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Student Experiences Leaving Health Profession Interest Areas

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A dissertation

presented to

the faculty of the Department of Education Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

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by

Megan Roberts

May 2022

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Dr. Susan Epps, Chair

Dr. Hal Knight

Dr. Deborah Dotson

Keywords: selective admissions, undergraduate major change, academic achievement, prescriptive degrees

## ABSTRACT

Student Experiences Leaving Health Profession Interest Areas

by

Megan Roberts

The undergraduate major change or declaration process can be cumbersome for students who find themselves in unknown territories when making decisions or seeking help during this transition. One of the most challenging groups of students to assist through this transition are those who are denied access to their intended program of study. These students are often pursuing selective degree programs with limited enrollment and competitive admission requirements. Research on students pursuing selective degree programs is largely outdated, with most studies being older than ten years. The purpose of this qualitative study was to explore how undergraduate students experience leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in Tennessee.

This qualitative study included the experiences of 12 third and fourth-year college students at one institution who applied for a selective degree program, were not accepted, and remained enrolled at the institution. It included semi-structured, open-ended individual interviews to investigate these undergraduate students' experiences when undergoing an undergraduate major change away from a selective degree program. The results aligned with the theoretical framework of Schlossberg's transition theory (Schlossberg, 1981; Schlossberg, 1991; Schlossberg et al., 1995).

The students leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences placed importance on college and career choice, experienced change of major difficulties, used campus and other support resources, and developed new strategies for success throughout the change of major process. Recommendations for further study include expanding the sample size and adding other selective degree programs to gain a more holistic picture, developing studies at multiple institutions that follow students throughout the entirety of their undergraduate careers, and investigating students' coping strategies to identify ways to foster resiliency.

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## DEDICATION

“You may encounter many defeats, but you must not be defeated. In fact, it may be necessary to encounter the defeats, so you can know who you are, what you can rise from, how you can still come out of it.” -Maya Angelou

With genuine gratitude and warm regard, I dedicate this work to the students who were willing to participate in this study. I greatly appreciate your willingness to express your joys and frustrations of changing majors. To these students, along with others, who enter college and learn how to navigate new waters, may you persist through the challenges, discover your passions, and continue to be courageous and eager to learn in the future.

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To my children, Quinn and Graham, thank you for understanding why I was sitting in front of my computer again. I know this was challenging. You have made me more fulfilled in life than I could have ever imagined. I hope that this experience has shown you that it takes hard work to accomplish your dreams, but you can achieve your own versions of success in the future with enough energy, effort, persistence, and support.

To my parents, Betty and Jim, thank you for always believing in me and instilling the importance of being a life-long learner. To my sister, in-laws, and brother-in-law, Riley, Robbie, Tom, and Duff, thank you for checking in on me and asking about my progress in this program.

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To my mentors, Drs. Lynn Williams and Don Samples, thank you for seeing my leadership abilities and giving me the confidence to chase my passions in the field of higher education. To my auditor, but more importantly, my friend, Ali, thank you for listening and encouraging me to keep going during the final stages of this dissertation. Lastly, thank you to NACADA for funding this study through a research grant.



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## Chapter 1. Introduction

Choosing an undergraduate major can be a difficult decision for many college students. A handful of studies mention that most college students change their undergraduate major at least once (Blekic et al., 2020; McKenzie et al., 2017; Milsom & Coughlin, 2015; Spight, 2020). Academic and environmental factors can influence students' intended academic plans (Jeffreys, 2012). For the allied health and nursing populations examined in this study, the academic factors that are most important for persistence rates are personal study skills, study hours, attendance, class schedule, and general academic services such as the college library, college counseling, and computer laboratories (Flores & Simonsson, 2012; Jeffreys, 2012). Environmental factors external to the academic process that may impact students' academic performance and retention include finances, hours of employment, outside encouragement, family responsibilities, and the opportunity to transfer (Jeffreys, 2012).

In addition to the previous factors, there are selective degree programs with limited enrollment and competitive admission requirements. This means that some students may be unable to progress from their first choice of major sometime after their freshman year of college. Gordon et al. (2008) indicated that second- and third-year students denied access to these programs might have limited choices because they have earned a significant number of college credits and already have an established grade point average (GPA) that may not meet the eligibility criteria for other degrees at the same institution.

“Perhaps the most challenging group of major-changers to advise are the students who are denied access to their intended program of study” (Gordon et al., 2008, p. 166). Gordon et al. (2008) stated that, unfortunately, many of these students had entered college underprepared for the rigors of college-level academics, or they may not have dedicated enough time and attention

to what is required to compete in specific rigorous academic fields. In contrast, others hold on to the belief that they will get into their major despite tangible evidence to the contrary (Gordon et al., 2008). This can be a frustrating process for both academic advisors and students. Academic advisors would like to help these students move past this setback and examine alternate majors comparable to the desirable characteristics of their original choice (Gordon et al., 2008).

However, some students do not want to face the reality of being ineligible for or of not being accepted into their first-choice major, which Gordon et al. referred to as “up-tighters.” These students are not receptive to examining alternate major options and can be anxious and upset about their inability to progress in their first career choice.

### **Selective Majors**

The relevant literature on students in selective majors is largely outdated (Ballman & Mueller, 2008; Flores & Simonsson, 2012; Halasz, 2013; Jeffreys, 2012). Halasz (2013) studied students leaving majors in business, engineering, and nursing, either on their own accord because of a change of interest or by not meeting the minimum requirements to enter one of these programs, and concluded that students who leave selective majors use a variety of resources but relied primarily on external support systems such as their parents when undergoing an undergraduate degree change. Halasz noted the need for additional research on the students forced into an undergraduate major change after being denied access to their original degree. She also suggested having the participants come from one or similar degree backgrounds for broader applicability to the hurdles a specific populace faces during their time in college (Halasz, 2013). In this dissertation, I intend to expand on the recommendations of this previous research study to see if common themes emerge with a different subset of students leaving selective majors in a college setting.

## **Health Profession Interest Area Students**

At the institution where I conducted this study, students seeking entrance into the competitive or capped enrollment programs in Dental Hygiene, Nursing, Nutrition, Radiologic Science, and Respiratory Therapy must begin in a health professions interest area where they complete the appropriate pre-requisite and general education courses. The university enacted these interest areas as exploratory health-focused tracks when federal laws mandated that financial aid only be awarded to students in degrees that they can progress through to graduation. Therefore, if a student is not accepted into one of these selective health degrees during the application process, they must move towards another non-selective degree on campus (Office of Financial Aid and Scholarships, n.d.). For this study, the population of students was limited to Dental Hygiene, Nursing, and Radiologic Science students only because these are the most competitive programs that consistently receive more applications than the number they can admit.

## **College Completion Factors**

Several factors can restrict completion rates for college students. The ones gaining the most traction on the national higher education landscape include time to degree and degree completion rates, specifically the increased awareness of installing accountability measures for institutions (Kelchen, 2018). In addition, there is a continued need to study the first-hand experiences of students changing their undergraduate major and the issues they experience during this transition (Allen & Robbins, 2008; Habley et al., 2013; Halasz, 2013; Milsom & Coughlin, 2015; Spight, 2020). Habley et al. (2012) remarked that the more rigorous approach to researching student issues founded on formal investigation the more beneficial this can be for higher education administrators and students.



### ***Time to Degree***

One issue that can impact a student's ability to finish a college degree is the "time to degree," or the number of years it takes to complete a college education. Many students who change their undergraduate major are concerned with finding a new major that accepts most of their earned credits (Desjardins et al., 2002; U.S. Department of Education, 2019). Desjardins et al. noted that an undergraduate major change may unexpectedly extend a student's college completion rate past the typical four years. This can add financial pressure as well. For example, "a public 4-year institution's average tuition and fees were \$9,200 in 2018-19, about 12 percent higher than they were in 2010-11 at \$8,200" (NCES, 2020, para. 4). Additionally, scholarships and other financial aid are typically packaged with a four-year completion deadline (NCES, 2020).

### ***Degree Completion Rates***

Another issue is degree completion rates. Several states have formal accountability measures in which funding models for higher education institutions are tied to retention and graduation rates (Kelchen, 2018; Nuckols et al., 2020). Many funding models recently changed from enrollment-based to performance-based (Nuckols et al., 2020). This is partly due to college enrollment being on the decline (Armour, 2020), but also primarily attributed to increasing questions about the value and worth of a college degree (Kelchen, 2018). "States are generally increasing their scrutiny of colleges' performance, while private companies and individuals are leveraging the power of the new data sources and social media to encourage colleges to focus on certain metrics and to become more transparent in their operations" (Kelchen, 2018, p. 163). Kelchen noted that this shift has caused more colleges and universities to focus on metrics such as retention, graduation, and job placement rates.

## **Statement of the Problem**

Students who face academic setbacks or disruptions to their initial degree plans tend to withdraw, transfer, stop out, or even drop out of college (Halasz, 2013). Students who apply to degree programs with limited enrollment and competitive admissions standards and are not accepted are usually past their second year of college. Higher education professionals must begin to understand the factors impacting students as they transition away from selective degrees, so they can develop and plan interventions to retain students at the institution.

## **Purpose of the Study**

The purpose of this qualitative study is to explore how undergraduate students experience the transition of leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in Tennessee.

## **Research Question**

The research question for this study was:

How do students experience leaving the selective health profession interest areas of dental hygiene, nursing, and radiologic science?

## **Significance of the Study**

This study has direct applications to academic advising and retention efforts within the higher education environment. It also has implications to help address time to degree and degree completion rates. The sheer number of students selecting health professions and related programs is another reason to study this specific student population. For instance, health professions and related programs are in the category for the greatest number of degrees conferred at the bachelor's, master's, and doctoral degree levels within the postsecondary sector of education (National Center for Education Statistics, [NCES] 2018). According to the NCES, health

programs make up 12% of all degrees conferred at the bachelor's level. "The number of degrees conferred in health professions and related programs increased by 61 percent between 2006-07 and 2011-12 and then by 45 percent between 2011-12 and 2016-17" (NCES, 2018, Degrees section, para. 4). Additionally, nursing and other allied health fields have posed the question of whether or not to require bachelor's degrees and beyond for entry-level credentials in these respective fields (Smith, 2017). Given that the majority of health care programs are already competitive entry, this leaves students who are not admitted particularly vulnerable for two main reasons: 1) not living close to another institution that has their program of interest; thus, dropping out because they cannot progress in their first-choice degree and 2) not being able to afford their degree because of the extended time it takes to complete it due to having to change majors (Smith, 2017).

### **Definitions of Terms**

**Academic Advising:** A situation where an institutional representative provides insight to a student about an academic, social, or personal matter during their college experience (National Academic Advisor Association, NACADA, 2014). This insight might be to "inform, suggest, counsel, discipline, coach, mentor, or even teach" (Gordon et al., 2008, p. 3).

**Academic Advisor:** Both faculty and professional staff involved in an educational role to enhance student learning and development during college (NACADA, 2014). "Academic advisors teach students about how information is relative to the learning environment and then applicable to the world outside the institution" (Gordon et al., 2008, p. 351).

**Drop out:** A student who leaves college before finishing their degree (Habley et al., 2012).

**Retention:** “The collective effort of both the student and institution to ensure continued persistence to graduation/degree completion” (National Association of Student Personnel Administrators, NASPA, n.d., Definition of Terms section).

**Selective Major:** An undergraduate major requiring students to apply for admittance in order to progress through upper-division coursework, or to maintain high academic performance in a prescribed set of courses over the tenure of the degree to graduate (Halasz, 2013).

**Stop out:** A student who disrupts education for a brief period but then returns to complete a degree (Habley et al., 2012).

**Student Success:** The act of a college student obtaining “academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills, and competencies, persistence, and attainment of educational objectives” (Gordon et al., 2008, p. 68).

**Transition:** Any event or non-event that results in changed relationships, routines, assumptions, and roles during a student’s college journey beginning with pre-college preparation through degree completion (Evans et al., 2010; Goodman et al., 2006; Gordon et al., 2008; NASPA, n.d.; Schlossberg et al., 1995).

### **Delimitations and Limitations**

The study is delimited to students who were interested in pursuing dental hygiene, nursing, and radiologic science in the future at a single regional four-year public institution. Because I used a limited number of participants at a single institution the results cannot be generalized to other selective majors such as business, education, and engineering, a larger population, or other institutions.

The potential subjectivity of the data gathered during the interviews is another limitation. For example, I have formed professional relationships and rapport with some of the participants

in the study from meeting with them for academic advisement appointments previously. I may have developed certain assumptions of the barriers these students face when leaving a selective admissions program. However, I addressed this by examining my judgments, practices, and beliefs during the data collection and analysis process by engaging in reflexivity. I made a deliberate effort to be attuned to my reactions and ensured that I transcribed the interviews verbatim to the participant's responses. I also used an external auditor to review the data and my analysis of the themes that emerged during the findings of my study.

### **Overview of the Study**

Chapter 1 included the purpose of the study, the significance of the study, research questions, limitations, and delimitations. Chapter 2 includes literature related to the research question posed in this study. Chapter 3 includes the qualitative methodology for the study. Chapter 4 includes the findings and themes. Finally, Chapter 5 presents the conclusions and recommendations for future studies.

## Chapter 2. Literature Review

College students are encouraged to declare their undergraduate major of choice from the onset of their higher education journey. This can be a challenging decision for both traditional and nontraditional college students. Many incoming college students do an immense amount of research on career options during middle and high school education experiences before beginning at their higher education institutions (Gysbers et al., 2014). They also attempt to obtain job shadowing opportunities to view the day-to-day activities of an occupation (Gysbers et al., 2014; Niles & Harris-Bowlsby, 2013). However, a student's interest may change during the pivotal, transformative, and developmental years of college. According to Evans et al. (2010), "students are unique individuals with different personalities, interests, and styles of interaction" (p. 33); these differences influence how students interact with their academic environments and develop cognitively, interpersonally, and intrapersonally (Evans et al., 2010).

After a student decides on an undergraduate major, there are parental and institutional pressures not to change it. The parental pressures often revolve around graduating from college promptly with as little financial debt as possible (Kelchen, 2018). In contrast, the institutional forces are more related to placing students in careers related to their undergraduate degrees to enhance accountability measures like job placement rates (Downey et al., 2011; Education Commission of the States, 2020). Something as simple as the student changing their undergraduate major can result in extended time to complete their degree or to find employment in a particular field (McKenzie et al., 2017). However, it is not always possible for a student to stay in the same degree during their tenure in college, particularly if they are interested in a major with selective or competitive admission such as professional health programs, business, and engineering (Halasz, 2013; Jeffreys, 2012). The students not accepted into these selected

admission degrees are forced to change their initial career path or reapply to the major later and are often left to fend for themselves during this experience (Halasz, 2013).

### **Organization of the Literature Review**

There is a body of research on academic advising of students who are undergoing a transition (Blekic et al., 2020; Glaessgen et al., 2018; Milsom & Coughlin, 2015). However, most of this research lacks the first-person experience of what students are doing during this period of change. This limitation in the available research creates a challenge for higher education personnel who want to understand the factors that impact students' experiences.

Because specific research on students leaving selective entry majors is lacking, this chapter includes relevant scholarly works on student success, retention, and the undergraduate major declaration or change process for several different populations of students. There will also be related research on best practices for working with pre-health student populations. The literature review will close with an overview of a theoretical framework related to students going through a transition experience during college.

### **College Student Success**

A student's success is critical to a college or university as well as society (Perna & Thomas, 2008; Picton et al., 2018; Strayhorn, 2015). Student success is generally measured by academic achievement, which usually encompasses student retention and degree completion (Picton et al., 2018). According to Strayhorn (2015), "college student success begins with access," or ensuring that students have equal opportunities to take full advantage of their education (Strayhorn, 2015, p. 57). Strayhorn also stated that students want to succeed but may enroll without the academic preparation required to flourish. They enroll and struggle to find the resources, information, and advice to achieve their educational goals at an institution. Access to

higher education has increased the opportunities for first-generation college students, students from low socioeconomic backgrounds, women, students of color, veterans, and more (Perna & Thomas, 2008; Picton et al., 2018; Strayhorn, 2015). Nevertheless, “access without success is useless, but access with success is everything” (Strayhorn, 2015, p. 58).

As college enrollment more than doubled from around nine million in 1980 to over 20 million in 2011, the overall completion rates only had a small, if any, increase in this same period (Tinto, 2012). Tinto continued to emphasize that just over half of the students obtain their college degrees at four-year institutions, and less than a third of community college students earn their associate degrees or certifications at their initial institutions. According to the National Student Clearinghouse Research Center (NSCRC, 2021), enrollment since 2011 has not increased but has instead declined. “Overall spring 2021 enrollment fell to 16.9 million from 17.5 million, marking a one-year decline of 3.5 percent or 603,000 students, seven times worse than the decline a year earlier” (NSCRC, 2021, para. 1). The state of Tennessee has specifically seen a stark decline in college enrollment and graduated 529 fewer high school students in the 2020 cohort compared to the previous year (Tennessee Department of Education, 2020). Higher education professionals are starting to shift their focus by not only concentrating on accessibility of college, but also increasing support systems and student success efforts for students once enrolled (Tinto, 2012). For example, the Tennessee Board of Regents (TBR, 2020) identified areas of focus with student success that include providing more funding to incoming students, working on graduation rates at the community colleges, evaluating equity gaps for graduation at all institutions, and incorporating more high impact practices like first-year seminar courses, online class support systems and trainings, and early outreach to struggling students.



The concept of student success is broad, and there are a few sources that note the vast amount of interdisciplinary literature on this topic (Habley et al., 2012; Perna & Thomas, 2008; Tinto, 2012). Tinto (2012) argued that “institutions should assess student experiences and analyze patterns of student progression through the institution” (p. 121). This can be done by developing flow models that indicate how different groups of students progress through their programs at the institution while identifying the points where students' progress is most at risk (Tinto, 2012). Using these identified points institutions can develop actions at specific sequenced times to eliminate the barriers for students. The transparent analysis of retention efforts and student progress should be the norm and not the exception of any institutional practice (Tinto, 2012).

Perna and Thomas (2008) created an “overarching conceptual framework that policymakers, practitioners, and researchers may use to guide development, implementation, and evaluation of policies and practices for improving success for all students and reducing persisting racial, ethnic, and socioeconomic gaps in student success” (Perna & Thomas, 2008, p. 3). This framework does not provide a model to understand any specific student success outcomes, but rather it is a tool to bring order to a variety of theoretical approaches so policymakers and practitioners can usefully intervene to promote student success (Perna & Thomas, 2008). However, it does include four key transitions during the student success process. The first transition includes being ready for college and is measured by academic preparation for college. The second transition includes the enrollment process, measured by college access. The third transition includes college achievement measured by academic performance, transfer among institutions, and persistence to program or degree completion. The fourth transition includes post-college attainment measured by enrollment in a graduate or professional school or

employment and income. Policymakers and practitioners need to recognize that no single approach to policy or practice will improve student success for all students because there are multiple layers of context to inform student success (Perna & Thomas, 2008). However, qualitative research on specific student populations with different cultural or contextual backgrounds like degree paths can be a powerful tool to gain insight into the ways that students navigate through policies and procedures on a certain college campus (Perna & Thomas, 2008).

In recent years, federal and state governments have called for more accountability in higher education (Blagg & Blom, 2018; Kelchen, 2018; Nuckols et al., 2020) due in part to the rising cost of higher education, dwindling public funding, and changes in state funding models (Nuckols et al., 2020). Policymakers have greater access to data on how higher education institutions are serving students from national datasets on the College Scorecard, new measures of student outcomes in the Integrated Postsecondary Education Data System, and state developed datasets that follow students from grade school, to college, and into their careers (Blagg & Blom, 2018). Federal and state governments, legislators, and some citizens are starting to question the value of a college degree (Nuckols et al., 2020). In response to this mentality shift, most public funding models have changed from enrollment-based to performance-based with greater emphasis on measurable outcomes such as retention and graduation rates (Kelchen, 2018). The increasing cost of higher education along with the availability of access to public datasets on student outcomes has caused students and their families to evaluate the return-on-investment for a college degree (Blagg & Blom, 2018). This change has also put more attention on student achievement because certain funding portions are based on student success metrics (Nuckols et al., 2020).

## ***Retention***

The study of student retention has increased over the last few decades (Seidman, 2012; Tetreault, 2013; Tinto et al., 2007; Wade, 2019). Much of the previous research on retention has examined the relationship between retention and an individual's connection or involvement with campus life at a specific institution (Kuh et al., 2005; Pascarella et al., 2005; Reason, 2009; Tinto, 2012). Several studies also specifically concentrated on first-year retention rates because this is when most students leave higher education (Seidman, 2012). For example, at four-year colleges and universities, both public and private, 38% of students leave in their first year, while only 29% leave in their second year (Tinto, 2012).

Thanks to Tinto's (2012) research the belief that students left because they were not capable of achieving success has been replaced with a call for institutions to take ownership of the barriers they create for students (Tinto et al., 2007; Tinto, 2012; Wade, 2019). Tinto determined that students bring inherent traits, including their race/ethnicity, gender, achievement, and socioeconomic status, that can influence their level of commitment to college. "The traits with which students enter and their commitment in turn influence the extent to which they become integrated into a school's academic and social communities" (Tinto et al., 2007, p. 22). However, Tinto et al. also suggested that even though students bring in varying levels of commitment to college, there are still insufficient resources and money dedicated to retention efforts. Thus, institutions often ignore or do not dedicate enough attention to addressing the barriers or structural issues including cumbersome processes that students face during their educational pursuits.

In general, selective colleges and universities have higher retention and graduation rates because they enroll students from wealthier backgrounds whose parents have college educations

(Swail, 2014) and these students generally have higher average high school grades and test scores (Astin & Oseguera, 2005; Gold & Albert, 2006; Horn & Carroll, 2006; Swail, 2014). However, institutions with similar selectivity standards still have varying retention and graduation rates, meaning that institutional efforts can play a more prominent role in increasing their persistence and graduation rates (Tinto, 2012). For example, college satisfaction, specifically with the academic environment, is a key indicator for student retention (Allen & Robbins, 2008). In addition, colleges and universities have started to focus more co-curricular experiences and academic and social supports on students from varying backgrounds through academic advising, first-year seminars, and other supplemental instruction (Dumke et al., 2018).

Retention beyond the first year has also been a blossoming field of research (Blekic et al., 2020). Factors that impact student retention range from pre-college abilities to academic and social experiences while on campus (Seidman, 2012). Seidman (2012) identified factors related to retention including family support, financial support, current environment, commitment to education, inside and outside of the classroom experiences, involvement in organizations, encouragement and support from faculty and staff, and overall sense of belonging while attaining an undergraduate degree. Seidman and others found that academic performance is a strong predictor of student retention past the first year of college (Allen et al., 2008; Seidman, 2012; Titus, 2004). For instance, Titus (2004) found that the chances of students persisting to the third year increased eight percent with only one standard deviation of increase in college GPA and that academic performance in college has a positive relationship for students who attend four-year institutions. Ishitani and Desjardens (2002) noted that students are at a higher risk of dropping out of college if they have a GPA of 2.0 or lower in their second year of college. Academic achievement, a letter grade of B or higher in courses, appears to be the best indicator

for student retention as noted in the literature for advanced standing students (Blekic et al., 2020). This can be troubling for those pre-health students who are working towards competitive programs at either the undergraduate or graduate level but are not meeting the high academic standards (Dumke et al., 2020). Early intervention from academic advisors and having a backup plan for another career and degree path may be the best approach to take with the students who find themselves in this situation (Khali & Williamson, 2014; Smale & Fowlie, 2009).

### **Factors Impacting Undergraduate Major Choice**

Several factors can impact an undergraduate student's decision on a career path and major during college (Downey et al., 2011; McKenzie et al., 2017; Milsom & Coughlin, 2015; Spight, 2020). These factors may be internal considerations such as a student's interest and satisfaction with a particular major or program or external concerns such as employability, pay, or parental influence (Downey et al., 2011). The undergraduate major change or declaration process can also be cumbersome for students who may find themselves in unknown territories when making decisions or seeking help during these transitions (McKenzie et al., 2017; Milsom & Coughlin, 2015).

### ***Major and Interest Alignment***

“Students who choose a major congruent with their skills and interests are more likely to succeed and persist in that major and in college” (Allen & Robbins, 2008, p. 62). When a student finds a major that aligns with their interests, they are more satisfied with their academic experience, thus increasing their timeliness to graduation (Downey et al., 2011; Glaessgen et al., 2018; McKenzie et al., 2017; Milsom & Coughlin, 2015; Spight, 2020, Wheeler, 2014).

Research on major choice satisfaction is gaining traction in higher education because it not only

adds to the literature on choosing a major and decidedness, but it also relates to retention, change of major, and academic performance (Milsom & Coughlin, 2015).

Milsom and Coughlin (2015) determined that students who engage with their instructors and peers in their majors have increased self and career awareness. These engagement opportunities include acquiring information from course content provided by instructors or having related internships and work experiences within their field of interest (Milsom & Coughlin, 2015; Nauta, 2007). Likewise, Nauta (2007) discovered a positive correlation between college major satisfaction and GPA as well as persistence within that program of study. Nauta also found a positive correlation between college major satisfaction and career decision self-efficacy. In other words, students who choose a satisfying major are more likely to have confidence in making other career-related decisions during their future professional experiences (Nauta, 2007).

### ***Major Changes***

Students who change their undergraduate major multiple times take longer to graduate (Allen & Robbins, 2008; McKenzie et al., 2017). McKenzie et al. (2017) stated that “35-75% of undergraduates change their majors at least once during their undergraduate years,” often due to losing interest in that major or being unable to progress because of the inability to meet academic standards for certain programs (p. 15). McKenzie et al. also mentioned that students who must re-select their major unexpectedly are particularly vulnerable to dropping out or being academically dismissed. Therefore, institutions have started to allocate academic advising and student support resources to respond to the specific needs of students undergoing an undergraduate major change experience (McKenzie et al., 2017).

McKenzie et al. (2017) found that the students who met with an academic advisor before changing majors remained at the institution at a higher rate than those who did not meet with one. However, they also concluded that students with higher GPAs often seek help from academic advisors and other campus resources while students with lower GPAs, defined as a 2.0 or less, did not seek help as frequently, and their major re-selection was usually involuntary (McKenzie et al., 2017). This also aligns with previous findings that students who demonstrate better academic performances seek help more frequently than those who do not perform as well as peers at their same collegiate level (Alexitch, 2002, Merry et al., 2013).

### ***Choosing a Major***

Most of the undergraduate major declaration research involved undecided or first-generation student populations (Glaessgen et al., 2018). Glaessgen et al. noted that “even as pursuing a college degree presents challenges, advancing toward an unknown degree complicates the journey to graduation” (p. 23). This is particularly true of those students who come in not knowing what they want to major in or having to change their major due to academic setbacks. Gordon and Steele (2003) conducted a 25-year cross-sectional study and noted that 85% of participants in their study were somewhat or very anxious about the major selection process. They also determined that approximately one-third of the first-year students in their study entered as undecided, and another third of their population of declared students changed their major at least once.

There are multiple reasons why students remain undecided in their undergraduate major decision (Cuseo, 2005; Glaessgen et al., 2018) including: 1) they are overwhelmed with too many options, 2) they want to explore all the areas that interest them before deciding, 3) they have narrowed their choice to a few options, 4) they may be questioning whether college offers

the best experiences for them to reach their goals, or 5) they may have been dismissed from a program and have not determined another alternative major (Cuseo, 2005). Cuseo also stated that “final decisions about majors and careers do not occur before students enter college; rather, students make these decisions during the college experience” (p. 6).

The decision to declare a major is typically more amplified for first-generation college students as they may have more feelings of isolation and doubt because they have entered an unknown collegiate environment where some of their continuing-generation friends have declared majors that serve as their academic homes (Cuseo, 2005). Cuseo noted that students often feel a sense of success when deciding on an undergraduate major; however, academic advisors and administrators need to understand that selecting a major is not always an easy and straightforward choice for students, especially first-generation and undecided populations (Cuseo, 2005; Glaessgen et al., 2018). When both the first generation and undecided variables are combined, these students may experience greater difficulty even connecting to an institution, thus being more likely to leave than their peers who do not fall into these two categories (Glaessgen et al., 2018).

### ***Transfer Students and Major Decision***

Community colleges have become a common entryway into the higher education environment (Hayes et al., 2020; Lukszo & Hayes, 2020). Now more than ever, a significant portion of students use the community college as a gateway to a four-year degree (Hayes et al., 2020; Lukszo & Hayes, 2020). The NSCRC (2017) reported that 49% of all students who completed a bachelor’s degree at a four-year institution were enrolled at a two-year institution within the last ten years. However, many students do not successfully navigate the transition between two different types of institutions despite this being a popular option. “While 75 percent



of first-year, first-time community college students aim to complete a baccalaureate degree, only one-quarter of these students go on to transfer and only 14 percent complete a bachelor's degree” (Hayes et al., 2020, p. 49).

There are also other issues with transfer students and their expectations of a seamless transition to a new institution. More specifically, community college students typically expect only two years of coursework remaining after finishing their associate degree, especially if they take advantage of a transfer pathway (Yang et al., 2018). For example, some students take Advanced Placement (AP) or dual enrollment courses during high school and other college courses during their associate degree which may not transfer to a four-year institution or apply to a specific college degree or program. This could negatively impact their progress toward degree completion (Yang et al., 2018). This is especially true for students who seek prescriptive degrees like education, engineering, or health-related disciplines. “Students who choose a prescriptive degree program may need to attend more semesters than those who matriculated directly from high school or who received and acted on accurate information about the transfer process” (Yang et al., 2018, p. 32).

Lastly, transfer students are starting to represent a large percentage of the applicant pools within science, technology, engineering, and math (STEM) disciplines for undergraduate programs and the workforce demand for professionals entering STEM fields remains at a high level (Zhang et al., 2019). Fayer et al. (2017) noted that between May of 2009 and 2015, STEM employment increased by 10.5%, double the rate of non-STEM occupations which remained around 5.2% during the same period. According to Starobin et al. (2016), the STEM fields of study account for about 25% of all degrees granted, and there is a higher percentage of males than females who earned bachelor's degrees in these areas across all racial/ethnic groups. To

match this known increase, institutions need to use an untapped talent pool of students, specifically community college transfers (Dowd, 2012). Community colleges can increase the diversification of the STEM workforce because they serve students of color, low-income students, first-generation students, and adult learners (Zhang et al., 2019).

Community colleges offer students opportunities to earn degrees in STEM programs (Allen & Zhang, 2016; Hagedorn & Purnamasari, 2012; Malcolm, 2010; Starobin & Laanan, 2008, Starobin et al., 2016), specifically females (Starobin & Laanan, 2008; Starobin et al., 2016), Latinx (Malcom, 2010), and adult learners (Allen & Zhang, 2016) who can explore their academic interests while being encouraged by community college faculty to transfer to four-year institutions to further their career aspirations. Although researchers found community colleges nurture students interested in STEM fields, unfortunately, students who go through the community college to baccalaureate transfer process are less likely to obtain their degree than those who enroll directly in four-year institutions (Jenkins & Fink, 2016; Wyner et al., 2012; Zhang et al., 2019). Wyner et al. (2012) mentioned that these challenges could be more severe for students in STEM fields because of the selectivity and rigor of most of these programs at four-year institutions.

### ***Financial Aid Impact on Major Decision***

While choosing a major and transferring institutions can be a daunting experience for an undergraduate student, financial implications can also impact a student's decision about their undergraduate major and progression through to graduation. Chen and Desjardins (2010) used longitudinal datasets from Beginning Postsecondary Students (BPS) surveys and the National Postsecondary Student Aid Study (NPSAS), both of which are sponsored by the National Center for Education Statistics (NCES), to determine that low-income and minority students received

the largest amounts of financial aid historically. However, national financial aid policies shifted the emphasis from increasing educational opportunities for diverse and low-income students to the affordability concerns of students from middle-income families (Chen & Desjardins, 2010; U.S. Department of Education, 2019). This has resulted in a decrease in need-based aid being readily available with loans, merit aid, and educational tax credits being the most common currently available forms of financial aid. This is a concerning trend because minority students tend to have higher dropout rates from college than do their peers because of the financial barriers they experience unless they receive larger Pell Grant funds over time (Chen & Desjardins, 2010; U.S. Department of Education, 2019). In addition to other need-based aid such as work-study programs, Pell Grants have demonstrated to be key factors in college entry, persistence, and success among low-income students, too (Bird & Castleman, 2016).

Given the racial/ethnic and socioeconomic gaps in degree attainment, institutions should also ensure that accurate information about student aid programs is available to students not only before enrolling in college but also during their college experiences (Bird & Castleman, 2016; Chen & Desjardins, 2010). Bird and Castleman (2016) also used BPS survey data to examine the proportion of college freshmen who refile the Free Application for Federal Student Aid (FAFSA), how the probability of refiling a FAFSA varies by student and institution characteristics, as does the association between successful FAFSA refiling and future success in college. Overall, they found that financial aid offices should assist their current students with the FAFSA because many forget to refile this on an annual basis which can be associated with higher dropout rates later in college and not being able to earn a degree within six years (Bird & Castleman, 2016).

There are further complications that students can experience when they do not understand financial aid rules. For example, institutions that provide their students with financial aid must follow state and federal laws that prevent undergraduates from becoming professional students (Yang et al., 2018). The *2020-2021 Federal Student Aid Handbook* states that undergraduates are required to complete their program within 150% of the published academic program length, and for those who exceed the maximum number of hours they must complete a Satisfactory Academic Progress Appeal to continue to receive financial aid (U.S. Department of Education, 2020). The U.S. Department of Education sets similar standards for students to remain in good academic standing at their institutions. Furthermore, institutions are now requiring that students only take courses that are part of the program of study for their undergraduate major (U.S. Department of Education, 2020). This adjustment in financial aid policy funding has limited students' options to take elective, exploratory, or prerequisite courses needed for graduate school applications during their undergraduate degrees (Yang et al., 2018). For example, students who transfer to a four-year institution with more than 60 credit hours from their associate degree may feel pressure to pursue an undergraduate major based on time to completion rather than their interest in that major to ensure they can finish while receiving aid (Yang et al., 2018). Additionally, students pursuing prescriptive degree programs who are not accepted into their program of choice after the first application cycle may be deterred from reapplying for the program (Yang et al., 2018). Students' anxiety levels about paying for college have been high in recent years, and this is typically caused by the anticipation of reaching the maximum number of hours for financial aid or possibly having to delay their expected graduation date with a change in college major (Bird & Castleman, 2016; Chen & Desjardins, 2010; Ishitani & Desjardins, 2002; Ishitani, 2006).

### ***Other External Factors that Impact Major Decision***

External factors that impact an undergraduate student's major decision include job characteristics like job security, availability, salary, and the prestige of employment (Downey et al., 2011; Education Commission of the States, 2020). Job availability and security may be the most important factors for students after many of them experienced their parents navigate through the 2008 recession (Downey et al., 2011), with salary and earning potential closely behind. Leppel et al. (2008) suggested that students tend to choose majors and work in fields with strong present and future potential for monetary growth. They also found that social image and status may impact a student's college major selection, however there appears to be a stronger correlation between social image and choice of majors for males than females (Montmarquette, 2002). Some students may even choose majors that they perceive to be easier than their alternate choices because they feel ill-prepared to select difficult majors like engineering, math, or science.

Parental influence also has an impact on a student's decision-making process. Montmarquette et al. (2002) found that information garnered from family members who attended college influenced undergraduates' college major decisions; students often noted this influence as positive (Keller & Whiston, 2008; Scott & Mallinckrodt, 2005; Weintraub & Sax, 2018). Pittaoulis (2012) found that while students from middle-class families said their parents expected them to attend college to obtain the necessary credentials for many occupations, the parents did not necessarily urge their students to choose a specific major but instead to use college to discover their interests and decide on a major after taking some exploratory coursework.

Additionally, Weintraub and Sax (2018) determined that students whose parents respond supportively and encourage their educational pursuits did well in a diverse range of majors and

were motivated to challenge themselves academically. Many students seek support from their parents on academic matters but not with the expectation that their parents would intervene on their behalf when faced with academic challenges (Weintraub & Sax, 2018). Specifically, for female students majoring in engineering, math, and the sciences, where they are typically underrepresented, unconditional support from both their mother and father is instrumental in their success during college (Scott & Mallinckrodt, 2005).

Conversely, other researchers noted parental support had unintended negative consequences (Furry & Sy, 2015; Hamilton, 2013; Hofer & Moore, 2010; Howard et al., 2019; Wentre & Yaffe, 2000). Hamilton (2013) found that students who received more financial support from their parents during college earned lower GPAs even when controlling for their demographic backgrounds, high school academic ability, and institutional type. Others mentioned that students who communicated frequently with their parents about academics had a higher likelihood of overdependence which can be detrimental to their success in college (Hofer & Moore, 2010), and as a student gets older parental support can become invasive rather than supportive (Furry & Sy, 2015). Furthermore, female students with authoritarian mothers earned relatively low GPAs (Wintre & Yaffe, 2000). In addition, students with parents who are overly involved show poor academic achievement, autonomy development, emotional regulation, and life satisfaction (Howard et al., 2019). Students furthering their education have varying levels of support for their families, as highlighted above. In order to understand how familial support can influence and guide college students, it is worthwhile to focus on pre-health student characteristics to assist with the identification of the specific hurdles that this population of students may experience during college (Alexander et al., 2009).

## **Pre-Health Students**

Many students enter college wanting to pursue a career in health care (Alexander et al., 2009). Alexander et al. noted that health care careers are generally economically stable with decent pay; however, this can be a challenging road due to the competitive nature of these programs at both the undergraduate and graduate levels (Alexander et al., 2009). Pre-health students face academic and non-academic setbacks alike.

The most common academic setback includes pre-health students not being able to obtain high grades in the science courses required for these health care programs (Alexander et al., 2009). Alexander et al. (2009) found that only 20% of students who took one required science course subsequently went on to complete four or more science courses later. Although the students in that study were not solely pre-health students, there is a clear indication that many students do not enroll in additional science classes after experiencing one challenging course (Alexander et al., 2009).

Adding to the academic setbacks are the non-academic ones such as losing or changing interest after experiencing other career exploration activities or maintaining interest towards a long-term goal of becoming a professional in the field of health care as many of these programs require a bachelor's degree or further education (Alexander et al., 2009; Dumke et al., 2018). Health-focused programs often have more applicants than spots available (Gordon, 1992; Reynolds, 2012). "Students unable to access oversubscribed and selective majors are often left to find alternative academic and career directions on their own" (Gordon, 1992, p. 82). Students who have the desire to enter these selective majors often choose their major with specific career goals in mind. It is particularly difficult to be dismissed from any major on a college for not

meeting matriculation standards. However, for students in selective majors, the rejection can be devastating because it creates a barrier to their previously defined career goals (Reynolds, 2012).

### **Theoretical Framework**

The most applicable theoretical framework to the study at hand is Schlossberg's transition theory (Schlossberg, 1981). Schlossberg's transition theory is commonly used under the umbrella of college student development theories (Evans et al., 2010; Patton et al., 2016; Schlossberg, 1981). "College student development theory is a body of scholarship that guides student affairs and higher education practice" (Patton et al., 2016, p. 22). The early college student development theories focused broadly on psychosocial approaches (Evans et al., 2010; Patton et al., 2016). They included foundational theories such as Chickering's theory of identity development, Erickson's identity development theory, Kohlberg's theory of moral development, and Perry's theory of intellectual and ethical development (Evans et al., 2010; Patton et al., 2016). These psychosocial theories "examine the content of development – that is, the important issues people face as their lives progress, such as how to define themselves, their relationships with others, and what to do with their lives" (Evans et al., 2010, p. 42). However, college student development theories have since evolved to create a stronger foundation and better understanding of today's diverse college students (Evans et al., 2010; Patton et al., 2016). College student development theories now include social identity theories that outline specific racial, ethnic, gender, and social development concepts like class, religion, and ability/disability status (Evans et al., 2010; Patton et al., 2016). Additionally, college student development theories have also incorporated more integrative and specialized theories (Evans et al., 2010; Patton et al., 2016).



The Schlossberg transition theory is considered integrative because “it examines both the internal psychological processes that people experience during a transition and also the circumstances surrounding them, including the situation itself and the supports available to the individuals experiencing the transition” (Evans et al., 2010, p. 156). This theory is applied best in a higher education setting when describing how a college student reacts to a specific life event, such as changing their undergraduate major (Evans et al., 2010; Patton et al., 2016). In a broader sense, this theory provides insights and understanding of adults undergoing a transition (Schlossberg, 1981). Schlossberg stated that a transition can “occur if an event or non-event results in a change in assumptions about oneself and the world and thus requires a corresponding change in one’s behavior and relationships” (p. 5). She also stressed that a transition only happens if it is defined as one by the individual (Schlossberg, 1981). In the second version of the theory Schlossberg et al. (1995) noted that there are three distinct types of transitions specifically with college students: 1) *anticipated transitions* that occur predictably like expected graduation from college; 2) *unanticipated transitions* that are not predicted or scheduled, like a sudden death of a family member; and 3) *non-events* which are anticipated to happen but do not, like a failure to be admitted into medical school. Transitions are generally experienced over time and through phases, which Schlossberg coined as moving in, moving through, and moving out of transitions (Schlossberg et al., 1995).

### **Factors Influencing Coping Abilities**

Schlossberg’s transition theory also included the four factors of *situation*, *self*, *support*, and *strategies*, known as the 4 S’s (Schlossberg, 1981; Schlossberg, 1991; Schlossberg et al., 1995). An individual’s ability to cope with a transition depends on their resources, or assets and liabilities, in these four areas (Schlossberg, 1991). This ratio of assets to liabilities helps to

explain “why different individuals react differently to the same type of transition and why the same person reacts differently at different times” (Schlossberg et al., 1995, p. 57). These four areas will be discussed in more detail below.

### ***Situation***

Schlossberg (1981) noted that “most transitions can be described using a common set of variables: role change, affect, source, timing, onset, duration, and degree of stress” (p. 8). Evans et al. (2010), who authored a book on student development in college, posited in *Chapter 12: Schlossberg Transition Theory*, that the following questions are important for students to ask themselves when examining their situation:

- *Trigger* – What triggered the transition?
- *Timing* – Is the transition viewed as happening at a “good” or “bad” time?
- *Control* – What does the individual perceive as being within his or her control?
- *Role change* – Is there a role change involved, and is this change viewed as a gain or a loss?
- *Duration* – Is the transition seen as permanent, temporary, or uncertain?
- *Previous experience with a similar transition* – How effectively did an individual cope previously, and what are the implications for the current transition?
- *Concurrent stress* – Does the individual have multiple sources of stress present?
- *Assessment* – Who or what is seen as responsible for the transition, and how is the individual’s behavior altered by this assessment? (p. 271)

### ***Self***

Schlossberg (1991) suggested that a student’s personal and demographic characteristics and psychological resources impact how they view life. Personal and demographic

characteristics include socioeconomic status, gender, age, stage of life, state of health, and ethnicity/culture. The psychological resources of ego development, outlook, commitment, values, spirituality, and resilience aid in coping mechanisms and comprise.

### ***Support***

Support is essentially referring to the social support surrounding a person experiencing a transition (Schlossberg, 1991). Schlossberg noted that the three facets of support are types, functions, and measurement. Evans et al. (2010) expanded on this noting that the most prevalent support systems for a college student are intimate relationships, family units, a network of friends, and institutions and communities. The functions of support are affect, affirmation, aid, and honest feedback from the student's social circles.

### ***Strategies***

Last are the coping strategies individuals use to cope during a transition (Schlossberg, 1991). These strategies include modifying the situation, controlling the meaning of the problem, and managing the stress in the aftermath (Schlossberg, 1991). Individuals may also employ different coping strategies such as information seeking, direct action, inhibition of action, and intrapsychic behavior. Those individuals who cope effectively demonstrate flexibility and use multiple methods specifically within this theory category (Schlossberg, 1991).

### **Research Related to Theoretical Framework**

There are a number of researchers who used Schlossberg's transition theory as their theoretical platform (Boyenga, 2009; Brown, 2014; Frazier, 2011; Frost, 2017; Gayer, 2017; Gemmel, 2017; Gross, 2016; Halasz, 2013; Hearn, 2016; Livingston, 2009; Neber, 2018; Powers, 2010; Rodriguez-Kiino, 2013; Rumann, 2010; Wall et al., 2018; Walters, 2017). These studies involved a range of student populations including, but not limited to, community college

students (Hearn, 2016; Rodriguez-Kiino, 2013), dual enrollment students (Frost, 2017), first-generation students (McCoy, 2014), low-income students (Gemmel, 2017), male students (Gayer, 2017; Powers, 2010), military veterans (Brown, 2014; Livingston, 2009; Rumann, 2010), minority students (Walters, 2017), nontraditional students (Frazier, 2011; Gross, 2016; Neber, 2018), nursing students (Wall et al., 2018) and theater program students (Boyenga, 2009). However, few researchers have used this theory as it relates to changing majors, except for Halasz (2013) who investigated undergraduates' experiences while transitioning away from selective pre-professional programs like business, engineering, and nursing.

The lack of research on student transition away from selective majors leaves an obvious gap in the literature. The Schlossberg et al. (1995) transition theory will serve as the theoretical platform for this study. Hamrick et al. (2002) noted that this theory can provide the information necessary to incorporate effective support systems across many spectrums at the institutional level. This theory is also straightforward and seamlessly applies to students experiencing a change during their time in higher education, and it is frequently used in advising, counseling, and programmatic settings at various institutions (Evans et al., 2010).

### **Chapter 3. Methodology**

The purpose of this qualitative study was to explore how undergraduate students experience the transition of leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in Tennessee. Garnering the firsthand experience of how these students managed the transition between majors and which resources they used during this major change process may inform the practices of academic advisors and other higher education administrators.

#### **Research Design**

I employed a descriptive exploratory qualitative research design using semi-structured, open-ended individual interviews to gather data. “Exploratory studies add to the literature by building rich descriptions of complex situations and by giving direction for future research” (McMillan & Schumacher, 2010, p. 324). As noted previously, as there is little research on my topic. Exploratory research allows the researcher to discover themes of participants' meaning on a little-understood phenomenon (McMillan & Schumacher, 2010) and therefore, is appropriate for this study.

While the main research design is exploratory in nature, this study also included elements of a phenomenological study that “describe[s] the common meaning for several individuals of their lived experiences of a concept or a phenomenon” (Creswell & Poth, 2018, p. 74). This was a logical choice for research based on interviews about a specific phenomenon, such as the forced transition that follows not being accepted into a selective degree program.

#### **Research Question**

The research question for this study was:

How do students experience leaving the selective health profession interest areas of dental hygiene, nursing, and radiologic science?

### **Role of the Researcher**

The role of the researcher in qualitative research is multifaceted as they can develop the research instrument, determine the population and sample, interact with participants, collect data, make observations, and analyze the results (McMillan & Schumacher, 2010). As such, Patton (2015) suggested that researchers should recognize their likely biases and take the necessary steps to lessen their influence on the study. The mitigation of bias can be done before, during, and after a research study (McMillan & Schumacher, 2010).

As the researcher, I acknowledge that I have a special interest in this topic, having worked with health profession interest area students as an academic advisor and director of an advisement center for the last six years. Because of these experiences, I have my own opinions and perceptions concerning students leaving selective degree programs, so I used an external auditor to review the data and my analysis of the themes that emerged. I asked Alison Williams, Director of Student Success for the College of Clinical and Rehabilitative Health Sciences, to serve as my auditor. Ms. Williams is knowledgeable of this student population as she coordinates academic advisement efforts for the students in the health profession interest areas of dental hygiene and radiologic science. She reviewed the transcripts of my interviews and determined that the emergent themes as I have noted are evident in the experiences of the interviewees. The auditor certification can be found in Appendix A.

### **Population**

The population of this study included students in the health profession interest areas of dental hygiene, nursing, and radiologic science. I selected these programs because they had the

most competitive undergraduate requirements at the institutional site. The institutional site for this study is also considered an Academic Health Science Center (AHSC) with five health-related colleges that include 35-degree programs, ten doctoral degrees, and over 4,000 students who enroll in these programs each year (AHSC, n.d.).

I requested the names of students who were not accepted during the most recent application cycles from the dental hygiene, nursing, and radiologic science programs. I initially asked the Deans from the two colleges that house these selective admissions programs for this information. One college referred me to their Associate Dean of Undergraduate Studies, while the other directed my inquiry to their Director of Student Success. Both colleges approved this request and provided a list of students who had not been accepted. The dental hygiene and radiologic science programs have one application cycles each year; they provided the list of not-accepted students from the spring 2021 semester. The nursing program accepts students each semester; they provided the list of not-accepted students from the fall, spring, and summer of 2021 semesters. Once I received the lists from the colleges, I recruited the students to participate in this study through email communication (Appendix B). I offered the students a \$25 gift card to Amazon for their participation in the study. This incentive was funded through the National Academic Advising Association (NACADA) 2021 Research Grant and assisted with generating more interest in study participation.

### **Sample Selection**

I used comprehensive and criterion-based sampling for this study. Comprehensive sampling, when the researcher chooses the entire group of participants by criteria, is often the preferred method in qualitative research (McMillan & Schumacher, 2010). Purposeful sampling strategies, such as comprehensive and criterion-based approaches, allow the researcher to

intentionally sample a group of people who can best inform them on the research problem at hand (Creswell & Poth, 2018). Potential participants had to meet the following criteria: 1) they were previously enrolled in a selective health profession interest area, 2) they applied to a selective degree program in dental hygiene, nursing, or radiologic science and were not accepted, 3) they were classified as juniors or seniors in college, and 4) they had remained enrolled at the institution after not being accepted into the selective program.

### **Ethical Considerations**

There are ethical considerations in qualitative research, such as the commitment not to harm the participants and to protect their privacy, anonymity, and confidentiality (Creswell & Poth, 2018; Patton, 2015). I completed the proper Institutional Review Board (IRB) process and received approval to conduct research before working with the participants in this study. In addition, I provided each participant with an informed consent that outlined the purpose, voluntary nature, and risks associated with the study. I also granted confidentiality to the participants by using pseudonyms instead of identifying them by their names in the findings section.

### **Data Collection**

“The data collection mainstay of a phenomenologist is the personal in-depth, unstructured interview” (McMillan & Schumacher, 2010, p. 346), which are typically long, and the researcher asks several interview questions to each participant. I developed interview questions to evoke a comprehensive account of the participant’s experience with the phenomenon. I semi-structured the interview questions to remain on topic and provide consistency with each participant throughout the study. I pilot-tested the interview questions with a student in the dental hygiene program who was not accepted the first time she applied. I chose her because she was familiar



with the application process for these selective admission programs. Lastly, I used intensive listening skills to prompt and encourage the participants to reflect, expand, and elaborate on their remembrances of the experience.

I conducted online interviews through Zoom's online video conferencing software. Participants chose the best time for their schedules to interview. I encouraged the participants to find a secure and private location for the interview to promote confidentiality. In addition, I used an external transcription service, Temi, to have a verbatim transcript for the data analysis process. I also allowed the participants to review their interview transcripts before including their information in this study's findings and themes section.

### **Data Analysis**

The coding process is an integral component of qualitative research as it involves making sense of the text gathered from interviews, observations, and documents (McMillan & Schumacher, 2010). According to Creswell and Poth (2018), some of the most detailed coding procedures can be found in phenomenological studies. "Because the focus is on shared meaning and consciousness, the researcher must be very careful in creating codes and concepts that form the bases for descriptions and meanings" (Creswell & Poth, 2010, p. 374). As such, the analysis process for this type of research study typically begins with verbatim transcriptions from the interviews that show how the participants are experiencing the phenomenon. Then the researcher reviews the transcriptions to identify codes and themes that provide an overall description of the meaning of the constructed experience (Creswell & Poth, 2018).

There are three data analysis strategies in qualitative research: 1) preparing and organizing the data, 2) reducing the data into themes through the process of coding and condensing the codes, and 3) representing the data in figures, tables, or discussions (McMillan &

Schumacher, 2010). I used this approach in this study. I analyzed the data from the interview transcripts on Temi and the notes I took during each interview. I reviewed these transcripts, checked for errors, and made any necessary corrections. Then I coded on Atlas.ti, a qualitative research data analysis software. This software allowed me to code and tie direct quotes from the participants simultaneously. I analyzed the interview transcriptions to determine all possible codes and to narrow and find similar patterns. Patton (2015) stated that there is no single right way to engage in qualitative research. However, “distinguishing signal from noise (detecting patterns and identifying themes) results from the immersion in the data, systematic engagement with what the data reveals, and judgment about what is meaningful and useful” (Patton, 2015, p. 552).

## **Measures of Rigor**

### ***Credibility***

Qualitative research depends heavily on perceptions, conceptual competence, and the researcher's integrity, therefore establishing credibility is an important aspect of qualitative research because it can be judgment-dependent (Patton, 2015). To enhance credibility, I conducted an intensive search for alternative themes, divergent patterns, and rival explanations. Additionally, I ensured that this study did not serve any of my vested interests or prejudices on the phenomenon. I used the verbatim transcriptions and let the students' experiences tell the story of leaving a selective degree program. This is an essential step in a phenomenological study. A researcher should bracket any past personal knowledge and all other theoretical knowledge on the phenomenon to allow participants' lived experiences to be untainted by their personal bias (Patton, 2015).

## ***Trustworthiness***

Trustworthiness and authenticity can go hand and hand in qualitative research (Patton, 2015). Patton referred to a researcher as being balanced, fair, and conscientious during their study. One effective technique mentioned for a qualitative researcher is to be a conscientious listener (Patton, 2015). It is essential for researchers not to interrupt or project any biases during their observations and to spend time with their participants (Patton, 2015). I spent considerable time with each participant during the interview process. Spending time with participants is a significant factor in acquiring reliable data, specifically if the researcher wants to gather comprehensive knowledge on their study (Patton, 2015).

Another technique to establish trustworthiness with qualitative research is triangulation. In triangulation, the researcher uses multiple and different sources, methods, investigators, and theories to provide substantiated evidence (Creswell & Poth, 2018). My use of semi-structured interview questions allowed for triangulation in this study. “For example, in order to gain a more complete picture of a participant perspective, the researcher may use a combination of conversational interviewing and structured interview questions, a technique that elicits different but complementary data” (Given, 2008). Likewise, another way to increase the validity and trustworthiness of a study is to deploy more than one investigator or auditor, often called investigator triangulation, during data collection or analysis (Given, 2008). I employed an auditor outlined above who provided additional insights during the process of making sense of the data.

## **Summary**

In this chapter, I outlined the research design, the role of the researcher, population, sampling techniques, data collection and analysis methods, measures of rigor, and ethical

considerations for this study. I used a descriptive exploratory method of inquiry to discover the basic structure of the phenomenon of the experience of students leaving health profession interest areas. In addition, I used phenomenology because of the ability to garner a deeper understanding of the phenomenon from a small number of participants. The qualitative findings are in Chapter 4.

## **Chapter 4. Findings**

### **Introduction**

The purpose of this qualitative study was to explore how undergraduate students experience leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in Tennessee. I explored this through one broad research question:

How do students experience leaving the selective health profession interest areas of dental hygiene, nursing, and radiologic science?

### **Data Collection**

I used a qualitative design to form a detailed analysis of students' experiences transitioning away from a selective degree program. I interviewed 12 participants between October 22 and December 10 of 2021 over Zoom, a video conference platform. The interviews were semi-structured, in-depth, and one-on-one, in which I asked the participants questions from a predetermined interview protocol (Appendix C). Depending on the participant's response to the initial questions, I followed up on some questions for further elaboration. I submitted the Zoom recording to Temi, an external transcription service. Temi transcribed the videos, and I then edited them for accuracy. Each participant reviewed and approved their interview transcript, thus permitting me to move forward to the data analysis process of discovering key themes.

I collected the data and coded and grouped it into themes to address the main research question. The findings section provides a series of direct quotations from the participants as supporting evidence. The discussion of the data and recommendations for future research are presented in Chapter 5.

## Participant Profiles

I identified the 12 participants through comprehensive and criterion-based sampling methods. All participants were previously enrolled in a health profession interest area, had applied to a selective degree program and were not accepted, were classified as a junior or senior, and stayed enrolled at the institution after not being accepted into the selective degree program. An overview of the health profession interest areas is presented in Table 1.

**Table 1**

*Participants' Health Interest Areas*

<b>Health Interest Area</b>	<b>Number of Participants in Study</b>
Dental Hygiene	6
Nursing	2
Radiologic Science	4

Additionally, nine students identified as female, while three identified as male. Nine students were classified as seniors, while three were juniors. Eight students started at the institution as transfer students, and four began as freshmen. I assigned each student a pseudonym to protect their confidentiality during this study. The participant's pseudonyms are Bethany, Brianna, Brady, Carter, Elizabeth, Enzo, Gabrielle, Jessica, Katie, Mary, Molly, and Sophia. An overview of the participant's student classification, their initial health profession interest area, and current major information is in Table 2.

**Table 2***Participants' Classification and Major Information*

<b>Name</b>	<b>Student Classification</b>	<b>Health Profession Interest Area</b>	<b>Current Major</b>
Bethany	Senior	Radiologic Sciences	Health Administration
Brianna	Senior	Nursing	Anthropology
Brady	Junior	Dental Hygiene	Rehabilitative Health Sciences
Carter	Junior	Nursing	Media and Communications
Elizabeth	Senior	Dental Hygiene	Health Administration
Enzo	Senior	Radiologic Sciences	Health Administration
Gabrielle	Junior	Dental Hygiene	Rehabilitative Health Sciences
Jessica	Senior	Radiologic Sciences	Health Sciences
Katie	Senior	Radiologic Sciences	Respiratory Therapy
Mary	Senior	Dental Hygiene	Nursing
Molly	Senior	Dental Hygiene	Health Sciences
Sophia	Senior	Dental Hygiene	Rehabilitative Health Sciences

Bethany is a senior undergraduate student who transferred from a local community college to the institution. She said, “There really wasn’t a specific reason I attended [the institution]. I didn’t want to go to the [the largest university in the state], and I really liked [this institution’s] campus better.” She recently had a child and said, “I just had a baby 18 months ago,

and it was really cool to see exactly what was on the ultrasound. I think x-rays are cool too.” She indicated being unaware of the competitive nature of the radiologic science program. “I actually didn’t realize that it [radiologic science program] was an application process, so I went through it for a semester and then found out it was an application process.” After not being accepted, she decided to remain in health care but changed her major to health administration. “It didn’t really take me that long to pick health administration. I do like desk jobs and managing a group, so it wasn’t difficult to pick that major and seems like a good fit for now.”

Brianna is a senior who transferred from another four-year institution. “I hated my transfer institution. I felt like a number there, and I wasn’t succeeding in my courses. I actually had to build my GPA back up because I was close to being on academic probation there.” She applied to the nursing program but was not accepted on the first attempt because she had not completed the entrance exam required before the deadline. “I think with all the shuffling between institutions from my community college, to another institution, and then here I got confused with testing deadlines. I missed the deadline for the TEAS exam and wasn’t accepted this past semester.” She decided to pick up a minor in anthropology before reapplying to the nursing program again. “I love my anthropology courses, specifically one I’m in currently, which is on magic, witchcraft, and religion. It’s cool, but my parents said this is only something I can take for fun, and I need to reapply to nursing.” Although she recently reapplied for the nursing program and was accepted, “I’m not really excited about it, but I know I’ll be employable, especially with this pandemic.”

Brady is a nontraditional junior student who served in the military. “My enlistment just ended from the military ... I wanted to pursue dental hygiene because of the dental hygienist I had while I was in the military. She was great and inspired me to enter this profession.” He was



not accepted to the dental hygiene program but planned to reapply during the next application cycle. He indicated his grades were a factor. “I wish I didn’t have to provide my grades from forever ago. I probably would’ve gotten in if I didn’t have to do that, or I wish someone would’ve told me about Academic Fresh Start before not getting accepted.” (The Academic Fresh Start program is a “plan of academic forgiveness which allows for undergraduate students who have experienced difficulty to make a clean start upon returning to college after an extended absence” (TBR, 2021, Minimum Criteria for Institutional Academic Fresh Starts Policies para.)).

Carter, a junior, is also a nontraditional student who decided to go to college to become a nurse after “the experience helping my grandmother with my grandfather when he was going through cancer led me down that path [nursing] in the long term.” He was accepted into the nursing program but said, “I was technically in the nursing program, but I wasn’t able to progress due to my background check and the [local hospital system] having a policy against people with my previous offense working there.” He recently changed his major from health care to digital media and communication with the help of campus resources and family. “When I found out I wasn’t able to continue [in nursing], it was shocking ... I had such tunnel vision for it. It was an overwhelming process to change majors, but I’m excited about the new major now.”

Elizabeth is a senior undergraduate student who transferred from a community college located a couple of hours away. Initially, she “didn’t know what to do. I just knew I wanted to do health care. They [advisor and friend] told me to do the pre-dental hygiene path because it was the most popular there [at the community college].” She applied to the dental hygiene program but was also leaning towards health administration at the same time. “I talked to one of my friend’s moms during the application process who works in health administration. It helped me decide that I wanted to do this instead. I like health care, but not bodily fluids.” She mentioned

that she should have chosen health administration. “I wish I would’ve got my associates in that [health administration] and just started as this from the beginning.”

Enzo is an international transfer student who chose to attend the institution because of the four-year bachelor’s degree program in radiologic science. “This is the program I wanted to do in the United States because it was a four-year degree with very good accreditation that was approved for study [in his country].” He is already working in health care and said, “I work with one of the doctors, and he gave me the encouragement to go further than where I am right now, even though I’m not going to be a surgeon or anything.” He is majoring in health administration now. However, he plans to reapply for the radiologic science program during the next application cycle. He prefers to be a radiologic technologist rather than doing health administration. “I’d like to emphasize that changing a program is a tough decision to make and that even though I didn’t get in the first time, that doesn’t mean I can’t be successful in that profession, so I’m applying again.”

Gabrielle, currently a junior, started as a freshman at the institution. “I chose to attend [the institution] because I had heard good things about the school, and it’s close to home.” However, she also “wants to be independent and decided to stay in a dorm freshman year.” She was not accepted to the dental hygiene program on her first attempt but plans to reapply for the next application cycle. She is currently majoring in rehabilitative health science because she could not remain in a health profession interest area, having earned over 60 credit hours. However, she said that she is “iffy on what I’m going to do because if I don’t get accepted again and stay in my current major, I would be looking at finding jobs in physical therapy, and that’s not really what I want to do.”

Jessica is a senior who started as a freshman at the institution. She anticipates graduating with a health science degree in Spring 2022. “At the moment, I plan to move forward with a health science degree, but I would like to work for a little bit and then eventually go back to school for radiologic science again or medical school.” She struggled with being a pre-medicine and radiologic science student during her first and second years in college. She mentioned that “if I had only taken one science per semester, it might have improved my science pre-requisite GPA when I applied to the program previously.”

Katie is also a senior who started as a freshman at the institution. “I had projects in high school where I looked up different major and career paths ... those projects helped me make that decision [deciding to pursue radiologic science].” However, shortly after receiving the news that she was not accepted into radiologic sciences, “the director of the respiratory therapy program looked through students who didn’t get into the bigger programs that get a lot more applicants ... and made offers to people who didn’t get in that had the same prerequisites.” She decided to change her degree to respiratory therapy and is set to graduate in Spring 2022.

Mary, a senior, transferred from a local community college. She applied to the dental hygiene program twice. She was not accepted the first time and pursued the nursing program afterward. She reapplied to the dental hygiene program after completing one year in the nursing program. “I got the alternate position letter on my second attempt at applying, and it was on my birthday, so that didn’t feel great. A spot didn’t open up, and I decided to just stick with nursing at that point.” Her mother is also a nurse. She said that initially “my passions were more towards the art side, but I felt confident enough to do something in health care because of my mom, so that felt like success to me and something I could be proud of when looking back at my time in college.”

Molly is a senior who started as a freshman at the institution. “I went and visited a lot of college campuses. I am from Northern Virginia, and no one knew about [the institution] in my area, but I mainly came because of their strength in the science programs.” She received a dental assistant license during high school, which piqued her interest in becoming a dental hygienist in the future. She applied to the dental hygiene program but was not accepted and changed her major to health sciences. “I was sad [about not getting into dental hygiene], but a week before I found out, I got a job as a pharmacy technician and realized I have other passions and can pursue pharmacy school after I graduate soon.”

Sophia is a senior who transferred from a local community college. She applied for the dental hygiene program twice. She said, “I got an alternate position last year. I was hoping to get that call that someone was dropping out before the first day of classes, but I never did. I know I’m going to get in this next time.” She is currently majoring in rehabilitative health science because she could not remain in a health profession interest area, having earned over 60 credit hours. She plans to apply a third time during the next application cycle. Her family has all graduated from the same institution, and she would prefer not to have to move away to pursue this profession. “I only see myself doing dental hygiene, and I want it to be from [this institution]. If I don’t get in the third time, I’ll look for another program, but I will be a dental hygienist one day.”

### **Data Results and Structure**

The interview results aligned with Schlossberg’s transition theory (Schlossberg, 1981; Schlossberg, 1991; Schlossberg et al., 1995), which has evolved since its original model. Initially, Schlossberg (1981) developed a model “in which transitions of *all* kinds... can be analyzed, and possible interventions formulated” (p. 3). It now contains three primary

components to a transition, including the specific stages of a transition, recognition of resources, and approaches for strengthening those resources (Anderson et al., 2012; Schlossberg et al., 1995). Each of these components appeared as the themes emerged for this study.

The stages of a transition involve the identification of a person's perspective of where they are placed within a transition and whether they are "moving in," "moving through," or "moving out" of this change (Anderson et al., 2012; Schlossberg et al., 1995). I structured the interview questions for this study to ask the participants about their specific experiences before, during, and after leaving a health profession interest area to gain additional insight into this phenomenon. Thus, I have organized the interview results in the three phases of *moving in*, *moving through*, and *moving out* of a transition.

### **"Moving In"**

In any transition, the first stage is conceptualized as "moving in." This is where people move into a new situation like an educational environment and need to become familiar with the rules, regulations, norms, and expectations of the new system (Anderson et al., 2012; Schlossberg et al., 1995). For this study, the moving in phase is defined as the time the students chose to go to college to their application cycle for the dental hygiene, nursing, or radiologic science program. The themes that emerged from the students' experiences in this phase were that institutional choice was based on program availability and location, career choice began prior to college, and more science and online course preparation was needed ahead of completing college-level courses.

### ***Institutional Choice***

Many students chose to attend the institution because they were interested in a specific program. For example, Katie said the institution "really stuck out with having a four-year

program in radiologic science.” Additionally, Jessica chose to attend the institution because “they had a radiology program, and they also had a good pre-med program.” This was similar for Carter, who mentioned that the institution has a “good nursing program, so it worked out to attend here.” Gabrielle also noted that the dental hygiene program was “exactly what I was looking for because that is what I wanted to major in.”

The other common reason noted for attending this institution was the preferred location. For Sophia, the decision was almost made for her:

I just needed somewhere to go ... I just couldn't afford moving to another institution, even though I am online this semester ... So I didn't really choose it ... I guess I kind of just came here because this is my preferred location ... My sister graduated here and my parents, so it was just kind of like a family thing ... it was what fit me the best.

Gabrielle also revealed that she wanted to remain close to home but not necessarily live at home while she embarked on her college journey:

I chose to attend because I had heard really good things about the school and it's close to home. I wanted to still be near home but also kind of be a little bit independent because I stayed in a dorm freshman year. And so I thought this was the perfect amount of distance away.

Finally, Carter, one of the nontraditional college students, stated that he could not move away to attend college because he had a family:

I mean, truthfully ... it started with convenience ... as it is closest to home. ... You know, I'm married with kids, so like I wasn't going to go somewhere else for school and disrupt my wife's or kid's lives.

## *Career Choice*

Most of the participants decided on a career by high school. According to Molly, “Dental hygiene was really in demand and the most popular choice at the time.” Gabrielle also said she went back and forth on her career decision during high school, but she knew that radiologic science was the profession she wanted to pursue by her senior year. Katie recalled that she did a lot of projects in high school where they researched different career paths. She specifically noted that she “researched a bunch of random things, and radiologic science just stood out, and those projects really helped make that decision.”

The prominent influences on career decisions stemmed from personal experiences, family members in the field, and shadowing or working in their area of interest before or during college. Brady said:

I just had a really great hygienist ... She always made me feel comforted, and it was always like an escape from my normal routine and day. So, I was just kind of hoping, you know, once I got out [of the military] I would do that and maybe get a job back in the military and give back and continue to comfort others the way she was able to ... pass the torch along, so to speak.

A few participants mentioned that the excellent care they or their family received after unexpected occurrences like getting a cavity, breaking an arm, or watching their grandparents get end-of-life care piqued their career interest. Bethany recently had a health care experience that opened her eyes to a field she was unaware of beforehand:

Well, I just had my baby 18 months ago, and I thought it was really cool to see exactly what was on the ultrasound. And I think x-rays are cool too. So, I thought it would be really neat to pursue that [radiologic science].

Conversely, Gabrielle and Jessica were inspired by specific family members who worked in health care. Gabrielle said:

It's been influential having my mom and both grandmothers ... They were all three nurses, so it's definitely been influential having them ... as kind of like an example. So, because they were in the health care field, I have always just kind of wanted to be in the health care field.

Jessica also had a family member who influenced her interest in working in radiology:

Specifically, my cousin is in radiology ... She's ten years older than me. And she'd always talk about it when we were growing up. We would go visit her because my family is not from Tennessee, but when we'd go visit her, she'd always talk about it. And I thought it was super interesting.

Finally, several students stated that shadowing or working in the field as an assistant or technician was when they knew they wanted to pursue a specific profession. Sophia said:

I would definitely say my dental hygienist, Candace ... She influenced me a lot ... She allowed me to come to observe her for a lot of hours ... her being so passionate about the career just really sparked something inside of me ... I wanted to be the person that makes a difference in each individual because there's a lot of people I know that are scared of going to the dentist because they're scared of the dental hygienist ... I don't know, hurting them, or they just had bad experiences in the past, and I really want to create a comfortable place for each person there.

Brianna and Molly attributed their certified nursing assistant (CNA) and dental assistant licenses to their interest in health care. Brianna said:



I think they [pre-nursing students] need to see what they're getting into because I had no health care background until I completed my CNA, and I look like I know what I'm doing. So, I'd recommend anyone be like a dental assistant or a nursing assistant or anything like that, or shadow somehow to get involved before they apply so that they know what they're getting into.

Molly expressed similar thoughts about her dental assistant license:

I was actually a dental assistant in high school. I did it through a technical college, or I think that's what you call it. Technical college ... through my high school. Yeah ... I got my dental assistant license there, and I was like, okay, I want to take this further.

Enzo was already worked in radiology and wanted to advance after being exposed to it at a specific hospital for the past few years:

I'm already working in the field as a steroid technician. I see people coming in and all that. And so, kind of had that interest because I'm already with patients and ... with people working in the field. It gave me excitement. ... if I'm already here, why don't I go further? And so that's what made my mind up, what made me change my mind ... I'm still doing a steroid technician, but I want to get a degree to do medical imaging.

### ***Science Course Difficulty***

Three participants struggled in the science courses before applying to their specific selective degree program. They mentioned that the anatomy and physiology, chemistry, and microbiology courses were the most challenging. Bethany said:

I did the first anatomy and physiology course. I had an issue with it because I felt like the material that we learned wasn't really on the test, or it was worded in a weird way. So I didn't do well in the first semester. I passed it, but I feel like I didn't do well. And then, I

took the second semester, like the second course, and I felt like I did better. Because I understood how the course was going to go from the last time. I took the same teacher.

Gabrielle grappled with online science courses due to the COVID-19 pandemic:

I mean it was just a hard semester for the microbiology class I had last semester ... It was online, and I don't really think there was anything else I could've done. I still think I would've made around the same grade if we were, you know, if I would have studied even harder. I mean, obviously, I couldn't change COVID, so really there's nothing I could change. I think it's just how it is. That's what I just had to realize ... There's a reason I didn't get in, I guess, this go-round.

Similarly, Katie had difficulty with the same course on an online platform:

I had the biggest challenges with microbiology ... It was just really difficult for me because it was all new content we had to learn on our own online-only ... We were learning strictly from a PowerPoint, and I didn't fully understand it.

### **“Moving Through”**

Once people become accustomed to a new situation, they must confront issues, find support systems, and embrace the uncertainties of experiencing a transition (Anderson et al., 2012; Schlossberg et al., 1995). Anderson et al. (2012) and Schlossberg et al. (1995) often refer to this period as the “moving through” phase where people are in the middle of a change. For the students in this study, the moving through phase was the period of time in which the students applied to the dental hygiene, nursing, or radiologic science program, discovered they were not accepted, and changed to a new major. The themes that emerged from the students' experiences in this phase included having negative feelings after not getting accepted, undergoing an unexpected major change, using resources, and running into financial issues.

### *Negative Feelings About Not Getting Accepted*

The participants most often noted negative feelings because they were not accepted into their selective degree program. They described being angry, anxious, confused, crushed, disappointed, frustrated, hurt, irritated, rejected, sad, shocked, and stressed. For example, Enzo and Jessica both expressed sadness. Enzo said:

I felt sad at the time, but at the same time, I got encouragement because ... every decision has a good side and a bad side. And so ... I made the decision that this is still what I want to do. I can still pursue it [radiologic science] regardless of me having to change to another major before reapplying next year.

Jessica recounted her sadness was mixed with other emotions:

I remember the day that I found out I was with my friend, and I immediately was super upset, and I was like, I don't know how I'm going to tell my parents. My parents are going to be so, so mad.

On the other hand, Gabrielle recalled being angrier about the situation:

I was kind of angry because I put so much effort into it and had friends that were in the program, introduce me around. I'd show up at like eight in the morning to get my teeth cleaned by them and stuff when I could be like sleeping in. I'd gotten recommendation letters ... especially from my dentist and stuff like that. I'd done so much. And then when it came down to it, it was like, oh, you had a B. If you would've had an A, maybe you would have gotten in for this class.

However, she followed up with:

And at the same time, I almost wasn't surprised because I'd been told countless times by everybody that it's a competitive program. My advisor told me to be prepared in case I

didn't get in because only a small percentage actually get in out of everybody that applies. I even had my dad ask me when we were leaving freshman orientation, are you sure you want to do this?

Brianna and Carter reacted by not telling other people about their situations. Brianna said:

At the beginning, I didn't tell anybody. All my friends had gotten in that were applying with me. My friends were like, 'Hey, did you get in?' And I was like, 'No, did you? Yeah. Oh, well congrats.' But they thought I was kidding them. I was like, no, I wouldn't kid about this.

Carter had a similar experience and said he disconnected from his peers and others for a short period:

I just kind of like disappeared, you know ... I didn't even want to talk to anyone ... My initial feeling was that I'd failed somehow. I just wish I'd communicated with more people around me, from my classmates to certain family members or professors. I felt horrible, but it was just so difficult to face anything that had to do with nursing. It was like a rug being pulled out from under me.

Mary applied to the dental hygiene program twice but decided to change her major to nursing because of one of her friends:

The first time I applied, I was like, oh no, I don't know what I'm going to do because I kind of thought about this for years. I think what made me decide to do nursing was I had a friend that was doing it too. So, I kind of was like, okay, I want to do this with her. The second time I applied, which was this last spring, I was like, oh my gosh, nursing school is suffocating me. And I felt like maybe I could try again.

Elizabeth and Katie were disappointed about not getting accepted into their program of choice, but they are pleased with their backup plan and current majors. Elizabeth said, “I was juggling both dental hygiene and health care administration, so finding out I was not accepted to dental hygiene narrowed down my options, and I am happy now.” Likewise, Katie said, “I was disappointed for a while, but I do feel lucky that I got the opportunity to enter the respiratory therapy program.”

### *Unexpected Major Change*

All the participants said they did not anticipate changing their major, even though most knew they were pursuing selective degree programs. Brady said, “I didn’t expect to change my major because I was very confident I would be able to get into the dental hygiene program.”

Bethany was not aware that her initial major required an application process:

I didn't expect to change my major ... I actually didn't realize that it was an application process. I went through it for a semester, and then I found out that it was an application process. So that's when I started to pick a different major just in case like a backup major.

Katie was aware that her initial major was competitive and required an application process. She also brought up the need for having a backup plan:

I was aware that it would be difficult to get in ... I wasn't aware of the respiratory program until later on. I knew I would have to have a backup plan, but I was really like banking on getting into radiologic science, and then I didn't get in, and I was offered an opportunity to get respiratory therapy, and I took it, and I'm really glad I did because I really like it.

A couple of students were frustrated they could not remain in the health profession interest area after discovering they were not accepted into a selective degree program. Sophia said:

I kind of felt like I was being forced out of my dental hygiene interest. It really made me mad. I kept getting emails about me changing it, and like I'm just ignoring them because I'm not changing. I kind of feel bad for my advisor because I'm sure she was irritated by me, but then she called me, and so then I had to change my major. So I was not expecting it, and I was really upset by it, and I haven't accepted it yet because it just recently happened.

Enzo also did not want to change his major because he planned to reapply for the next application cycle:

I didn't want to change it. I was just trying to push it to the last minute that I get into the program I wanted to do, but ... I got the email from the school about some changes regarding a financial aid requirement at the school ... and that I had no other option. They told me I could still apply to my program while I was changed to health administration. So that's how things happened. But, um, yes ... I didn't have any intention to change my major because I'm really interested in medical imaging.

One outlier was Carter, who was accepted to the nursing program but could not persist to the clinical requirements for this degree:

I didn't [expect to change majors] because I didn't anticipate not being able to do my clinicals [due to the background check results]. I just never anticipated that problem. I thought I would experience issues with my background check after completing the program and closer to job searching.

### ***Resources***

The resources that the participants most frequently used during the transition to a new major included their advisors, campus support services, and online information. Additionally,

they reached out to their family, friends, and partners for support when deciding on a new degree.

**Advisors.** Several participants mentioned that their interactions with their advisors were positive and helpful while changing their major. Molly said, “I talked to her [advisor] a few times over the summer. She was very helpful. I kept asking about my credits matching up with other degrees, and she helped me line that up because it was so much work.” Similarly, Sophia said, “My advisor was my resource because she helped me browse different majors, possible majors.” Elizabeth also spoke positively of her advisor:

I'd honestly say my advisor helped me with a lot. The amount of emails and Zoom calls I've had with her is astronomical. We talked all the time. She's helped me so much. She's just the best. Like I wouldn't trade her for anything, honestly.

Bethany echoed similar sentiments about her advisor:

I thought I was going to have to do all that paperwork and stuff, but the advisor did all of that for me ... She changed my minor as well ... it was really easy to do, so I feel like I didn't have to do much other than pick major and minor and then register for my classes ... the advisors were really helpful in changing my major.

However, a few participants commented that they could have received more guidance from their advisor during this transition period. Jessica said, “I feel like my advisor gave us a bunch of information, but it wasn't obvious we had to make an immediate decision on a new major if we weren't accepted.” Likewise, Sophia said:

I just wish there was a better list [of other majors to choose from], and I would've been more prepared rather than just like it's all in your hand kind of thing ...I mean, she [advisor] kind of talked about GPA, all that kind of stuff, but I wish I would've been able

to talk to students during that time for them to help guide in the right direction. I wish that would've happened, but I also felt like the information I was getting didn't necessarily help me. It was just more of, this is what our program is, but not like this is what you can do to help yourself kind of thing.

Brianna also mentioned that she wanted her advisor to check in more regularly:

I wish she [advisor] would have drilled in the points needed to get into the program over time and like reached out a little bit more. The reason I didn't get in was the TEAS exam, but I could've gone to [take] the test earlier, and I could've done a little bit more. I feel like if somebody was there pushing me to do a little bit better, make sure that I'm meeting those deadlines than I would have. And then switching into another major, I just wish it was kind of an easier transition. It was so abrupt.

**Campus Support Services.** The other campus resources that participants sought help from included their professors, peer study groups, supplemental instructors, and tutoring.

Gabrielle briefly mentioned using the counseling center. "I do counseling, so they definitely helped, yeah, my counselor that I have over in the counseling center here."

Enzo and Molly sought help from their professors. Enzo said, "I would reach out to my professors and meet with them on Zoom during their office hours whenever I was struggling in courses." Molly concurred, stating, "I definitely would reach out to my professors some and utilize those office hours." Katie and Carter said they preferred forming peer study groups as their resources. Katie said, "I did join a study group. I formed a study group and studied with classmates, so I guess that counts. Studying with groups has really helped me in courses that I struggle in." Carter said:



I certainly sought out help, but it was more from peers rather than any specific services or anything ... My main advice would be to create a peer networking group that you're close with that helps each other. That was huge for me. Finding those people I kind of connected with and, you know, starting the group meets and group chats. There was always a lot of supportive and positive messages to each other and reminders about due dates and tests and things like that. It would be a lot more difficult if you don't have that person that you can kind of tell and be like, oh my gosh, like the test was horrible or whatever.

Finally, supplemental instruction and tutoring went together for Brady, Elizabeth, Mary, and Gabrielle. Brady explained, "I didn't go to tutoring, but I did do supplemental instruction. They are about the same thing. Right?" Elizabeth said, "I didn't really struggle in my courses, but I did use a tutor and supplemental instruction for my microbiology course to make a B." Mary described that, "If I was really, really struggling, I would go to tutoring. If I got the hang of it, I would not go back, but I was like, okay, that was good." Gabrielle said, "I did not really do much tutoring during COVID just because it was through Zoom, and it was not as helpful." However, she followed up by stating that she did utilize supplemental instruction in place of tutoring:

We had supplemental instructors that would sit through the class. They were graduate students. She definitely helped. I ended up being one of the only ones that would come until the week of the test. Then everybody would show up during the week of the test.

**Online Information.** A few students said they used online resources during their transition to a new degree. Sophia said, "I didn't necessarily reach out to anyone, but I did a lot

of extra outside learning on my own with like YouTube trying to learn about other careers in health care.” Enzo also researched other career options online:

I read a lot from the internet and a lot from other stuff relating to what I was thinking of changing my major to and the professions that go along with it. So I was reading a lot myself, and I was talking with my advisor, but I never talked to any family member regarding that [changing majors].

Similarly, Elizabeth and Katie researched other options independently, specifically through campus-provided online resources. Katie described how she “looked through just the major list on the [institution] website. I was looking through that major list, and that was the biggest resource that I used.” Elizabeth said:

I did go onto the institution’s website. The catalog, I guess, is what it’s called ... where you can go in, and you can see all the classes that you have to have for each major and stuff. I didn't want my entire general education courses to be a waste because I finished my associate’s degree. I wanted at least to try and find something that I wasn't going to have to take other prereqs for, and it worked out so perfectly because anatomy and physiology and all those are required for my new major.

**Family, Friends, and Partners.** The participants cited seeking assistance from their families, particularly their parents, siblings, and grandparents, most frequently. Katie said:

I talked to my parents about it [not getting accepted] a lot. I had a lot of conversations with them, and I also looked through just the major list on the website. I didn’t use campus resources, but I relied heavily on my parents and my two best friends and my boyfriend. They just helped me work through everything emotionally and logically.

Gabrielle shared a similar experience:

I guess just mainly family. I haven't really talked to anybody much on campus about it. I mean, I might have reached out to like a couple of my friends in the dental hygiene program and told them, hey, I didn't get in. They were like, no. But other than that, mainly just family was like a big support system for me this year when it happened or back in the spring.

Molly also had conversations with her parents around the cost of her education:

Yeah, my parents because I'm an out-of-state student, so it [tuition] is a little more, so I had to figure out if I was going to stay here or transfer ... My parents are very supportive. I'm just very lucky to have great parents. So they told me to stay here, and they'd do whatever they could to help me figure it out. They understand my busy schedule I have with work and all the things that come with being able to stay, like having to find a cheaper place to live and this and that, the only thing they were kind of worried about was extending my stay at the institution because even just changing from radiology to health science, it really threw off my credits, like I'm looking at an extra year now.

Conversely, Sophia said her family tried to be supportive, but sometimes the conversations were discouraging:

My grandmother and my mom ... I mean, obviously they supported me, but they were also kind of being discouraging. They weren't trying to be discouraging, but they were saying, oh, don't worry. You're going to get in. And like, you aren't going to have to do this major. You don't need to do that [change your major] because you'll be fine, kind of thing. And I'm just like, that was frustrating because they don't understand my footsteps that, yeah, I am not in the dental hygiene yet. I need them to accept reality. Like I had to accept reality, so yeah.

As for peer support, Mary decided to change to a new major with a friend. “I pretty much just based my decision [to change her major] on a friend. I kind of saw what they were doing it, so I was like, okay, I’ll try that.” Elizabeth described a similar experience:

There was one girl that I had classes with at my community college who was actually the one that talked me into applying for it [dental hygiene], and she didn’t get accepted either. She was so upset about it because she didn’t know what she was going to change her major to. We transferred as sophomores. We changed our majors together junior year to health administration. She reapplied to dental hygiene, got rejected again, and is back at our community college doing it.

Several participants mentioned reaching out to their partners for support. Gabrielle said, “My boyfriend was definitely supportive because I called him afterward and told him, and he was very shocked.” Likewise, Carter noted that his wife was his most significant support figure:

Probably my wife was my biggest support. She kind of jogged my memory to a number of things I considered prior to nursing that I talked about all the time. She reminded me what I was interested in that kind of made me lean in the direction of media and communications with a minor in journalism. She was the one who helped to make it a clear, obvious path now.

### ***Financial Issues***

One of the main issues that students faced while changing their major was financing their education. Brady was worried about what the military would cover for repeated courses while he waited to reapply. “I’d like to avoid paying out of pocket for classes, but I’m not sure if my GI Bill supports repeated courses.” Jessica also had to figure out how to pay for classes, but her main concern was whether her parents would continue to support a different degree:

They [parents] helped me pay for my tuition. So I have to take into account what they say ... When I was trying to figure out which major I wanted to do, I wanted to make sure that I either kept it in one that I already had classes going towards or one that I could eventually change into my minor. And so it took a lot of convincing for my parents to let me do art for a year, but I did art, and then I retook some of my science classes to hopefully bring up my GPA to try to get back in.

Sophia, Enzo, and Gabrielle all noted being concerned with federal financial aid issues. Sophia was worried about repeating a specific course. "I don't know what to do with my situation, whether I should retake chemistry or not because it isn't going to be covered by financial aid." Enzo and Gabrielle had to change their majors from a health profession interest area because of an institutional policy stating that students cannot remain in these exploratory areas after earning over 60 credit hours. Enzo said:

Right now, I didn't want to change it [major]. I was trying to stay in it until I got into the program. I got an email from the school that said there were some recent changes regarding a financial aid requirement and that I had no other option except to change my major. They told me I can still reapply to my program while in another major. So that's how, I mean, things happen. But, I don't have any intention to change my career path because I'm really interested in anything related to medical imaging.

Gabrielle described a similar experience with an institutional policy affecting her financial aid:

I wasn't expecting to have to change my major, but they [the institution] had a deal where I think financial aid would only be given to anybody who had some sort of major for students who had over 60 hours to qualify for like all these grants and stuff I have. So I changed my major to rehabilitative health just for a backup because I can always take

some classes for that major if I do not get in the second time. I am hoping I do get in because the head of the program says, you know, you are more likely to get in the second time.

### **“Moving Out”**

After a change has occurred, the “moving out” phase is seen as ending a transition and asking what comes next, which may come with the loss of former goals, friends, and structure (Anderson et al., 2021; Schlossberg et al., 1995). For this study, the moving out phase is defined as when the students settled into a new major or degree program. The themes that emerged from the students’ experiences in this phase included developing new strategies for student success and recognizing the importance of having a backup plan.

#### ***Developing New Academic and Co-Curricular Strategies for Student Success***

After not being accepted into a selective degree program and changing into another major, the students were self-reflective and discussed specific strategies they could have used or that they planned to use in the future. Brady jokingly said, “I would’ve taken my classes more seriously, and I plan to do that now.” Gabrielle, Sophia, and Enzo said they would study harder for each course. Gabrielle said, “I would’ve studied even harder, specifically for my microbiology course.” Sophia expanded by stating:

I would’ve known for myself to work 10 times harder or 50 times harder in school. I would’ve gotten A's the first time, and I could’ve gotten in the first time.

So, if I really want this, I need to really work for it and also try to get A's from here on out.

Enzo also said he would have studied harder while focusing more on his GPA:

Maybe I would've studied harder and worked on my GPA. I think that would be the best option for now because they're looking at people with higher GPAs, and maybe people are more qualified or had better GPAs than I did. And so, what I would do is maybe work on my GPA. I need to work hard on my GPA because every competitive course comes with good grades and a high GPA. And so, if you have a high GPA or good grades, you do well with all your major prerequisites, and maybe you may have that chance.

Bethany and Jessica learned they needed to space out their science courses. Bethany said, "My situation was a little unique because I transferred from community college and I did all my prerequisites first and nothing like science-based, so I crammed all my science classes together, so I definitely would not do that over." Similarly, Jessica said:

I don't think I had a huge problem with the radiology [pre-requisite] courses. I was also pre-med, and there are not many students that do both ... My major issue was trying to fit both of the science classes in each semester ... There would be semesters where I was taking like three science courses and then whichever labs correlate with that. And some of my [required pre-requisite] classes that would be radiology would kind of fall in grades. Like I could've made an A if I was just taking one science course, but I made a B because I was taking like a bunch at a time.

Academics aside, the students were still passionate about their chosen profession. For example, Katie said, "I guess just make sure that you really want to do what you are applying to because it takes a lot of effort and dedication." Also, Molly said she would have gotten more involved during college:

Definitely get more involved in the community and like build that resume ... My freshman year, I wasn't very involved because it was like a new city and a new place. I

didn't want to get overwhelmed. I had a great time, but like looking back or compared to where I am at now, I am so much more involved. I wish I had started that sooner because it's really good to make those connections.

Lastly, Elizabeth stated that she wanted to have more of a college experience:

If I had gone to [the institution] as a freshman and decided to go the dental hygiene route, I think I might have been more successful than starting at [the community college] and transferring because there's just such a gap now. Like I don't regret any of my time [at the community college] because it saved so much money and stuff. It's free. But I think there was some like disconnect when I moved here solely because I was a junior coming in, so I don't get all those freshman experiences or anything like that.

### ***Importance of Backup Plan***

Five students noted that they were told about the importance of having a backup plan early during their college journey. Brady said, "I was told by my advisor to have a backup plan, but I didn't have one or want to make a backup plan ... my plan is just to prolong it until I can get in." Mary remarked that "they [advisors] recommend having a backup, and they talked about different health care stuff like respiratory therapy or nursing or anything like that if I wanted to go for it." While Katie said, "I didn't have a solid backup plan, and I didn't know what I wanted to do. So, if I were to redo that, I would make sure that I had a solid backup plan." Jessica concurred, saying:

Take your time if you don't get accepted. Try again. Like, listen to what they [advisors and program directors] have to say about the reasons why you didn't get accepted. And before you get to the point where you're like applying already have backup plans because it was super stressful to be applying and trying to figure out which major to change into if



you didn't get accepted. So I definitely would have backup plans and just like try to figure it out a little bit ahead of time so that you aren't freaking out at the last minute.

Bethany also suggested that students should explore other options and not be limited in their choices of majors if they are pursuing a selective degree program:

I would have a backup because there are so many people that don't get in. They don't know what to do when they aren't accepted, and they don't have anything else they want to do. And so, then they're just like kind of up the creek because they don't have anything else they could see themselves doing, like they put all their fish into one pond. They should see if there are other things they might enjoy. Like don't solely think that is the only thing you could ever do.

### **Suggestions for Selective Degree Program**

Because of their experiences, some of the students had suggestions for the selective degree programs to better support future students going through this same situation. These ideas emerged in response to the last question - what would you like to tell me about your experience changing majors that I have not asked you about already? These suggestions included improving the application process by conducting interviews and enhancing the essay component, having multiple application cycles, creating a mentoring program, and not looking at grades more than ten years old. Molly, Sophia, and Mary suggested a more well-rounded approach to the application. Molly said, "I'd suggest that the program not just focus on ... the GPA in the classes and also focus on ... the experiences and the certifications and the license and not just class stuff." Jessica offered similar suggestions:

It's weird because when I first applied, it was under a different program director, I believe ... She had like a point system and ... I know my GPA wasn't going to be

necessary [sic] as high as everybody else because I had ... organic chemistry and some advanced science classes that were a struggle for me to take ... but there [were] interviews ... It was like, okay, I'll do all of the observation hours. I'll write the essay, I'll do the interview ... I thought I'd like have a pretty good chance. I suggest they go back to other requirements outside of just having good grades.

Sophia recommended improving the application process:

I'd say one thing that really hurt me was there being no interviews, which you're doing it this year, which I'm very thankful for, but I think no interviews hurt the classes for the last two years. I think that was a very important part of the application process, and I'm very disappointed that they did get rid of that, and they shouldn't do that again.

She also provided other application enhancement ideas, such as accepting more students and reevaluating the essay topic:

Having a once-a-year submission is hurtful as well, especially with only 24 students. And there are only maybe five schools in the state of Tennessee that have dental hygiene ... As Tennessee as a whole, I think they need to look into that ... maybe possibly building more colleges or having more people per semester, or more people per year, if that makes sense. And then for ... the paper writing aspect of the application, it's almost too open-ended to where you are kind of guessing on what the admission committee wants. A sample essay or application workshop prep would be nice to have an idea of what they are looking for when applying.

Mary also agreed that the application cycle should be more than once a year or at a different time of year with feedback on why someone was not accepted if they want to reapply again. She explained:

I wish there were a couple of times that we could apply to the program throughout the year. We were also on summer break, so not a lot of people were answering me, and I had to switch my class, my whole class schedule for the fall, on my own. So I was just like really stressed. It was a lot of stress for me. It would've been nice to know why I did not get into the program, I guess. And I know that I think that maybe they aren't allowed to say that, but I'm not sure ... but it would have been nice to know why or what I could've improved or something.

Bethany suggested having peer support because the application process was “confusing and overwhelming.” She said she would have liked a “mentoring program, like of the students in the actual program, to potentially help the folks that may be applying in the future of what to expect.” Then, lastly, Brady expressed concern about how far back they looked at grades:

I think one of the things that really shot me in the foot personally was providing those two grades. The one thing that really kind of hit me directly was the fact that they didn't only look at my past military experience, but they went beyond that and looked at my grades from even further back. So, it kind of makes you feel, you know, like the in-between does not matter, but the GPA pointing up should matter much more, and it's like, well, at some point, do you kind of like, you know, it is so far in the past do, when do, when do these classes become invalid? Do you know what I mean? I think that the classes I took that are older than ten years should be ignored.

### **Interest in Reapplying and Remaining in Health Care**

The participants all changed majors after not being accepted into a selective degree program; however, 10 of the 12 students remained in a health-related discipline. Despite the experiences of not being admitted into a program, the students wanted to remain in health care.

Brianna and Carter, the only two who didn't remain in health-related majors, switched to anthropology and digital media and communications, respectively. However, Brianna recently reapplied to the nursing program and was accepted on the second attempt. Bethany, Carter, Elizabeth, Jessica, Katie, Mary, and Molly have settled into their new majors, and are set to graduate this year. Brady, Enzo, Gabrielle, and Sophia still intend to reapply in the next application cycle.

Even though Jessica is graduating with a health science degree soon, she said she would eventually “like to go back and reapply. I'll graduate in the spring with a health science degree and then hopefully work and then go back to school for radiologic science again or medical school.” Gabrielle was also on the fence about reapplying:

And so I was like, you know what, I don't think I am going to do this [reapply] ... but after about a week and a half, two weeks, I was like, there is still a part of me that wants to do it ... I was like, you know what, I'll take some extra classes just so I can have more credits. And then, I will retake microbiology, and I'll apply again in the spring.

Bethany and Elizabeth said their transition to a new major was seamless. Bethany said, “It didn't really take me that long to pick a new major. It wasn't difficult to pick that major, but I definitely would've liked to have done radiologic science.” Elizabeth said:

For me, it [changing majors] was honestly really easy. I Zoomed with my advisor, and we talked for like an hour about stuff and tried to figure out what exactly I wanted to do. And that's when we concluded, she was like, this is everything you said you want in a major. And I agree like it is, and I love it. Like I wouldn't change a thing now.

## **Summary**

This chapter began with a summary of the data collection process and an overview of the 12 students who participated in this study. The above data detailed the themes that emerged as students were experiencing the transition away from a health profession interest area. The themes included choosing an institution based on program availability and location, deciding on a career path prior to college, needing more science and online course preparation ahead of completing college-level courses, having negative feelings after not getting accepted, undergoing an unexpected major change, using resources, running into financial issues, developing new strategies for student success, and recognizing the importance of having a backup plan. The students also suggested changes for the selective degree programs based on their experiences. Additionally, they remained interested in staying in health care despite not being admitted into a selective degree program. The next chapter presents the conclusions I drew about these 12 students' experiences.

## **Chapter 5. Conclusions and Recommendations**

The purpose of this qualitative study was to explore how undergraduate students experience leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in northeast Tennessee. Students recalled their experiences before, during, and after changing their major from a selective degree program and noted their decision-making processes throughout each stage.

As noted in the literature review, there is a lack of research on students' first-hand experiences leaving selective degree programs. There is a growing need to address institutional barriers to student retention, specifically when those impediments can directly affect time to degree and degree completion rates (Kelchen, 2018; Tinto et al., 2007; Tinto, 2012; Wade, 2019). I designed this study to explore students' experiences leaving selective degree programs.

To gather information, I interviewed 12 students who were pursuing the selective degree programs of dental hygiene, nursing, and radiologic science. Based on the students' experiences, I garnered insights into innovative ideas to support and retain students pursuing selective degree programs in the health sciences. In this chapter, I will highlight these students' experiences by outlining the findings and discussing implications of the findings related to previous research, the university setting, and future study. However, I must note the following caveats:

1. I had previous experience working with students in these selective degree programs. I attempted to remain as objective as possible by allowing the interviewees to tell their stories with minimal interference from me as the interviewer. I also had an external auditor review my data analysis to provide a second layer for an unbiased perspective.

2. I recruited participants for this study from one institution. As such, their experiences may reflect a specific campus culture and are not generalizable to the encounters of students at other institutions.
3. I only interviewed 12 students from health profession interest areas, which is not a large enough number of students to be generalizable to students in all health related programs or to students pursuing other selective majors such as business, education, and engineering.

## **Conclusions**

Although the purpose of this study was to learn about students' experiences leaving selective degree programs, they also shared their experiences related to college choice. The students decided on which college to attend based on program availability and preferred location. They chose their career path in high school and knew they wanted to do something in health care. I also learned that the sudden shift to online courses during the global COVID-19 pandemic impacted the students in this study. This shift to online courses was an unexpected occurrence that was situational to the time this study was conducted but still worth mentioning because students noted that this impacted their experience.

The interview results also aligned with the findings outlined in Chapter 2, specifically the research on factors impacting undergraduate major choice. The students discussed the resources they used and new strategies they put in place when leaving a selective degree program which is in alignment with the influences of coping abilities during a change from Schlossberg's transition theory (Schlossberg, 1981; Schlossberg, 1991; Schlossberg et al., 1995). The study results will serve as a foundation for the recommendations for enhanced institutional practice in the next section.

### *College Choice*

One pattern that emerged was that students spent substantial time researching their college choice. They were mainly concerned about the availability of their specific health-related program and the institution's location. The two non-traditional students in this study placed particular importance on the institution's location to avoid upending their family's lives, evidenced by Carter's comment that "it [deciding on an institution] started with convenience and choosing an institution closest to my home. I'm married with kids, so I wasn't going to go somewhere else for school."

According to Robertson and Stein (2019), "College choices are among the most consequential decisions individuals make in their lifetimes" (p. 4), and that many incoming college students are interested in attending an institution because of the availability of their specific major or career preference. They recommended that colleges prominently display their job placement, annual earnings, and completion rates for all their major, minor, and program options because these are the three most important disclosures for consumers. Similarly, Hillman (2016) noted that students who work full-time, care for dependents, or have close social ties to their local communities are likely to search for a postsecondary institution near their current location. This was accurate for the two non-traditional participants and the one student already working in radiology. They all mentioned location was a factor in their decision to attend this specific institution.

Hillman (2016) also mentioned that students of color generally stay close to their families when deciding which institution to attend. I interviewed one student of color, who was also considered an international student. The eligibility criteria for my study only yielded two students of color from the initial participant pool qualified to interview. This lack of diversity



reflects national statistics showing that Black, Hispanic, and Native American people remain significantly underrepresented in health care professions, which has only marginally improved over the last two decades (Allied Health Workforce Diversity Act, 2021). The Allied Health Workforce Diversity Act (2021) stated that this is also observed within the allied health workforce, which includes dental hygiene and radiologic science. “Data from the Bureau of Labor Statistics indicate that the allied health professions in particular are severely lacking in racial and ethnic diversity; less than five percent of these professionals are Black and less than seven percent are Hispanic” (Allied Health Workforce Diversity Act, 2021, p. 4). The student of color in my study was also the student who worked in the field radiology, and as previously mentioned, location played a factor in his college choice. However, this student’s experience cannot be generalized and further studies with expanded sample sizes should look at how specific demographic information, such as race and ethnicity, play a role in college choice for those seeking a career in health care.

### ***Career Choice***

Another pattern that emerged was that these students knew what they wanted to do as a career during high school. Many of them mentioned that they had a “first choice” option and wanted to pursue a career in one of these selective degree programs but still wanted to remain in health care if that did not work. Elizabeth said:

I just knew I wanted to do something in health care. I chose dental hygiene at first, but I also know [the institution] had other really good health programs. So regardless of what I decided to do, I knew that they would have whatever I wanted. That’s why I decided to go here.

Gysber et al. (2014) emphasized that career development, defined as “self-development over the life span through the interaction and integration of the roles, settings, and events of a person’s life” (p. 9), is a complex topic and decision for many people. Career development depends on several factors, including life settings (e.g., home, school, work), life roles (e.g., parent, spouse), and life events (e.g., marriage, retirement, entry job, divorce). In addition, other factors such as gender, ethnic origin, race, spirituality, social class, and sexual orientation can impact a person’s choice of profession (Gysbers et al., 2014). The participants’ responses are consistent with this view of career development. Most of the students in my study were traditional-aged (18 to 23 years of age), and they are at the beginning of their career development. They have not experienced many of these life events yet. However, they specifically said some life experiences, like visiting a practitioner, having a family member in health care, or shadowing or working in the field were the main reasons they chose to pursue a selective health-related degree program.

### ***Online Science Course Difficulty***

Another pattern that surfaced was that students struggled with online science courses. One of the most common academic setbacks for pre-health students is not obtaining high grades in the prerequisite science coursework requirements for health care programs (Alexander et al., 2009), so I anticipated that students would report struggling with science courses. However, the COVID-19 global pandemic threw many students a curveball when there was a sudden shift to online learning in the middle of the 2019-2020 school year (Carrasco, 2021). This sudden thrust into an online environment impacted the students in this study as well. Gabrielle and Katie both stated that their microbiology course was challenging in an online platform, and they thought they would have done better in an in-person modality.

The American College Testing (ACT; Schneiders & Moore, 2021) reported that two-thirds of first-year students struggled with online learning last year. In this same report, 52 percent of students responded that their coursework was “somewhat challenging,” and 14 percent reported that it was “very challenging” (Schneiders & Moore, 2021). The students cited lack of motivation, difficulty retaining information, and trouble understanding concepts without hands-on experience as their biggest hurdles (Carrasco, 2021). Furthermore, 82 percent of students were a “great deal” or “somewhat concerned” that online learning during the pandemic would negatively impact their academic success and have long-term consequences (Carrasco, 2021; Schneiders & Moore, 2021). There was one student in the ACT study who said, “this [the online courses] made me feel as if I would be behind next semester as I have missed a lot of in-class activities such as labs” (Schneiders & Moore, 2021, p. 4). This is consistent with the experiences of Bethany, Gabrielle, and Katie, who had difficulty in online science courses. For example, Katie said:

I had the biggest challenge with my microbiology class. It was really difficult for me because it was all new content we had to learn on our own online-only ... We were learning strictly from a PowerPoint online, and I didn't fully understand it ... I also had to do the labs at home and couldn't ask my teacher for help during it because all my classes moved online this semester.

### ***Changing Majors***

Factors that can impact an undergraduate student's decision on a college major and career path range from internal considerations such as a student's interest and satisfaction with a particular major or program, or external concerns such as employability, pay, or parental influence (Downey et al., 2011; McKenzie et al., 2017; Milsom & Coughlin, 2015; Spight,

2020). The students in my study had primarily negative responses to not being admitted to their selective degree program and noted apprehensions about changing their major. For many of these students, finding out they were not accepted into their selective degree program, changing their major, and deciding on another profession or improving their application and reapplying during the next cycle was the first big obstacle they had faced during college.

I was not surprised by the negative reactions from the students based on my previous experience working with this student population. However, I was surprised that the students said changing majors was unexpected even though they admitted their academic advisors had told them about the competitive nature of these programs. As discussed in Chapter 4, 10 of the 12 students remained in health-related degrees after changing their majors. These students expressed the importance of being employable after graduation and finding a similar occupation in health care as their primary motivations for remaining in college after finding out they were not accepted into a selective degree program. Ten students in my study were Generation Z (Gen Z). Gen Z, born between the mid-1990s and the late-2000s, currently makes up most of the college-going population (Dennington, 2021). This generation of students puts great stock in their choice of major (Dennington, 2021). Dennington (2021) mentioned that these students have shifted to practically oriented majors, which has meant fewer majoring in the humanities, preferring health professions, computer science, and engineering instead.

This generation, including the students in this study, also needs more campus support systems, such as advising and counseling, that provide frequent check-ins and reminders (Dennington, 2021). There is less stigma surrounding seeking help for this generation, and knowledge is everywhere for these students (Dennington, 2021). They seek constant information and are used to customization, which means support services cannot be merely added on, but

rather must be fully integrated into the student experience (Dennington, 2021). Telehealth services for counseling centers, or virtual drop-in hours for advising, could address the needs of these students as it eliminates wait times and is available when they need support.

### ***Experiencing Financial Issues***

Financial concerns are often the top reason college students leave school (Giovananetti, 2021). “About two in five (42%) college dropouts cited financial reasons for leaving school, outweighing the percentage of students who left for other reasons like family commitments (32%) and health reasons (15%)” (Giovananetti, 2021, p. 1). “83.8% of first-time, first-year undergraduate students receive financial aid in some form” (Hanson, 2021, Student Financial Aid Statistics para.). However, students who receive federal financial aid have limited options for taking elective and exploratory courses (U.S. Department of Education, 2020). Institutions also generally have policies that students must declare a major shortly after completing 60 credits (Yang et al., 2018). These limitations have mainly impacted students on federal financial aid; however, similar requirements are also being extended to other forms of scholarships, grants, loans, and tuition discounts, depending on the state (Hanson, 2021).

Five students in the study expressed financial concerns, mainly stemming from having to extend their time to degree completion and the need to repeat certain courses. Jessica’s concerns were unrelated to federal financial aid coverage, but she had to make sure her parents were still willing to pay for her education. Brady was concerned about whether his GI Bill scholarship would cover certain repeated classes. Sophia was worried about her financial aid covering a course she needed to repeat. Enzo and Gabrielle mentioned financial aid regulations and an institutional policy requiring students with more than 60 earned credits to declare a major; they both shared that they felt forced into a new major because they had met this limit.

At the institution where I conducted my study, the students seeking entrance into the selective degree program in dental hygiene, nursing, and radiologic science must begin in a health professions interest area. These health profession interest areas are considered exploratory majors. An institutional policy states that students in one of these areas must declare a major after earning 60 credits (Undergraduate Catalog, Declaring a Major para., n.d.). This institutional policy has deterred some students who are not accepted into their selective degree program of choice after the first application cycle from reapplying again. However, Sophia encouraged other students going through this experience with:

My advice would be not to give up ... I don't really know the statistics, but almost everyone I've talked to said they didn't get in the first time they applied. I think other students need to know that from the get-go. They may be very discouraged and want to give up after they don't get in the first time. I actually know a few students who didn't reapply with me because of that financial aid policy saying you can't remain in a health interest area, so they gave up and changed majors or left [the institution]. Then some students may just feel like a failure after not getting accepted, but they're not a failure ... There's always next year, and yes, it's like putting your life on hold. And I thought that myself too, especially with two years of it, but at the end of the day, if you really want to do it, it's going to be worth it because people say, if you're doing a job that you love, you're not working a day in your life.

According to Poth and Luth (2015), “in many institutions, policies are in place to guide student participation in the governance structures, yet mechanisms for their voices to be heard may not be effective” (p. 364). I would suggest that institutions review their policies regularly and have students inform their practices. This institution in particular could attempt to find a way

to classify these health profession interest programs as something other than exploratory majors. One option could be a joint degree or a double-major option with health care administration or rehabilitative health sciences, the two most common major change choices for the students in my study.

### ***Resources***

Colleges have an entire system of resources to support students in various ways (Felton & Lambert, 2020). Felton and Lambert (2020) said that some students might feel pressure to succeed on their own and not ask for help because of the independent nature of college-related decisions. However, the participants in my study did seek help. They cited using various resources when transitioning to a new major, including their on-campus advisors, counselors, professors, supplemental instructors, and tutors, as well as their family, friends, and partners. They also noted that they searched online campus resources like the undergraduate catalog and departmental websites. This is consistent with Schlossberg et al.'s (1995) findings that college students' most common sources of support are intimate relationships, family units, networks of friends, and institutions and communities.

According to Felton and Lambert (2020), college students will value the relationships they formed during their educational journey, specifically “the people who afforded them a sense of belonging, helped shape their professional and personal identities, and guided them in discerning their purpose in the world and the values that are most meaningful to them” (p. 147). For the students in my study, an academic advisor was their primary campus resource when changing their major. Advisors must have conversations with students beyond transactional items such as navigating general education requirements, declaring a major, registering for courses, and outlining the minimum GPA required to meet retention standards. They should

move towards intentional goal setting and discussions about their values that encourage students to form relationships with faculty, staff, and peers to make college a meaningful and transformational experience.

Because the students also mentioned using online campus websites, institutions should ensure that the major change process is outlined clearly in the undergraduate catalog and on advisement webpages. For example, information on how a student changes their major, links to the career center or other related student support services, and listings of centralized or college advising offices with building location and advisor scheduling information should be readily available. This information should be continuously updated through a centralized advising office or a campus advising group of faculty and professional advisors.

### *Developing New Strategies*

According to Schlossberg et al. (1995), individuals employ different strategies such as information seeking or direct action when experiencing a change. One result of not being accepted into their chosen program was that the students developed new strategies for success. Enzo, Gabrielle, and Sophia, who intend to reapply to these programs, noted that they planned to study harder, specifically before exams in the pre-requisite science courses because those are weighted heavily in the application process. Bethany and Jessica, who were not reapplying to a selective degree program, but remained in other health-related majors, said they learned to space out their science courses and take one at a time. Elizabeth and Molly, who are also not reapplying to a selective degree program, mentioned that they wished they had gotten more involved on campus or in the community. They plan to do that in their remaining time at the institution. Bethany, Brady, Jessica, Katie, and Mary now know the importance of having a backup plan.



Missing an educational opportunity, in this case not being accepted to a desired program of study, is what Schlossberg et al. (1995) classified as a non-event, something that is expected to occur but does not happen. A non-event requires a person to refocus and reshape their original goals and plans in order to work through a non-event transition (Anderson et al., 2012; Schlossberg et al., 1995). Refocusing involves letting go of old expectations and reframing the non-event, changing one's perceptions, and moving towards a new vision (Anderson et al., 2012). Anderson et al. (2012) stated that an individual must forcefully begin to identify a new dream or vision. Academic advisors can play a critical role in the refocusing process by being the person a student can talk to about the loss of their original dream (Anderson et al., 2012). An academic advisor could also connect the student with other students in similar situations or refer them to other appropriate campus resources such as the counseling center to grieve during this process or career services to determine a new occupation (Anderson et al., 2012). I would also suggest that academic advisors try proactive advising approaches for the students in selective degree programs. As mentioned in the findings, five students noted their advisor told them they needed a backup plan, but there was no mention that the advisor helped these students build one. A semester or two before the student is eligible to apply for a selective degree program, the academic advisor should plan a specific meeting to create a backup plan with the students.

The process of reshaping requires a person to act on their new vision by taking stock, regaining control, and transforming their new dream into reality (Anderson et al., 2012). An academic advisor can also play a key role during the reshaping process (Anderson et al., 2012). They could help the students examine their lost dream and create an action plan or assist them with making proactive decisions about the next steps (Anderson et al., 2012). For example, they could have conversations with students about when to move on if they are not within a

competitive range for acceptance in a selective degree program or explain the process for reapplying if they were not accepted during the last application cycle. The students in this study went through the experience of refocusing and reshaping their original dream of entering a selective degree program and determined new plans to either reapply or be content with their new chosen major and future occupation primarily on their own. However, academic advisors could enhance this experience by playing a more pivotal role during this transition period.

### ***Developing Solutions for Programmatic Barriers***

Lastly, one unanticipated by-product of the interviews was that students offered suggestions to the selective degree programs to improve the process for other students applying to these programs in the future. They volunteered these suggestions in response to my final question which prompted them to bring up anything I may not have asked them during the other questions. Brady, Bethany, Mary, Molly, and Sophia suggested refining the application process by conducting interviews, enhancing the essay component, having multiple application cycles, creating a mentoring program, and not using grades more than ten years old.

Selective degree programs base their admissions heavily on numerical figures such as GPA and entrance exam scores to remain objective. However, these programs could create a more holistic application process by looking at GPA and test scores alongside other relevant information such as essays or interviews that provide more insight into who the student is. I suggest that recommendation letters from professionals in the field who a student may have shadowed or worked with to discuss their fit or preparedness for that occupation should be considered as part of the application process. Additionally, the students not accepted into a selective degree program should be offered information on ways to enhance their applications if they decide to reapply during the next cycle.

## **Recommendations for the Institutions**

Although my findings are of a small number of students at a single institution, their stories can help inform institutional practices related to the student experience. Some recommendations include strengthening family partnerships, teaching students self-regulated learning strategies, improving the major change process, meeting the on-demand needs of college students, and incorporating more co-curricular experiences.

### ***Strengthening Family Partnerships***

Extensive research suggests that parents want to remain involved in their children's lives, and they play an important role in their academic success during college (Castro et al., 2018; Keller & Whiston, 2008; Korostyshevskiy, 2021; Pittaoulis, 2012; Scott & Mallinckrodt, 2005; Weintraub & Sax, 2018). The students I interviewed relied heavily on their parents for support while changing majors. Institutions should have advisors and other primary support persons provide families with specific information about academic advising, the major change process, and other support programs such as academic coaching, career development counseling, supplemental instruction, and tutoring during open houses, orientations, and parent information sessions. Institutions can also sponsor parent groups on social media outlets to regularly inform them about upcoming academic events such as midterms, registration, and other co-curricular experiences. This information could help parents know who to connect their child with when they encounter academic and other difficulties.

### ***Teaching Students Self-Regulated Learning Strategies***

Korostyshevskiy (2021) refers to self-regulated learning as a student's ability to understand and control their learning environment by planning for a task, monitoring their performance, and reflecting on the outcome. Korostyshevskiy (2021) also said that training

students to process new information and acquire new skills efficiently could improve their self-confidence earlier in college. Three students in my study mentioned that they struggled in online and face-to-face science courses during their first-and-second years in college. They also mentioned strategies they should have incorporated earlier in their college journey, such as studying harder, spacing out science courses, attending tutoring, and seeking more help from campus resources.

As such, institutions should focus more on helping students learn how to navigate their courses (e.g., accessing materials, using a syllabus, etc.), study effectively, develop note-taking skills, and learn how to use campus resources for assistance with academic or personal problems. Institutions should consider creating numerous platforms to incorporate goal setting, task analysis, motivation, self-monitoring, and self-reflection skills into the curriculum or student support services. To a certain degree, each of these skills needs to be custom-tailored to each student (Korostyshevskiy, 2021), so institutions could fuse them into bridge programs for underrepresented student populations, at new or international student orientations, or within the classroom setting in a first-semester seminar or general education course. For example, in the classroom setting, faculty could walk new students through the process of how to build academic relationships, take advantage of office hours, find research opportunities, and get involved on campus to start fostering a sense of belonging early on in their educational journey.

### ***Improving the Major Change Process***

Students change their majors for various reasons, and academic advisors play a pivotal role in facilitating this change. “With a relatively large percentage of college students changing majors or planning to change majors, the characteristics of students who change into a different program need to be understood as does the timing of such changes” (Skylar, 2018, p. 47). Some

researchers have found that if a student changes their major early in their academic career, it has little impact on their time to graduation (Foraker, 2012; Skylar, 2018). However, Foraker (2012) found that changing majors after the second year of college was usually associated with lower graduation rates and a longer time to graduation.

Institutions should conduct focus groups, interviews, or surveys in order to view the academic pathways, including the major change process, from the student perspective (Halasz, 2013; Skylar, 2018). However, as noted in recent research, the most useful approach has been through historical data analytics (Skylar, 2018). Institutions should have their institutional research offices compile enrollment data on entire first-year student cohorts to examine their academic journeys longitudinally. They could look at students' academic characteristics such as high school GPA, major declaration, major changes, major migration pathways, and other demographic information like gender, ethnicity, and parent's highest level of education. This information could garner invaluable insights on student progression metrics that should be shared with advisors, advising administrators, and others involved in the retention efforts at an institution. These insights could allow institutions to identify their specific roadblocks, determine which students are experiencing the most difficulty, and implement interventions to support the students experiencing challenges with degree progression.

Institutions should also continue to provide online resources and degree planning tools for students so they can see what a four-year graduation plan looks like in other degree programs. Additionally, academic departments and colleges should promote related degree programs for students interested in or facing an undergraduate major change. The selective degree program advisors could partner with the centralized advising office or other common health-related degree advisors to create an electronic flyer outlining "other health-related major"

information. This flyer could include information on how their prior coursework could apply in a new major. This information would have been particularly beneficial to students in my study as they said they wished they had received more materials about related, alternative degree programs.

### ***Meeting the Needs of College Students***

In addition to guidance related to other academic options, the students in this study mentioned that they needed more guidance in general. For example, Brianna said, “I feel like if somebody was there pushing me to do a little bit better, make sure that I’m meeting those deadlines then I would have.” Bethany would have liked a “mentoring program, like of the students in the actual program, to potentially help the folks that may be applying in the future of what to expect.” Additionally, as noted earlier, five students in this study were confused about the financial aspects of funding a college degree and could have benefited from a conversation with their financial aid counselors.

As stated earlier in this chapter, most of the current college-aged students fall within Gen Z. This generation was born into a technology-filled world (Hope, 2016; Weber & Keim, 2021). Weber and Keim (2021) suggested that this generation possesses the urge to multitask, has shorter attention spans, craves instant satisfaction, and desires to have collaborative learning experiences that are practical and relevant to their future careers during college. However, Hope (2016) noted that even though this generation is fluent in today’s technology, they still want face-to-face communication. This could be because although much of their time is spent online, they miss a human connection and desire it as part of their college experience (Hope, 2016).

Weber and Keim (2021) also noted that this generation of students is willing to talk with faculty, staff, and administrators about topics ranging from issues in their classes to mental

health challenges and career readiness. They want to garner more insightful academic knowledge inside and outside the classroom (Weber & Kiem, 2021). To address this, institutions should develop multi-layer opportunities for students to get the guidance they need, both online and in-person, to persist to graduation. These opportunities could include a centralized resource center or one-stop-shop with virtual and walk-in services or collaborative and intentional programming efforts between academic and student affairs units such as linked academic courses, learning communities, experiential learning, and peer mentoring programs.

### ***Incorporating Co-Curricular Experiences***

College students who partake in co-curricular activities are equipped with more career readiness, which equates to more confidence in their career choice and transferable skills (Weber and Kiem, 2021). Likewise, engaging in co-curricular experiences can help students obtain internships, jobs, research opportunities, and advice about classes (Weber & Kiem, 2021). Therefore, creating opportunities for students to engage in the community or their future professions can enhance their college experience. Five students in my study said they discovered their career interest by shadowing or working in the field before starting college. They also mentioned that the selective degree programs recommend that students have specific shadowing hours or campus and community involvement to be considered competitive for entry. Thus, institutions should think about ways to incorporate co-curricular experiences into a student's college experience. For example, certain college courses could include service learning or community service requirements. Other student support services, such as career services, should promote local internship and job opportunities. These two examples are already occurring at most institutions, but co-curricular opportunities must be embedded across a campus and not just within a student affairs division. These experiences should include interacting with peers about

socio-cultural differences, developing leadership skills, and serving others in the community, as these are the best evidence-based practices for co-curricular involvement currently (Haber-Curran, 2019). Haber-Curran (2019) discussed ways to incorporate co-curricular experiences such as adding peer mentoring components into organizations, colleges, or departments, providing student leadership opportunities by creating committees, and offering service projects for residential students or as part of graduation requirements.

These experiences can provide students with first-hand knowledge of serving others in the community or working in a specific prospective profession. If there were more built-in opportunities for students to engage in co-curricular activities, this would have benefited the students in my study. The five students who mentioned they shadowed or worked in the field said that this opportunity occurred before college. There was no mention from these students that they continued to do this during college, except that the selective degree programs recommended community service or shadowing hours opportunities.

They also noted that they did not feel prepared to choose a backup plan when they were not accepted. With this in mind, it would be a good idea to develop several opportunities for students to explore other majors or professions before applying to a selective degree program. These opportunities could be provided through a collaborative effort between the health-related degrees. They could consist of joint events that showcase all possible degrees or careers in the health professions, alumni seminars that outline a typical day in common occupations, or a compiled list of shadowing prospects with contact information shared with students seeking different experiences.



## **Recommendations for Further Study**

While this study does contribute to the literature, it was limited to a single institution and to a limited number of students, therefore I would make the following recommendations for further study.

This study should be replicated with a larger number of students from other institutions and program areas. Future studies could include students who are pursuing other selective degree programs such as business, education, or engineering. With the expanded sample size and degree selection, researchers could also investigate student progression by demographics including adults, first-generation, international, Pell-eligible, transfers, race, and ethnicity.

Future research using multiple institutions or types of institutions would broaden the scope of this study. Including students from community colleges, private colleges, and various sized public universities in different locations ranging from rural, suburban, and urban may yield different results, bridging the gap in the current literature about major-changing students.

The current study provided only a snapshot of students in their undergraduate careers. Future research could involve following participants through their full undergraduate experience in order to gather more information such as the success of those who reapplied or the time to degree completion for those who chose another degree option. Furthermore, the continued examination of whether students drew upon the same resources or had similar experiences with other academic challenges could be explored to determine variable patterns throughout the undergraduate degree obtainment process.

A final recommendation is related to something that emerged during the interviews. I did not include interview questions related to how students coped with not being accepted into a selective degree program and having to change majors. Eight students mentioned that they had

negative feelings after not being accepted into one of these programs. Future studies should address how students coped with the unexpected news of not being accepted to their program of choice. This could inform training for advisors in how to foster student resiliency, which Dwivedi (2020) described as one's ability to cope with adverse situations and bounce back stronger..

### **Closing**

These students described their experiences leaving selective degree programs. They talked about their experiences changing their undergraduate major, shared the resources they used, and explained the strategies they planned to incorporate to help them towards the finish line of their new academic programs. Based on their experiences, I recommend further research with an expanded sample size at multiple institutions, including other selective degree programs that follow students throughout their undergraduate careers. I also encourage other researchers to incorporate specific interview questions on students' coping strategies when going through the change of major process. This broader approach will allow future researchers to gain a more holistic picture of these students' experiences and the possibility to investigate other student progression issues by demographics such as adults, first-generation, international, Pell-eligible, transfers, race, and ethnicity. I hope this study sparks the interest of other researchers to further examine barriers to student persistence in selective degree programs.

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## APPENDICES

### Appendix A: Auditor Certification

The audit of Megan Roberts' interviews with students in selective undergraduate degrees in the health profession interest areas and what is presented from them in Chapter four is complete. I found everything to be accurately represented and the process for determining how to present the results to be sound.

A handwritten signature in black ink that reads "Ali Williams". The signature is written in a cursive style with a horizontal line underneath it.

Ali Williams, Ed.S, NCC

February 1, 2022

## Appendix B: Recruitment Letter

Hi [Name],

I am an Executive Director of Academic Advisement and student in the Educational Leadership, Higher Education Leadership Concentration, program at East Tennessee State University (ETSU). I am conducting a research study that explores how undergraduate students experience the transition of leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences. I am looking for people who were previously enrolled in a selective health profession interest area, applied to a selective degree program in dental hygiene, nursing, or radiologic science and were not accepted, classified as a third or fourth-year college student, and remained enrolled at the institution after not being accepted into the selective program. This study involves an interview which should take about an hour. The interview will take place online on Zoom, a video conference platform.

This research study is funded by a grant from the National Academic Advising Association (NACADA). After the interview, you will receive a \$25 Amazon gift card as a small token of appreciation for your time. Please think about participating. Participation is voluntary. If you have any questions, you can contact me at [robertsmm@etsu](mailto:robertsmm@etsu) or 423-439-8560.

Sincerely,

Megan Roberts, M.Ed.  
Executive Director of Academic Advisement  
Doctoral Student in Educational Leadership,  
Higher Educational Leadership Concentration  
East Tennessee State University  
Undergraduate Student Advisement  
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423-439-8560

## Appendix C: Interview Protocol

### **Purpose Statement:**

The purpose of this qualitative study is to explore how undergraduate students experience the transition of leaving selective health profession interest areas in dental hygiene, nursing, and radiologic sciences at a public research university located in northeast Tennessee.

### **Research Question:**

How do students experience leaving the selective health profession interest areas in dental hygiene, nursing, and radiologic science?

### **Interview Protocol:**

Introduction/Instructions: Good morning (afternoon). My name is Megan Roberts; I am a doctoral student in the educational leadership program, higher education concentration, at East Tennessee State University (ETSU). I am conducting a research study to explore the experiences of students leaving a health profession interest area in dental hygiene, nursing, or radiologic science. Thank you for meeting with me today. I will be asking you a series of interview questions. There are no right or wrong or desirable or undesirable answers.

Time commitment: Your time commitment will vary depending on how much information you are willing to share, but interviews are estimated to be 60 minutes in length.

Procedures: If it is okay with you, I will be recording our conversation. This is so I will have a verbatim transcript and to be able to carry on an attentive conversation with you. I will be using direct quotes in my dissertation, but I will replace your name with a pseudonym to ensure confidentiality.

Participation: You may decline to participate or to opt-out of the study at any time after your initial participation. This study is considered to have minimal risk of harm. If you feel uncomfortable, you may request for the interview to be stopped at any time and I will destroy any data you have provided at your request with no penalties to you. By participating in the interview, you are providing your consent to be a part of this research study.

### **Interview Questions:**

1. Did you begin at this institution as a freshman or transfer student?
2. Why did you choose to attend this institution?
3. What was your initial major?
4. What is your current major?
5. When did you decide to pursue dental hygiene, nursing, or radiologic science?
6. Tell me about any specific people or experiences that influenced your decision to choose that major.



7. Did you experience any difficulties in courses required for the major and if so, please tell me about them.
8. Did you seek any assistance on campus when you experienced these course difficulties? Tell me about that.
9. Did you expect to change your major? Why, or why not?
10. How did you feel about not getting accepted into [insert program]?
11. What was it like to have to choose a new major?
12. Did you use any resources to help you select another major, and if so, which ones?
13. Were there any people who you talked to about not getting admitted to dental hygiene, nursing, or radiologic science or about having to change your major?
14. Did they support you, and if so, how?
15. Which resources were the most valuable to you and why?
16. Is there anything anyone could have done differently to help you change majors?
17. Is there anything you would have done differently if you had to do this all over again?
18. What advice would you give to advisors working with students pursuing selective majors like dental hygiene, nursing, or radiologic science?
19. What advice would you give to another student who is pursuing a selective major like dental hygiene, nursing, or radiologic science?
20. What would you like to tell me about your experience changing majors that I have not asked you about already?

Debrief/Wrap Up: Thank you for taking the time to participate in this interview and talk about your undergraduate major change transition experience on campus. I greatly appreciate your time and thoughtfulness when answering the questions. As a small token of appreciation for your time, I have a gift card to give to you. Please do not hesitate to contact me if you have any questions about my dissertation study or the information you provided.

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