere in the country. Every aspect of a campus community and campus life intersects with disability. And I think that whether you are going to [consider an] issue [with] housing, financial aid, working with faculty, working with academics, technology…literally every aspect of the University intersects with disability.

CAS (2019) standards indicate that institutions should provide environments that are accessible, inclusive, equitable, and free of discrimination or harassment. As the demographic of graduate students changes, so do their needs ranging from familial obligations to financial constraints and everything in between. One participant, Gabriel, asks questions about better understanding the needs of graduate students:

Do we know who our graduate students are? Do we? We can be fortunate if they happen to do undergrad at VCU and know a little bit more about them. But for our graduate students, do we have predictive analytics of their metrics for success?

Along the same lines, Ellen asks similar questions that are also connected to funding and resources:

Just how do you program for a diverse group of students? Meet individual needs, but

also, you know, there's only so many staff, there's only a few of your resources at the

university. So how do you balance that?

Participants consistently mentioned the difficulties they face lacking funding or other resources

at VCU. Limited funding and staffing creates inequities in how the various identity groups are

supported at the university. These inequities often result in complaints about access to facilities,

embedded systems of privilege and oppression, and other barriers to success. Ellen speaks about

the challenges she faces with her direct supervisor that perpetuate systems of oppression and

privilege:

I think this is not to diminish my boss in any way. I mean, He's about my age. He's a

white male who has had a pretty traditional upbringing. I think he's one of those people

who often thinks that the way it always has been, is the way it should be. He said, "When

I went through graduate school, when I got my PhD, I did this and this and this." And I'm

like, great, but why can't we make progress if progress can be made, right? It doesn't have

to be bad for other people just because it was hard for you, right? If there's a way to make

it easier without diminishing the value of the degree or the education, I think we need to

do that.

CAS (2019) standards also set an expectation of cultivating an understanding of identity,

heritage, and culture. This can be fostered through inclusive learning. Another participant, Cathy,

identified the need to mandate inclusive curricula:

We do embed diversity, equity, and inclusion into every single class. Every class is

basically required to. And there's lots of ways faculty can meet this. [For example], I

teach leadership, so we do an entire week on bias. We have a list of non-white male

authors that can be used in the [syllabus]. We have a bunch of different ways that [faculty] can [make] sure that equity and inclusion is a part of the curriculum. So that's one thing everyone has to do.

Collaboration

Collaboration emerged as another theme among VCU and its peer institutions. Collaboration requires consultation and formal alignment between departments, university leaders, community stakeholders, faculty, and other essential stakeholders in graduate student success. It also requires engagement with student leaders and organizations. Participants believe that collaboration among departments and units at the institution is required in order to effectively support graduate students. Gabriel, a program support administrator, shares their thoughts on the role of graduate student affairs and cross-collaboration at VCU:

> Recognizing that graduate program directors are a strong stakeholder in graduate students' success and their experience overall [is key]. Using the relationship [with programs] as an opportunity for face time with program directors, for reports back to program directors about what we're seeing, and recognizing that program directors also have a number of responsibilities.

Similar to peer institutions, VCU decision-makers collaborate with and consult with other university leaders and departments to ensure graduate student success in graduate programs. Gabriel goes on to talk about the role of graduate student affairs in the holistic dimensions of graduate student success:

> How student affairs [becomes] the expert on student culture, student life, student wellbeing, and the student experience overall is the position I think [graduate student affairs] should be in. [Graduate student affairs should] be able to report on the holistic

dimensions of a graduate student and be partners with the graduate school in supporting

the academic experience overall. I think those are stories and rich data that we can paint

with the resources, the strengths, the talents that exist in the division of student affairs. It

just needs to be packaged in a way that is digestible for our graduate program directors

and graduate stakeholders.

While collaboration with other departments and stakeholders is important, institutions are also

expected to engage student leaders and organizations to ensure representation of graduate

students on policy-making, programs/service, governance, etc., and to empower them to

advocate for themselves. VCU appears to engage students at least in some capacity; however,

participant feedback on how well students are engaged is limited. Here, Brian shares why

engaging graduate students is crucial to his program's success:

So we're very intentional about hiring undergraduate and graduate students to work in our

office. We want to hire the people that we serve for this kind of reason. We want their

input. We have graduate students who are working with our student population on a daily

basis. We welcome their input too, and then we regularly will turn to, for example, a

student organization [for input].

Along these lines, best practices among peer institutions and CAS (2019) standards indicate a

need for graduate schools to develop student advisory councills to solicit feedback and make

recommendations on the services, programs, and needs of graduate students. Evidence of

engagement with student advisory councils and organizations is limited.

Community Engagement

Collaboration at the university level requires partnerships with students, faculty and staff,

and other stakeholders. While these stakeholders can often be other partners across the institution

or colleagues at peer institutions, key stakeholders should also include the community within which an institution exists. CAS (2019) standards indicate that institutions should collaborate with community partners to establish effective relations, engage diverse populations to enrich the educational environment, and refer students to external resources. Engaging the community and collaborating with local groups and organizations enhances graduate programs and supports graduate student success.

Community engagement at VCU's peer institutions varies. The University of South Florida includes a commitment to demonstrating inclusion through community engagement and service in its strategic plan. Similarly, several other institutions, including VCU, mandate a commitment to community engagement in their strategic plans. "Thriving Communities" is one of four primary goals in VCU's Quest 2028 strategic plan. This includes a commitment to seeking partnerships that elevate awareness and collaboration between VCU and the community, leveraging goals that complement the work of community partners, and developing an infrastructure that meets the needs of both VCU and communities (Virginia Commonwealth University, 2022d). Community engagement also assists VCU graduate students in preparing for life after graduate school. One stakeholder participant, Sarah, reflects on partnering with the community to assist with job placement:

> We have a really good relationship with career placement. Actually, our [community partner] is married to a forensic scientist. So he really knows what he's talking about, and we have him come in and talk to the students during their orientation, and we have him come back in the fall of their second year, so that they can kind of have him on their mind if they're building their resumes and cover letters and everything. So we have a really good relationship with him [and] that's probably the most helpful.

VCU's Office of Community Engagement specializes in fostering relationships through high-quality community engagement while leveraging university resources to address critical community-identified needs. Similarly, the office seeks to establish a partnership between the researcher and community stakeholder to disseminate information, contribute to the discipline, and strengthen the health and wellbeing of the community (Virginia Commonwealth University, 2022d). While this is a goal within the central university office, stakeholder participants identified a growing need to partner with the community at the program or department level. One stakeholder indicates that his department is in a discipline or field where there is a disconnect between the institution and the community stakeholder and asks, "What role can VCU play in [community engagement and partnership]? Ultimately, you're [sending students] into the field where VCU is hands off. We don't have any authority there." The level of community engagement varies widely by department and program, even though VCU has established "Thriving Communities" as one of its primary goals by 2028.

Assessment and Strategic Planning

Institutions are also expected to foster a culture of assessment. Graduate programs should develop assessment plans and document progress towards goals, create strategic plans that incorporate ongoing assessment activities, and collect relevant data on goals and outcomes. Strategic plans are developed after assessment and outline data usage and continuous improvement for reassessment, outcomes reflecting improvement, communicating findings. (CAS, 2019). Along those lines, CAS (2019) also indicates that strategic plans should include representation from institution leaders and stakeholders, student leaders or organizations, and external community stakeholders.

While each of the peer institutions have recently developed a strategic plan (within the last three years or less), the level of student and community engagement varied. VCU's Quest 2028 strategic plan involved representation from leaders, team members, faculty, staff, and student shared governance groups, alumni, and external community stakeholders (Virginia Commonwealth University, 2022c). Several graduate departments have started engaging student leaders and groups to assist in programming development. One stakeholder who works as graduate support staff reflects on the student leadership in an outdoor activity:

> We really [wanted] to try and do as many in-person things to rebuild like some of the relationships and contact and just seeing people. So, we have a retreat at the VCU Rice Rivers Center. There's a lodge out there. [The students were] like, "hey? We'd love to do something where we have the outdoor adventure program, you know. [We could] be there to do a team building exercise. We [could] go out there and potentially stay overnight." There. I agreed and we helped to pay for that. But the idea was really from the students.

Alignment with VCU Strategic Plan

Virginia Commonwealth University's strategic plan, Quest 2028: One VCU Together We Transform, is "a broad, guiding document to provide strategic direction for the organization in which all departments will be encouraged to develop plans in alignment." (Virginia Commonwealth University, 2022c). The purpose of a university strategic plan is to enhance practice (Presley and Lesley, 1999) while simultaneously positioning institutions of higher education to respond to unforeseen challenges in positive and practical ways (Barnetson, 2001; Cutright, 2001; Gordon, 2002; Rowley, et al., 1997). The strategic planning process involves defining the organization's mission and developing strategies and plans to align resources with

opportunities and challenges in order to achieve the institutional mission most effectively (O'Brien, 1991). VCU's Quest 2028 plan outlines four interconnected themes that support the university's central commitment to national prominence: Diversity Driving Excellence, Student Success, Research and Innovation, and Thriving Communities.

Alignment with strategic plans is important for the holistic growth and success of graduate students. According to CAS (2019), strategic plans should target key graduate student success objectives, establish a framework for graduate programs and services, and translate the mission into actionable outcomes and strategies. VCU's commitment to its strategic plan, particularly its themes of student success and diversity driving excellence, is hindered by budget constraints at the graduate level. One graduate staff participant indicates their frustration with university funding, Another faculty member reflects on the negative impacts of funding on student success:

> I think internal funding for students is always an issue and can be extremely stressful, not just for the students but also for faculty. If a faculty member's grant is ending and they still have a student who hasn't finished, it's extremely stressful for the faculty member. They ask, "how do I get the money? Where does the money come from?" [Our department] is very big on all PhD students being fully funded. We have a couple who are self-funded, but that's mostly because their jobs are paying for it. It's stressful for the students sometimes.

VCU's financial difficulties result in limited funding for graduate programs, services, and support that are conducive to graduate student success. The budget deficit creates gaps in student needs, including health and wellbeing, housing, and food security. When compared to outcomes

for graduate students nationally, VCU students in the ACHA-NCHA III survey reported issues, such as food insecurity, at higher rates than their peers.

Gaps in financial support at the institutional level, whether in the form of paid assistantships, campus resources, or other mechanisms should be considered within the broader context of funding for public higher education in the United States. As of December 2022, VCU was operating on a deficit of $51 million, needed to maintain current educational and service quality for students (Kolenich, 2022). One of the largest public universities in Virginia, VCU disproportionately serves and supports students of financial need while receiving less state funding per student than most of its counterparts and, moreover, deferred tuition increases (the largest source of university revenue), for four years in efforts to sustain inclusive and equitable access (Kolenich, 2022). The university has also suffered enrollment decline after COVID which followed a decade of state disinvestment in the university as demonstrated in Figure 13.

Figure 13

Decline in State Funding for VCU 2001-2017
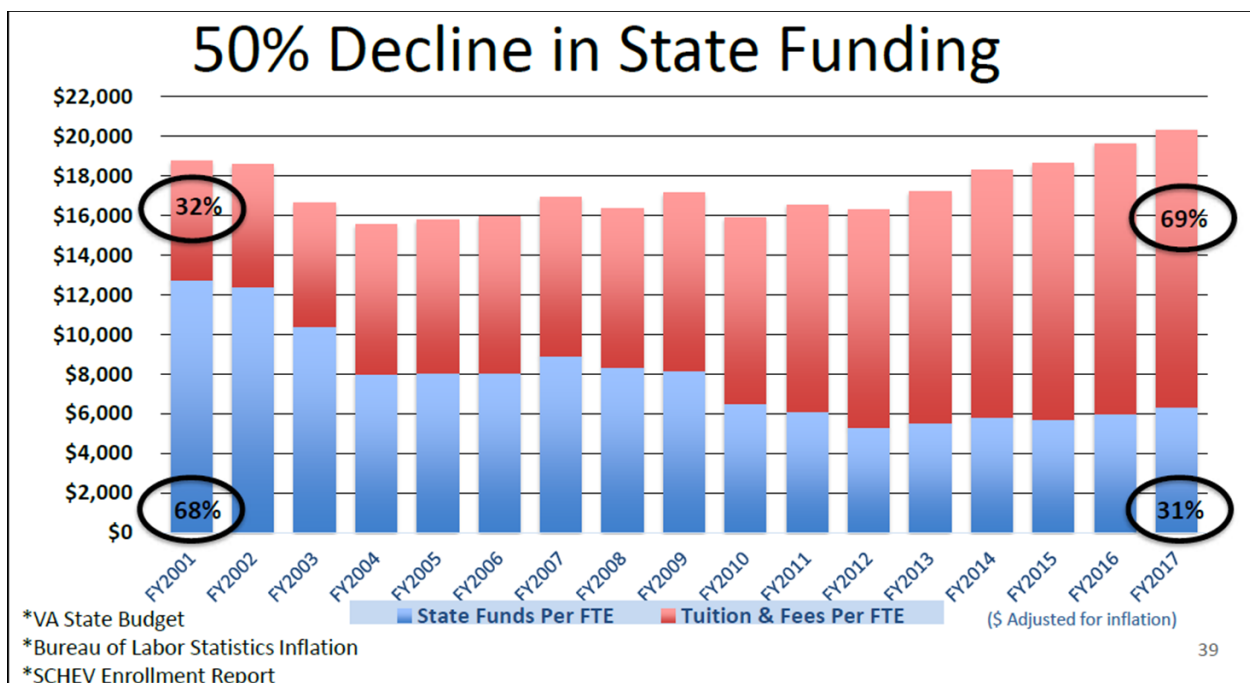
With that said, participants identified a variety of institutional offices and resources as viable, if not exhaustive, mechanisms of support, including University Health Services, the Office of Financial Aid, the Division of Student Affairs, VCU Libraries, the Global Education Office, the Graduate School, the Writing Center, Career Services, the Office of Research, and the Office of Student Accessibility and Educational Opportunity. However, participants also noted the lack of alignment between student support and student affairs offices across campuses. As one stakeholder commented,

> A lot of the alignment for what (graduate support) looked like was campus-based rather than class-standing based. And so I think the tricky part was that the systems were currently aligned based on campus.

Summary of Findings

Many of the findings from this study highlight how current conditions at VCU are not always comparable to the state of graduate education across the country. While some of the challenges or issues faced by graduate students at VCU, such as maintaining positive mental health, are similar to the struggles of all graduate students, how they manifest in this specific student population provides critical insight for leaders and decision makers on how best to structure the institution to respond appropriately. Examples supporting a more institution-specific or targeted approach to promoting graduate student success came from the comparison of the results through the benchmarking process and from the VCU graduate student sample in the 2020 VCU ACHA-NCHA III survey with the national reference group of all graduate students. The key differences in the VCU sample compared to the GSNRG data highlight the importance of understanding the unique institutional population, both in terms of risk and

protective factors. The results also provide critical context that explain the additional needs uncovered in this study, for example, why VCU students might have a higher level of need for financial and basic needs assistance.

The findings related to graduate student support paint a picture of an institution in need of a more cohesive identity for graduate education. One major finding that emerged in answer to the primary research question of how the institutional landscape was positioned to support graduate student success is that it is varied and context dependent. The institutional landscape and conditions in which graduate students work and learn vary depending on the department/program, or even the faculty with whom students spend most of their time. Institutional policies in place limit the ability of faculty to be flexible in some cases. In other cases, faculty choose how to enforce policies related to daily, course-related issues like attendance, hybrid options, or submitting late work. This decentralization, while in some cases can be helpful, creates confusion and challenge for students when there is no consistency between faculty, even in the same program or department.

Similarly, the level of funding and support received by students varies depending on the department or program, with the perception that certain high-demand disciplines get preference from the university. Some programs have policies that prohibit graduate students from seeking external employment or getting compensated for required clinical placements. The ways in which graduate students are introduced to the university, provided information about valuable support resources, and acclimated to the rigors of graduate studies are also varied, with many in-person orientation processes being halted due to the COVID-19 pandemic. While there are several institutional resources that students cited as being very helpful and supportive, there is a disconnect in how students learn about these resources or are encouraged to access them. Some

departments maintain their own staff or internal resources and handle many requests for support in-house as opposed to referring students externally, except in certain situations.

The opportunities for social support and connection also vary by department, with many program directors or support staff being stretched beyond capacity. Many staff supporting graduate students recognize the importance of questioning the assumption that graduate students are well-prepared and well-equipped to excel, simply because they obtained an undergraduate degree. Some staff act as de facto case managers for graduate students, who present with high levels of both academic and non-academic needs for support- the latter mainly focused on mental health and well-being. Students themselves report how difficult it is to balance the demands of a graduate education with their other responsibilities to family, employment, or their own needs. Some students in this study also shared challenges to well-being stemming directly from the expectations from their faculty that they work well above their stipend amount or that needing to miss class or scheduled hours was unacceptable.

Ultimately, the answer to better understanding the needs and challenges of graduate students is that the challenges and subsequent needs articulated by students are directly impacted by their life situation, identities, and correlate to the levels of support they receive from the institution and their program. The findings from this study also indicate the importance of addressing graduate education as separate and distinct from undergraduate education; Needing specific, dedicated resources and funding, and distinct, tailored supportive resources developed with graduate students' needs in mind. This study also highlights the importance of researching the unique needs and trends of an individual institution's graduate population in order to create a more targeted, equity-oriented approach that not only emphasizes the recruitment of a diverse

graduate student population, but is also best positioned to retain and support students with diverse identities and lived experiences once they enroll.

Recommendations

The secondary aim of this study was to use the findings to recommend potential high-impact practices to better position the institution to support the overall success of graduate students. These recommendations are related to the larger, more universal needs or gaps that were identified from the findings across all methods of data collection, 1) the need for increased resources and funding support, 2) the need for increased support related to the transition to graduate studies, 3) the need for more transparent, consistent policies and procedures across departments, 4) the need for support focused on mental health and well-being, and 5) the need for further attention to diversity, equity, belonging, and inclusion (DEBI).

Funding Graduate Studies

There is an overall lack of funding for graduate students impacting their essential areas of need. Funding discrepancies have contributed to difficulty with students being able to meet necessary needs for health care, housing, and food security. Some participants shared a reliance upon government subsidy programs for nutritional assistance, while others addressed challenges with finding affordable health care coverage and housing near campus. This study displayed that inadequate funding support was a concern for graduate students across departments and programs at VCU. At the same time data analyses were being conducted for this study, news outlets reported on ongoing labor organizing among VCU graduate students who were members of the United Campus Workers of Virginia (2021). Students were protesting issues specifically related to funding at the university, alleging that VCU has been behind in stipend payments and that transparency and equity in funding processes has been lacking (Cordes, 2023).

Difficulty with managing financial stress as a graduate student may lead to struggling academically as well (Bain et al., 2011). In support of meeting the funding needs of graduate students, it is recommended that VCU consider factoring in cost of living and economic impact when determining stipend amounts and hourly pay for graduate students. The university should also consider offsetting the costs of health care to provide more affordable health care options for students. Attention to the financial obstacles graduate students face at VCU is important in being able to promote graduate programs and support degree completion.

In light of the current financial constraints VCU is operating within, it is also recommended that cross-campus alignment is formalized between institutional student support units positioned on both campuses. Formal alignment or reorganization would optimally involve development of a strategic plan focused on graduate success and grounded in a shared set of values, mission, goals, and metrics. Central to this initiative should be the identification of campus leaders and units responsible for the ownership of graduate success metrics, as well as a specified structure of interlinked support points for our graduate student population. This process would ultimately better position the university to serve its graduate population as a whole, regardless of students' primary campus.

Orientation and Transition Support

Based on the interview responses of focus group participants, students are missing out on the benefits of more robust support through the transition of becoming graduate students at VCU. A lack of social connectivity on the graduate level was also mentioned as a hindrance to the transition process for students. A heavy emphasis was placed on the overall disconnect between graduate students and resource awareness and accessibility across campus and within departments. To address the transitional gaps that were found to impact graduate students, VCU

should increase the information provided regarding campus and virtual resources available and ensure reliable communication through the orientation process, both campus- and department-wide, for all graduate students. In alignment with best practices, the focus of a more collective graduate-student orientation should address the more global needs of social connection and belonging, connecting students to supportive resources and information about the institution, and providing graduate students with the tools they need to navigate the transition to graduate studies (Spratling & Valdovinos, 2022).

Audit policies/procedures/handbooks for consistency

Reviewing and auditing current policies, procedures, and handbooks across departments and programs is vital to accurately certify consistency for graduate student academic expectations. Students being able to navigate the micro-transitions as a graduate level student, and frequently as employees, is important for their success and sense of belonging. VCU's value of their graduate students through their review of current policies, procedures, and handbooks is vital in encouraging the success of their graduate student population across departments and programs. The unique needs of graduate students must be acknowledged and considered in the process, in no small part due to the workforce contributions they make to the university research and teaching enterprise.

Mental health and Well-Being Support

A need to acknowledge and support the realities for graduate students as they pursue advanced degrees was identified and emphasized as a large disparity at VCU by many participants. Participants shared that there was a lack of consideration across the institution, departments/programs, and faculty regarding the other external responsibilities that students are having to balance in addition to their academic requirements. Graduate students face complex

stress and pressure in higher education that increases their risk for the development of mental health issues (Flaherty, 2018). Several students shared increased needs for mental health support, adequate health resources, and compassion for their overall dimensions of health and well-being. An increase in focus on the various identities held by graduate students should be considered by VCU to better provide students seeking advanced degrees with the appropriate resources and accessibility to assistance that better addresses their individualized needs. Providing adequate resources and staffing for those in student support roles is necessary to ensure that graduate students can be provided with services designed to specifically support their mental health and well-being.

Commitment to Diversity, Equity, Belonging, and Inclusion

There is a continuous need for increased consciousness and purposeful measures to be in place to effectively provide a campus environment that embodies diversity, equity, belonging, and inclusion (DEBI) for students at VCU. Through our study, participants highlighted specific concerns with DEBI that they had experienced through their identification as an individual having a marginalized identity. As a recognized "Diversity Champion," (Virginia Commonwealth University, 2022) VCU should work toward hiring and retaining a more diverse faculty and staff, whose identities align more closely with those of the students they teach and support. Students who come to study at VCU as international students from other countries need further support from not just the Global Education Office, but from within their own departments and programs of study. Students who are parents, especially single or lactating parents, are in need of additional support.

Additional concerns around inclusion spoke to structural challenges for students with a disability or chronic health condition and accessing campus while also experiencing issues with

faculty and staff being unwilling to acknowledge or adhere to student accommodations. The Student Accessibility and Educational Opportunity (SAEO) department was recognized for their advocacy and support by a participant who also shared feelings of embarrassment for having to receive interventions from the department. Bowers et al. (2019) suggests something similar- that "students may fear a negative stigma that might be associated with their attempts to seek help." To ensure campuswide inclusivity and forward movement for students through work in DEBI, VCU should make sure departments and programs are including the Student Accessibility and Educational Opportunity (SAEO) office or Division for Academic Success (DAS)(within the Health Sciences) as an available resource in their communications to all students. In recommending that SAEO or DAS be a shared resource communicated to students, these offices should not be the only designated department at VCU advocating for students' equal access to the University's programs, services, and activities.

Future Research

There are several limitations with this study. While this study explores the mechanisms involved in supporting graduate student success, the findings generated are specific to students at one institution. These results, while providing valuable insight into how institutions of higher education can better support graduate students, are not necessarily meant to be generalizable beyond VCU. The scope of this study was intentionally broad and was designed to capture as much information as possible about the institutional landscape at a discrete point in time. However, it was not feasible for our study team to both access and review every handbook or artifact for each graduate degree program. This study relied heavily on publicly available data from the institution, so some data is from previous years. Some data, such as the demographic

characteristics for those employed as graduate assistants, adjunct instructors, or hourly graduate student employees were unavailable.

This study relied on several sources of data to examine the issue of graduate student success from multiple perspectives. Still, more robust representation and further study is needed to better understand how institutions can support the individual identities of graduate students, especially those with intersecting identities and needs. The ability to triangulate findings was further limited by the smaller graduate student sample from the VCU 2020 ACHA-NCHA III survey. The small sample size precluded further between-group comparisons that might have provided additional insight into ways in which the identities and various intersections of identities students hold might shape their experience. Further study into this issue might consider national datasets with larger graduate samples represented, or consider attempting to incentivize larger, institutional research into this issue. The VCU 20202 ACHA-NCHA III survey was also administered prior to the onset of the COVID-19 global pandemic. Obtaining updated institutional data specific to graduate students and exploring any changes to the health and well-being of graduate students would help to better understand how pandemic related experiences have further compounded any negative impacts to graduate student success. Collecting these data on a regular basis might also help to evaluate outcomes of any changes that are instituted and to monitor any emerging trends over time.

Conclusion

The needs of graduate students are diverse, robust, and have evolved over time. Issues such as the global COVID-19 pandemic have impacted the lives of current graduate students, as well as disrupted pipelines of students who might enroll in future graduate studies. These, as well as other ongoing societal issues, should be contextually explored when considering how to best

ensure the success of graduate students moving forward. Institutional focus on improving

graduate studies, with the ultimate outcome of ensuring the success of graduate students requires

a targeted, multi-dimensional, and collaborative approach that goes beyond simply adapting

traditional services at the undergraduate level. While this study addresses how the current

landscape at one institution of higher education serving graduate students is positioned to support

graduate student success, this is an ever-evolving issue requiring ongoing research and dedicated

resources that are guided by the unique needs and identities of graduate students themselves.

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Appendices

Appendix A: Focus Group Recruitment Email

Dear VCU Graduate Student,

We hope you are well this semester. We (Kiama Bishop, Tameka Burroughs, Herb Hill, and Trisha Saunders) are doctoral candidates in Virginia Commonwealth University's Educational Leadership Program within the School of Education. We are contacting you as a fellow graduate student at VCU to participate in research for our doctoral capstone study: "Assessing Graduate Student Needs and Structures of Support at Virginia Commonwealth University." The purpose of our study is to explore the existing institutional landscape and how current policies, programs, and resources at VCU support your needs and success as a graduate student. The aim of the study is to identify graduate student strengths, needs, and areas of opportunity for VCU to better support graduate students.

As part of our study, we are conducting focus group interviews with VCU graduate students. If you are a currently enrolled or recently graduated (within the last semester) VCU student enrolled at the Masters or Doctoral level, we are inviting you to participate in a 60-90 minute focus group interview session. We will conduct these sessions via zoom or in-person based on your level of comfort, availability, and proximity to VCU's campuses. If you are interested in participating, please take a moment to fill out our interest form. One of our team will follow-up with you. Your participation in this study is voluntary and can be withdrawn at any time.

This study is considered research and is covered under VCU IRB [IRB number]. Please take a moment to review our Research Participant Information.

We know how busy you are and we value your time. As a small thank you for your participation, each participant will receive a $20 [amazon/gas/grocery] gift card. If you have any questions about the study, please contact one of our team.

Sincerely,

Kiama Bishop, bishopka3@vcu.edu
Tameka Burroughs, burroughstf@vcu.edu
Herb Hill, hhill@vcu.edu
Trisha Saunders, trsaunders@vcu.edu
Capstone Chair, Dr. Jeffery Wilson, jlwilson4@vcu.edu

Appendix B: Focus Group Recruitment Advertisements

Digital Recruitment Flier

TelegRam and Listserv Submissions

Are you a VCU Graduate Student? Consider participating in a voluntary focus group study to share your experiences at VCU. The aim of the study is to identify graduate student strengths, needs, and areas of opportunity for VCU to better support graduate students. Please indicate your interest by filling out the interest form by [date]: https://forms.gle/rRidzJEov2tcBgP17 You will be contacted by study personnel. As a thank you, participants will receive a $20 gift card. Contact Dr. Wilson, Capstone Chair, jlwilson4@vcu.edu with any questions.
Study approved by VCU IRB #xxxxxx

Appendix C: Focus Group Interview Question Prompts

Instructions: Before the start of the focus group interview session, please share the Study Information Sheet and Participant Questionnaire with each participant. Verify that each participant has read or had read to them the Study Information Sheet, and that they understand that 1) the session will be recorded, 2) they are participating voluntarily, 3) they can withdraw or stop their participation at any time with no loss of benefit, 4) all data associated with this study will be kept confidential. By continuing to participate in the interview session, participants are signifying their consent. Share information about VCU resources (University Counseling Services, University Student Health Services, Dean of Students, and Student Accessibility and Educational Opportunity/Division for Academic Success) after the session.

1. What factors most influenced your decision to enroll in a graduate program at VCU?
2. Describe the most difficult challenges you have faced as a graduate student.
   a. Tell us more about each of these challenges.
   b. What helped/hurt your ability to deal with these challenges?
3. What would you say has most contributed to your overall (academic, personal, professional) success as a graduate student?
   a. Include personal characteristics or lived experiences
4. What would you say has been a barrier to your overall (academic, personal, professional) success as a graduate student?
5. In what ways have you felt supported by:
   a. VCU
   b. your department
   c. your faculty
   d. your peers/cohort
6. In what ways have you felt you weren't or aren't supported by:
   a. VCU
   b. your department
   c. your faculty
   d. your peers/cohort
7. How would you characterize your biggest needs as a graduate student?
8. In what ways have these needs been met/unmet by:
   a. VCU
   b. your department
   c. your faculty
   d. your peers/cohort

Appendix D: Study Participant Information

VCU IRB PROTOCOL NUMBER: XXXXXX

STUDY TITLE: Assessing Graduate Student Needs and Structures of Support at Virginia Commonwealth University

VCU INVESTIGATOR: Dr. Jeffery Wilson, PhD, Capstone Chair

PURPOSE OF THIS STUDY: The purpose of this study is to explore the existing VCU institutional landscape and how current policies, programs, and resources support your needs and success as a graduate student. The aim of the study is to identify graduate student strengths, needs, and areas of opportunity for VCU to better support graduate students.

VOLUNTARY NATURE OF THIS STUDY: Taking part in this study is voluntary. You may choose not to take part or may withdraw your participation in this study at any time. Withdrawing from the study will not result in any penalty or loss of benefits to which you are entitled.

RISKS ASSOCIATED WITH THIS STUDY: Participation in this study presents minimal risks to participants. Emotional risks may be associated with participation in the focus group when sharing personal information in a group of your peers from across the institution. Participants will be asked to maintain confidentiality of what is shared during the interview sessions. Participants in focus group sessions may be invited to share information about their experiences and could be exposed to others' experiences which may be challenging or difficult. Each participant may decide what information they feel comfortable sharing, and may elect not to answer questions that are asked. Information about resources available to support students will be shared with all participants at the conclusion of the interview sessions.

RESEARCH PROCEDURES: As part of this study, you are being asked to participate in either a 1) recorded individual interview with a member of our study team either in-person or via Zoom about your perspective as a VCU employee in a role supporting graduate students, 2) recorded focus group interview with other VCU graduate students either in-person or via Zoom about your experience as a graduate student at Virginia Commonwealth University. In order to schedule the individual or focus group sessions, you will be asked to provide your name, email address, degree type (students), and school/college affiliation for your degree (students). As part of the individual and focus group interviews, we will also ask you to fill out a supplemental questionnaire with optional demographic information to help us better understand the unique characteristics of our study participants.

CONFIDENTIALITY: All data collected as part of this study such as interview transcripts and questionnaires will be stored on VCU secure networks, and are only accessible to individuals working on this study. All identifiable information will be maintained in an encrypted file maintained separately from the interview transcripts and questionnaires.

Results of this study may be presented at meetings or in publications. However, any identifiable personal information about participants will remain confidential and not be disclosed. If information disclosed through the study may lead to identification of a study participant (ie. the

participant is the only person in a graduate program), results will be further aggregated to maintain the confidentiality of participants (ie. results shared by institution or college/school vs. department or program level). Once data collection is complete, all identifiers will be removed from the information you provide in this study. In general, we will not share with the study participants any individual results from the study.

CONTACT FOR QUESTIONS: If you have any questions or concerns about this study now or in the future, please contact the Capstone Chair for this study, Dr. Jeffery Wilson, jlwilson4@vcu.edu.

Appendix E: Focus Group Participant Demographic Questionnaire

1. Age:
2. Degree Type
   a. M.S., M.A., M.Ed. or other Masters Degree Type
   b. PhD
   c. EdD
   d. Other:
3. Degree Program:
4. VCU School/College Affiliation
   a. College of Engineering
   b. College of Health Professions
   c. College of Humanities & Sciences
   d. School of the Arts
   e. School of Business
   f. School of Education
   g. School of Medicine
   h. Wilder School of Government & Public Affairs
   i. Other:
5. Date began degree:
6. Anticipated graduation date:
7. Status (part-time, full-time):
8. Gender Identity:
9. Racial/Ethnic Identity:
10. Funding/Financial Aid [select all that apply]
    a. Scholarship
    b. VCU Financial Aid
    c. Graduate Assistantship
    d. Fellowship
    e. Federal Loan
    f. Personal Loan
    g. Other:
    h. None
11. Household income:
12. Number of dependents:
13. Employment Status:
    a. Work full-time
    b. Work part-time
    c. Work in a Graduate Assistantship/Fellowship
    d. Not currently employed
    e. Other:

Appendix F: Individual Interview Recruitment Email

Dear _____,

      We hope you are well this semester. We (Kiama Bishop, Tameka Burroughs, Herb Hill, and Trisha Saunders) are doctoral candidates in Virginia Commonwealth University's Educational Leadership Program within the School of Education. We are contacting you because you have been identified as a VCU faculty or staff who has a role in ensuring graduate student success. We are inviting you to participate in research for our doctoral capstone study: "Assessing Graduate Student Needs and Structures of Support at Virginia Commonwealth University." The purpose of our study is to explore the existing institutional landscape and how current policies, programs, and resources at VCU support your needs and success as a graduate student. The aim of the study is to identify graduate student strengths, needs, and areas of opportunity for VCU to better support graduate students.

      As part of our study, we are conducting individual interviews with VCU faculty and staff who oversee programs designed to support graduate students. We will conduct these recorded sessions via zoom or in-person based on your level of comfort, availability, and proximity to VCU's campuses. If you are interested in participating, please fill out our interest form: https://forms.gle/GeogP6krkMencQS8A One of our team will follow-up with you. Your participation in this study is voluntary and can be withdrawn at any time.

This study is considered research and is covered under VCU IRB [IRB number]. Please take a moment to review our Research Participant Information.

      We know how busy you are and we value your time. We appreciate any support you can provide. If you have any questions about the study, please contact one of our team.

Sincerely,

Kiama Bishop, bishopka3@vcu.edu
Tameka Burroughs, burroughstf@vcu.edu
Herb Hill, hhill@vcu.edu
Trisha Saunders, trsaunders@vcu.edu
Capstone Chair, Dr. Jeffery Wilson, jlwilson4@vcu.edu

Appendix G: Individual Interview Informed Consent and Questions

Instructions: Before the start of the focus group interview session, please share the Study Information Sheet and Participant Questionnaire with each participant. Verify that each participant has read or had read to them the Study Information Sheet, and that they understand that 1) the session will be recorded, 2) they are participating voluntarily, 3) they can withdraw or stop their participation at any time, 4) all data associated with this study will be kept confidential. By continuing to participate in the interview session, participants are signifying their consent.

1. Describe the ways in which your role/department/program supports graduate students at VCU.
2. What frameworks/principles/theories/professional networks guide the work you do with graduate students at VCU?
3. What assumptions should administrators question about graduate student services as they currently exist? (Adapted from Kezar & Posselt, 2020)
4. What would you identify as the largest areas of need for graduate students?
5. In what ways does your program/department/VCU meet those needs?
6. With what other units/divisions/departments/ do you collaborate (either via formal or informal partnerships) in order to address those needs?
7. What specific policies or practices (within your unit or others) help or hinder graduate student success?
8. How have you embedded social justice and equity into your own practice? (Kezar & Posselt, 2020)
9. In what ways are students part of administrative considerations and practice? (Adapted from Kezar & Posselt, 2020)

Appendix H: Individual Interview Demographic Questionnaire

1. Division/Department/Role*
2. Length of time in role:
3. Number of years at VCU:
4. Gender Identity:
5. Racial/Ethnic Identity:
6. Degree:

*Any identifying information will be generalized or aggregated to maintain confidentiality, ie. reported as program coordinator or director vs. specific title.