



8-2021

ASSESSING GRADUATE STUDENT NEEDS AND RESPONSIVE INSTITUTION ASSETS: APPLICATION OF AN ASSET AND CAPACITY BUILDING HYBRID FRAMEWORK

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I am submitting herewith a dissertation written by Jessica D. Osborne entitled "ASSESSING GRADUATE STUDENT NEEDS AND RESPONSIVE INSTITUTION ASSETS: APPLICATION OF AN ASSET AND CAPACITY BUILDING HYBRID FRAMEWORK." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Educational Psychology and Research.

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**ASSESSING GRADUATE STUDENT NEEDS AND
RESPONSIVE INSTITUTION ASSETS:
APPLICATION OF AN ASSET AND CAPACITY BUILDING HYBRID FRAMEWORK**

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Jessica D. Osborne
August 2021

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ACKNOWLEDGEMENTS

Completing a doctoral degree takes a village, and I am incredibly lucky to be surrounded and supported by one of the best possible villages. Thank you to everyone at the University who supported me in this endeavor: Dr. Skolits and my committee members; Doug Renalds and the fantastic Academic Success Center Staff; all of my professors and colleagues in the department of Evaluation, Statistics, and Measurement; and the study participants for having the courage and commitment to give this study its voice.

Thank you to my family. I am so grateful to have been endlessly and unconditionally supported and loved by my parents and parents-in-law as well as by my friends. Thank you to my children for their understanding and for giving me a sense of motivation and purpose. Most importantly, thank you to my husband, Patrick, who has been my constant pillar of understanding, help, kindness, love, positivity, and humor. There is nothing in this world for which I am more grateful for than our partnership.

ABSTRACT

This study seeks to better understand the needs of graduate students at a large southeastern university through a qualitative needs assessment framed by Altschuld's (2015) asset / capacity building needs assessment model. Through graduate student focus groups and faculty, staff and administrator interviews, this study investigates the needs, successes, and assets of and for post-baccalaureate students within the university setting and context. Qualitative analysis procedures inductive thematic content analysis, primarily following an interpretivist paradigm (Fereday & Muir-Cochrane, 2006; Saldana, 2016). Findings illustrate the existence of both specific graduate student needs as well as assets to supplement these needs. Study analysis yielded thirteen primary themes, which were then categorized into Altschuld's (2015) asset / capacity building needs assessment framework of unmet needs, barriers, current assets, and future assets. Study findings evidence several key current assets currently supporting graduate student success, including graduate student support structures, research opportunities, and professional development opportunities. Unmet needs and barriers evidenced in the study included areas focused on communication, advising, mental health, and institutional structures. Future assets include building broader, deeper graduate student communities and emphasizing the importance of individual student identities. Recommendations to improve graduate student success evidenced from this study include the establishment of a centralized hub for graduate students, a review of institutional processes, and increased support and structures for advising and community development.

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CHAPTER ONE: INTRODUCTION

The goal of this study is to gain an understanding of the needs of a large southeastern university's post-baccalaureate student population and to determine how existing university assets can be leveraged to improve graduate student success. The study employs Altschuld's (2015) Needs Assessment and Asset / Capacity Building Hybrid Framework to investigate the needs, successes, and assets of and for post-baccalaureate students at a large, southeastern university. The following pages provide an overview of the study, study context, relevant literature, and study methods and methodology. Chapter One provides a brief overview of post-baccalaureate education and an initial study context, both of which are further developed in Chapter Two. Additionally, Chapter Two provides a thorough review of literature related to graduate student needs and successes as well as an overview of relevant research publications and methodologies pertinent to this study. Chapter Three provides all details related to study methods and methodology, including information regarding instruments, participants and recruitment, data collection and analysis, and qualitative trustworthiness. Key terms within this study include the following: needs; barriers; academic and professional success; assets; students; professors; and administrators. Table 1.1 in the Appendix E provides working definitions within this study for these key terms.

Graduate Student Education

Since inception, the primary mission of higher education has been to teach and guide each student to fulfill the individual promise that lies within, not just for the benefit of self but for the benefit of society (Golde & Walker, 2006; Walker et al., 2008). This charge is especially critical for institutions providing graduate and professional degrees, from which students set forth as highly specialized experts in their field with an aim to discover, understand, and share their skills with the world (Wells & Henry-Darwish, 2019). Within the last 30 years, access to higher education and graduate education has improved, equating to higher numbers of students as well as new and diverse challenges and barriers to

success (Wells & Henry-Darwish, 2019). Current complexities such as a national pandemic and significant issues in social justice likely leave graduate school practitioners and students struggling to meet needs and achieve success (Zahneis & Williams, 2020). Accordingly, the purpose of this study is to understand the needs of one specific target group of graduate students within a large southeastern university and to determine how existing university assets can be leveraged to improve graduate student success.

As of 2018, the most recent, available data, over three million graduate students were enrolled in programs consisting of certificates, master's or doctoral degrees (National Center for Education Statistics, 2020). Broad fields of study within this number include Engineering, Math and Computer Sciences, Physical and Earth Sciences, Business, Biological and Agricultural Sciences, Arts and Humanities, Social and Behavioral Sciences, Education, Health Sciences, and Public Administration and Service, with Business, Education, and Health Sciences comprising 45% of the first-time graduate enrollments (Okahana, Zhou, & Gao 2019). Additionally, 59% of first-time graduate students were women, and 80.2% were U.S. citizens and permanent residents. Enrollment by race/ethnicity equated to 0.5% American Indian / Alaska Native, 7.5% Asian, 11.8% Black / African American, 11.6% Latinx, 0.2% Native Hawaiian/Other Pacific Islander, 59.5% White, 3.1% Two or More Races, and 5.7% Race/Ethnicity Unknown (Okahana, Zhou, & Gao, 2019).

Institutions offering graduate studies can be found across the United States and are comprised of a wide diversity of institution type, degree, field, and learning delivery method. With more than 820,000 master's degrees conferred and over 184,000 doctoral degrees conferred as of the 17-18 academic year, the number and type of graduate student continues to grow (Hussar et al., 2020). Graduate schools include public, private for profit, and private nonprofit institutions with a range in numbers of students from the hundreds to the thousands (Hussar et al., 2020; Okahana, Zhou, & Gao, 2019). Graduate degrees are delivered online, in-person, and through hybrid methods, and offer a myriad of different degree specialties.

Definitions and rates of graduate student success vary nationally. In most instances, success is defined through quantitative measures such as retention, graduation, grade point average, and career placement (Bowen & Rudstein, 1992; Ferrer de Valero, 2001; Gabb, Milne & Cao, 2006). A small number of studies include student perspectives and perceptions defining success (Byers et al., 2014; Gardner & Holley, 2011; Golde, 1995); however, more research is needed to fully understand and define graduate student success. Similarly, measurements of quantitative success yield significant variation, with studies citing graduation rates anywhere between 30% to 70%, with an assumed average, national graduation rate of approximately 50% (Bowen & Rudenstine, 1992; Earl-Novell, 2006; Hussar et al., 2020; Lovitts & Nelson, 2000; Okahana, Zhou, & Gao, 2019). Again, additional research is needed to fully define and understand graduate student success in the United States.

Study Context: Institution Overview

The institution studied within this project is a Research-1, land-grant institution comprised of more than 30,000 students with 6,305 graduate students, 11 colleges with 547 graduate programs of study, over 1,500 full and instructional faculty, and a 1.7 billion dollar annual impact on the state (The University of Tennessee, Knoxville [UTK], 2021). Graduate education is distributed across 11 colleges: Agriculture; Architecture and Design; Arts and Sciences; Business; Communication and Information; Education, Health and Human Sciences; Engineering; Law; Nursing; Social Work; and Veterinary Medicine (UTK, 2021). Graduate / Professional student enrollment count for Fall 2020 totaled 6,305 students: 3,817 full time; 2,488 part time; 2,787 men and 3,518 women; 262 Hispanic; 10 American Indian; 148 Asian; 334 Black or African American; 4,594 White; 140 Two or more races; 94 Unknown; 723 resident alien (UTK, 2021). The institution, on the whole, is large and de-centralized, serving many diverse stakeholders. Additional in-depth study context is provided in chapter two.

Problem Statement and Study Purpose

Given the ever-changing and complex world today, it is increasingly difficult for institutions of higher education to provide for the varying and dynamic needs of a diverse range of graduate students. Students come from many backgrounds with different needs in all aspects related to success: academics, finances, health and wellness, social community, and many others. Additionally, each institution functions through a variety of structures with various forms and types of student support. This combination of variation in students, and in institutions and programs, leads to a complex and challenging experience for students who face many paths that may ultimately lead to success or failure (Wells & Darwish-Henry, 2019).

With an understanding of the current context and challenges, it is clear that institutions of graduate education have an important and difficult mission (Wells & Darwish-Henry, 2019). However, gaining a better understanding of current graduate student experiences, perceptions, and needs can help professors and administrators leverage existing assets to provide for student needs and increase student success. The purpose of this study is to determine and assess the specialized needs of graduate students at a large, southeastern university and to determine how established and future institutional assets can be leveraged and prioritized to improve graduate student success. Ideally, the culmination of this study will not only provide information on how this specific institution can leverage and prioritize current and future assets to improve graduate student success, but will also provide a roadmap for needs assessment and asset / capacity building studies that other institutions may use and emulate.

Study Delimitations, Limitations and Assumptions

All study aspects function under a few key assumptions, specifically that all admitted graduate students have the capacity to succeed, that a lack of graduate student success is not an indicator of student-related deficit, and that systemic cultural issues related to race, gender, and other identity factors play a role in graduate student success. While graduate student admittance at the study's

location is decentralized and varies across colleges, most programs admit a small, highly-qualified number of students, and admittance criteria remains high (UTK, 2021; UTK, 2021). Consequently, admitted students are assumed to have the capacity to succeed, and further, some level of student success responsibility is thus placed on the university, specifically to ensure the provision of student needs related to this success (McNair, Albertine, Cooper, & McDonald, 2016).

Further, a lack of student success does not necessarily indicate student deficit. One of the primary underlying principles of this study is the knowledge of the problematic nature of deficit thinking, defined as locating the source of failure within an individual instead of external systems (Patton & Museus, 2019; Valencia, 1997). This ideology is described in detail in the literature review below and functions as a primary lens through which graduate student needs and barriers to success are viewed. Again, this places the responsibility of success not solely on the student but also on the institution to provide for student needs and eliminate unnecessary barriers.

A final primary assumption within this study is that systemic cultural issues, such as racism, sexism, heterosexism, and many other cultural biases, can play a significant role in graduate student success. Many studies have illustrated the significant impact that cultural bias can have on student success (Haley, Jaeger, & Levin, 2014; Kelly, 2005; Mencha, 1997). This impact comes in the forms of access, support, and emotional and mental drain on the student. As with the assumptions above, it is the university's responsibility to eliminate systemic cultural issues within their systems and on campus, partly through a sustained effort and focus on diversity, equity, and inclusion. Broadly speaking, diversity is heterogeneousness in a global sense, including all types of internal and external identity markers and applying to all campus individuals – students, faculty, and staff (Smith, 2020). Equity means the elimination of unequal access through custom provisions that identify and address inequity (McNair, Bensimon, & Malcom-Piqueux, 2020; Smith, 2020). Finally, inclusion means providing equal access and acceptance for marginalized groups (McNair, Bensimon, & Malcom-Piqueux, 2020; Smith, 2020).

As with assumptions, there are several limitations within this study that are important to consider. Because this study examines the needs and successes of a specific, target participant population, generalizability of findings is not a key purpose (Given, 2008). While it may be possible to loosely extrapolate some findings to the broader post-baccalaureate student population, primary key findings will relate and be relevant to the target university and student population under study. However, it is the researcher's hope that the methods and methodologies employed in this study can be applied to other student populations and institutions, providing a guide or framework for similar schools to use to gain a better understanding of the needs and successes of their specific student populations.

An additional possible limitation within this study, particularly because of the current health context and pandemic within the United States, is yielding high sample sizes. The goal of this study is to provide findings applicable to graduate students at the institution on the whole (Creswell, 2014). Several steps are detailed in chapter three regarding efforts to recruit participants from all key graduate fields and programs within the institution. If these steps are not sufficient in producing participant numbers representative of the specific sub-populations, this will be noted in analysis and findings will not be applied to these groups.

While there are several relevant studies detailed in Chapter Two, this specific framework – described in detail in Chapters Two and Three – has yet to be applied to this specific context and purpose. While there are a small number of studies analyzing post-baccalaureate student needs, no studies use the specific framework and methodologies applied here (Baum & Steele, 2017; Byers, Smith, Hwang, Angrove, Chandler, & Kelsey, 2014; Gardner & Holly, 2011; Lovitts, 2000). While this can be a limitation, it is also the researcher's hope that this approach will yield deep, rich findings related to the study purpose.

The researcher's background can also pose a possible study limitation in terms of cultural and situational bias. Steps to address these possibilities are detailed in Chapter Two and include work prior

to data collection and analysis as well as post-analysis to ensure researcher bias does not impact study findings (DeMeyer, 2018; Ben-Ari & Enosh, 2011, Maxwell, 2013). While this study has a small number of both method limitations and researcher limitations, each possible delamination has been considered and steps to alleviate the impact of these limitations have been taken.

Conclusion

The following pages provided an overview of the study's purpose, overarching post-baccalaureate student context as well as a brief introduction to the institution context. Key terms and study delimitations were also discussed. The following chapters provide an in-depth literature review of post-baccalaureate student success and needs as well as detailed information regarding relevant studies and research related both to the study context and the study methods and methodology.

CHAPTER TWO: LITERATURE REVIEW

The following pages provide an overview of relevant literature in two main categories: higher education student needs and successes and relevant research studies and methodological references related to the study's specific methods and procedures. Information related to higher education focuses primarily on post-baccalaureate student studies, with a brief overview of undergraduate student success as a closely related context. Information related to relevant, similar studies focuses on graduate student success and needs, providing a historical overview of the field and then focusing on a few key studies most closely related to the current study context and purpose. Additionally, this category also focuses on similar studies employing qualitative methods and methodologies and specifically provides information on any studies focusing on post-baccalaureate student needs. Finally, attention in this chapter is also paid to relevant contexts, including the specific study context and the broader student success context, particularly as it relates to current socio-economic and political contexts.

This literature review was conducted through a multi-step process as defined below. First, the researcher began by looking for and identifying key terms within the subject, focusing on defining the population, identifying previous study techniques for this population, and looking for relevant markers of research and student success. From this point, sources were evaluated and themes, subtopics, debate points, and gaps in the literature were identified. Then all sources were reviewed holistically to synthesize primary findings and outline the main components of the literature review, detailed below.

The majority of this literature review will focus on understanding needs of post-baccalaureate students as well as an understanding of the research underlying the theoretical and methodological framework of this study. However, prior to this, it is important for readers to have a basic understanding of undergraduate student success, as this is the precursor to achieving graduate student access and success.

Undergraduate Student Success: The Traditional Student Needs Focus

Within the last 50 years, access to higher education has increased, particularly through improved funding sources, and the ways in which success is measured have shifted (United States Department of Education [USDOE], 2020). Previous to this, funding was tied primarily to enrollment metrics; however, state and federal funding has continued to shift more toward measures of attainment, particularly through retention and graduation rates (USDOE, 2020). The confluence of these characteristics led many institutions of higher education to focus on academic success and academic support. Subsequently, many studies have attempted to gain a better understanding of the levers to success, with analysis ranging from quantitative, statistical analysis of variable predictors to success to theoretical underpinnings of student engagement and relationship building (Anderson, 2014; Arendale, 2004; Beal, 1980; Chism & Banta, 2007; Dansereau, 1985; Grillo & Leist, 2014; Ryan & Glen, 2004; Tinto, 2004; Wells & Henry-Darwish, 2019; Zhao & Kuh, 2004).

This current literature overall indicates a shift in focus from student pre-entrance characteristics to focus on institutional capacities in terms of meeting student needs (Duckworth, 2016; Dweck, 2006; Pink, 2011). Additionally, current standards and guidelines for undergraduate student success include a focus on the following success levers: programs and services; student learning and development; assessment; and access, equity, diversity, and inclusion (Wells & Henry-Darwish, 2019). Many of these same features can be found as relevant to and impactful for graduate student success. The below paragraphs provide a review of literature first on current graduate student needs and success as well as an historical overview of Altschuld's (2015) Needs Assessment Asset / Capacity Building Hybrid Framework, the primary theory supporting this study.

Graduate Student Needs

Graduate students in the United States today also have many needs and face many barriers to success (Lovitts, 2000). The Council for Academic Standards categorizes emergent needs for these

students into four primary categories: structure / organization / attitudinal; recruitment / retention / enrollment management; transition / personal development / engagement; and professional and career development (Wells & Henry-Darwish, 2019). Each of these categories represent both potential needs and potential assets for the graduate student community.

Broadly defined, graduate student needs fall into four categories: recruitment; culture; engagement; and career (Wells & Henry-Darwish, 2019). Recruitment needs focus on issues of diversity, funding, student prior institutional knowledge, and financial support (Haley, Jaeger, & Levine, 2014). Cultural components include the institution's structure, organization, and attitudes, academic policies and support, and the broader socio-political context within which the institution is situated (Cain, Marrara, Pietre, & Armour, 2003; Craddock, Birnbaum, Rodriguez, Cobb, & Zeeh, 2011; Gardner & Barnes, 2007; Guentzel & Elkins, 2006; Haley, Jaeger, & Levin, 2014). Engagement needs include transitional support, personal development, research support, mental and physical health, professional community involvement, and academic support and interaction with peers and professional colleagues (Hyun, Quinn, Madon, & Lustin, 2006; Tokuno, 2008). Career needs include appropriate introduction and emersion into the field or profession, education and understanding of ethical values, and clear pathways to student career goal attainment (Allum, Kent & McCarthy, 2014; Denecke, Feaster & Stone, 2017; Okahana, Zhou, & Gao 2012; Wells & Henry-Darwish, 2019).

While some current literature identifies diversity components within recruitment, newer studies indicate the importance of a focus on diversity, equity, and inclusion within all aspects of graduate student needs, from recruitment through career (Haley, Jaeger, & Levin, 2014; Kelly, 2005; Mencha, 1997). Given the assumptions and focus of this study, this is an important need to consider and keep at the forefront of all research activities. Additionally, while graduate student needs can be generally categorized as above, it is also important to remember that students are individual and their needs vary

tremendously based on many factors. The qualitative design of this study is intended to capture these varying needs.

Graduate Student Success

Theories and attitudes on student success and the possible predictors and factors in achieving success are important to consider as well. The following pages provide an overview of current research and findings related to graduate student success.

As early as the 1960's, educational researchers considered and studied factors related to undergraduate and graduate success and whether these factors existed primarily within the student or within the institution, and many of these studies still stand as the bedrock of current literature (Berleson, 1960; Tinto, 2004; Bowen & Rudenstein, 1992; Berg & Ferber, 1983). Early research focused on student factors such as demographic and biographic qualities, high school success, and entrance examination scores as primary indicators and rationales for success (Abedi & Benkin, 1987; Berg & Ferber, 1983; Tuckman, et al., 1990; Zwick, 1991). However, more recent findings have shown a much higher importance on institutional characteristics such as fit and connectedness, advisor and faculty support, financial support, and other similar components (Bowen & Rudenstine, 1992; Girves & Wemmerus, 1988; Golde, 1995; Golde & Walker, 2006; Herzig, 2002; Monsour & Corman, 1991; Nerad & Cerny, 1993). Finally, the vast majority of studies have focused on quantitative methods, with few studies implementing exploratory, qualitative methods to gain a better understanding of institutional contexts and how this impacts student success (Ferrer de Valero, 2001; Okahana, Zhou & Gao, 2018; National Center for Education Statistics, 2020).

While the current research on post-baccalaureate student success is limited, there are a few studies that stand out as exemplars, and these studies are helpful to review to gain a better understanding of the current context for graduate student success as well as to guide methods for this study. Stevenson (2013) conducted a review of graduate student success with focus on gaining a better

understanding of the gender gap between males and females. This study highlighted that while there are increasing numbers of women in post-baccalaureate programs, on average they are attending lower-quality, lower-ranked programs, which directly impacts future earnings (Stevenson, 2013). This study, which utilized IPEDS data for analysis and findings, is very helpful to understanding current gender and attainment contexts within current post-baccalaureate programs.

Along these same lines, Baum and Steele (2017) reviewed several key data sources, including the U.S Census Bureau and NCES studies, to identify important demographic and biographic themes within graduate students. This study highlighted disparities in post-baccalaureate attainment related both to race/ethnicity and family income, with primary illustrations that students with incomes in the lower quartiles are less likely to attend graduate school upon completion of a bachelor degree (Baum & Steele, 2017). Further, these students are also less likely to complete their degree, with students receiving Pell grants earning an average completion rate of 58% as compared to 66% for students who did not receive Pell grants (Baum & Steele, 2017).

Another key graduate student group to consider when understanding needs and successes for post-baccalaureate students are first-generation students, broadly defined as college-going students whose parents or guardians did not attain a baccalaureate degree (Choy, 2001; Pascarella, Pierson, Wolniak, & Terenzini, 2004). Gardner and Holley (2011) conducted a qualitative study of 20 first-generation graduate students, via semi-structured interviews and utilizing a social capital conceptual framework, to better understand the structures and processes that act as barriers to success for this specific population. Key findings from this study include the following themes: breaking the chain; knowing the rules; living in two worlds; and seeking support (Gardner & Holly, 2011). Essentially, these findings indicate that while first-generation students feel pride and motivation from their status as *first* (breaking the chains), this status also comes with real barriers that can limit success (knowing the rules and living in two worlds), and that seeking and attaining support from both internal and external groups

is critical to success. Given the relative size of this sub-population of graduate students, with one-third of post-baccalaureate students identifying as first-generation (Hoffer et al., 2003), understanding the findings from this study is critical to gaining a better understanding of the overall graduate student success content.

Finally, Byers and colleagues (2014) conducted a study providing a holistic overview of doctoral student perceptions and challenges to success, including student coping methods for said challenges. This study utilized a critical dialectic pluralistic philosophical lens to conduct semi-structured interviews of doctoral students to better understand their perceptions about challenges and coping strategies for success (Byers, Smith, Hwang, Angrove, Chandler, & Kelsey, 2014). Key findings from this study “highlight common experiences of doctoral students, identifying the ways in which doctoral students might be encouraged to persist to degree attainment,” and include themes such as general working processes, domain-specific expertise, supervision and the scholarly community, and resources (Byers, et al., 2014, pg. 125). These findings are critical to understanding the current context surrounding post-baccalaureate needs and successes and are also helpful to this study in supporting decisions related to methods and methodology, further detailed below.

A thorough review of these studies shows that while there has been some work done in understanding graduate student needs and successes, much is still left to explore, particularly from the qualitative needs assessment and capacity-building arena. In fact, most of the current studies trend toward findings that indicate post-baccalaureate student success has at least as much to do with institutional factors as it does with individual student factors. Additionally, while the debate on locus of control within graduate student success is ongoing, the current socio-political backdrop, which includes significant barriers to equality and social justice for marginalized populations, accentuates the importance for graduate education professionals to focus on those elements which are in their control,

namely, institutional characteristics that may be impeding graduate student success as well as institutional assets and capacities that can be leveraged to improve success.

Also important to consider within this discussion is the trend away from a deficit-centered student success ideology and toward a strengths-based framework. Deficit-thinking can be broadly defined as locating the source of failure within an individual instead of recognizing the hegemonic systems that account for many systemic barriers to success (Patton & Museus, 2019). Perez and colleagues (2017) highlight the importance of shifting from the mindset of ‘fixing students’ and instead toward focus on how institutions, and the faculty and staff within, can improve policies, systems, practices, and cultures to increase student success. Current work in this field highlights the importance of examining the relationship between instructional factors and individual attitudes toward student success and the possible subsequent impact these elements have on students, and a brief overview of research on this topic is provided below.

It is important to gain a basic understanding of the roots of deficit thinking within early racist discourse. Menchaca (1997) illustrates how racist discourse influenced academic practices and procedures to the detriment of minority and under-represented populations. Going all the way back to the English Pilgrims of North America, Menchaca illustrates how racial beliefs came to America and have continued to impact culture. Further, Valencia (1997) provides an overview of how current theory and practice express deficit thinking, leading up to today’s construct of the ‘at-risk’ student (Larose & Tarabulsky, 2014). Pairing this with studies on post-baccalaureate attainment within marginalized populations provides researchers and practitioners with a better understanding of how hegemonic systems and socio-economic and racist structures can impact student success.

However, current research also shows that there is much that academia can do to positively influence success, as is evident in Renbarger and Beaujean’s (2020) meta-analysis of the positive impacts of graduate school enrollment from the Ronald E. McNair Post-Baccalaureate Program. With so much

emphasis in academia now placed on quantitative measures and predictors of student success, it is critical for researchers and practitioners to understand both how deficit thinking can impact students and how qualitative studies can highlight needs and capacity to improve success. Current literature provides a foundation for these studies, but there is much work still to be done.

Needs Assessment: The Asset / Capacity Building Hybrid Framework & Previous Post-Baccalaureate Research

The use of a hybrid needs assessment and asset-based approach in research started in the late 1990's to early 2000's and has become increasingly common over the last two decades (Altschuld, 2015). The origin of this framework lies within both needs assessment work, which began in the 1960's with an increase in activity in the 1970's and 1980's along with the development of asset / capacity building and empowerment evaluation (Altschuld, 2015). Much of the hybrid framework can be attributed to the extended debate between these two camps, in which needs assessment proponents such as Kamis (1979) and Whitkin (1984) argued for systematic assessment of participant needs while researchers such as Weintraub (1989) and Kretzman and McKnight (1993) rebelled against the needs assessment linkage to positivism and quantification, arguing instead for a focus on humanistic dimensions and development of asset, capacity, and participant and community strengths (Altschuld, 2015). While initial debates were heated with the two camps decisively on one side or the other, from this continued dialogue arose the possibility of a hybrid framework comprised of a synthesis of needs assessment and asset / capacity building processes, spearheaded primarily by Altschuld and colleagues. This framework combines the identification of discrepancies between *what is* and *what should be* – needs assessment – along with the identification of potential assets and strengths for the positive improvement of the group or community (Altschuld, 2015).

The recent prevalence of needs assessment arose primarily from a perceived dearth of educational focus on this area in evaluation education, research, and practice (Altschuld & Kumar,

2010). Accordingly, now needs assessments are prevalent in many fields, including education, health, youth sports and recreation, and many other social contexts (Altschuld, 2015; Gupta, Sleezer, & Russ-Eft, 2007). Interestingly, the field of needs assessment grew in tandem with focus on methods of evaluation and research focused on more positive, strengths-based ideologies (Creswell, 2014; Creswell & Plano Clark, 2011). Altschuld's Needs Assessment and Asset / Capacity Building Hybrid Framework is a direct result of this history (Altschuld, 2015).

Altschuld's (2015) model provides a bridge between needs and strengths, from deficit-thinking to an emphasis on possibilities. The framework consists of eight steps through which a researcher or evaluator can assess both needs and strengths, providing a platform both for understanding current contextual complexities as well as an understanding of how individual and institutional attributes can be leveraged for success. Cases from other fields of studies utilizing this model illustrate the effectiveness in assessing both needs and strengths as a method to improving participant outcomes (Hausman, Siddons, & Becker, 2000; CADISPA Trust, 2013). Additional discussion of the functionality of this framework is provided in the method and methodology section.

Several recent studies have used Altschuld's (2015) model to assess needs and capacity, primarily within the fields of public health and community development (Balogh, Whitelaw, & Thompson, 2008; Williams, Bray, Shapiro-Mendoze, Reisz, & Peranteau, 2009; Pepall, Earnest, & James, 2006;). In particular, the current study draws from this previous research for methods of efficient gathering of community input and perspectives, through focus groups and interviews, with limited financial, personnel, and time resources. Additionally, previous studies focused on needs assessment and usage of asset inventories also provide a foundation for this study, again with several studies located primarily in community development and health sciences (Grim, Poole, Poole, & Zeakes, 2011; Mirzoev, et al., 2014; & Mahat et al., 2013). These studies provide examples of possible themes within

stakeholder needs and community capacity (Grim, Poole, Pool, & Zeaks, 2011), as well as examples of effective data collection and analysis methods.

In particular, Mirzoev and colleagues (2014) provide an example of a capacity building study located within a post-baccalaureate educational setting using semi-structured interviews for data collection. Similarly, Byers and colleagues (2014) provide a framework for semi-structured interviews to gather and understand doctoral student perceptions of challenges to success. Additionally, Tuononen, Parpala, and Lindblom-Ylänne (2019) also provides insights into over-arching academic competencies and how these can influence student success. Finally, Mahat and colleagues (2013) assessed graduate public health education student challenges and provided recommendations to address these challenges through a qualitative study using interviews with primary stakeholders and qualitative content analysis. These studies provide a foundation both for the use of the Hybrid Framework model as well as an illustration of how needs assessment and capacity building can provide insight and suggestions to improving graduate student success, including relevant details and strategies for structuring interview and focus group protocols and questions, participant recruitment, data analysis, and even possible ideas for implementing results based on study findings.

Study Context

Given the exploratory and interpretive nature of this study, a basic understanding of the study context is important. As indicated previously, the study will be located at a Research-1, Land-grant institution home to more than 7,000 post-baccalaureate students. The institution provides both undergraduate and graduate studies and generally functions through a de-centralized administrative system where individual colleges and programs have high levels of control and decision-making capabilities. This level of control, however, is tied directly to internal and external funding; colleges and programs with large endowments and grants are able to achieve higher levels of control and decision making. Additionally, the programs represented within the graduate school are comprised of a wide

variety of program type, ranging from liberal arts to hard science, with everything in between. Finally, there is a wide range of levels of student access paired with a less-wide range of levels of student diversity. These factors all possibly can equate to very different graduate student experiences, hinging on factors related to individual students, program focus and funding, and overall institutional contexts. Given an understanding of the wide variations in student experiences, it is important to qualitatively study student, faculty, and staff perceptions to hopefully gain a better understanding of the big picture of graduate student success at this institution.

The institution houses more than 90 graduate programs, located in the following fields of study: Architecture and Design; Arts and Sciences; Communication and Information; Education, Health and Human Services; Business; Agriculture; Intercollegiate; Law; Nursing; Social Work; Engineering; and Veterinary Medicine (UTK, 2021). Within these programs, the last academic year of 2020-2021 houses more than 1,600 master's students and over 600 doctoral students. Degree conferment has risen slightly over the last decade, with master's level degree conferment increasing slightly from 1,515 in 2011 to 1,612 in 2020 and doctoral level degree conferment increasing from 481 in 2011 to 620 in 2020 (UTK, 2021).

Most services for graduate students at this institution are de-centralized and spread across both undergraduate and graduate administration. The institution provides one centralized office supporting graduate students, which assists with recruitment, advising, policy support, record evaluation, and oversight of the graduate student catalog; however, many of these services are additionally provided through specific programmatic and college-level administration. Additionally, several services provided primarily for undergraduate students also provide resources for graduate students, including career development, student disability services, university libraries, and teaching and learning support. Standard university services such as mental and physical health and wellness are provided for post-baccalaureate students attending full-time. While undergraduate students are served by a centralized

academic success division and office, graduate student academic support is provided primarily through individual program offerings. Research and scholarly support are provided through an Internal Review Board, which offers some programming to assist researcher ethics and protocols, as well as through an information technology office, which provides software research support and technical support. As is evident, while there are several support offices and functions provided for graduate students, many of these services are decentralized, splitting focus between undergraduates and graduates, and are provided at varying levels among different programs and departments.

Theoretical Framework

This study will employ Altschuld's (2015) Asset/Capacity Building Needs Assessment Hybrid Framework. This framework merges the efficiency of needs assessment – identifying conditions of *what should be* versus *what is* – with the asset/capacity building potential to enact change and growth in accordance with an organization's strengths and assets (Altschuld, 2015, pg. 25). The Needs Assessment and Asset / Capacity Building (NA A/CB) Framework consists of 8 steps, detailed in Table 2.1. in Appendix E. The context and nature of this study allows for completion of steps 1-7, with the first steps completed within the proposal timeline and with findings and recommendations provided to relevant stakeholders to complete final steps in the process at their discretion.

Literature Summary

Previous pages illustrate both the current limitations in graduate student needs and success research as well as the possibilities inherent in needs assessment capacity and asset building frameworks. While decades have been spent researching graduate education and graduate student success, there is still much to be learned, particularly in how individual institutions can better learn about and understand their specific student populations and student needs. Additionally, new emphasis on strengths-based ontologies, highlighting the problematic nature of deficit-thinking, provides an opportune platform for this study. This, coupled with the current socio-political climate and ever-

increasing importance of the production of successful graduates, will inform the nature, structure, and success of this study. Additional details about this study are provided in the sections below.

CHAPTER THREE: METHODS AND METHODOLOGY

This was a qualitative study utilizing semi-structured focus group and interview protocols to conduct an Asset/Capacity Building Needs Assessments based on Altschuld's (2015) Hybrid method. The following pages provide an overview of the study methods and methodology. Included in this discussion is an overview of the theoretical framework: Altschuld's (2015) Asset/Capacity Building Needs Assessment Hybrid Framework. Content related to qualitative methods and methodology, including research questions, participant and recruitment information, timelines, data collection and data analysis, and researcher positionality and qualitative trustworthiness, is also included. Additionally, this chapter again reviews key study definitions and provides several tables highlighting specific steps within each area of the study. Study instruments and protocols are referenced in this chapter and provided in the appendix.

Research Questions

The below research questions and definitions were used to guide this study and to evaluate findings. These questions were developed to focus findings on the key terms and components of this study, based on the literature review of the study population as well as the theoretical framework with a key emphasis on identifying needs, barriers, and resources for graduate student success. Broadly speaking, graduate student success is defined as the achievement of standard success markers, such as persistence, grade point average, graduation, and career placement. However, this study also emphasizes the individual student and so success is also measured on the individual level, based on student achievement of specific goals within the student's life, field, or generalized studies. Finally, the questions were constructed based on Altschuld's (2015) framework that separates strengths and needs to better identify and assess each one individually, illustrated in Table 3.1. in Appendix E.

Researcher Positionality

As a practitioner, researcher, and student in higher education, my positionality in relationship to this study is important to explore. The following paragraphs provide an overview of my educational experience and attainment, as well as my professional career in higher education and current status as a graduate student, with an aim to explore my assumptions about and relationship to higher education and any other primary subjects within this study. Along with this current exploration, the study data-gathering and analysis plans include steps for reflexive qualitative journaling to routinely review and consider positionality and increase reflexivity (DeMeyer, 2018; Ben-Ari & Enosh, 2011, Maxwell, 2013).

My educational experiences and attainment include a bachelor's degree in English from a small, private institution in the southeast, a Master's of Fine Arts in Creative Writing from a mid-sized university in the southeast, and my current work as a doctoral student at a large, research-focused institution. These experiences included learning and studies in liberal arts and social sciences, with a foundational belief in the importance of higher education for the betterment of the self and the society. Underlying this belief is the assumption that institutions of higher education have a critical purpose to achieve, and that this purpose should be achieved with a primary focus on leveraging assets to improve student attainment, an ideology that relates directly to this research.

Additionally, my experience working as an educator and administrator in higher education is important to consider when reviewing researcher positionality. The bulk of my work has been focused on student academic success, and while this study will have connections to academic needs and assets, this professional focus must not limit the review of needs and strengths in totality of graduate student experience, including financial, health and wellness, and social needs and strengths. Throughout the journaling process, assumptions garnered through my work in higher education, focused on academic success, will be an important consideration.

Finally, my identity as a white woman born, raised, and living in the southeast United States is an important factor to consider for this study. The disparity in the provision of needs and access for underrepresented populations seeking higher education has been illustrated time and again (The National Center for Education Statistics, 2020; Hazelrigg, 2020; Bensimon, 2005; Kelly 2005). These experiences have become even more problematic with significant issues in racial justice and equality at the national, state, and local level as well as the impacts of the national pandemic. The lived experiences of underrepresented minorities must be heard and validated, and as a researcher it is critical that I continually assess my own biases and how these could potentially impact research practices. The steps for data gathering and analysis listed below provide insight as to how positionality will be structurally considered as well as how reflexivity will be continually utilized and enhanced to improve the findings and impact of this study.

Study Participants and Recruitment

Participants in this study fall into three groups: graduate students, professors, and administrators. Each participate group is described in detail in the table below. Each participate group plays a vital role in providing necessary information to determine and assess graduate student needs and barriers as well as how to identify assets to improve capacity and student success. Note that if an individual functions in multiple roles within the University, the participant was placed in the group that functions as the individual's primary role, based on the percentage of time spent in each role. For example, a full-time graduate student who has a part time teaching role was placed in the student group. Additionally, a full-time staff member who works with graduate students and is a part-time student was placed in the administrator group.

Participants were recruited via IRB approved e-mail communication as well as social media posts and Zoom chat and waiting room announcements, following ethical guidelines in qualitative research as

well as IRB standards (Bernard, 2002; Creswell, 2014; Given, 2008; Henry, 1990; Maxwell, 2013; Opong, 2013). Additional details regarding participant recruitment are provided in Table 3.2. in Appendix E.

Instruments

Three instruments were used in this study: a graduate student focus group protocol; a professor and administrator interview protocol; and a professor and administrator written response protocol. Graduate student needs were assessed in this study through qualitative methods including focus groups and interviews structured within the Asset / Capacity Building Framework (Altschuld, 2015) for students, faculty and administrators. Each instrument is described in detail below. Each instrument was pilot-tested by key stakeholders familiar with the study and the larger post-baccalaureate context and who were not possible participants of the study. Initial protocol instruments were revised based on pilot-test feedback.

A semi-structured focus group protocol (Appendix A) was used to collect information regarding graduate student perceptions and experiences of needs, barriers, and potential capacity for improvement. Guiding questions for focus group discussions were developed and refined through ongoing review of current literature and through discussion with stakeholders, including institution graduate school administrators. Focus groups were conducted via Zoom technology and were recorded and transcribed for analysis. Sixteen focus groups were conducted, and all focus group participants were placed within the student participant group of this study. Standard IRB protocols minimizing researcher power and influence, minimizing participant risk, and protecting participant identifying information will be used to ensure participant comfort, safety, and value to participation.

Similarly, a semi-structured interview protocol (Appendix B) was used to collect information regarding professor and administrator perceptions and experiences of needs, barriers and potential capacity for improvement. This method of single-participant study rather than a focus group was employed for professors and administrators due to the potential heightened level of risk related to

employment to ensure participants privacy and comfort in responding to the protocols. Twelve interviews were conducted, with participants placed in the staff / administrator of faculty participant group. Guiding interview questions were developed through review of current relevant literature and through discussions with institution stakeholders, including graduate school administrators. Interviews were conducted online via Zoom. Online written response procedures, to account for varying availability and time constraints of participants, were developed but ultimately not needed. Standard IRB protocols minimizing researcher power and influence, minimizing participant risk, and protecting participant identifying information were used to ensure participant comfort, safety, and value to participation.

Study Procedures and Timelines

Participant sampling was achieved through a combination of convenience sampling and purposive sampling (Battaglia, 2008; Patton, 2002; Creswell & Clark 2011; Given, 2008; Zhi, 2014). Student focus group sampling was achieved primarily through convenience sampling, with efforts to include proportional representation from all colleges represented in the graduate school. Faculty and staff interviews used purposive sampling, with efforts to include proportional representation from all colleges as well as proportional representation from faculty, staff, and leadership and between PhD and Master's level students.

Participant recruitment was conducted primarily through online communication tools, including e-mail invitations via program staff and listservs, social media postings, zoom waiting room and chat posts, and website postings. To achieve this, administrators were sent e-mail communications containing student invitations to focus groups as well as digital flyers to email to students, post to social media, or for professors to include in their classroom Zoom chats or waiting rooms. These communications included an invitation to focus groups or interviews, depending on the participant population, as well as a flyer with additional details. Additionally, hard-copy fliers were placed in any areas where graduate students, faculty, and staff may be likely to congregate, particularly in the

graduate student lounge located in Hodges Library. See Appendix D for sample recruitment e-mails for all participants.

Once IRB approval was obtained, the researcher made contact via e-mail with key stakeholders to distribute recruitment documents and invitations. Key stakeholders include graduate school administrative staff for each department, such as deans, coordinators, and department heads, graduate school faculty members, and key graduate student groups, such as the Graduate Student Senate. Departmental listserv and graduate school listserv were also used to distribute recruitment documents and invitations as available. In instances where a key stakeholder has access to several methods of communication, such as e-mails and social media, the initial outreach communication will include all resources and requests sent by the researcher. Focus groups and interviews took place over a two-month span, and timing and recruitment details during this timeline are provided in the table below. Participant totals for the study were met based on the following criteria: analysis of saturation of knowledge; attainment of an appropriate percentage of participant populations; and feasibility (Patton, 2002; Seidman 2006). Analysis of saturation of knowledge evaluated the level of repeated versus new response content within both focus groups and interviews. Saturation of knowledge was met when continuing data collection did not yield new information (Bernard, 2002; Creswell, 2014; Given, 2008; Henry, 1990; Maxwell, 2013; Oppong, 2013). The initial goal was to obtain population percentages of at least 3% of the total population per college; however, feasibility of participant recruitment during a national pandemic as well as researcher time and availability were considered, along with knowledge saturation, to discontinue data collection (Patton, 2002). Additionally, a yield of rich, qualitative data was the primary objective to be met in data collection, which was obtained with over 15 hours of transcription data (Bernard, 2002; Creswell, 2014; Given, 2008; Henry, 1990; Maxwell, 2013; Oppong, 2013; Palinkas, Green, Wisdom, & Hoagwood, 2013). Table 3.3. in Appendix E provides an overview of recruit methods and timelines.

Analysis

Because this study employed an emergent and exploratory design focused on a strengths-based approach to assessing needs, data collected from this study was analyzed through inductive thematic content analysis, primarily following an interpretivist paradigm (Fereday & Muir-Cochrane, 2006; Saldana, 2016), and Altschuld's (2015) NA A/CB Hybrid Framework. Following the emergent and exploratory nature of this study, data collection and analysis occurred concurrently (Tobin & Begley, 2004). Prior to interviews and focus groups, the researcher utilized reflexive journaling techniques to continually assess positionality and potential researcher bias (Maxwell, 2013). During the interview and focus group process, the researcher took notes of participant comments, highlighting possible emergent themes based on data-driven codes (Fereday, 2006). Protocol questions were constructed to match research questions as detailed in Table 3.4. in Appendix E.

Interviews and focus groups were recorded, and the second step of data analysis occurred immediately following transcription, when the researcher used classical content analysis to determine appropriate codes for participant statements and developed a code manual with labels, definitions, and descriptions for each code to guide additional analysis (Mayring, 2014). This process involved the identification of primary themes, developed into codes, based on participant responses. Where appropriate, codes were clustered to study research questions for thematic analysis (Fereday & Muir-Cochrane, 2006). Coding was done through MS Word.

Once all data was transcribed and an initial review for codes was conducted, the researcher began a holistic overview of content with an aim to discover and develop recurrent, emergent themes within the data, with initial separate analysis for needs followed by analysis for assessment (Altschuld, 2015; Creswell, 2014; Saldana, 2016). Analysis at this step occurred in multiple rounds as is detailed in the table below, with separation of analysis of needs and strengths based on the NA A/CB model

detailed above. Stages of analysis for coding and thematic development are overviewed in Table 3.5. in Appendix E.

Trustworthiness

As illustrated in the table above, several steps were taken throughout the analysis process to establish qualitative validity, accuracy of the findings, reliability, and consistency across analysis (Creswell, 2014). First, during analysis and following the NA A/CB Hybrid Framework, intra-rater reliability was used by establishing a two-week time gap between initial and second rounds of thematic coding (Altschuld 2015; Saldana, 2016). Next, this study employed inter-rater reliability to confirm accuracy of coding, with an unbiased third party experienced in qualitative research at the professional level who is not connected to the study reviewing the researcher's coding (Given, 2008). Triangulation of findings between participant groups as well as a comparison of findings to current literature also occurred in the final phases of analysis to check for accuracy and authenticity of findings (Creswell, 2011; Mackay & Gass, 2005; Mayring, 2014). Additionally, the researcher conducted member checking by distilling preliminary findings into brief summaries to be reviewed by interview participants via e-mailed summaries and discussion follow up if requested by the participant (Creswell, 2014). Researcher positionality and subjectivity were addressed through researcher qualitative journaling and subjective inquiry (Maxwell, 2013). Due to the exploratory and context-specific nature of this study, the findings themselves do possess transferability. However, it is the researcher's hope that the study process itself is transferable, and this will be ascertained through external audit of both study methods and methodology as the study timeline allows (Creswell, 2011).

Conclusion

The previous pages, chapters one through three, provide in-depth information regarding all components of this study. Chapter one provides an introduction and overview of the study, its context

and purpose, and over-arching definitions. Chapter two provides a review of all relevant literature, including information regarding undergraduate and graduate student needs and success, qualitative methods and methodology related to this study, Altschuld's (2015) framework, and a discussion of over-arching study contexts. Finally, chapter three provides details on study methods and methodologies with attention paid to all components of the study process as well as qualitative trustworthiness and researcher positionality. Following chapters provide a review of findings and recommendations.

CHAPTER FOUR: FINDINGS

The following chapter provides a brief review of analysis process and procedures, including details within the analysis steps and stages, and then provides in-depth information regarding study findings. Findings are organized by providing a brief overview of the primary emergent themes from the data alongside research questions and subsequent answers (Creswell, 2014; Fereday & Muir-Cochrane, 2006; Given, 2008; Maxwell, 2013; Miles & Huberman, 1993; Potter, 1999; Saldana, 2016). Following this section, the theme descriptions will be further discussed along with examples from the data. Because this study follows Altschuld's (2015) Asset Capacity Building Needs Assessment model, following the overview of themes will be a summary of findings as relates to Altschuld's model: needs, barriers, current assets, and future assets (Altschuld, 2015). This chapter will conclude with research questions answered in light of needs and assets as well as a summary of findings.

Analysis and Procedures

Participant recruitment yielded 40 focus group participants, spread across sixteen focus group sessions. Participants represented all institution colleges, excluding the colleges of social work, architecture and design, and agriculture. Participants also represented a mixture of doctoral and masters level students, with 35% of participants seeking a master's level degree and 65% of participants seeking a doctoral degree. Additionally, twelve interviews were conducted with representation from institution departments as well as from administration and offices that work directly with graduate students. Similarly, interview participants represented a mixture of faculty and administrators, with 50% of participants representing faculty positions and 50% of participants representing administrative or staff positions.

Following the procedures outlined in chapter three, analysis of data began with emergent code development and the establishment of research question clusters associated with emergent themes. This was accomplished using MS Word highlighting recurrent, emerging themes, subsequently organized

in an excel document that provided referential quotations from the data as well as connections to other emergent themes. Inter-rater reliability was satisfied through an external review of codes by a colleague qualitative researcher with experience in qualitative data analysis and emergent thematic coding. A random sampling of qualitative data, determined through online random generation, roughly equaling 10% of the total dataset, was provided for the secondary reviewer to read and code. All data were cleaned and sanitized prior to sharing. The reviewer coded data and provided feedback on coding agreement and disagreement. Where there was disagreement, these codes were reconsidered and, when relevant, reviewed again within the entire data set while considering reviewer feedback. This secondary review provided opportunities to double-check and occasionally recode data and also illustrated the intersectionality of several themes, which is discussed further in chapter five. From this initial analysis, the researcher followed Altschuld's (2015) Asset Capacity Building model, leading to additional rounds of analysis initially focused on strengths and assets and then needs and barriers separately. Each analysis session was conducted via inductive thematic coding through a content analysis approach, which first considers emergent themes based on the data and then uses content analysis to consider findings within the broader content and context of the data (Creswell, 2014; Fereday & Muir-Cochrane, 2006; Given, 2008; Maxwell, 2013; Mayring, 2014; Potter, 1999; Saldana, 2016). Separating each analysis session were individual rounds of journaling to reduce bias, during which the researcher summarized processes and reflected on initial thoughts and findings, considering any potential internal bias or analysis limitations within qualitative techniques or personal experiences. (Ben-Ari & Enosh, 2011; DeMeyer, 2018). Following a week intermission for intra-rater reliability, during which no analysis work was conducted to allow time for intra-rater reliability to occur, a final round of analysis reviewing all components of Altschuld's model and incorporating these within emergent themes within the data and supported by previous research was conducted (Altschuld, 2014; Creswell, 2014; Fereday & Muir-Cochrane, 2006; Given, 2008; Maxwell, 2013; Mayring, 2014; Potter, 1999; Saldana,

2016). Finally, based on emergent themes and findings from the data, the researcher finalized and interpreted meanings behind emergent themes and created multiple diagrams to illustrate findings.

Findings

Findings from this study are categorized through two views: emergent themes from the data (N = 13) and within the lens of Altschuld's concepts of needs and strengths (Altschuld, 2015; Creswell, 2014; Fereday & Muir-Cochrane, 2006; Given, 2008; Maxwell, 2013; Mayring, 2014; Potter, 1999; Saldana, 2016). Accordingly, the thirteen themes are described, defined, and exemplified in the paragraphs below and are also categorized within the Asset Capacity Building framework.

One important context of this study to note is the cultural context surrounding the Coronavirus pandemic. This study took place directly in the middle of the pandemic, with initial study designs created during the second half of 2020 and data collected during the winter of 2021. This impacted participant recruitment processes and also could influence participant feedback related to study research questions. Also impacting this study are social and cultural issues surrounding equity and justice, which also plays a significant role within the context of the study, as national events, both violent and non-violent, shape individual perspectives, feedback, and identity. The impact of these two factors were considered during study design as well as during analysis and review of findings. Primary findings from this study speak to all timelines of graduate student success – past, present, and future. Given the new reality that these universal contexts have and will continue to create, locating these findings within these contexts and suggestions is both reasonable and helpful.

Additionally, before fully exploring themes, a basic understanding of the study participants' definition of graduate student success is important. The ways in which graduate student success is defined by students and institutional personnel alike within the data suggest a higher degree of individual variability and depth than in previous literature (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al, 2014; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley,

2011; Hussar, 2020; Okahana, Zhou & Gao, 2020; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). Particularly, graduate students cited the individualistic nature of success for today's student as well as a student's ability or lack thereof to control the likelihood of success. One participant defined success as "a journey that kind of looks different for everyone," and this idea was echoed by many participants. While persistence, graduation, scholarly contributions, and job attainment were often mentioned by participants, of equal mention were individual, short-term goals such as gaining a deeper understanding of course content, performing well in class discussions, and simply continuing on the post-baccalaureate path in a fashion that maintained personal health and professional promise. Further, several participants cited that degree completion did not necessarily constitute success, as it was either simply one more step in the process or, conversely, became an unobtainable goal existing outside of student control and thus causing significant anxiety and stress. One participant stated, "I feel like my likelihood to succeed is based almost entirely on the approval of my advisor. I have a lot of anxiety about that." These sentiments were echoed throughout focus groups and varied only minimally between degree programs. Thus, while graduate student success can still be traditionally defined by graduation, scholarly contributions, and job attainment, equal consideration must be paid to the individual goals for each graduate student and how these impact ultimate levels of success. The discussion below provides an overview of findings as they relate to graduate student success and, when relevant, to associated cultural contexts as applicable.

Research Questions and Primary Themes

This study's aim is to answer the following four research questions: RQ1: What are the current perceived academic, social, health, and financial needs of graduate students from the perspective of student, faculty, and administrators; RQ2: What are the current barriers to graduate student success, measured by retention, GPA, graduation, and career placement; RQ3: What assets are currently used and available to graduate students, and how are they perceived by student, faculty, and administrators;

RQ4: How can available and future assets be used to meet graduate student needs and eliminate barriers. These questions are answered through the following codes and subsequent themes below that emerged from the data: clear communication; holistic mentoring and advising; graduate student support; achieving a balanced life; clear expectations; conflicting institutional roles; finances for basic needs; personal power; achieving mental health; research opportunities; structured professional development; building community; individual identity recognition. These themes are further detailed in Table 4.1. in Appendix E.

The above themes connect directly to the four research questions within this study. Each theme above is defined primarily as a need, as all thirteen themes represent a potential or current need for graduate students. For analysis of themes within Altschuld's (2015) model, the themes are categorized primarily into either an unmet need, a barrier, a current asset, or a future asset. These categorizations were made by considering the content and context surrounding each participant mention within the data, with an emphasis on locating themes within the category that most accurately represents the current context for the majority of participants. Thus, the following themes connect to each research question as follows: RQ1: clear communication; holistic mentoring and advising; and mental health RQ2: achieving a balanced life; clear expectations; conflicting institutional roles; finances for basic needs; and personal power; RQ3: graduate student support; research opportunities; structured professional development; RQ4: building community; and individual identity recognition. These theme and research questions are further illustrated in Table 4.2. in Appendix E.

The emergent themes connect to key research questions, providing answers to each. Current needs for graduate students include clear, two-way communication, mentoring and advising focused on holistic student development and success, and the ability to create and sustain positive mental health. Current barriers to graduate student success the inability to achieve a balanced life with time and space for non-academic needs, the lack of clear expectations as related to policies, processes and procedures,

conflicting institutional roles as both graduate students and instructors or staff, the lack of finances to meet basic needs such as housing, food, and transportation, and the lack of personal power over one's own personal and professional life. Current assets include social and academic graduate student support, such as library services and technology, research opportunities and research knowledge base, and opportunities to participate in professional development both in-field and within the broader higher education context. Possible future assets include building complex and varied communities to increase a sense of belonging and recognition of individual student identities. These answers are further illustrated in Table 4.3. in Appendix E and will also be further explained in the following paragraphs below.

Theme Descriptions and Examples

Now that a basic understanding of emergent themes exists, the following paragraphs provided extended descriptions and examples of each theme, following Altschuld's (2015) categories of needs, barriers, current assets and future assets. Table 4.4. in Appendix E provides two to three pieces of qualitative data from which themes emerged and additional paragraph descriptions with additional examples are also provided below.

The first theme to describe is clear communication, defined as a graduate student's need for clear and consistent two-way communication, both in the form of receiving information and in the ability to provide feedback and information to others. Examples of these types of communication include receiving clear and concise information regarding dates, policies, and procedures, as well as information related to coursework, social and academic resources, and the ability to provide information and feedback to mentors, advisors, and the institution as a whole. A key finding within this theme is the reality of communication as a dual process where having the ability to send out communication is just as important as receiving information. As is evidenced in the quotations below, the communication theme can be seen as a bridge, with the student as one side and institutional staff or advisors as the other. How communication flows across this bridge depends heavily on the surrounding

context, which will be discussed further in chapter five. This, however, should not downplay the importance and necessity of clear, easy-to-find information that can be quickly received, reviewed, and categorized by the graduate student for optimum success. One participant cited the extent of e-mail communication and the time-consuming nature of having to carefully read through a large variety and type to gather key information points; the participant summarized by saying “there’s overcommunication, but at the same time it’s not representing the necessary resources for me.” Consequently, clear communication emerges within this data as a currently unmet need.

The theme of holistic mentoring and advising is defined as an individual or network of professionals who support graduate student success, with an emphasis placed on the need for mentoring and advising that has both depth and breadth. Specifically, study participants cited the importance of an advisor who is supportive, communicative, and available but also who provided students the opportunity to show up and communicate as their whole selves, acting not just as an academic advisor but also a personal mentor, a social and emotional support, and essentially a kind, listening ear: “you can have a good mentor that’s transactional, but then we’re also human so it’s nice to be able to just emotionally confide, because PhD programs can be taxing on your mental health.” Because being all of these things can be a difficult task for one advisor, many participants referenced the need for a network of advisors and / or mentors. One participant stated “all graduate students would benefit from network mentoring, where there’s an understanding that you’re not trying to depend on say, one individual mentor,” but to develop a community of mentors. In most cases, participants recognized and voiced the vital role advising and mentoring plays on graduate student success, connecting this theme to the study primarily as an unmet need.

Achieving mental health also emerged as an unmet need within this study. Participants often referenced the importance of achieving and maintaining positive and productive mental health, similar to maintaining physical health. Additionally, participants indicated that current resources existed and

were helpful when available, but that they often did not exist at the optimal level: “mental health services are capped...they are more for crisis support...and there wasn’t a more sustained therapy or just mental support for mental health.” Achieving mental health, then, exists within this data as an unmet need, where current resources are limited and their lack connects to difficulty in succeeding as a graduate student.

Similarly, the theme of achieving a balanced life also arose as a concern for participants within the data; however, this theme emerges primarily as a barrier instead of an unmet need. Again, achieving a balanced life is defined as the graduate student’s ability to achieve and exist within a full life, containing all the necessary and standard elements for full and healthy living including academics and research, social engagement, family engagement, physical health, and time for general life needs and maintenance. This theme emerges as a barrier, as do the themes below, for several reasons. First, themes become barriers instead of unmet needs when graduate students have limited ability to impact or improve upon the need. For example, improving one’s mental health can be achieved through many activities and resources both on and off campus. Similarly, graduate students have the opportunity to expand advising and mentoring, to some degree, by individual networking and cross-discipline activities. Conversely, graduate students have little control over the expectations and needs placed that quickly accumulates into all available time; they cannot simply create more time. One participant described the inability to balance as a constant tension between roles existing both inside and outside the institution, without enough time “to do them all, having to pick which role to allocate time to.” Thus, this theme, as well as those below, emerge primarily as a barrier to graduate student success.

The themes of clear expectations via clear rules, regulations and processes emerged from the data as a barrier. This theme references any and all expectations, rules, regulations, or procedures related to being a graduate student within the study institution. Examples include but are not limited to the following: timelines for comprehensive exams and dissertations; expectations for final work

products as a graduate student; submitting forms; applying for financial aid or research support; internal review board processes; and much more. Primarily, study participants referenced the need for clarity and simplicity in standards and processes. One participant described standards and processes as being “on a very decentralized level” where “a lot of things that are expected or depended upon are done by individual departments.” Again, because this is an area in which graduate students have limited ability to impact change, this theme emerged as a barrier to graduate student success.

Similarly, the theme of conflicting institutional roles, within which participants indicated a need for clarifying rules, regulations, and organizational structures for students and their various institutional roles, emerged as a barrier to graduate student success. This theme is defined as a graduate student’s need for clarity within the often intermingled role as a student and a university instructor, in the form of a teaching assistantship, or staff member, in the form of a graduate assistantship or research assistantship: “and I feel like as a graduate student I’m somehow like a faculty, a staff, and a student, and then also a graduate student.” Rules and regulations that require clarification include schedules, pay, options for leave, and opportunities to provide confidential feedback.

Finances were one of the most commonly referenced barriers by study participants. This theme is defined as a graduate student’s need for and ability to meet basic human needs through financial resources. The majority of data from this study suggests that finances are a significant barrier to graduate student success. Many study participants referenced a lack of provision of finances to meet basic human needs such as safe housing, food, and transportation: “I know that most people have a hard time finding housing that’s within budget. And then we have students on food stamps.” Several participants also referenced the need for federal financial assistance in the form of food stamps and the reality of food insecurity for themselves and fellow students, with several participants commenting on the need to create for and provide financial resources that included steps for how to get food stamps. While there were participants who expressed being financially stable and able to meet basic needs, the

students who referenced a dearth of financial stability indicated significant need as well as a direct connection to this need and success or failure. Types of financial supports referenced included federal funding, state funding, graduate student assistantships, and other forms of part-time work or financial compensation. While one could argue that finances are an area where a graduate student can exert change through additional jobs or other non-institutional resources, current regulations and policies often limit a student's ability to take part in off-campus work and, further, most graduate students indicate a significant lack of time to put toward other economic or financial pursuits. Consequently, this theme emerges primarily as a barrier to graduate student success.

Personal power, like the themes above, connects as an emergent theme primarily to the barriers category. This theme references specifically graduate student power and a student's ability or lack of ability to maintain control, authority, or influence over all aspects of one's life as it relates to being a graduate student. Participants in this study often referenced a lack of power, particularly within research positions in which one's advisor is also one's supervisor for funding: "it's always tough when you have to talk to your advisor, who's essentially your boss, like the mentor versus boss." Further, this lack of power was often directly connected to success or a lack thereof. Consequently, the theme of personal power connects to this study primarily as a barrier to graduate student success.

Graduate student support is defined as a social or academic resource that provides a need or acts as an asset to graduate students, and in most instances this theme emerged from the data as a current asset. Most participants referenced the reality of post-baccalaureate attainment as requiring a village, and the importance of institutional support within that village, and many students also referenced current assets that play a significant and positive role in graduate student support, including the libraries, the teaching and learning innovation center, and technology support. Participants routinely referenced libraries and library resources as critical and significantly helpful resources for their success, as well as teacher training support and access to software and other technology needs. These comments

indicate the current positive assets existing to support graduate student success with one key graduate student support piece referenced a future asset, a centralized support hub, which will be further discussed in chapter five.

Similarly, research opportunities emerged as a current asset through participant references to multiple available opportunities and sufficient knowledge in how to conduct research, with positive emphasis placed on lab opportunities, opportunities to connect with advisors and other professors and researchers, as well as positive supports in terms of classroom instruction and pedagogy surrounding research practices. Some limitations to this current asset are referenced within the data as related to processes and procedures, referenced within the theme of clear expectations, and to funding, referenced within the theme for finances for basic needs. However, overall, most participants cited positive experiences within research and cited these opportunities as meeting current needs and existing as current assets.

The theme of structured professional development connects to the study primarily as a current asset. Study participants often cited positive opportunities in professional development, specifically referencing current programs provided both by individual departments and university offices. Exceptions to this are discussed in chapter five and are primarily related to the themes of communication and / or standards and processes. However, on the whole this theme primarily evidence current assets that contribute to graduate student success.

The theme of building community emerges in the data primarily as a future asset, as data analysis from this study suggests that robust, varied, and inclusive communities are essential to graduate student success and are, as yet, not fully realized for study participants. Again, community is defined as networks, spaces, or resources that work to create a sense of belonging within social or professional communities for graduate students. Participants in this study regularly referenced the importance of having broad community and social support and access to professional networks that

extends past their specific field of study. Participants indicated a desire not just to be connected to their program, but to the greater graduate student community, often indicating a current lack in this area. While graduate students may feel connected to their specific program, they do not feel connected to the broader graduate student or institutional community. One participant summarized this by stating a need for “an interdisciplinary graduate student group...where you could come together and talk about concerns and meet based on different group interests.” Another participant summarized this by stating a desire to be “plugged into a community outside of my own little microcosm,” and to feel like a part of the university as a whole.

Similarly, individual identity recognition, defined within this study as any form of seen or unseen individual characteristic accumulating into self-perception, emerges primarily as a future asset, as many participants referenced the importance that recognizing, supporting and developing personal individual identity can have on graduate student success. Participants in this study referenced many identity components, including but not limited to gender, race, ethnicity, religion, and socioeconomic factors. Within these references, participants indicated that a current lack of opportunity as well as future opportunity for recognition and support of identity, particularly for underrepresented minorities but not limited to any one group or groups. Further, individuals with representative identities acknowledged that their lack of difficulties or struggles could be related to additional burden due to their majority identity. Finally, participants spoke generally about the identity of a graduate student as a whole person, the reality of the complexity of the individual, and the desire to be seen as an individual, summarized by this statement: “don’t assume that our masks are who we are.” Participants varied in categorizing levels of support and recognition of personal identity, occasionally differing based on individual experiences or specific colleges and programs. In some instances, significant steps had been taken to support individual identity development; in other instances, there was a significant lack of support and recognition. Thus, on the whole, this theme emerges as a future asset.

Once an understanding of these themes and their definitions is achieved, it is important to consider the ways in which these themes intersect and relate to Altschuld's model within the context of graduate student success. The below paragraphs provide this understanding.

Current Assets

This study evidences many current assets connected to graduate student success, with key assets including graduate student support, research opportunities, and structured professional development. In the theme of graduate student support, participants indicated key positive support functions within the libraries and technology support. The below image shows the ways in which the themes within current assets intersect and impact graduate student success. Within the context of this study, these themes represent areas of currently met needs and indicate the ways in which graduate student success is supported and developed within this institution. As seen in Image 4.1. in Appendix F, graduate student support, such as library services and technology, provide direct connection to resources for graduate students, positively impacting graduate student success. Similarly, research opportunities and structured professional development opportunities, such as teacher training and field-specific programming, also directly connect students to resources and information.

Needs and Barriers

Definitionally, each theme within this study can represent a need that, when not met, becomes a barrier. As is detailed above, barriers are separated by needs primarily through a graduate student's ability to impact change within this category and also the severity or significant impact the individual theme can play on graduate student success. Needs emerged from the data primarily as clear communication, holistic mentoring and advising, and achieving mental health. Students need the ability to live a balanced life, to receive and give clear and complete communication, to provide for their basic physical and mental health needs, to be recognized and valued as a unique individual, and to be advised and mentored by an individual or group of individuals able to care for the whole student within a

complex and confusing world. These needs emerged as not being fully met or satisfied for participants within this study, occasionally causing difficulty for students and negatively impacting student success.

Similarly, barriers arose from the data primarily through the following themes: achieving a balanced life, clear expectations, conflicting institutional roles, finances for basic needs, and personal power. Again, these themes are categorized as barriers because of two main factors: the routine lack of control students have in impacting these issues and the increased difficulty these issues cause in terms of achieving success. For example, as illustrated above, many participants referenced the necessity of food stamps because of their significant financial need. Again, because graduate students have limited time for outside employment, and because there are current policies in place that do not allow graduate students to participate in outside employment, the lack of finances to meet basic needs is a significant barrier. This is also the case with the other emergent themes in this category; graduate students have very limited locus of control in balancing their life, being provided with clear expectations and institutional roles, and in many other areas of their own personal existence. All of these situations cause added stress and anxiety and act as significant barriers to success. Students need to be provided with clear expectations surrounding standards and processes that create clarity and equality, particularly when it comes to institutional roles which often come into conflict, such as the role of a student versus instructor or student versus part-time staff. Finally, graduate students need to maintain a level of power and influence over their own life and pursuits. All of these needs are important and any barrier can become a significant hindrance to success. As with strengths, needs and barriers also exist in an interconnected manner that impacts graduate student success, as shown in Image 4.2. in Appendix F, where each layer of needs or barriers blocks students' ability to gain move to the inner circle of graduate student success.

Future Assets

Future assets thematically include building community and individual identity recognition. While these elements are definitionally needs, within the context of this study the themes emerged primarily as future assets because of the ways in which participants talked about these issues. While participants often referenced minimal levels of community development existing for them currently, within the same breath they also expressed a desire for more and different types of community, as illustrated above. Additionally, these comments were also surrounded by data that indicated that the addition of these future assets would be positively impactful to graduate student success. Because the lack of community currently is not functioning as a significant hinderance to success, as compared to finances or mental health, for example, this theme emerges primarily as a future asset.

Identity also emerged thematically as a future asset, with some specific exceptions. When considering the data set in whole, most participants referenced the importance of identity and the need for identity recognition. Participants also indicated that, when this identity support and recognition occurred, the ability to succeed as a graduate student was significantly positively impacted. In this way, the theme of identity exists as a future asset. However, for many participants this theme also emerged as a significant need and barrier, with one participant stating simply, “it’s hard to be black” in this city. Further, in many ways, identity is the one theme over which graduate students have a significant locus of control – and so does not exist as a barrier – but paradoxically is also most often ignored or not supported by the broader community. This current context, finally, supports the categorization of this theme as a future asset because of the current lack of assets available and the potential for future success were this asset to be leveraged.

Thus, when looking at the data set in its entirety, the themes of building community and individual identity recognition emerge primarily within the category of future assets. Image 4.3. in

Appendix F provides a picture of how these future assets can be grown and capitalized on to improve graduate student success, and additional discussion and recommendations are provided in chapter five.

Research Questions Answered

This study provides specific, detailed, rich answers to all study research questions. First, when considering graduate student needs, key findings show that graduate students have varied and significant needs in many categories, encompassing the themes referenced in this study. All themes exist definitionally as a need and current unmet needs within the data primarily are clear communication, holistic mentoring and advising, and achieving mental health. These, according to study participants, are three perceived needs for graduate students within the context of this study where additional capacity is needed to meet needs at optimal level. Similarly, this study evidences several barriers to graduate student success impacting standard success measures such as retention, GPA, graduation, and career placement, as well as students own personalized goals: achieving a balanced life, clear expectations, conflicting institutional roles, finances for basic needs, and personal power. Finally, current and future assets include graduate student support, research opportunities, structured professional development, building community, and individual identity recognition. The current assets – graduate student support, research opportunities, and structured professional development – are perceived positively and used regularly by the majority of study participants. In the category of future assets, many participants recommended increased community building and individual identity recognition as ways to positively impact graduate student success and eliminate barriers.

Summary

Findings from this study have provided answers to all four research questions, highlighting specific, significant graduate student needs, illustrating how barriers exist when these needs are not met, and evidencing current assets that can be leveraged to increase future graduate student success. Utilizing Altschuld's (2015) Asset Capacity Building framework provides a picture of how the themes that

emerged in this study can be directly connected to realize actual positive student outcomes. The following chapter provides suggestions and recommendations on how these next steps can and should be taken.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

The following chapter provides a review of findings and a discussion on how these findings fit within current literature. Also included below is a discussion of findings and recommendations to improve graduate student success based on this study. The chapter will conclude with limitations and final thoughts and reflections.

Summary of Findings

Findings from this study can be organized in two ways as detailed in chapter four: by an understanding of key themes and through Altschuld's (2015) Asset Capacity Building model. Primary findings highlight the needs of current graduate students at the study institution, including all emergent themes with specific emphasis on clear communication, holistic mentoring and advising, and achieving mental health as currently unmet needs. Additionally, barriers to graduate student success emerged primarily as achieving a balanced life, receiving clear expectations, conflicting institutional roles, finances for basic needs, and personal power. Currently, there are many institutional assets in place that play a positive role in graduate student success, including research and professional development opportunities as well as broader graduate student support such as libraries and technology. Additionally, there are current resources, practices, and standards in place that could be leveraged into future assets, including building community and individual identity recognition. The following pages consider these findings and provide insights and recommendations for next steps and a deeper understanding of graduate students at the study institution.

Findings within the Literature

A number of findings from this study support current literature, while also adding deeper understanding and context within the field, including the importance of mentoring and advising, the need for financial support, and the importance of mental health and identity support (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al, 2014; Earl-Novell, 2006; Ferrer de

Valero, 2001; Gardner & Holley, 2011; Hoskins, 2005; Hussar, 2020; Okahana, Zhou & Gao, 2020; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). Providing deeper understanding is the context of power dynamics and conflicting institutional roles, an idea already in the literature that is further developed within this study through the finding connections to standards and processes (Baum & Steele, 2017; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley, 2011; Renbarger & Beaujean, 2020). Additionally, several findings are additions to the literature, new understandings and concepts as yet to be fully discussed and reviewed within the current field, including the importance and complexities of communication and the need for more robust communities.

A number of studies have cited the critical importance of mentoring and advising in graduate student success, and this study upholds that understanding while also deepening the level of insight into what types of advising graduate students of today most want and need (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al., 2014; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley, 2011; Hussar, 2020; Okahana, Zhou & Gao, 2020; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). As referenced in the findings above, graduate students in this study expressed the need for advisors, or a team of advisors and mentors, who could act not just as subject matter experts and scholarly referees, but who could attend to the whole student, providing support in most all areas of life. Additionally, findings related to mental health and finances are similar in that they support current literature but also add to the complexity of the need while also illustrating the significant barrier these needs can become when not met (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al., 2014; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley, 2011; Hussar, 2020; Okahana, Zhou & Gao, 2020; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). The impact of identity on an individual and the potential for success and how identity connects to one's surroundings is also commonly established in the literature (Smith, 2020). This study

supports those ideas and also highlights the ways in which identity connects to almost all elements of graduate student success, further detailed below.

Issues related to power dynamics and graduate student roles are also addressed in current literature and further expounded upon in this study (Smith, 2020). Focus group participants and interviewees alike often cited the reality of a graduate students' role as existing uncomfortably somewhere between staff and student. Administrators and faculty members referenced students performing roles typically reserved for full-time institution staff, particularly when full-time staff turnover occurred and graduate students were required to fill a gap. And graduate students routinely referenced the lack of clarity and communication, and the issues within power dynamics, that occurred within this dual role: "it's a very tenuous balance between trying to be both [student and employee, and neither role is very supported, or respected...but there's not really recognition that we are employees a lot of times, and there's not the support and resources that employees should be entitled to." This reality, further discussed below, is already highlighted in the literature, but this study provides depth to the ways in which this dual role can deeply and negatively impact graduate student success (Smith, 2020).

Finally, the importance of a broad, cross-discipline, and inclusive group of communities, as well as the importance and complexity of communication, are relatively new ideas within the field. While it is certainly already understood that community and belonging are key components to student success, the desire to be connected to the broader graduate student community and to varying and different communities across the institution is a relatively new concept (Arendale, 2004; Cain, Marrara, Pietre & Armour, 2003). Previous literature has often cited the importance of finding one's niche, essentially making a large community small (Craddock, Birnbaum, Rodriguez, Cobb & Zeeh, 2011; Gardner & Barnes, 2007; Gross, Lopez & Hughes, 2008). Within this ideology, providing graduate students a community within their specific program or field of study would seem to be sufficient. However,

participants in this study, even when this niche community was present, expressed a desire to be connected to a larger variety of communities across campus, both in social and academic foci. Further, the ideology of niche communities also has a likelihood to leave individuals behind, particularly those who do not fit a majority identity or who participate in fields that do not place emphasis on creating niche communities. Given the importance of community and belonging, and the findings from this study, the need for broader and more diverse community opportunities seems clear.

Likewise, the need for and complexity of communication within the graduate student role is also a relatively new concept. Again, while copious literature supports the importance of communication generally and the ways in which communication can go awry, this study highlights how and why this general idea significantly impacts graduate student success (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al., 2014; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley, 2011; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). Findings in this study illustrate two key concepts: the best ways to communicate to graduate students and the importance of open and understanding avenues for graduate students to provide communication back to the institution. Study participants often cited the difficulty of sorting through mountains of digital communication, taking precious time and often leading to a lack of specific resource information. Additionally, participants cited the importance of having a safe and open conduit to communicate needs and to ask for support. These findings provide a deeper understanding of the complexity and need for community and communication in graduate student success.

Discussions

The following paragraphs provide deeper insights into the findings and implications within this study, focusing primarily on the intersectionality of themes, the definition of graduate student success, and the locus of responsibility for graduate student success.

Intersectionality of Themes

A key finding from this study is the way in which most all themes intersect with one another to impact graduate student success. As is detailed above, the themes can be broadly categorized into needs, barriers, and current or future assets, with the possibility for many themes to exist in several categories, depending on the context and the individual student. Image 5.1. in Appendix F illustrates the ways in which all themes intersect and connect to graduate student success.

The image above illustrates the ways in which themes intersect and how they could support or hinder graduate student success. The themes in the outer rings of the image – graduate student support, research opportunities, structured professional development, community, and identity – can support and connect graduate students to opportunities for success. However, as the image shows, the space in which all supporting themes intersect in the middle is quite small, indicating that very rarely are all of these opportunities leveraged to improve success. The inner, darker ring illustrating barriers and unmet needs – balanced life, clear expectations, conflicting roles, finances, power, clear communication, holistic mentoring, and mental health – shows the ways in which these themes or lack of opportunity hinder and effectively block graduate student success. Image 5.2. in Appendix F shows this same context in a linear fashion where barriers hinder success and assets are unattainable or unreachable.

Conversely, Image 5.3. in Appendix F illustrates how these themes could be shifted to positively impact graduate student success. This image shows how, when needs and barriers are converted to assets, they surround the context as a whole, connecting with other support functions and positively impacting graduate student success. This reimagining of the themes can also be seen as a continuum, depicted in Image 5.4. in Appendix F, where the removal of barriers through capitalization of future assets creates a more direct line to graduate student success.

As this image shows, the interaction between these themes is often messy, and barriers can be a substantial road block to student success. However, re-envisioning themes to meet needs and realize future assets could provide a very different picture of the various themes impacting student success. This could be done by improving communication, better supporting mentoring and advising, and providing better avenues for students to achieve a mental health to meet student needs. Additionally, institutions could improve graduate student success and attend to intersecting themes by providing more opportunities for graduate students to achieve a balanced life, providing clearer communication, standardizing institutional roles, providing finances for basic needs, and empowering students to have autonomy and authority within their spheres of influence. Additional insights along these lines are detailed further in the image. The themes from this study can be seen as a tangled web of intersecting resources, contexts, needs, barriers, and assets, and that is often how study participants expressed feeling. However, with focus on these intersecting themes, institutions can leverage current assets and implement future assets to improve graduate student success, as is summarized in recommendations below.

Success Defined

A key finding from this study is that, for participants, success is defined individually. While current literature as well as practitioners and institutional staff traditionally define success as matriculation, graduation, placement in the field and scholarly contributions, study participants referenced different and more nuanced types of success (Baum & Steele, 2017; Bowen & Rudenstine, 1992; Braunstein, 2002; Byers et al, 2014; Earl-Novell, 2006; Ferrer de Valero, 2001; Gardner & Holley, 2011; Hussar, 2020; Okahana, Zhou & Gao, 2020; Renbarger & Beaujean, 2020; Stevenson, 2013; Tokuno, 2008). First, study participants often referenced the importance of defining success on the smaller scale, particularly in an attempt to decrease the stress and anxiety caused by placing success on long-term, binary (yes or no) goals such as passing comprehensive exams or successfully defending

dissertations. Second, study participants noted the reality of the locus of control related to their success. Given this, many participants cited success as simply being able to continue the journey in some way, on any timeline, and to apply knowledge and learning gathered along the way. Finally, many participants expressed the individuality of success and its connection to self, illustrating again the intersectionality of themes and the importance of institutional recognition of identity, power dynamics, and other factors contributing to or blocking graduate student success.

Given these findings, re-examining support systems and structures within the individual nature of students and individual goal definitions is critical. While institutional goals can and still should focus on quantitative standards such as graduation, career placement, and scholarly works, institution administrators, faculty, and staff, must also consider the individual student when assessing needs and providing supports. Essentially, there is no longer a 'one-size-fits-all' model of support for graduate students. This is made clear by the varying ways in which success is defined within this study. Steps and recommendations to address this reality are highlighted below.

Responsibility and Power

An important finding within this study is the significant role power dynamics play in graduate student success, including where the locus of control exists in increasing success as well as each stakeholder's responsibility therein. Additionally, identity and its interconnectedness to institutional factors and graduate student success is also an important theme to consider. Primary stakeholders within graduate student success context include the students themselves, the institutional administration, faculty, and staff, and the broader academic, economic, and social community within which the institution exists. Given the findings of this study, it is critical to consider where responsibility and power lie within each stakeholder group.

First, let's consider graduate students. Many participants cited an imbalance between responsibility and power, in which the students felt they carried the heaviest burden of responsibility

with the lowest accumulation of power. Given the additional findings related to clear communication and institutional roles, it is not difficult to see how this creates a significant and possibly insurmountable burden for graduate students. This is further exacerbated when one considers identity, an often-ignored yet critical component of a student's mental and physical health, contributing to success or failure, depending on the ways in which identity is nurtured, or ignored. Again, this may be more relevant and impactful for non-majority identities who can be met with misunderstanding, at best, to outright violence, at worst. This, of course, is not to say that graduate students are powerless. In fact, given the significant successes of the majority of graduate students within the study institution, it is clear that these individuals possess significant capacity, courage, and skill, and that they routinely capitalize on the abilities they do possess to strive toward success. That said, were the pendulum of power to swing toward a more centered position, much of the strife graduate students face could be eliminated.

Thus, next we should consider the institution and its administration, staff, and faculty. Because each of these entities have specific and varied responsibilities and levels of power, which could easily fill another sixty pages, this discussion will focus primarily on the institution as a whole and its levels of power and responsibility. It should be seemingly obvious that the institution holds both significant responsibility and significant power. The institution, in essence, sets the standards, makes the rules, creates the procedures, and thus has real and direct power impacting graduate student success. Not to mention that the institution decides who attends, who cannot or can no longer attend, and provides a significant portion of funding. Similarly, because of this high level of power, the institution should take a significant portion of the responsibility to promote and increase graduate student success. However, the institution is not without external factors and internal complexities, and these elements must be considered and attended to as well.

This leads to the larger community, which like the institution, is comprised of many different sub-communities, including the academic community and the economic and social communities within

which the institution exists. Because of the variety and complexity of these groups, it is easy to either dismiss this subcommunity as too large, unyielding, and complex. However, considering the power and responsibility within this group is just as critical as with students and institutions themselves. First, these communities at large have a responsibility and an inherent benefit to positively influencing graduate student success. This can be done in similar ways as institutional practices, by supporting and promoting graduate student success through processes and through cultural significance. One study participant stated “graduate students are an indicator of where we’re going.” The academic community needs graduate students, as do the economic and social communities. Consequently, recognizing the responsibility and power within these groups and then empowering graduate students therein would be of significant benefit to all stakeholders involved. The below image illustrates where locus of control lies within the emergent themes of this study and provides a depiction of the limited power of graduate students compared to the significant power, and consequent responsibility, of institutions. As Image 5.5. in Appendix F indicates, within the current context, institutions have much greater locus of control on all thematic categories as compared to students themselves, and the following pages provided recommendations based on this and additional study findings.

Recommendations

Based on findings and discussions above, the following pages provide recommendations emanating from this study to improve graduate student success.

Process Review

The first recommendation is to conduct a process review of all key institutional processes and procedures related to graduate student success, matriculation, and graduation. This would include a review of processes such as admissions, internal review board systems and procedures, financial aid application and grant processes, and all processes related to comprehensive exams and dissertations. The institution could make the most of this by first beginning a review of local, institutional processes

that might be easy to simplify, such as the process and intake of standard forms. Also important to consider within this review is the way in which process expectations and steps are communicated. Providing clarity and simplicity in communication alone could be a significant yet impactful step in improving graduate student success.

Further, considering the processes of communication as a whole is another important yet possibly simple yet impactful system to improve. Because study participants routinely referenced the difficulty in parsing information, sorting essential from non-essential communication, two key recommendations are a varied system of communication as well as a more robust orientation process. Participants cited many different preferred ways of communication, including e-mail, websites, short videos, and text messaging. Allowing for all forms of access to communication would be one way to meet student needs. Additionally, providing one brief, concise initial reference point or website for the most critical information – something like an internet hub – was also a key insight from the study. A more robust, centralized orientation could also assist with the dissemination of information, providing graduate students with an initial groundwork of information as well as two to three key point persons to contact with needs or questions. These changes would all bring significant improvement in communication.

A somewhat less nuanced though critical standard and process to review is the role of graduate students as employees on campus. Referenced above in the theme of conflicting roles, this opportunity plays an important part in providing graduate students with experience and learning but can also become a barrier when structures and procedures are not in place to protect the student. As evidenced above, many study participants felt a loss of power and balance due to increased demands within their role as an institution employee. Further, participants, students and institutional personnel alike, often referenced a lack of understanding in the specific policies and procedures related to student employee and work status. Some examples include vacation or leave options, health insurance, scheduling, and

pay. In most cases, for employees these policies and procedures are clearly communicated before a position even begins; yet, for students, there is often vagueness around what is allowed, expected, acceptable, or provided, and they often do not have the power needed to positively impact this vagueness. Consequently, these policies, as well as the processes mentioned above, should be reviewed.

Finally, considering a process review of internal review board processes may also be helpful in positively impacting graduate student success. Several participants noted difficulties in navigating this process: "I think they [students] run into barriers with processes." While revisions to this process and platform would be arduous, there may be some short-term solutions to assist students, such as additional support resources and more opportunities for students to collaborate with reviewers.

Mentoring and Advising

Because many participants referenced the need for mentoring and advising that consisted of more depth and breadth, recommendations within this area include increased and more robust professional development in advising, including increased resources for advisors, and the establishment of a mentoring network for graduate students. Professional development and resources for advisors and / or mentors could take several forms, including trainings, certifications, or electronic resources. Also helpful would be an emphasis and heightened valuation of advising as well as giving those who function in this role the time and space needed to excel. This could mean a reduced teaching load, increased recognition of the role in evaluation, or other forms of incentives and support. Additionally, establishing a network of peer and professional mentors could provide additional opportunities for graduate students to connect with personnel and resources. Because of the increased need and responsibilities related to mentoring and advising, the best option would be to institute both recommendations, providing increased support for advisors as well as expanding the advising and mentoring community as a whole.

Community

While a mentoring network would provide opportunities for graduate students to form community and a sense of belonging, the significant need for varied and diverse types of communities within this study suggests that mentoring and advising is not enough to form communities needed by the graduate students of today. Study participants voiced many ideas for improved community, including cross-departmental and cross-subject research groups, graduate student focused clubs and organizations, and institutional focus on community development within graduate student populations. It is important to note that some of these opportunities do currently exist; however, few participants knew of these resources. Consequently, some improvement here could be made just through review of communications processes suggested above. This, plus the additions of more graduate student focused groups and opportunities to connect would provide substantial community engagement opportunity for graduate students.

Centralized Hub

Finally, many of the recommendations and suggestions mentioned above could be supported, improved, and streamlined through a centralized hub focused on graduate student success. Many study participants voiced a need for such an establishment. One participant summarized this recommendation as “a place where professional students can to see what resources are actually available, because, typically, you don’t know what you need until you need it.” A centralized hub would provide a place where students could go to inquire about meeting needs. Providing this resource could improve communication, streamline processes, provide community, and address many other barriers and needs referenced in this study. Further, several examples of a centralized hub exist both internally and externally, with over 93 institutions providing centralized graduate student support services and / or centers (Council of Graduate Schools, 2020). While the institution does have several current assets within the graduate school functioning to centralize resources and services, these assets could be

bolstered and further supported by a hub focused specifically on graduate student success, leaving time, space, and resources for existing assets to focus on administration.

Limitations

One limitation that impacted this study was participant recruitment. Because this study was conducted amidst a pandemic, participant recruitment yields were not as robust as originally hoped for. Several steps were taken during recruitment to increase yield, including doubling the number of focus group and interview offerings and revising recruitment materials, per IRB protocols. While the final qualitative data set did yield robust, rich data, in order to gain a better understanding of graduate students as a whole at this institution, additional research and evaluation is needed. This could be accomplished through survey questions based on study findings or through additional focus groups and interviews. Additionally, review of large-scale data and institutional success metrics also need to be more fully considered when evaluating graduate student success as a whole at this institution.

Similarly, an important stakeholder population not considered within this study is graduate students who leave the institution without completing their degree. Because of the nature of this study, inclusion of this group was not possible. However, to gain a better and more comprehensive understanding of graduate student success at this institution would require research and evaluation including this population. Possible solutions to this include a survey of leavers or large-scale data analysis of those who do not matriculate.

Conclusion

The purpose of this study was to gain a better understanding of graduate student needs within this specific institution and to provide a possible framework to conduct this study within other similar institutions. Focus groups and interviews yielded a rich data set that included both diversity in experiences and opinions from students, faculty, and administrators alike, and yet also contained consistency in key needs, barriers, and recommendations. Additionally, the study methods provide a

clear and simple process for future researchers to follow at similar institutions or to continue within the study institution to gain more knowledge for this specific student population. Findings from this study are significant both in number and impact, but perhaps the most essential function of this study was simply providing a voice for graduate students to be heard. The time, effort, skill, and fortitude needed to progress in a graduate degree is significant, and the return on investment to the community even more so. Given this reality, it is essential that graduate students be routinely given a platform from which to safely provide feedback and make recommendations. After all, it is the graduate students' success on which the institution relies. From their shoulders, future generations will be carried high and raised up, to see, shape, and mold the world we all need.

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APPENDIX

Appendix A: Graduate Student Focus Group Protocol

Orientation:

Good afternoon! My name is Jessica Osborne and I'm an Educational Psychology PhD student. We are here today to learn more about your perceptions and experiences as a graduate student at your institution. Today, we'll spend about an hour talking about your perceptions and experiences as a graduate student and any barriers that may inhibit your ability to succeed.

I appreciate your honest feedback. I want to hear from each and every one of you; your opinions are important to us. Your feedback will be used to assess needs of graduate students on campus. We thank you in advance for your feedback.

Even though you have come here today, you still have the option of declining participation. This is a purely voluntary activity. If you do not wish to participate, please do not. You can opt out at any point during the group even if you start the process. Understand that the information you provide us today is kept confidential; all data will be sanitized for any identifiable information. We ask that you help us maintain that confidentiality by not sharing any of the information disclosed by your fellow participants today. Additionally, if you have any questions during the session, please feel free to ask. Lastly, if you feel uncomfortable answering any questions, please understand you may decline responding, but again your information and responses will remain confidential.

I will be recording this focus group in order to accurately summarize the information you provide. The audio and video recording will be destroyed after the recording has been transcribed and sanitized for any identifying information. I will not identify any individual in the transcriptions or reporting. Any questions?

Is this okay that I record this focus group, please say yes or nod your head? [if only a couple of participants don't agree to having the interview recorded they don't have to participate, if many participants don't agree just take detailed notes].

-----**Start Recording**-----

Focus Group Questions

1. How would you describe your experiences (both positive and negative) as a graduate student at your institution regarding:
 - a. Academic support
 - b. Research
 - c. Social experiences and connectedness
 - d. Financial support
 - e. Health and wellness
 - f. Other?
2. How do you define success as a graduate student for yourself?
 - a. For your peers?
 - b. Within your field?
3. What factors limit graduate student success at this institution and what could be done to address these factors?
4. What are the primary needs for yourself and for your graduate student peers to achieve success?
 - a. Academic
 - b. Social
 - c. Financial
 - d. Health and wellness
5. Which if any graduate student needs at this institution are not being met at an optimal level?
 - a. What could be done to meet these needs at an optimal level?
6. What are the most important resources for graduate student success?
7. Are there any resources you feel could be capitalized on to improve your success?

8. In what ways would you describe your likelihood to succeed as a graduate student?
9. If the institution had unlimited resources to add one new element (program) of graduate student services, what would you recommend and why?
10. Do you have any specific suggestions for to improve graduate student success?
 - a. Processes and procedures
 - b. Inside the classroom
 - c. Outside the classroom
 - d. Mental health and wellness
11. Any information, questions, or discussions that was not covered that you feel is important to address?

Appendix B: Professor and Administrator Interview Protocol

Orientation:

Good afternoon! My name is Jessica Osborne and I'm an Educational Psychology PhD student. We are here today to learn more about your perceptions and experiences working in a graduate program at your institution. Today, we'll spend about half an hour talking about your perceptions and experiences and any barriers that may inhibit students' ability to succeed.

I appreciate your honest feedback. Your feedback will be used to assess needs of graduate students on campus. Thank you in advance for your feedback.

Even though you have come here today, you still have the option of declining participation. This is a purely voluntary activity. If you do not wish to participate, please do not. You can opt out at any point during the group even if you start the process. Understand that the information you provide us today is kept confidential; all data will be sanitized for any identifiable information. Additionally, if you have any questions during the session, please feel free to ask. Lastly, if you feel uncomfortable answering any questions, please understand you may decline responding, but again your information and responses will remain confidential.

I will be recording this interview in order to accurately summarize the information you provide. The audio and video recording will be destroyed after the recording has been transcribed and sanitized for any identifying information. I will not identify any individual in the transcriptions or reporting. Any questions?

Is this okay that I record this interview, please say yes or nod your head?

-----**Start Recording**-----

Interview Questions

1. How do you define success for graduate students?
2. What are the primary needs for graduate student success at this institution?
 - a. Academic
 - b. Research
 - c. Social
 - d. Financial
 - e. Health and wellness
 - f. Other?
3. How are graduate student needs identified at this time?
4. To what extent and in what ways are graduate student needs being met?
5. In what ways are graduate student needs not being met?
6. What, if any, are the primary barriers limiting graduate student success?
7. Are there any resources you feel could be capitalized on to improve graduate student success?
8. If you had unlimited resources to add one new element (program) of graduate student services, what would you recommend and why?
9. Do you have any specific suggestions (e.g. policies or procedures) for improving graduate student success?
 - a. Processes and procedures
 - b. Inside the classroom
 - c. Outside the classroom
 - d. Mental health and wellness

10. What role do you feel your office plays in helping graduate students succeed?

11. Any information, questions, or discussions that was not covered that you feel is important to address?

Appendix C: Professor and Administrator Written Response Protocol

Introduction

Thank you for providing your written response addressing questions related to graduate student needs and success. I appreciate your honest feedback and appreciate your participation. Your feedback will be used to assess needs of graduate students on campus.

All information you provide in this response is kept confidential; all data will be sanitized for any identifiable information. Additionally, if you have any questions, please feel free to e-mail Jessica Osborne at jcox35@utk.edu. Lastly, if you feel uncomfortable answering any questions, please feel free to leave blanks on any responses.

Response Questions

12. How do you define success for graduate students?
13. What are the primary needs for graduate student success at this institution?
 - a. Academic
 - b. Research
 - c. Social
 - d. Financial
 - e. Health and wellness
 - f. Other?
14. How are graduate student needs identified at this time?
15. To what extent and in what ways are graduate student needs being met?
16. In what ways are graduate student needs not being met?
17. What, if any, are the primary barriers limiting graduate student success?
18. Are there any resources you feel could be capitalized on to improve graduate student success?
19. If you had unlimited resources to add one new element (program) of graduate student services, what would you recommend and why?

20. Do you have any specific suggestions (e.g. policies or procedures) for improving graduate student success?

- a. Processes and procedures
- b. Inside the classroom
- c. Outside the classroom
- d. Mental health and wellness

21. What role do you feel your office plays in helping graduate students succeed?

22. Any information, questions, or discussions that was not covered that you feel is important to address?

Appendix D: Participant Recruitment E-mails

Initial E-mail

Dear,

You are receiving this e-mail because of your connection to administrators, faculty, and/ or students within the graduate school at (institution name). I am a PhD student in Educational Psychology, conducting my dissertation via an asset / capacity building needs assessment for graduate students on campus through student focus groups and administrator and faculty interviews.

Attached are focus group dates and times for graduate students along with all materials for participant invitations to administrators, professors, and students. I would very much appreciate if you would forward this information to any possible participants who would be interested in providing feedback on their experiences.

I am currently scheduling interviews with administrators and staff to gather their feedback as well. Please feel free to forward my name and contact information to any faculty or administrators who might be interested in providing feedback.

Finally, if you would like to provide feedback on your experiences, please respond to this e-mail with available dates and times for interviews.

All interviews and focus groups will be conducted via Zoom technology, following IRB approved protocols.

Please feel free to contact me with any questions or for additional information.

Signature

Attachments:

Focus Group Information & Flyer
Interview Information
Invitation to Students
Invitation to Professors
QR Code with information & Flyer
Zoom Chat Room Link with information

Follow Up E-mail

Dear,

I am following up on my recent communication regarding recruitment for student, faculty, and staff participation in a graduate student needs assessment. You are receiving this e-mail because of your connection to administrators, faculty, and/ or students within the graduate school at (institution name). I am a PhD student in Educational Psychology, conducting my dissertation via an asset / capacity building needs assessment for graduate students on campus through student focus groups and administrator and faculty interviews.

Attached are focus group dates and times for graduate students along with all materials for participant invitations to administrators, professors, and students. I would very much appreciate if you would forward this information to any possible participants who would be interested in providing feedback on their experiences.

I am currently scheduling interviews with administrators and staff to gather their feedback as well. Please feel free to forward my name and contact information to any faculty or administrators who might be interested in providing feedback.

Finally, if you would like to provide feedback on your experiences, please respond to this e-mail with available dates and times for interviews.

All interviews and focus groups will be conducted via Zoom technology, following IRB approved protocols.

Please feel free to contact me with any questions or for additional information.

Signature

Attachments:

Focus Group Information & Flyer

Interview Information

Invitation to Students

Invitation to Professors

QR Code with information & Flyer

Zoom Chat Room Link with information

Appendix E: Tables

Table 1.1 Key Terms and Definitions.

Key Terms	Definitions
Needs	Requirements to graduate student success, including academic, social, health and financial needs.
Barriers	Hindrances to graduate student success, including but not limited to the following: scarcity of needs; academic or political policies and practices; and personal, social, or systemic contexts.
Academic and Professional Success	Achievement of graduate student success, measured by student retention, graduation, grade point average; professional career placement; and student self-report of academic and professional goal attainment.
Assets	Institution or student strengths useful to improving graduate student success, including but not limited to the following: institution personnel; academic and professional resources; health and wellness resources; financial resources; academic or political policies and practices; and allocation of time for students, faculty, and staff.
<i>Participant Groups</i>	Definitions
Students	Graduate students enrolled in a Masters or PhD program within the study timeline.
Professors	Any individual employed by the institution to teach graduate courses at the Masters or PhD level at a part-time or full-time capacity within the study timeline.
Administrators	Any individual employed by the institution in the role of an administrator or staff position related to performing job duties connected to graduate students or graduate programs within the timeline of the study, with emphasis on obtaining data from program leadership.

Table 2.1. Study Steps, Tasks, and Purpose.

Step	Task	Purpose
1	Context	Evaluate study context
2	Decisions	Determine course of action
3	Separation of Needs & Strengths Analysis	Independently consider needs & strengths
4	Review of findings	Independently assess needs & strengths
5	Merger of Needs & Strengths	Combining power of NA A/CB models
6	Development of strategy for improvement	Translate findings into action
7	Implementation and evaluation of plans	Provision of results and recommendations to appropriate stakeholders
8	Review of initial findings to improve growth	In collaboration with appropriate stakeholders, if requested

Table 3.1. Research Questions.

RQ N	Research Question
RQ1	What are the current perceived academic, social, health, and financial needs of graduate students from the perspective of student, faculty, and administrators?
RQ2	What are the current barriers to graduate student success, measured by retention, GPA, graduation, and career placement?
RQ3	What assets are currently used and available to graduate students, and how are they perceived by student, faculty, and administrators?
RQ4	How can available and future assets be used to meet graduate student needs and eliminate barriers?

Table 3.2. Study Participant Group Definitions.

Group	Definition
Students	Institution graduate students enrolled in a Masters or PhD program within the study timeline.
Professors	Any individual employed by the institution to teach graduate courses at the Masters or PhD level at a part-time or full-time capacity within the study timeline.
Administrators	Any individual employed by the institution in the role of an administrator or staff position related to performing job duties connected to graduate students or graduate programs within the timeline of the study, with emphasis on attaining data from program leadership.

Table 3.3. Recruitment Methods and Timelines.

Participant Population	Recruitment Method	Recruitment Stakeholder	Planned Requests Number
Students	E-mail and Listserv Distribution	Graduate Student Senate	2 over 3 week span
		College Deans	2 over 3 week span
		Graduate School Administration	2 over 3 week span
		Program Department Heads & Coordinators	2 over 3 week span
	Social Media	Graduate Student Senate	4 over 4 week span
		Graduate School Administration	4 over 4 week span
		Program Department Heads & Coordinators	4 over 4 week span
	Zoom	Graduate School Faculty & Instructors	2 over 3 week span
Flyers	Program Administrators	Hard copy posts	
Professors	E-mail	Program Department Heads & Coordinators	2 over 3 week span
		Program Faculty and Instructors	2 over 3 week span
	Phone Call	Program Faculty and Instructors	2 over 3 week span
Administrators	E-mail / Call	Program Department heads & Coordinators	2 over 3 week span

Table 3.4. Research Questions within Protocols

Protocol Root Question	RQ	Population
How would you describe your experiences as a graduate student?	RQ1; RQ2	Student
How do you define success as a graduate student?	RQ1; RQ2	Student
What, if any, are the primary barriers limiting graduate student success?	RQ1; RQ2	All
In what ways do gender, racial, or other identity components impact graduate student success?	RQ1; RQ2	All
What factors limit graduate student success and what could be done to address these factors?	RQ1; RQ2	All
Do you have any specific suggestions for improving graduate student success?	RQ3; RQ4	All
What are the most important resources for graduate student success?	RQ3; RQ4	All
Are there any resources that could be capitalized on to improve graduate student success?	RQ3; RQ4	All
What role do you feel you play in helping graduate students succeed?	RQ3; RQ4	Faculty, Staff
What are the primary needs for graduate students to achieve success?	ALL	All
Which if any graduate student needs are not being met at the optimal level?	ALL	All
What are the primary needs for graduate student success?	ALL	All
How are graduate student needs identified?	ALL	Faculty, Staff

Table 3.5. Analysis Steps and Procedures.

Step	Task	Purpose	Analysis Outcome
1	Reflexive Journaling	Bias reduction	Trustworthiness
2	Interviews & Focus Groups	Data Collection	Emergent Code Development
3	Transcription	Data Collection & Analysis	Defined Codes and Code Manual
4	Reflexive Journaling	Bias reduction	Trustworthiness
5	Research Question Clusters	Data Analysis (Inquiry)	Emergent Thematic Coding
6	Reflexive Journaling	Bias reduction	Trustworthiness
7	Classical Content Analysis: Needs	Data Analysis (Inquiry)	Solidification of Themes
8	Classical Content Analysis: Strengths	Data Analysis (Inquiry)	Solidification of Themes
9	Time Lapse	Intra-rater reliability	Trustworthiness
10	Reflexive Journaling	Bias reduction	Trustworthiness
11	Classical Content Analysis Round 2: Needs & Strengths	Data Analysis (Interpretive)	Finalization & Interpretation of Themes; Extrapolation of Findings
12	External Review of Findings	Data Analysis	Trustworthiness via Inter-rater reliability, triangulation, and member checking

Table 4.1. Overview of Themes, Descriptions, and Definitions.

Theme	Description	Definition
Clear Communication	Two-way communication is complex and difficult to create and maintain.	A graduate student's need to receive clear information and provide complex, holistic feedback.
Holistic Mentoring and Advising	Graduate students need depth and breadth in mentoring and advising.	A graduate student's need for an individual or network of professionals who can support holistic graduate student success.
Achieving Mental Health	Positive mental health is a tipping point for student success: a barrier when lacking, an asset with developed and supported.	A graduate student's need for and ability to maintain positive and productive mental health.
Achieving a Balanced Life	Balance is an essential and often unobtainable graduate student need.	A graduate student's need for time and space for all necessary elements of healthy living including work, social life, family life, physical health, and other essential life components.
Clear Expectations	Standards must be clearly communicated and processes must be streamlined and simplified.	Graduate students need rules, regulations, and processes that are clear, standardized, and simple to follow.
Conflicting Institutional Roles	Graduate student primary identities as student, instructor, or staff to their institution require clarity and organization.	A graduate student's need for the intermingled role as both university student and instructor or staff to be clarified, structured, and supported.
Finances for Basic Needs	Adequate financial support is essential and not always obtainable	A graduate student's need to receive adequate financial and economic accommodations to meet basic needs such as food, shelter, and transportation.
Personal Power	Graduate students lack personal power.	A graduate student's need to maintain some level of control, authority, or influence over one's own life, context, and environment.
Graduate Student Support	Graduate student support is a key asset to success.	Any academic or social resource that provides a need acts as an asset for graduate students.

Table 4.1. Continued.

Theme	Description	Definition
Structured Professional Development	Professional development provides a key asset for graduate students.	A graduate student’s need for resources or opportunities within a specific field of study or academic pursuit.
Building Community	Cross-sectional communities exhibiting variety and inclusivity are essential for graduate student success.	A graduate student’s need for social and professional networks, spaces, and avenues within which graduate students can make connections and develop a sense of belonging.
Individual Identity Recognition	Graduate student identity must be recognized, fostered and developed.	A graduate student’s need for all forms of seen or unseen individual characteristic to be recognized and supported.

Table 4.2. Connection Between Themes and Research Questions.

Research Question	Themes
RQ1: unmet needs	clear communication; holistic mentoring and advising; and mental health
RQ2: barriers	achieving a balanced life; clear expectations; conflicting institutional roles; finances for basic needs; and personal power
RQ3: current assets	graduate student support; research opportunities; structured professional development
RQ4: future assets	building community; and individual identity recognition.

Table 4.3. Connections Between Themes and Research Question Categories.

Theme	RQ1: Unmet Need	RQ2: Barrier	RQ3: Current Asset	RQ4: Future Asset
Clear Communication	X			
Holistic Mentoring and Advising	X			
Achieving Mental Health	X			
Achieving a Balanced Life		X		
Clear Expectations		X		
Conflicting Institutional Roles		X		
Finances for Basic Needs		X		
Personal Power		X		
Graduate Student Support			X	
Research Opportunities			X	
Structured Professional Development			X	
Building Community				X
Individual Identity Recognition				X

Table 4.4. Theme Examples.

Theme	Examples
Clear Communication	People are overwhelmed by the amount of information that's coming at them
	We need more flexibility and options built into communication
Holistic Mentoring and Advising	I need a mentor who is not only there in a professional way but who also understands the stress associated with grad school.
	I need an advisor with academic depth and personal breadth.
Achieving Mental Health	I defiantly feel a constant pressure when it comes to grad school.
	My mental health has suffered; it was really the first time in my life I experienced depression and isolation.
	I felt I had to suffer in silence, just put your head down, get your work done.
Achieving a Balanced Life	There aren't enough hours in the day and you have to let go of the desire to be able to do everything.
	There's a disconnect between what people ask and what you are able to give.
	I have to pick and choose what I allocate my time to.
	I feel like my time is not my own.
Clear Expectations	We need clarity and ease of use of forms and all graduate school processes.
	We operate under a decentralized model, but we need to do a better job educating about the process.
Conflicting Institutional Roles	As a graduate student I'm somehow a faculty, a staff, and a student, and then also a graduate student.
	It feels like my employer says here I'm giving you a salary but also charging you a fee to come use my computers and be at work.
	There's not really recognition that we are employees a lot of times, and there's not the support and resources that employees should be entitled to.
Finances for Basic Needs	Financial help is important; I found out I qualify for food stamps.
	I know most people have a hard time finding housing that's within budget.
	The people who seem like they're progressing and being more successful tend to be those who are funded.
	A vast majority of the common grad student issues that a lot of us face would be drastically improved if not completely eliminated by actually having a living wage and having money to deal with some of these problems ourselves.
Personal Power	The person that I would go to [for help] was the person who signed my paychecks and my principal investigator.
	They [supervisors, PIs, etc.] often have a financial stick on graduate students and if graduate students do not develop in the ways they need them to, then the students are at risk.

Table 4.4. Continued

Theme	Examples
Graduate Student Support	Our generalized services are not fully meeting the needs of graduate students.
	I've found the libraries very helpful.
	The technology support has been great.
	Graduate students do need more specific support academically and career oriented.
Research Opportunities	It would be helpful to incentivize and protect faculty from the speed of the research cycle.
	I would like just a bit more guiding students, scaffolding us through the research process.
Structured Professional Development	Graduate students benefit from professional development, whether they choose to go into academia or the corporate world.
	I recommend a professional development series that would offer multiple opportunities for development and engagement.
Building Community	Grad school seems like kind of a lonely experience.
	Grad student groups are intertwined with undergrad groups, but I feel like our needs are a little different.
	It's really hard for me to find my people.
	I never really thought of myself as being part of the graduate school.
	Our grad students need a sense of connection to community; they feel isolated from the greater university as a whole; they want to belong to the greater community but they're not quite sure how to do that.
Individual Identity Recognition	We have not been able to recruit a very diverse population.
	Don't assume that our masks are who we are.
	There are definitely identity politics within graduate school.
	There are some pretty serious kinds of inequities within the program and with outcomes of what people experience.

Appendix F: Figures

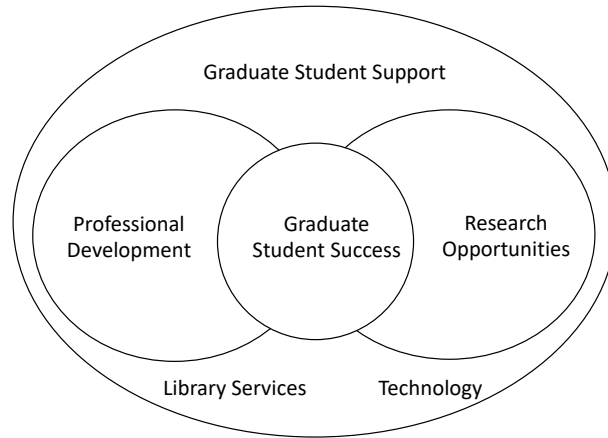


Figure 4.1. Connecting Graduate Student Support

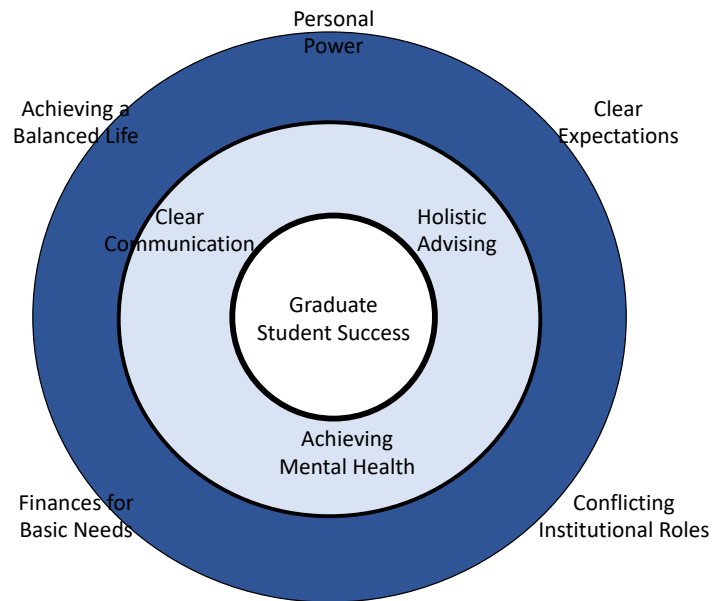


Figure 4.2. Barriers to Graduate Student Success

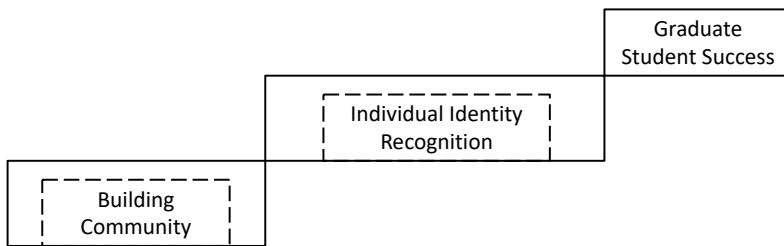


Figure 4.3. Growing Future Assets

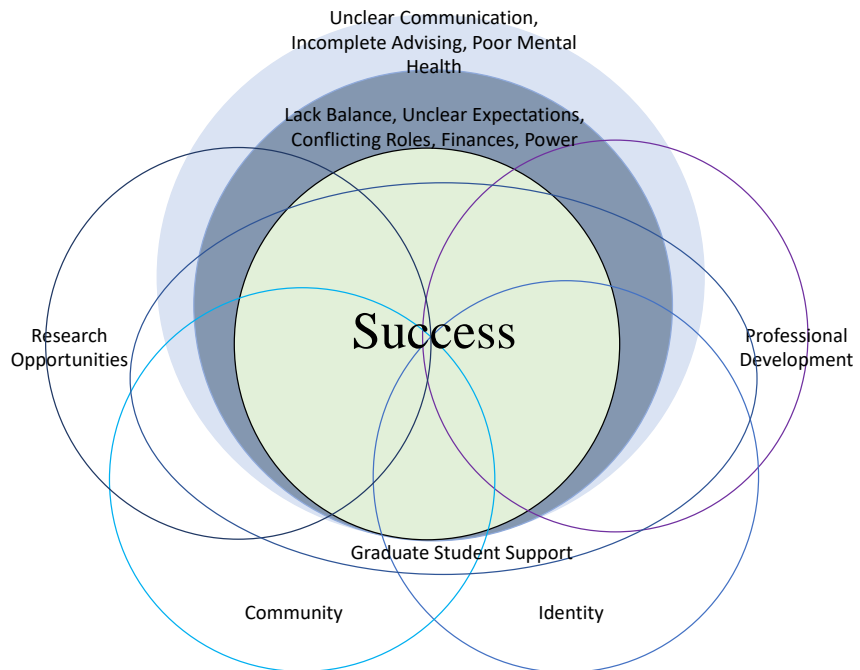


Figure 5.1. Intersectionality of Themes

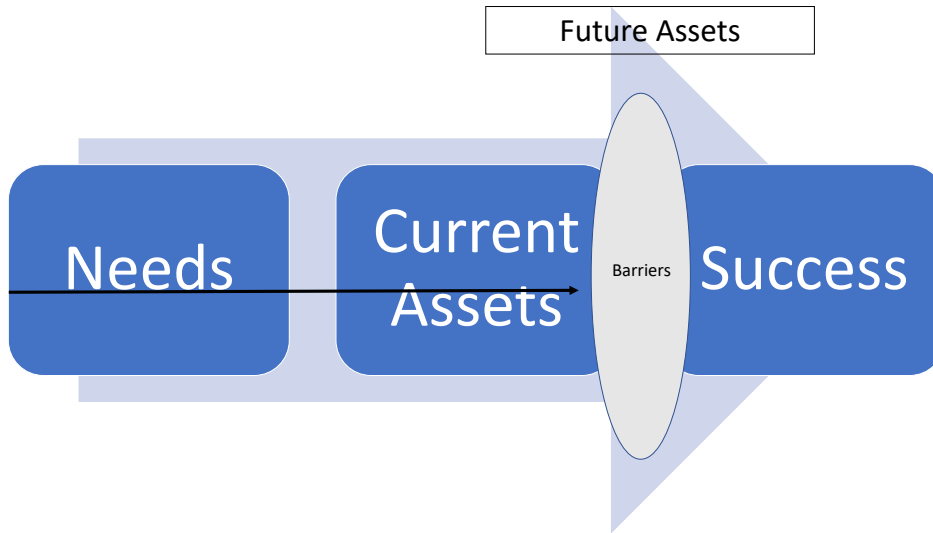


Figure 5.2. Linear Intersectionality of Themes



Figure 5.3. Thematic Positive Impact on Graduate Student Success

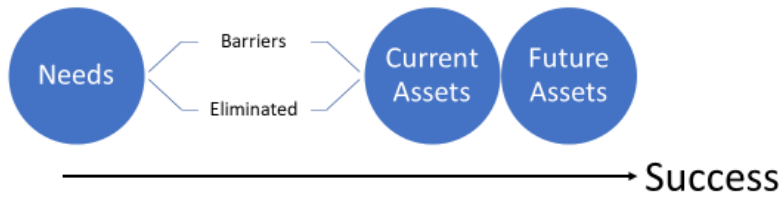


Figure 5.4. Linear Thematic Positive Impact on Graduate Student Success

Student	Locus of Control		Institution
	Clear Communication	Balanced Life	Clear Expectations
	Mental Health	Holistic Advising	Conflicting Roles
	Building Community	Personal Power	Graduate Student Support
	Individual Identity Recognition	Professional Development	Basic Needs Finances
		Research Opportunities	

Figure 5.5. Locus of Control

VITA

Jessica Osborne was born and raised in Kingsport, Tennessee. She attended Elon University, earning a Bachelor of Arts degree in English. She then moved to Greensboro, North Carolina, where she earned a Master's of Fine Arts in Creative Writing from the University of North Carolina, Greensboro. This led her to a career in higher education, teaching writing and composition courses and working in writing centers. In 2013, Jessica started working at the University of Tennessee, Knoxville and, shortly thereafter, began to pursue her PhD in Educational Psychology with a focus on Evaluation, Statistics, and Measurement. After graduation, she plans to continue her work in higher education and student success.