

**TRANSFER STUDENT FACULTY ACADEMIC ADVISING:  
UNDERSTANDING STUDENT PERSPECTIVES**

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by

Ashleigh Everhardt Queen

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Approved by

---

Pamela L. Eddy, Ph.D.  
Chairperson of Doctoral Committee

---

Tracy L. Cross, Ph.D.  
Committee Member

---

Sharon L. M. Stone, Ph.D.  
Committee Member

## **DEDICATION**

I dedicate this work to my students – past, present, and future. Your passion for life and desire to learn inspire me daily. Thank you for allowing me to be a part of your educational journey.

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**TRANSFER STUDENT FACULTY ACADEMIC ADVISING:  
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**ABSTRACT**

The purpose of this study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly selective, public institution in the Mid-Atlantic Region. A phenomenological case study of Small University was utilized to understand the perception and socially constructed reality and knowledge that vertical and lateral transfer students build through interactions with a faculty academic advisor. Interviews were conducted with a diverse population of 20 junior and senior transfer students who have declared their major in one of the eight STEM departments at Small University. Overall, students experienced difficulties once on campus in terms of navigating the institution and obtaining the courses needed in a timely manner. The majority of participants did not work closely with their advisor and therefore needed to find supports and resources on their own. Modification of faculty advising away from a prescriptive model towards a developmental or proactive model may serve to prevent negative outcomes for transfer students during the transition into a new institution.

**ASHLEIGH EVERHARDT QUEEN  
EDUCATIONAL POLICY, PLANNING, & LEADERSHIP  
HIGHER EDUCATION ADMINISTRATION  
THE COLLEGE OF WILLIAM & MARY IN VIRGINIA**

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## **CHAPTER 1: INTRODUCTION**

Academic advising is an activity that is a hallmark of faculty-student interactions in higher education. Academic support is an important part of a student's experience in higher education because faculty members serve as a direct connection between students and the institution. Faculty advisors can help influence the student experience as it relates to satisfaction and retention (Schreiner, 2010). This interaction, particularly when the advising practice is carried out by faculty members, can help determine the path a student will take at the institution (Frost, 2003). Light (2001) indicated that "agreement is widespread that academic advising is important" (p. 85) and that "students who get the most out of college, who grow the most academically, and who are the happiest organize their time to include activities with faculty members" (p. 10). Thus, time spent with faculty members in advising during the college years can provide students with initial levels of engagement that leads to expanded connections with faculty over their college years.

The National Survey of Student Engagement (NSSE, 2019) indicates that engagement can occur in many forms, such as discussing coursework, formulating career plans, participating in non-coursework activities, or discussing academic performance. While not all of these types of engagement fall strictly under advising, coursework discussions, career planning, and academic performance all fall into faculty advising territory. Academic advising is an important example of a shared activity between

faculty and students. This activity provides an opportunity for relationship building between a faculty member and a student that can allow students to have a point of contact when trying to navigate the institutional environment (Frost, 2003). It is also important to realize that successful academic advising should be personalized to individual students, as the social interaction is key in building a successful working relationship (Light, 2001).

The relational core of academic advising as an activity aligns well with social constructivism as a lens for viewing shared experiences (Bess & Dee, 2012a), which existed in this study as the academic advising interactions. Social constructivism, the principle that knowledge and reality are constructed through social interactions (Bloomberg & Volpe, 2019), provides a view of the influence that the faculty-student relationship involved in this activity has on students. By understanding that the advising relationship contributes to how students socially construct their reality of the institution and higher education, practitioners can examine how advising can best serve students as they seek to obtain a degree from the institution.

Student engagement has been noted as related to student persistence, although the relationship is not linear (Hu, 2010). Hu (2010) also notes that student academic engagement without social engagement on campus can actually negatively impact student persistence. This outcome is key for academic advisors to realize as they serve on the academic side of the students' college experience, and during advising they can also encourage students to become involved on campus outside of the classroom.

Transfer students, those who enroll at multiple institutions in pursuit of a bachelor's degree (Binkley, 2015), are a growing population in higher education. Within

certain fields, such as Science, Technology, Engineering, and Mathematics (STEM), it is estimated that almost 50% of graduates will, at some point during their educational career, enroll at a community college (National Science Board, 2014). STEM gained importance in education, and higher education specifically, due to the Obama Administration's focus on increasing STEM opportunities for students in the United States (The White House, Office of the Press Secretary, 2015). The increased focus on STEM has led to an increase in demand for students with STEM degrees, most of which position students to have successful career outcomes (Moody, 2019). This fact, along with the cost savings that community colleges in particular can provide (State Council of Higher Education in Virginia [SCHEV], 2016), points to the importance of understanding how to help transfer students in general, and specifically those who intend to pursue a four-year STEM degree. For the purpose of this study, both vertical transfer (students who transfer from a two-year institution to a four-year institution), and lateral transfer (students who transfer between four-year institutions) were considered (Townsend, 2001).

Students who are engaged both socially and academically on campus are more likely to succeed at the institution (Lester, Brown Leonard, & Mathias, 2013). It is important for students to include engagement with faculty members in their academic paths (Light, 2001), and as the NSSE (2019) indicated, there are many types of engagement that involve students and faculty members, some of which are tied to academic advising. Additionally, as transfer students face different barriers to success than traditional students, connecting this population to the institution is critical in aiding them towards degree completion at the receiving institution. These barriers include

difficulty navigating the new institutional environment, a decreased involvement on campus due to family or work roles, or a separation from the traditional student population due to a difference in age (Binkley, 2015; Chin-Newman & Shaw, 2013; Lester et al., 2013; Mamiseishvili & Deggs, 2013).

As transfer students enter a new four-year institution, the goal of the faculty and staff should be to aid students and mediate the phenomenon of transfer shock, the decrease in academic performance during the initial semester post-transfer (Hills, 1965). It is important to note that motivation for transfer can be vastly different when comparing students who transfer from one four-year university to another with students who transfer from a two-year institution to a four-year university (Ishitani, 2008). Regardless of the nature of their original institution, it has been shown that transfer students need support from the receiving institution in order to acclimate to their new academic home (R. N. Miller & Durham, 2014). Faculty advisors are in a unique position to interact with students in a way that can help combat any initial challenges they may encounter.

In light of the importance of carrying out academic advising in a manner that aids students, this study focused on understanding the socially constructed reality that students hold around this vital activity. I conducted a phenomenological case study, grounded in social constructivism, that sought to understand the perception that junior and senior transfer students in STEM departments hold around academic advising. This study was conducted at a small, highly selective, public university in the Mid-Atlantic region, henceforth referred to as Small University.

## **Background**

Two background elements help situate this study. I provide background on two vital components that provide context for this research: transfer student populations and academic advising in higher education. Following, I will define each of these terms and explain their importance in higher education.

**Transfer students.** Transfer students, or those who have enrolled at multiple institutions in pursuit of a post-secondary degree, are becoming more numerous in higher education, with almost 60% of students who received bachelor's degrees in 2000 attending multiple institutions (Peter & Forrest Cataldi, 2005). In fact, increased rates of transfer were noted as early as the 1970s by Peng (1977), who stressed the importance of transfer between institutions as critical in higher education. In 2011, it was found that of a cohort of over two million students, 38% were transfer students, with women transferring at slightly higher rates than men (Shapiro et al., 2018). One concerning phenomenon for transfer students is transfer shock, the decrease in academic performance post-transfer (Hills, 1965). Berger and Malaney (2003) asserted that difficulties of transition can be mitigated by university personnel aiding students during the first semesters post-transfer. Hills (1965) demonstrated that "recovery to transfer shock is about as prevalent as shock itself" (p. 209), pointing to the fact that while transfer shock is a known phenomenon, transfer students can, and most often do, recover. It is important to note that transfer students from junior colleges show lower success rates than transfer students from other types of institutions, such as those who transfer from one four-year university to another (Hills, 1965).

The process of transition is one item of concern when working with transfer student populations, particularly in light of the social and institutional barriers that exist when a student transfers to a new institution (Binkley, 2015; Chin-Newman & Shaw, 2013; Lester et al., 2013). Townsend (2008) noted that it is important for individuals at the receiving institution to listen to the needs of transfer students, including the fact that they should not receive identical treatment as freshmen since they are not entering higher education for the first time. Townsend also indicated that faculty and staff can be instrumental in determining a student's needs and concerns as they encounter the campus environment for the first time. Through seeking out the opinions and perceptions of this student population, faculty and staff can aid transfer students through the adjustment period post-matriculation. Within this study, I sought to understand what faculty academic advising practices were perceived by transfer students as helpful in facilitating successful transfer and mitigating transfer shock.

**Academic advising.** Academic advising is a main point of connection for students as they enter a new campus community, whether as freshmen or as transfer students (Frost, 2003). Larson, Johnson, Aiken-Wisniewski, and Barkemeyer (2018) created a comprehensive definition of academic advising, stating that “academic advising applies knowledge of the field to empower students and campus and community members to successfully navigate academic interactions related to higher education” (p. 86). It is worth noting that this definition does not indicate that academic advising is

discipline specific; rather, it explains that advisors are in place to aid students in navigating the campus environment at institutions of higher education.

Traditionally, academic advisors served as points of reference for students when course selection questions arose (Crookston, 1994). Faculty members represent one type of academic advisors. It is important to note that other types of advisors also exist on campus, but this study focused solely on the faculty advisor. Additionally, not all faculty members serve as academic advisors. In this type of advising regarding course selection, known as prescriptive advising, faculty would advise students on the courses that should be taken in order to successfully earn a degree in a specific major (Crookston, 1994). Developmental advising, in comparison, focuses on the relationship between a faculty member and student as they work together as the students navigate the environment of higher education. Winston, Ender, and Miller (1982) defined this type of advising method as:

Developmental advising both stimulates and supports students in their quest for an enriched quality of life; it is a systematic process based on a close student-advisor relationship intended to aid students in achieving educational and personal goals through the utilization of the full range of institutional and community resources. (p. 8)

This definition of developmental advising also points to the important role of faculty members in advising student populations, particularly students who have attended multiple institutions in pursuit of a degree. In developmental advising, faculty members work with students to develop a plan for academic success as opposed to simply directing students through a stepwise process. It is through this method of advising that advisors

are able “to recognize where the student stands along the educational, career, and personal dimensions of her or his life” (Grites, 2013, p. 13) in order to assist the student in a successful navigation of higher education. Academic advisors are vital to students when transferring due to the difficulty a transfer student may have navigating the new academic environment. For example, students who transfer may find that they are not able to take classes in an ideal time frame due to scheduling, or students may have problems declaring their first choice of major, often due to grade requirements or pre-requisite courses that they may have not taken prior to transfer (Tobolowsky & Cox, 2012). Faculty advisors can guide students through this somewhat complex process at the new institution.

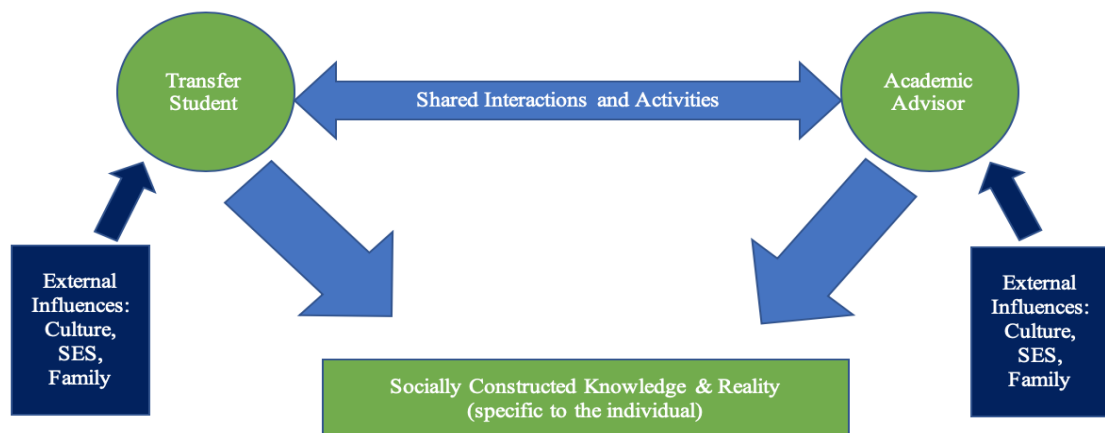
### **Conceptual Framework**

Academic advising and transfer students are two important topics within higher education, but the two are inevitably linked through the interactions of faculty with transfer students both pre- and post-transfer. The literature highlights that academic advising serves as a student’s connection to the university and is important given the needs of transfer students. Transfer students seek help to mitigate the occurrence of transfer shock during the first semesters post-transfer and seek out campus allies for this help (Berger & Malaney, 2003; Hills, 1965; Townsend, 2008). For the purpose of this study, I utilized a social constructivist paradigm in trying to understand the crucial interactions between transfer students and academic advisors. Through this paradigm, I sought to understand the perceptions that transfer students hold around academic advising by faculty members and the interactions that helped them be successful in declaring a major at the receiving institution.

**Transition.** As transfer students enter a new institution, they will go through a transition period. Academic advisors tasked with aiding students through this period of transition should be informed of the stages that a student will go through. Schlossberg (2011) provides context through the four *S*'s included in her theory of transition. The four words associated with this theory are *Situation*, *Self*, *Supports*, and *Strategies*. The theory includes a view of the events taking place in an individual's life during the period of transition and their strength to handle the change, encompassed in the first two *S*'s of the theory. The theory then looks at the support system an individual depends on during change and, finally, the plans an individual has to handle change that comes with transition (Schlossberg, 2011). As academic advisors work with students, particularly in a way that is relational in nature, Schlossberg's (2011) theory can be used to inform the process of transition that students will experience in transferring between institutions. Undoubtedly, students will encounter challenges through the transfer process, but in understanding the stages of transition, academic advisors can work with students to navigate entering into a new academic environment. Transition theory, while critical to understanding this important time in a student's process, serves as a guiding principle rather than the framework of this study. By utilizing the principles of Schlossberg's (2011) theory, practitioners are able to understand the different parts of a student's transition process while transferring to a new institution.

**Social constructivism.** Social constructivism is based on the principle that knowledge and reality are socially constructed through the interactions that individuals have with each other (Bloomberg & Volpe, 2019). Transfer students interact with fellow students and with faculty and staff in different environments on college campuses. For

example, transfer students may interact only with each other in the context of transfer student orientation, but once school begins, they will be interacting with both traditional and transfer students. Transfer students interact with faculty and staff in different contexts, both inside and outside of the classroom. In each instance, transfer students will utilize the experiences they have to socially construct their reality and knowledge around a given circumstance. Figure 1 illustrates how social constructivism was viewed in this work. Within this figure, it is important to note that all individuals within a social relationship will construct reality or knowledge, but the construction will vary based on the individual. Also important in this model is the realization that culture and a person’s history can help to shape socially constructed knowledge in a new setting, for example, that of a relationship between a transfer student and their academic advisor at a new institution of learning.



*Figure 1.* Social constructivism in academic advising. SES = socioeconomic status.

This conceptual framework provided the foundation for the analysis in this study.

Understanding the phenomenon of transfer as socially constructed by transfer students

can help practitioners understand better what type of support to provide for transfer students.

### **Problem Statement**

Academic advisors meet with students at different points during the academic journey in order to help guide students through the process of declaring a major and navigating the institution (Larson et al., 2018). Townsend (2008) noted that, specifically for students transferring from a two-year institution, faculty perceptions of students' needs and thoughts is key in successful transfer. Community colleges have a mission of aiding students in fulfilling the requirements for transfer (Townsend, 2008). A main connection students have to the campus community is through the practice of academic advising (Frost, 2003), although classroom interactions also play a role. Academic advising, unlike a classroom setting, provides students with a face-to-face setting in which they can address individual needs. Furthermore, Bridgen (2017) explained that it is necessary that all advisors be trained to follow the theoretical principles of advising; however, there are different schools of thought and little training that is mandated by the site institution. For this reason, understanding the perceptions that transfer students hold about academic advising can shed light on the effectiveness of practice in higher education.

Previous studies have considered the effectiveness of academic advising in two-year institutions pre-transfer and in four-year institutions post-transfer. Clark (2013), for example, examined community college student satisfaction with academic advising pre- and post-transfer using survey data that was quantitatively analyzed and noted student perceptions when comparing advising at the two types of institutions. Clark (2013)

recommended that further studies investigate programs of advising, and this study helps answer this call for more research on advising. Other researchers, such as O'Connor (2017), have included a phenomenological approach to study advising, but considered student perceptions of advising solely at the community college level. Within that specific study, O'Connor (2017) focused on faculty perceptions as opposed to student perceptions and noted that future studies should examine the student-faculty interactions, as these are important for a better understanding of the advising process. O'Connor (2017) indicated that "the influence of a good faculty advisor may make the difference between having a successful college experience or a negative one" (p. 123). In order to best serve students, faculty advisors need to understand the challenges that the students may encounter to effectively employ advising strategies to help facilitate successful transfer into the four-year university. This study specifically sought to understand what practices students perceive as helpful in the process of transfer.

While many authors have focused on transfer student populations, and the aforementioned works that examined student perceptions, existing research did not examine a specific advising program or include an examination of both vertical and lateral transfer students. Additionally, former studies have not focused on STEM transfer students, a growing population due to the emphasis being placed on producing students with STEM degrees. At Small University, there was an observed difference between the graduation rates of transfers and native students. In examining the four-year graduation rates of both populations that had a projected graduation date of 2017, native students graduated at higher rates compared to transfer students (85% relative to 82% for transfer students). The rate at which students graduated in six years also differed; native students'

rates were 9% higher than transfer students. Although these differences are small in magnitude, rising transfer populations, particularly in STEM fields, make it imperative that attention be paid to this difference.

In understanding the importance of academic advising for students in higher education and reviewing the gaps in the literature, I sought to understand the perceptions that transfer students hold around the events of academic advising. Specifically, I focused on junior and senior students who had declared a STEM major at Small University. This study, in consideration of the recommendations of Clark (2013) and O'Connor (2017), explored how students experience academic advising and how the knowledge and reality created through and around the process helps to mitigate transfer shock during their first year on campus post-transfer.

### **Research Questions**

The main research question guiding this study was:

- How do junior and senior transfer students within STEM departments perceive the influence of academic advising on their transition to Small University?

Underlying questions of this larger aim were as follows:

1. What perceptions do transfer students have of their initial academic advising experiences during their first year on campus? How does this experience change over time?
2. How do transfer students in STEM departments perceive the influence of academic advising on their academic success at the new institution?

3. What practices do STEM transfer students perceive to be the most valuable in combatting transfer shock at the new institution?

### **Purpose Statement**

The purpose of this study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly selective, public institution in the Mid-Atlantic Region. Through a lens of social constructivism, I sought to understand the socially constructed reality that this population holds based on interactions with a faculty academic advisor. Additionally, this study sought to understand the way, if any, that the student-faculty relationship built through academic advising works to mediate the phenomenon of transfer shock. By selecting a population that includes junior and senior students, I worked to determine if time at the university and increased interactions with a faculty advisor serve to alleviate transfer shock for seniors.

### **Significance of the Study**

Academic advising is an important part of the college student experience for all students, both native and transfer. Clark (2013) stated that “the words of advisees suggest that advisors need to be personable towards students and knowledgeable of their needs” (p. 125). Although advisors work to aid students in obtaining a degree, they may not always be aware of the reality that the student is constructing through the interactions of academic advising or how this reality informs student decisions throughout their time at the institution. With these facts in mind, this study sought to enlighten practitioners of the way that students perceive interactions with their academic advisor as a way to successfully chart their path at the four-year institution. As higher education focuses

more on producing students with STEM degrees (National Science Foundation [NSF], n.d.) and more of these students spend time at multiple institutions (National Science Board, 2014), it is important that advisors understand how to aid transfer students towards successful degree completion.

This study focused on STEM students, as there is a growing drive to produce more degrees in STEM fields. President Obama, during his presidency, prioritized an increase in the number of STEM degrees by one million within a 10-year period (United States Department of Education, n.d.). President Obama's administration followed this call with \$200 million in funding for developing greater STEM programming for students, including those in higher education (The White House, Office of the Press Secretary, 2015). Additionally, the NSF (n.d.) continually works "to promote excellence in undergraduate science, technology, engineering, and mathematics (STEM) education for all students" (para. 1). Part of the mission of the Division of Undergraduate Education at the NSF is to "support an increase in diversity, size, and quality of the next generation of STEM professionals who enter the workforce with two- or four-year degrees" (NSF, n.d., para. 4). Considering this with the fact that a great number of students transfer between institutions, and nearly 50% of STEM bachelor degree recipients attend a community college at some point in their educational career (National Science Board, 2014), it is important that educators understand how to aid this specific population in attainment of STEM degrees. By understanding how students perceive interactions and advising activities, faculty members can better prepare students as they enter departments that prepare them for careers in these high-demand fields.

## **Definition of Key Terms**

Academic advising and transfer in higher education are two phenomena that include a wide variety of concepts and definitions. For the purpose of this study, I focused on a specific form of academic advising that appropriately aligns with the use of the social constructivism paradigm. In this section, I define the key terms that served to delineate the parameters of academic advising and transfer for the purpose of this study.

**Academic advising.** For the purpose of this work, I utilized the definition of academic advising provided by Kuhn (2008), which states that academic advising occurs in “situations in which an institutional representative gives insight or direction to a college student about an academic, social, or personal matter. The nature of this direction might be to inform, suggest, counsel, discipline, coach, mentor, or even teach” (p. 3). Academic advising in this research project was not limited to faculty members providing prescriptions for course options, but a more comprehensive view that encompasses aiding students in multiple areas of the academic world at the institution.

***Developmental advising.*** Developmental advising is academic advising that does not employ a hierarchical relationship; rather, it is based upon a mutual relationship between the advisor and student. Developmental advising was considered in this study because it based on the relationship between the student and advisor in which each individual contributes to knowledge generation (Crookston, 1994; Xyst, 2016). As this project intended to grasp the socially constructed reality that students have around

academic advising, the developmental model of advising, centered on the participation of both advisee and advisor (Crookston, 1994), served as a fitting model of advising.

***Prescriptive advising.*** Prescriptive advising is characterized by an interaction between a faculty member and a student in which the faculty member provides a recommended list of courses and tasks that a student should complete in order to successfully complete a degree program at an institution. This model of advising predates the developmental model of advising and is not the currently recommended best practice in academic advising (Crookston, 1994). This type of advising has also been compared to a physician-patient type of relationship, in which the advisor prescribes certain courses to the student and the student follows without question (Drake, 2011).

***Proactive/Intrusive advising.*** Proactive, or intrusive, advising represents a model of advising created through a blending of developmental and prescriptive advising (Donaldson, McKinney, Lee, & Pino, 2016). This form of advising is characterized by a structured relationship in which advisors intentionally take a leading role in guiding the students through their academic decisions while also allowing for the student to come to the advisor with questions that they may have, academic or otherwise.

**Academic advisor.** This study focused on the interaction between students and a faculty academic advisor. For the purpose of this work, I use the term academic advisor in reference to a faculty member who aids students in the process of course selection, major declaration, and navigating the university as a whole. Even though non-faculty advisors also exist on campus, this study only considered faculty who have chosen to carry out the task of academic advising. This specific definition was explained to

students during the interview process in order to eliminate any confusion around an unfamiliar term.

**Transfer shock.** Transfer shock, defined as a decrease in academic performance post-transfer (Hills, 1965) is discussed throughout this study. I sought to understand the ways that students perceive academic advising as a mitigating factor in transfer shock.

**Transfer student.** The designation of transfer student can be used to define two different modes of transfer. For the purpose of this project, I did not group students based on the type of transfer experienced; rather, I used the self-reported designation that each student provided. Vertical transfer and lateral transfer were considered for this work, while dual-enrollment, which allows for credits to be transferred from courses taken at community colleges while students are in high school, was not considered a type of transfer student. Additionally, students who took classes at other institutions, while maintaining enrollment at Small University, were also not considered in the sample population for this study.

**Lateral transfer.** The designation of lateral transfer was used to identify participants who have moved between two institutions of the same type, such as moving from one four-year university to another four-year university. While less common than vertical transfer (Bahr, 2009), this type of transfer does occur in higher education, and therefore was considered for this project. Lateral transfer can also be used to designate a student who moves between two-year institutions (Townsend, 2001), but for this particular study was not considered, as the institution of interest is a four-year institution.

**Vertical transfer.** Vertical transfer refers to students who enter a four-year institution after previously completing a portion of their coursework at a two-year

institution, such as a junior college or community college (Townsend, 2001). A vertical transfer designation can apply to students who have earned an Associate degree, but this is not a requirement for vertical transfer (Hossler et al., 2012).

## **Summary**

The purpose of this study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly selective, public institution in the Mid-Atlantic Region. I focused on students who have declared a STEM major at Small University, a small, highly selective public institution within the Mid-Atlantic region. As institutions are encouraged to graduate more students with STEM degrees (NSF, n.d.; United States Department of Education, n.d.) and a majority of STEM students spend time at multiple institutions (National Science Board, 2014), it is imperative that educators understand how students perceive academic advising interactions and how this practice can aid in students successfully completing a degree. Through the lens of social constructivism, I sought to understand the reality that students socially construct through interacting with a faculty academic advisor. I also sought to understand how this practice and the reality that is constructed as a result helps to mediate the phenomenon of transfer shock.

In the chapters that follow, I examine the literature that exists around academic advising, transfer student populations, and the increasing focus on STEM in higher education. An examination of the literature provides the background information of what is known in the field and demonstrates that we as an educational community still need to investigate. I outline the methodology of a phenomenological case study, a qualitative research method that was utilized in this study. The methodology includes an

explanation of why certain methods were chosen, the lens of social constructivism, and the process by which participant interviews were conducted. The participants in this study were found to have experienced a transition in Small University that did include difficulties such as a decrease in academic performance and negative experiences related to housing and social adjustment. It is notable that the majority of the students who were interviewed experienced prescriptive advising leading to minimal contact with their advisor. A few participants did experience developmental or proactive advising, which seemed to alleviate the transition difficulties that they experienced. At Small University, a linkage between academic affairs and student affairs could be key in providing faculty with the training and resources to carry out developmental or proactive advising that would aid transfer students through the transition process and help to alleviate transfer shock.

## **CHAPTER 2: LITERATURE REVIEW**

Transfer students, those who move from one institution to another at least once in pursuing a college education, are much more common today than ever before in higher education, with approximately 37% of students transferring at least once while pursuing their four-year degree (Binkley, 2015). It is also common for students to transfer multiple times, entering and exiting different institutions with different expectations emerging throughout their time in college (Leavitt, 2015). Increasingly, this type of transfer pattern, known as the “student swirl” (Selingo, 2015, para. 1), is being observed as students move between multiple institutions while working towards degree attainment.

As the population of transfer students has grown and continues to be quite large, faculty and staff in higher education must realize that the four-year college student population they are working with is no longer only the traditional student who enters and stays for four years. Additionally, higher education professionals must recognize that students may be outside the 18-22 age range and may come in with varying educational and career backgrounds (Choy, 2002). Choy (2002) found that from 1970 to 1999, there was an 11% increase in the rates of enrollment of students who were 25 years of age or older. In fact, in the 1999-2000 school year, only 27% of all undergraduates were students who entered college as a traditional student. A traditional student is defined by the National Center for Educational Statistics as one that enrolls at an institution directly following high-school graduation, does not work full-time or only works in a part-time

position during the school year, and is financially dependent on their parents or family. Faculty advisors are now working with a population of students who are facing barriers that students may not have encountered historically when they entered into one four-year college and graduated from that same college.

In order to aid this new, growing population of college students, faculty advisors must examine their methods of advising and alter them to benefit students from diverse backgrounds with differing needs. As the practice of advising has become a more centralized focus in higher education, prescriptive and developmental models of advising have become central to discussions regarding how one should approach working with students (Crookston, 1994). Instead of more rigid models of telling students their academic pathway, faculty are now encouraged to work with students in creating an individualized plan that considers specific barriers and student needs. This approach counters simply giving a prescriptive list of tasks and prescribed courses to students that guides them from their first day on campus through graduation (Crookston, 1994).

In this study, academic advising for community college transfer students was considered in light of the challenges facing these transfer students who are entering a four-year institution having previously completed work at the community college level. Examining the barriers, such as difficulty navigating the environment of higher education due to a lack of familiarity with the demands of post-secondary institutions (Mamiseishvili & Deggs, 2013), that exist for this population provides a means of explaining what models of advising are in use and what areas of this topic have yet to be explored. This study focused on Small University, which is a school that accepts a modest number of transfer students each year. While it does not accept the largest

percentage of transfer students in the region, its unique characteristics of being a small, highly selective, public liberal arts institution could influence the transfer student experience on campus.

### **Academic Advising in Higher Education**

Academic advising provides key support to college students along their pathways through the higher education system in that it provides faculty the opportunity to foster learning through involving students in the process of shaping their educational journeys (Frost, 2003). Historically, the delivery of academic advising occurred in different forms, each with specific goals for the advising process. In the following sections, I review the history of academic advising in higher education and the role of academic advisors, explain the different approaches to advising, and relate these items to the student experience.

**A brief history of academic advising.** In higher education today, academic advising is most commonly grounded in a teaching philosophy in which the student and advisor work together to create a plan to ensure student success (Frost, 2003). Although this practice is critical to the success of today's students, academic advising is far from a new concept in higher education. In fact, academic advising began during the *in loco parentis* period in education (Cook, 2001). The term *in loco parentis* refers to a time, beginning in the colonial era of the 17th and 18th centuries, in which institutions of higher education assumed parental responsibilities for students during their tenure at the college or university (Lee, 2011). This role of oversight is argued to have continued until the civil rights era during the mid-20th century. In the mid-1960s, the courts ruled in favor of students in cases in which universities were limiting protest rights of students

(Fieldstein, 2016), giving students more autonomy in their choices while in college. Generally, the era of *in loco parentis* involved faculty of the institution as the responsible individuals for advising many parts of students' lives, including "extracurricular activities, their moral life, and intellectual habits" (Cook, 2001, para. 1). Up until the mid-1960s, faculty members guided and oversaw many of the options students were given during their college program.

In the 19th century, the first system identified for the purpose of academic advising was instituted at Kenyon College, marking the starting point of pairing students with faculty advisors (Cook, 2001). Throughout this time period, colleges and universities, including Harvard and Johns Hopkins, established positions for individuals tasked with advising students. During this time, the individuals responsible for advising were involved in the types of responsibilities that we often associate with advising today. Then, as now, the advisor, more commonly referred to in the 19th century as a dean, was charged with aiding students in achieving institutional success. Starting in the 20th century, advisors worked to ensure that students were advised in psychological matters, vocational matters, and the pursuit of a successful academic career (Cook, 2001). These historic functional roles are similar to the modern developmental model of advising examined in depth in this study. A developmental model of advising focuses on involving the student in the decision-making process as opposed to simply prescribing a path for them (Crookston, 1994).

During the 20th century, cultural changes led to a change in methods of advising (Cook, 2001). Beginning at the turn of the 1900s, faculty advisors become responsible for the advisement of academic concerns, while guidance in other affairs such as

discipline continued to be the responsibility of designated deans of men and women, with a clear shift occurring in 1906 at Columbia University. At this time, Columbia expanded the advising program to bridge the student-faculty gap. This change involved faculty becoming responsible for aiding students in course selection (Cook, 2001).

The two World Wars also influenced the advising function, with the advent of counselors on campus following World War I and specialized advisors after World War II for soldiers entering college on the GI Bill (Cook, 2001). Spurred by demands for admission of soldiers post-WWII, there was also a drastic increase in the number of community colleges (Cooper, 2010).

The 1960s and 70s were marked by the expansion of community colleges that saw an increase in the enrollment of first-generation and other under prepared students who needed help navigating the realm of higher education (Cook, 2001). Women entered higher education in large numbers during this time period due to a cultural move towards workplace equality (Parker, 2015). Critically, community colleges offered access to a college education to commuters and to those with other work and family responsibilities, particularly women who were homemakers in addition to being students. It was in this time that developmental advising, a common method utilized by many advisors today, began. Frost (2003) noted that this change in advising is a result of a shift in the population of undergraduate students and their desire to receive “innovative responses” (para. 6) from their professors. The shift to a developmental advising model is a response to the changing needs and desires of the undergraduate population.

Crookston (1994) explained that the purpose of academic advising was historically directed at aiding students in the determination of a career and designing an

academic path directed towards successfully entering said career upon graduation. During the rise of developmental advising practices in the mid-1900s, a shift occurred in which advising became “concerned with not only a specific personal or vocational decision but also with facilitating the student’s rational processes, environmental and interpersonal interactions, behavioral awareness, and problem-solving, decision-making, and evaluation skills” (Crookston, 1994, p. 5). As I discuss in more detail to follow, the advent of developmental advising represents a major shift from prescriptive advising methods centered on the advisor dictating to the student what steps needed to be taken to fulfill a major to a new approach of fostering a teaching relationship with the student in which both parties are active participants. This shift took place following the 1970s, a time when academia experienced a move away from advisors offering only course information to also serving as a guide for students throughout their educational careers (Frost, 2003).

Other important events in the 20th century included the creation of The National Academic Advising Association (NACADA) in 1979 (Frost, 2003). This organization works to “promote student success by advancing the field of academic advising globally” (NACADA, n.d., para. 2). In 1981, the term *academic advising* appeared for the first time in the Educational Resource Information Center (ERIC), a search engine maintained by the federal government that allows individuals to search for information about topics in education, including those from books, journals, and individual submissions (Frost, 2003). As advising evolved throughout the 20th century, what were initially special populations, such as lower income and first-generation students, became the standard population of students (Cook, 2001). As the 20th century came to a close, specific

targeted populations became the focus in academic advising. For example, there is specialized advising for athletes, those seeking to enter graduate programs (particularly in professional schools), and transfer students (Frost, 2003), which was the focus of this study.

**The role of academic advisors in higher education.** Although the *in loco parentis* advising period was marked by a great deal of involvement by campus professionals in students' affairs, today the focus of advising has shifted to guiding students through the intricacies of curriculum and career seeking. Faculty, beginning in the early 20th century, became more central in the role of guiding students through the process of navigating higher education (Cook, 2001), resulting in a shift away from a solely student-affairs-based practice. White (2015) suggested that the change towards an advising model that provides students a greater deal of curricular advice was a result of the inclusion of a wide breadth of elective courses, which brings in portions of prescriptive advising to complement developmental advising practices. The advisor's role in the 1900s was then to prevent students from taking courses that were not beneficial to their educational career.

There is still confusion among faculty and students, as well as among leadership at institutions, as to the exact role of the advisor (Bridgen, 2017). Bridgen (2017) explained that "to reach academic advising goals, all personnel associated with an advising system must be educated about the theory and philosophy of advising so that they can understand the critical purposes of advising" (p. 18). The difficulty with this aspirational statement is that there have been numerous purposes and theories of academic advising throughout its history, making it hard to identify a single philosophy

of advising. In the following sections, I outline some of the prominent models and definitions of student advising.

**Models of academic advising in higher education.** The literature related to academic advising in higher education contains two predominant models commonly used on college campuses: a prescriptive model of advising and a developmental model of advising. Generally, there has been a shift away from prescriptive advising and the “traditional relationship between the academic advisor and the student” (Crookston, 1994, p. 5). In this traditional format, the faculty serves as the authority figure in the relationship, prescribing the best plan of action for the student to follow. In contrast, developmental advising, beginning in the 1970s (Cook, 2001) and seen more commonly in current literature, is characterized by a relationship that is based on both parties learning from each other and creating knowledge together as opposed to reliance on a hierarchical structure (Crookston, 1994; Xyst, 2016). Additionally, this relationship between the faculty member and student is based upon mutual agreements on carrying out tasks within the advising relationship (Crookston, 1994).

The developmental model emphasizes a relationship between the student and advisor that allows for effective communication between the two individuals. For example, at the College of the Holy Cross, advisors monitor student progress, ensuring that students are completing the necessary steps to graduate and to pursue their goals following graduation (Freije, 2008). Beyond this, advisors are also tasked with a mentoring role, which involves helping students grasp the importance of a liberal arts education (Freije, 2008). Advisors utilizing a developmental approach to advising work to understand the developmental stages of students in order to aid advisees in choosing a

major or career path. It is helpful for advisors to understand the importance of self-authorship, defined by Baxter Magolda (2008) as “the internal capacity to define one’s beliefs, identity, and social relations” (p. 269), as this is a primary way students make sense of their academic path. Understanding students’ developmental stages can help inform student transitions.

Schlossberg’s (2011) theory relating to individuals that are experiencing transitions provides advisors an understanding of anticipated student transition into the collegiate environment and also accounts for the student’s support system. As noted in Chapter 1, Schlossberg’s (2011) transition theory uses four *S*’s to explain student transition. The first *S*, *Situation*, refers to the other occurrences in an individual’s life during the time of transition. The second *S*, *Self*, relates to “the person’s inner strength for coping with the situation” (Schlossberg, 2011, p. 160). The third *S*, *Supports*, examines all support systems available to the student during the transition. The final *S*, *Strategies*, examines how an individual plans to cope with transition (Schlossberg, 2011). The four *S*’s also represent key components of developmental advising, as they help to examine the student and evaluate how they will transition. In examining transfer student populations, which is the main focus of this study, it is important to realize that this population, by nature of moving from one institution to another, is in a state of transition during the advising process.

While many forms of advising follow closely with the prescriptive form of advising, which describes advising in which the student receives formulaic instruction regarding course selection (Crookston, 1994), or developmental advising, which describes a relational approach to advising models (Freije, 2008), there are cases in

which the two are combined. This combined model is termed *proactive* or *intrusive* advising (Donaldson et al., 2016). Intrusive advising is characterized by advisors making intentional contact with students in order to foster “increased academic motivation and persistence” (Varney, 2007, p. 11). This relationship differs from a purely developmental approach in that the faculty takes an active lead in making contact with the student. This connecting is done through intentional interactions during orientation and through faculty monitoring of mid-term and final grades and then speaking with the student about any concerns regarding student performance. Advisors following this model should have purposeful discussions with their student advisees regarding behaviors that can foster academic success, such as class attendance. This approach also involves the student being able to reach the advisor when necessary with questions about various topics and the advisor being able to advise the student on items of a greater breadth than academic matters (Varney, 2007). In using this type of advising, it is imperative that institutions and advisors recognize that students who need the most help through academic advising might not be the most likely to reach out to their advisor in a proactive manner, which further demonstrates the potential effectiveness of intrusive advising (Donaldson et al., 2016).

Even though prescriptive, developmental, and intrusive are the predominant models of academic advising, there are also many methodological approaches that can be utilized in advising undergraduate students. The sections that follow explain the use of systems theory and institutional vision as suggested methods for advising transfer students.

*A systems theory view for academic advising.* The application of systems thinking and systems theory to advising provides a unique view of the activity. Systems thinking is defined as “the process of understanding how a group of interacting, interrelated, interdependent components influence each other within the whole” (Czarnecki, 2012, p. 2). This process involves the use of feedback loops, both negative and positive, that “reinforces and balances ever-present processes” (Orr, 2010, p. 53). Systems thinking involves viewing all parts of a system as a whole instead of singling out different cause and effect relationships without viewing how they affect the system overall; this allows for patterns within the system to become evident (Orr, 2010). From this perspective, problems or components are viewed as they relate to one another as opposed to being viewed individually (Czarnecki, 2012). Advisors must consider the interrelated nature of all that accompanies the student’s transition to the new institution, as it directly relates to the student’s educational success or failure. What remains unknown is the amount of interactions the faculty and student have related to academic advising and what forms of advising influence the transition process.

Due to the confusion regarding best practices in academic advising, Bridgen (2017) applied systems thinking as a way of clarifying the purpose of this important function in institutions of higher education. Bridgen (2017) used the following definition of systems theory in this context: “an area of inquiry through which one attempts to understand the wholeness of scientific and social problems” (p. 10). Through the use of a systems theory approach, it is possible to clarify the confusion that seems to exist around the practice of academic advising. Interestingly, when this lens is applied to any academic area, one is able to apply feedback loops similar to what is observed in a

biological system. These loops allow for viewing the system regarding the results that come about due to different inputs. Helgesen (1995) explains a similar phenomenon that she termed a “Web of Inclusion” (p. 10) to describe the adaptation to change that can occur when individuals at multiple levels of organizations are interacting and providing feedback. Through multi-level interactions that are not led from the top of an organization, institutions can monitor and make changes leading to organizational transformation (Helgesen, 1995). By viewing academic advising in this manner, institutions can determine the effectiveness of their advising programs and practices by measuring various student outcomes, such as grade point average (GPA), retention, and graduation rates. If these outcomes are demonstrating student successes, then the feedback loop indicates that the program is working in an effective manner.

*Academic advising as a function of institutional vision.* All organizations should have a vision statement indicating “purposes, behaviors, performance criteria, decision rules, and standards” (Bryson, 2011, p. 273). The vision statement serves as the guiding principle for practice as an organization looks to achieve its future purpose. As Bryson (2011) stated, this statement should infiltrate all levels of the organization, affecting the way day-to-day activities are carried out and guiding the organization to successfully reach its goals. As academic advising is a key organizational task in higher education, it too should reflect the vision of the organization.

Abelman and Molina (2006) emphasized that the vision is a reflection of “the nature of the learning community and defines the perceived purpose, priorities, and promises of the institution” (p. 5). As students and faculty are both members of the institution and key stakeholders, they are invested in the successful pursuit of the vision.

Abelman and Molina (2006) suggest that advisors are in a unique position to serve as champions of efforts by including the institutional vision within their practice. The key to faculty successfully carrying out their role as an advisor is the recognition that they are important members of the institution that are intricately linked to other key stakeholders, specifically as a bridge between administrators and students. In this scenario, a trickle-down effect occurs in which advisors serve as the link that communicates to students through practice what the administration intends through the vision statement (Abelman, Atkin, Dalessandro, Snyder-Suhy, & Janstova, 2007). Unfortunately, this type of connection to the vision is not always the norm, as often there is a gap between the vision statement and the practices of advisors. Abelman et al. (2007) purport that even though vision statements are widely available for students and faculty to review, they often do not serve as a guiding principle in implementing advising practices. In order to fully focus on student needs via advising, institutions must directly incorporate this population and their needs into the vision of the institution.

***Student centered academic advising.*** Active student participation in academic advising is key to fostering successful outcomes such as graduation from the institution and the successful pursuit of a career or further education and is a hallmark of developmental advising practices (Crookston, 1994). The advising relationship is often one of the most structured interactions that a student will experience during their tenure at the institution, and as such, is a key influencer in student satisfaction and retention (Schreiner, 2010).

Interestingly, the intrusive advising approach has been noted to demonstrate success, but the outcomes of this model differ by gender and race (DeLaRosby, 2017).

Within intrusive advising, advisors seek to demonstrate to students that the college or university cares for their well-being. This model also emphasizes the advisor providing ways for a student to contact them, contributing to a more open flow of communication between the two individuals (Varney, 2007). This approach, which has been noted as an “aggressive approach” (Glennen, Baxley, & Farren, 1985, p. 336), provides a greater degree of individualized attention to students.

As minority groups face different psychological and personal challenges than historically majority students, the intrusive style may be ideal in that it aids students in coping with the stressors and struggles they will encounter on campus (Glennen et al., 1985). Of note, Jeschke, Johnson, and Williams (2001) indicated that women tend to prefer developmental advising. This preference is an important finding because women, particularly in minority populations, tend to take time off when pursuing a degree (Jeschke et al., 2001). Developmental advising could be key in aiding women, particularly in minority populations, with the continuance of pursuing a post-secondary degree in light of the challenges that may take them out of an institution temporarily.

Given the institutional focus on student learning outcomes as part of assessment and accreditation, effective academic advising should also be centered on this aspect of the student experience. These student learning outcomes should be measurable and reflect institutional goals, such as relating to degree attainment or policies of the organization (Powers, Carlstrom, & Hughey, 2014). In order for this method to be effective, advisors must first know and understand the student learning outcomes being measured. NACADA (2006) indicated that “student learning is at the center of what advisors do” (para. 2) and that effective advising, generally speaking, focuses on the

identification and of outcomes that should be achieved by students during their undergraduate career. Advisors should also be aware of the requirements for designated majors and for graduation. It has been noted that one of the chief complaints among students related to advising is the fact that advisors are unaware of program requirements or campus resources (Suvedi, Ghimire, & Millenbah, 2015).

**Summary.** Academic advising is key in fostering student success at the institution and also plays a role in the loyalty students feel towards the institution. As institutions grapple with the consequences of decreased funding, they must find other ways to raise money. A well-functioning academic advising program can increase feelings of student self-efficacy, student commitment towards the institution, and student persistence and loyalty once alumni status has been achieved (Vianden & Barlow, 2015). According to Schreiner (2010), the advisor-student relationship may be the most important institutional relationship that students have while on campus. In thinking through the business of operating an institution of higher education, the valuable relationship between student and advisor is one that must be considered for its later effects, particularly of a monetary nature (Vianden & Barlow, 2015).

As the four-year university student demographic is shifting, faculty and staff must capitalize on meeting the needs of a diverse student population made up of both traditionally aged students and non-traditional adult learners. As demonstrated through the literature, academic advising that focuses on student outcomes is most beneficial to students (NACADA, 2006), with intrusive advising providing the most individualized attention, a factor that transfer students may need to a shift in demands at the receiving institution (Glennen et al., 1985). Transfer students make up a growing portion of the

undergraduate student population, and many of these transfer students are adults.

Advising offers a unique way to accommodate these students as they enter campus, but higher education professionals must first understand exactly who these students are before they can effectively serve them on campus.

### **Transfer Students at Four-Year Universities**

As noted, institutions of higher education are now facing a change in student populations. As opposed to past decades when many students followed a traditional path of entering a four-year university after high school graduation and completing their degree at the same institution, an increasing number of students are attending multiple colleges and universities in the pursuit of a degree. Beginning in the 1960s, California, in a document entitled *A Master Plan for Higher Education in California*, set out to clarify procedures that should be followed to allow student transfer within the state (California State Department of Education, 1960). The original document was created as a general plan for higher education at a time when California ranked as one of the states with the highest number of students to transfer from community colleges to four-year universities (California Competes, 2017). Today, the plan has shifted to better suit the current climate in the state. By ensuring access to the community college system and offering guaranteed transfer for students who earned degrees at community colleges, the state widened the availability of higher education, and provided a way for those trying to decrease their cost in higher education to pursue a degree. Today, however, California is grappling with the continued effect of decreased revenue as students attend community colleges prior to entering a four-year institution, during a more difficult financial climate (California Competes, 2017). Transfer students are students “who attended more than

one institution” (Simone, 2014, p. 8). Pointedly, over a third of undergraduates in the United States who matriculated in 2008 transferred between institutions at some point; additionally, 45% of this population transferred between institutions multiple times (Leavitt, 2015). While California provides a case study for understanding the dilemma of higher education in a tougher financial climate, students are continuing to utilize the community college pathway as a means of saving money while earning a degree.

The name given to the phenomenon of students transferring more than once in their pursuit of a degree is “student swirl” (Borden, 2004; Selingo, 2015, para.1). McCormick (2003) pointed to several types of student swirl, indicating that students may transfer for a multitude of reasons, from supplementing their degree program with outside courses to participating in serial transfer, which is the transfer between multiple institutions in pursuit of entry into a specific university. One reason this has increased in prominence is the fact that entering a four-year institution as a freshman has increased in cost, so completing some course work at the community college level prior to transfer serves as a cost saving decision (Selingo, 2015). Another influence in this student swirl trend is the fact that students take courses at other institutions for reasons such as enrollment caps on courses at their native institution or the fact that the teaching style may be more favorable at a different institution.

If a student feels they need more individualized attention in a certain subject, a community college course may be preferred due to the smaller class size (D. S. Bailey, 2003). The key to institutions effectively handling student swirl is understanding how to meet students’ needs when they enter a new college or university in the middle of their academic career. In order to serve this population at that time, faculty and staff must

understand who is transferring and the mechanisms of transfer that may be involved (Borden, 2004). Understanding more about the role of academic advising for transfer student success is therefore important.

**Trends in transfer.** In previous generations, students would often graduate from high school and enter into a college that would become their four-year home. Today, this trend has shifted, as an increasing number of students transition between colleges and universities during their post-secondary tenure (Binkley, 2015). Importantly, the decision to transfer is often related to the feelings a student has towards an institution and the fit they feel within the culture (Tinto, 1975). This type of connection is one students hope to have during the transfer process too, as the transition is difficult. Because of the fact that many students lose credits from the previous institution during this process (Leavitt, 2015), it is especially important for them to receive good counseling and advice during the transfer process. Receiving institutions group transfer students together, but it is important to note that there are two main types of transfer student, namely vertical transfer students and lateral transfer students.

**Vertical transfer.** Vertical transfer is the term used to designate students that matriculate into a four-year university after attending a two-year institution (Townsend, 2001). Using a cohort from 2011, the National Student Clearinghouse found that 59.2% of students transferring from two-year institutions transferred to a four-year institution, and that of those who transferred, 41.4% of those who started at a two-year public institution then entered a four-year public institution (Shapiro et al., 2018). This type of transfer may occur after the student has earned an associate degree or may occur after the student has completed some coursework that will go towards a degree at the new

institution (Hossler et al., 2012). Handel (2013) indicated that facilitating successful student transfer is central to community colleges, yet the receiving institutions also have a responsibility to help in facilitating student transfer. Even though a component of the community college mission advocates for transfer after completing an associate degree, statistics show a different pattern. The National Student Clearinghouse found that even though one-third of all students transfer at some point during their college career, only 20% of these students obtained an associate degree or certificate prior to vertical transfer (Hossler et al., 2012). Interestingly, Turk (2018) found that there is not an association between a student earning a degree from a two-year institution prior to transfer and the subsequent completion of a bachelor's degree at their new institution. Rather, pre-transfer GPA seems to be a much better indicator of future success.

In some cases, students may choose to vertically transfer due to the cost savings that community college enrollment can provide. For example, the State Council of Higher Education in Virginia (SCHEV, 2016) reported an estimate of the amount of money saved by utilizing the community college pathway to graduate from a four-year institution. The SCHEV report estimates that a native student at a four-year institution will pay close to \$47,000 for their education. In comparison, a student who transfers into a four-year institution after earning an associate degree pays closer to \$33,000 for their degree, a savings of around \$14,000. The savings increases as the student transfers more credits with the associate degree prior to matriculation, providing the most savings (SCHEV, 2016).

***Lateral transfer.*** Lateral transfer is defined as movement from one institution to another of the same type (e.g., four-year to four-year). This type of transfer is less

common than vertical transfer of community college students into four-year universities (Bahr, 2009). The National Student Clearinghouse demonstrated that while transfer occurs from two-year and four-year universities, a higher percentage of students transfer after initial enrollment at a two-year institution (Shapiro, Dunder, Wakhungu, Yuan, & Harrell, 2015). The National Student Clearinghouse collected data on a cohort of students in the fall of 2008 that showed the percentage of transfer, split by the type of receiving institution, based on the type of origin institution the students attended. This study showed that 24.4% of the students in this cohort who enrolled in a two-year institution transferred to a four-year institution, while 15% of those who initially enrolled in a two-year institution then entered another two-year school (Shapiro et al., 2015). With regards to students who initially enroll at four-year institutions, 17.9% transfer to another four-year school while 17.2% of the transfer students in this cohort transferred to a two-year institution (Shapiro et al., 2015). In 2011, Shapiro et al. (2018) found that 49.5% of those who begin at a four-year institution and then transfer go on to enroll at another four-year institution. Additionally, the author demonstrated that there are greater lateral transfer rates in the first and second year of a student's career in higher education and greater vertical transfer rates starting at the third year of enrollment (Shapiro et al., 2018).

Another aspect to be considered in this definition is the occurrence of students enrolling in two separate institutions at the same time (Bahr, 2012). While more commonly seen as moving from one four-year institution to another, lateral transfer at the two-year institutional level can also occur as a result of students taking courses at two

nearby community colleges or relocating to a different city or state during their educational career (Townsend, 2001).

In many cases, lateral transfer is completed due to the student finding a transfer institution that better serves their personal needs or contains a program they are interested in for their degree pursuance. The National Student Clearinghouse study found that, within the cohort examined, 37.6% of students transferring from a community college made a lateral transfer (Hossler et al., 2012). Interestingly, lateral transfer at the community college level is associated with living in urban areas in which students have options among two-year colleges in the region. One hypothesis for this finding is the fact that more highly educated areas are often found in more urban areas, which often have more institutions than do rural areas (Bahr, 2012). What remains unknown is whether the advising that transfer students receive upon arrival at their new campuses is conducive to allowing the students to pursue the degree of their choice more frequently than if the students had transferred to an institution without a specialized advising system specifically for transfer students.

**Transfer and STEM.** In 2015, President Obama directed over \$200 million towards encouraging students in pursuing educational paths within the STEM fields. This money, available at all levels of education, included a call to action for college and universities to increase student exposure to the STEM fields early in their post-secondary academic career (The White House, Office of the Press Secretary, 2015). Additionally, it has been observed that community colleges in particular play a large role in the educational path of many who go on to obtain a STEM degree (National Science Board 2014). In 2008 and 2009, almost half of all undergraduates in STEM had attended a

community college at some point (National Science Board, 2014). The programs that are considered in this reporting are those that the National Science Board (2014) designates as Science and Engineering, but this group is comprised of those degrees that fall in the STEM classification as well.

Since almost half of graduates in STEM programs attend a community college at some point during their time in higher education (National Science Board, 2014), it is imperative that educators work with this population in order to meet their needs at the four-year institutions where the final degree is earned. As Townsend (2008) indicated, the recognition of student needs by university personnel is key in aiding students towards successful degree attainment. As students in STEM are among those who transfer into universities, and as the federal government has directed a great deal of money towards increasing student interest and success in the STEM fields, it is imperative that practitioners work to understand and aid this student population towards success.

### **Academic Advising for Transfer Student Populations**

As the number of transfer students entering four-year institutions continues to rise, it is imperative that educators recognize the many barriers to success that exist for this population. Barriers toward transfer student success include factors such as requirement differences between institutions, decreased institutional involvement due to familial and work commitments, differences in age from traditional students, and difficulty using newer technology (Binkley, 2015; Chin-Newman & Shaw, 2013; Lester et al., 2013). Given the existence of these barriers and others, it falls to those at the four-year transfer institution, especially those who are in direct contact with this population, to try to ease the transfer process.

As Glennen and colleagues (1985) indicated, transfer students, particularly those from minority groups, are more likely to experience psychological and personal stressors that may not be observed in traditional student populations. These authors explained how the use of a separate center on the campus of Western New Mexico University allowed for centralized advising in one location. This system was used to concentrate resources and monitor students more closely in order to help alleviate any issues that arose during the semester (Glennen et al., 1985), such as those noted in the following section.

**Problems faced by transfer students.** Transfer students in four-year colleges, regardless of vertical or lateral starting points, tend to face barriers to success when entering a new institution (Andres, 2001; Carter, Coyle, & Leslie, 2011; Chin-Newman & Shaw, 2013; Tobolowsky & Cox, 2012). A common personal barrier faced by this population is their higher age upon transfer; with this comes the associated demands of dividing time between school, family, and work commitments. McGuire and Belcheir (2013) found in a study of over 14,000 transfer students that a majority were first generation and eligible for receiving a Pell grant, two markers that are associated with lower socioeconomic status. These two characteristics have been documented as increasing the likelihood of difficulty navigating the new institution and the process of degree attainment at a four-year institution (Mamiseishvili & Deggs, 2013).

In addition to student challenges, institutional barriers also exist. These obstacles may take the form of outdated or confusing policies regarding the process of admittance to the new institution, the transfer of class credit, and requirements that students must meet in order to become part of the campus community (Andres, 2001; Tobolowsky & Cox, 2012). Taylor and Jain (2017) pointed out the lack of or insufficient scope of

transfer articulation agreements for students, as many of these agreements only include general education courses that are required and may not make mention of technical degrees the student has earned. Additionally, T. Bailey (2015) explained that many community colleges utilize a “cafeteria style” or “self-service” (para. 3) course selection process in which the colleges seek to expand the options that are available to students. In this model, community colleges have expanded their offerings in an attempt to gain access to funding that is tied to enrollment rates. Concerning in this practice is the fact that students may need specific courses to achieve their end goal of a degree in a certain field and may not choose the correct options in the “self-service” model (T. Bailey, 2015). When transfer articulation policies are not clear, are not strictly enforced, or have not been updated to reflect the current institutional practices, transfer students can become confused and frustrated. While community colleges are beginning to address the problem of confusion due to the vast amount of course offerings, students who are attempting to enter or are entering four-year institutions currently may face confusion in the courses that they should take due to the previous model of “cafeteria style” (T. Bailey, 2015, para. 3) offerings. What remains unknown is whether the transfer students, with effective advising from faculty and staff, are able to more easily overcome the challenges of understanding new institutional practices and the associated challenge of transfer shock at the new institution.

In addition to the more general items listed above, there are also instances of policy enforcement that is not conducive to transfer student success. For example, there may be certain courses that are accepted from the student’s transcript, while others must be retaken. Also, enrollment caps may exist for certain classes that make it difficult for

transfer students to register for the courses in the order necessary for speedy degree obtainment. Additionally, there may be strict residency requirements that require some of the courses taken previously to be retaken in order to achieve the mandated number of on-campus hours (Moodie, 2007). In a study using a representative cohort of first-time freshman, Monaghan and Attewell (2015) found that around 14% of transfer students in the study were forced to re-start their educational careers upon entering a new institution due to less than 10% of their credits being accepted. Even though 58% of transfers successfully transferred 90% or more of their credits, 28% of those in the study lost credits amounting to a loss of 10% to 89% of prior credits earned.

Institutional barriers can also deter transfer student success. For example, requirements related to a designated major or the timing of course scheduling can also play a role in student success. If a class is only offered once a year or every other year, a transfer student may enter during a time when the course is not available, therefore prolonging their time to pursue a degree. Another institutional issue centers around the requirement that many transfer students declare a major directly upon entering the institution into which they are transferring. If they are unable to enter their first choice of major due to grade requirements on prerequisite courses designed to limit major declarations, they may then be forced to pick a second or third option for their major due to being over the allowed credits of undeclared status (Tobolowsky & Cox, 2012). An additional institutional concern is the fact that these students may have an abbreviated orientation time that does not allow faculty and staff to adequately help the students acclimate to campus or address pertinent questions they may encounter once on campus (Tobolowsky & Cox, 2012).

Finally, and perhaps the most serious of the challenges, is a feeling of being disconnected from the institution. Transfer shock (Hills, 1965), particularly through vertical transfer, can increase feelings of isolation, especially from peers who are native students who do not predictably suffer a dip in performance in the midpoint of their academic career. Cedja, Kaylor, and Rewey (1998) found that students may encounter a small decline in GPA, which may seem insignificant to faculty. This may lead to faculty members, particularly in mathematics and science departments overlooking the challenges students face during the initial transition period. In other cases, challenges in the transition process are due to the different responsibilities that transfer students may have outside of school, and may also be attributed to the limited information students receive at the community college level regarding preparation strategies for success at the four-year institution (Chin-Newman & Shaw, 2013). As students enter a four-year institution, they may find a larger classroom setting that seems less supportive than those they encountered at a previous two-year institution. For this reason, academic advising should be utilized to provide “individual attention and guidance for the crucial first semester” (Thurmond, 2007, para. 12), as a means of combatting the transfer shock phenomenon.

**Pre-transfer environment for community college transfer students.** Prior to transferring into a four-year institution, students will interact with advisors at the community college level. Studies found that students are more satisfied with advising prior to transferring because they tend to receive more personalized and individualized attention (Allen, Smith, & Muehleck, 2013, 2014). Another aspect of pre-transfer advising that differs from advising post-transfer is the fact that students and advisors are

focused on general education requirements that must be met. Even though an advisor at the community college level may have many student advisees, they typically are focusing on a common set of goals as opposed to individualized degree and career paths, leading to less student confusion (Allen et al., 2013). In addition to more individualized attention, students also see the community college, with the sense of community and advisor attention, as more of a safe haven when compared to a four-year institution where there is increased pressure to perform to set standards for degree obtainment.

Community colleges often create an environment conducive to informal advising. This type of advising is experienced when faculty utilize class time to discuss opportunities that exist within a given field of study (Wai-Ling Packard, Tuladhar, & Lee, 2013). For example, in STEM community college classrooms, approximately 30 minutes of class time is spent discussing various career pathways (Wai-Ling Packard et al., 2013). Additionally, community college faculty members will offer further discussion options with smaller groups of students. In this capacity, faculty members are advising students about transfer and career paths but not in the capacity of the official advisor. This type of engagement with faculty can motivate students toward successful transfer by allowing students to visualize themselves more accurately within their field of interest.

In addition to students having, perhaps, a more involved or personalized advising experience, many community colleges have a less intimidating environment compared to four-year institutions. Community colleges appear to provide a setting that encourages connections between students as opposed to the more competitive environment of the receiving institution a student will enter after transfer (Allen et al., 2014). Community

colleges represent an introduction to the college environment while allowing students to stay close to home and maintain a schedule that allows for other activities such as caring for a family or working. These institutions also serve more diverse populations, offering an opportunity to enter higher education to students who might not have otherwise (Strikwerda, 2018). In addition to this, students have expressed that there are more resources available to them at the community college level, although this could be due to the greater familiarity students have with the resources at the institution of origin (Allen et al., 2014). As students enter into a four-year institution, advisors can serve as a guidepost to aid in navigating the new environment, particularly with the differences that exist when compared to a community college.

**Post-transfer environment.** Upon successful entry into a four-year institution, transfer students must become acclimated to the new environment. Acclimation can occur through effective academic engagement. This type of engagement can take multiple forms, but should include peer engagement as well as faculty engagement, ideally through a helpful academic advisor (Lester et al., 2013). As previously stated, addressing transfer shock head on can aid these students in being successful. For example, at the University of Virginia, a program was instituted to ease transfer students into their new environment and, therefore, ease transfer shock.

The summer bridge program at the University of Virginia allowed transfer students to spend time on campus taking one course that would count for credit in their intended major or for their general education requirements and to attend workshops that introduced the students to the campus culture (R. N. Miller & Durham, 2014). Important in this program was the connection between the students and their advisors, allowing for

connections to be established prior to the school year beginning. The advisors who worked with the transfer students in the summer bridge program followed the students throughout their time at the university (R. N. Miller & Durham, 2014). What remains unknown is how transfer students who do not participate in bridge programs fare post-transfer and what role academic advising plays for students during this transition period. This question, compounded with the fact that students have reported greater satisfaction with pre-transfer advising than post-transfer advising due to the change in environment and the severity of student outcomes that can result from erroneous advising during the last two years of their college careers (Allen et al., 2014), points to the importance of focusing on academic advising as a means of transfer support.

**Integrating into the four-year institution.** In order for an institution to successfully aid students in the transfer process, it is important that the receiving institution have a mission statement and policies in place that are conducive to supporting the transfer student population (A. Miller, 2013). It is also important for institutions to realize that these students commonly come from lower socioeconomic status backgrounds and are older than traditional students. McGuire and Belcheir (2013) estimated that 60% of the over 14,000 students they studied were first generation and half were eligible for Pell grants, factors documented as being associated with a lower socioeconomic status background. In order to admit students who have the most potential for success, four-year institutions should work with community colleges to reach students who may not normally gravitate toward a four-year institution.

It is imperative that four-year institutions recognize that students with an increased number of perceived barriers may not seek out transfer on their own

(Dougherty & Kienzl, 2007; Strikwerda, 2018). As this population enters after native students, they are not able to experience bonding the way that students who begin at the institution might. Integrating transfer students into a learning community specifically for them can begin to alleviate the problem of transfer shock (Scott, Thigpin, & Bentz, 2017). Because transfer students tend to have connections to their families or to local friends while they are at the community college, when they transfer to a four-year university and commute versus live on campus, they may not be involved in learning communities (Dougherty & Kienzl, 2007). Given their commuter status, Scott and colleagues (2017) suggest that assigning mentors at the beginning of the transfer process can aid students in the process. How mentors or special programming supports students relative to the roles undertaken by academic advisors remains unexplored in the literature.

### **Social Constructivism as the Lens for Examining Transfer Student Advising**

Using a sociological lens is one way to make sense of advising practices for transfer students. Social constructivism is a paradigm that is useful in understanding the interactions that occur between individuals and the reality that is constructed by individuals as a result (Bess & Dee, 2012a). The process of constructing reality and knowledge occurs through communication, reflection, and examining experiences. Within this paradigm, it must be recognized that within a single interaction, multiple realities can be constructed (Creswell, 2014).

In considering the interaction between a faculty advisor and a student, the social constructivist paradigm is useful in that it allows for an examination of interactions between two individuals and the reality that is constructed as a result (Burr, 2015).

Although both the advisor and the student are involved in the advising process, it is also imperative to consider that the two individuals involved in the interaction are likely to have very different perspectives around the event. This paradigm is essential in understanding the realities that students construct through internal processes and through social interactions with those around them (Bess & Dee, 2012a).

### **Summary**

Transfer students are a growing population at four-year institutions (Binkley, 2015). As the group of transfer students expands, it is imperative for practitioners in higher education to recognize that the demographics of the student population overall are different than in previous years, including students who come into higher education at a later age, from a former career, or with other concerns such as familial or work responsibilities. This student population represents a new challenge for higher education, particularly in the area of academic advising. Academic advisors have the opportunity to serve as guides for students as they encounter new challenges at a four-year institution that they may not have experienced at the community college level.

Through a social constructivist frame, advisors can examine interactions with students in order to determine barriers that exist and ways that this interaction between faculty advisors and students impact student populations, particularly transfer students (Bess & Dee, 2012a). As advisors work with students, they must remain aware of the fact that each individual student they interact with constructs a different reality around the advising practice (Creswell, 2014). Additionally, they must consider the fact that transfer students, many of whom will eventually declare a STEM major (National Science Board, 2014), enter higher education with a different educational background

than traditional students due to enrollment at another institution. This population also brings different life experiences into the advising relationship, as they may have familial or career responsibilities that traditional students may not have encountered (Andres, 2001; Carter et al., 2011; Chin-Newman & Shaw, 2013; Dougherty & Kienzl, 2007; McGuire & Belcheir, 2013; Tobolowsky & Cox, 2012). Through the lens of social constructivism, advisors can work with students in building this reality in light of the different challenges and backgrounds that may be present for transfer students in higher education.

## **CHAPTER 3: METHODOLOGY**

Academic advising is a key component of the undergraduate student experience and is one of the first experiences transfer students have once they arrive on the four-year college campus. In many instances, the university faculty advisor provides transfer students with a direct connection to the greater campus community. With that in mind, the purpose of this study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly selective, public institution in the Mid-Atlantic Region. The students in this case study came from a range of STEM departments at Small University. Given that transfer shock is a documented phenomenon among students who transfer into four-year universities, it is important to better understand the realities that transfer students construct as they transition from a previous institution, whether a two-year or four-year university, into their new institution.

### **Research Questions**

The main research question guiding this study is:

How do junior and senior transfer students within STEM departments perceive the influence of academic advising on their transition to Small University?

Underlying questions of this larger aim are as follows:

1. What perceptions do transfer students have of their initial academic advising experiences during their first year on campus? How does this experience change over time?
2. How do transfer students in STEM departments perceive the influence of academic advising on their academic success at the new institution?
3. What practices do STEM transfer students perceive to be the most valuable in combatting transfer shock at the new institution?

### **Method: Phenomenological Case Study**

Qualitative research designs allow for the researcher to “study people in their natural settings, attempting to make sense of or interpret phenomena” (Bloomberg & Volpe, 2019, p. 42). This type of research design is aimed at understanding how people experience a phenomenon and how they construct knowledge and reality from their experiences. Qualitative research also provides the benefit of allowing for the researcher to investigate the phenomenon of interest in the natural setting in which it takes place (Creswell, 2014). Researchers in this design also have the benefit of collecting data for their project directly as opposed to being dependent on outside investigators (Creswell, 2014). Through immersing herself in the project and being familiar with the data through the collection process, the researcher is able to understand the context in which observations and data collection occur. In the case of this study, I interacted with students at the four-year transfer institution to understand their experiences of academic advising. I sought to understand the realities that they have each constructed by conducting interviews aimed at gathering their perceptions of this important practice.

Additionally, I utilized observational data made at the institution's transfer welcome day to frame the questions posed in the interviews.

A phenomenology is a study approach that aims to “shift from a superficial understanding of a lived experience to an understanding at a deeper level, as it is experienced in conscious and unconscious ways by its participants” (Mertens & Wilson, 2012, p. 337). Within this research approach, it is imperative to gain insight from multiple individuals that are experiencing the same or similar experiences in order to understand how “*experience presents itself to their consciousness*” (Spickard, 2017, p. 233, emphasis in the original). Spickard (2017) indicated that interviews are the most effective way to conduct this type of study, as it allows for the use of open-ended questions that will elicit responses revealing the self-identities of the participant, personal feelings around the phenomenon, and cultural knowledge they possess. Additionally, a phenomenological design allows for the researcher to look at meaning as it is contextually constructed by individuals, often leading to the realization of beliefs and perceptions that may not be consciously realized by the participants (Mertens & Wilson, 2012). A crucial part of a phenomenological research design is the summarization of shared experiences that allow for the information to be viewed through an outsider lens (Spickard, 2017).

A phenomenological case study allows for the investigation of a phenomenon within a specifically defined context in which the researcher hopes to uncover how something has occurred or why a phenomenon was perceived a certain way by individuals (Yin, 1984). In the real-life context of an institution of higher education, the researcher has no control over the events that occur, making interviews with people

involved ideal for understanding the phenomenon and how those people perceive it. The ways in which phenomena are experienced differ by context. A case study is a type of investigation that is bound by context and a pre-determined time frame and activity, thereby limiting the scope and narrowing the focus to perceptions that are felt around a certain event as opposed to multiple events over an extended time period (Creswell, 2014; Mertens & Wilson, 2012).

For the purpose of this research, I conducted a phenomenological case study of transfer student academic advising at a small, highly selective, public university in the Mid-Atlantic region. The first step of this study included observations of the new transfer student orientation held at the institution in the summer before transfer students enroll on campus. This step was followed by the distribution of a survey to all transfer students via email. Selection of participants for the interview stage was based on the survey data collected. This case study investigated the perceptions that junior and senior students in STEM departments have around the advising they receive post transfer.

**Epistemology.** The guiding principle for this study was the social constructivist paradigm. Social constructivism is characterized by “developing a deeper understanding of core values and shared commitments among organizational members” (Bess & Dee, 2012b, p. 478). Social constructivism assumes that “reality is socially constructed, that individuals develop subjective meanings of their own personal experience, and that this gives way to multiple meanings” (Bloomberg & Volpe, 2019, p. 45). Bess and Dee (2012b) emphasized that this paradigm focuses on the “*web of meaning*” (p. 478, emphasis in original) that is constructed through social interactions. Knowledge is also constructed through processes such as communication, reflection, and reframing of

experiences (Bess & Dee, 2012a). In short, knowledge is constructed through interactions with others, making it a social process with all parties involved in the shaping of knowledge. It is important to note, however, that during the students' interactions with other non-transfer students or faculty, transfer status may not be known. This could contribute to a feeling of isolation that is commonly associated with transfer shock (Hills, 1965). With this in mind, it is imperative to understand what social norms, particularly within a specific institution, will serve to define interactions, and therefore knowledge, for individuals. It is also imperative to realize that, as it is based on experiences, the constructed reality is subject to change over time (Patton, Renn, Guido, & Quaye, 2016). For example, junior students may have different perceptions of academic advising, as they are newer to campus than seniors who have had the benefit of multiple years on campus. Interviewing individuals from both groups helped to shed light on the changes in perception that might occur over time.

Bess and Dee (2012a) further clarified the construction of knowledge into primary construction and secondary construction. Primary construction is the process by which an individual "internalize[s] the basic constructions of reality that guide most of [their] activities and interactions with others" (Bess & Dee, 2012a, p. 59). In secondary construction, the "cognitive world begins to converge with other members of the social system" (Bess & Dee, 2012a, p. 59). It is essential that both parts of reality construction be considered when using the social constructivist paradigm, because the construction of reality is two-fold, taking place through the internalization process and through social interactions.

It is important to realize that people create diverse meanings within given experiences (Weinberg, 2014). In addition to this, individuals understand their world and construct reality based on historical or social perspectives. In light of this, researchers must be cognizant of the effect that context or setting can have on the construction of reality (Crotty, 1998). Burr (2015) complemented this idea of multiple perspectives by stating that, while shared versions of knowledge and reality are created through interactions, multiple views of reality still exist. When conducting research through the paradigm of social constructivism, researchers must also look for “taken-for-granted ways of understanding the world and ourselves” (Burr, 2015, p. 2) as it applies to the participant and the researcher. In the case of this research project, I sought to remain cognizant of my own experiences as an academic advisor and the thoughts I have around the process in order to eliminate my own bias in understanding the perceptions of the students who were interviewed.

The complexity of social constructivism is evident in the varied construction of meaning from person to person. For example, two individuals could share a common experience yet construct a reality of the experience in non-identical ways (Creswell, 2014). Within this project, I sought to understand the ways in which junior and senior STEM transfer students understand and construct their reality of academic advising based on interactions with a faculty advisor. I conducted face-to-face interviews as a means of aiding students in constructing the reality they hold around academic advising (Patton et al., 2016). Through this, I analyzed the experiences of students who began their institutional time with an advising meeting and tried to understand how the social interactions of the advising process shape the social reality that each student experiences.

**Case.** Small University served as the location for this phenomenological case study. Small University is unique in that it is a highly selective university that puts great emphasis on academics but is smaller than many other public institutions in the Mid-Atlantic. Small University provided a unique campus setting in which most students are traditional, yet a small number of transfer students are admitted each year. Because transfer students are the minority of the student body, they may experience academic life at the university in unique ways that are not shared by traditional students.

STEM departments at Small University are also of interest because there has been increased interest in producing STEM degrees following the Obama Administration's push to emphasize STEM in education (The White House, Office of the Press Secretary, 2015). Additionally, it is estimated that over half of all students who receive STEM bachelor's degrees will spend some time in a community college (National Science Board, 2014), leading them to be designated as transfer students in many cases. Small University has 40 total degree-granting programs with eight being designated as STEM programs in which transfer students may declare a major. One item of consideration in this case is the fact that transfer students by declaring a major, and in this case a STEM major, are further sectioned from the general student body and from their cohort of entering students. Since most transfer students bring general education course credits from their previous institution, this population is able to delve into major-specific coursework sooner than a student who enters traditionally as a freshman. One item of interest is whether this further separation into a smaller group aids in mediating transfer shock.

**Participants.** Participants were selected through a two-level process (Merriam, 1998). The first level involved responses to a survey (Appendix A) and associated consent form (Appendix B) that provided information for the basis for interview selection and process. I distributed a survey to undergraduate students who were identified as transfer students by the University Registrar at Small University. Small University admits close to 200 transfer students each year, with most entering in the fall semester. This survey served as a tool to collect self-reported demographic data of potential participants to be used for the purpose of participant selection. The University Registrar was asked to provide information to verify the students' self-identified status concerning transfer and major declaration.

Following the survey administration, I reviewed the data to select 12 individuals for follow-up interviews. Students were selected using a purposeful sampling selection (Merriam, 1998), which allows for the investigation to be targeted to a specific population who is experiencing a specific phenomenon. All of the individuals chosen for interviews met the requirement of having transferred into the university and then declared a STEM major, providing the common shared experience that is the hallmark of phenomenological research (Spickard, 2017). The 12 individuals were equally divided between junior and senior students who declared a STEM major. In choosing the sample, I was able to obtain a mix of vertical and lateral transfer students from a combination of STEM departments. Additionally, I selected a diverse group of participants who represent different STEM departments, gender identities, and races in following with Creswell's (2014) recommendations for establishing a diverse group of participants.

Once the interview participants were selected, I contacted each of them to schedule an in-person interview. The interview consisted of open-ended questions, as suggested by Creswell (2014), which allowed for the students to express their feelings and perceptions around academic advising. For the purpose of this study, I interviewed participants with the goal of understanding the socially constructed reality that students hold around transfer and academic advising. I conducted face-to-face interviews with six junior students and six senior students, all of whom had declared a major in a STEM department on campus. Table 1 shows the full selection criteria, ordered by level of selection.

Table 1

*Selection Criteria for Interview Participants*

Level	Selection Criteria	Definition
1	STEM	Students chosen for interview had declared a STEM major, as designated by the school and governing body of the institution.
2	Class Standing	Equal numbers of juniors and seniors were selected for this study.
3	Major	Participants were chosen from among the eight STEM programs in proportion to the population of each major compared to the overall student population.
4	Gender	A diverse group of males, females, and non-binary students were selected.
5	Race/Ethnicity	A diverse group of students from different racial and ethnic backgrounds were selected.
6	Age	Participants represented a diverse group of students representing different age brackets.

**Data Sources and Data Collection**

The following sections outline the observational data, the two-level sample selection (Merriam, 1998), and the methods of data collection that were utilized for the purpose of this study. This selection process allowed for the identification of individuals

who were transfer students at the institution as well as also junior and senior students in STEM departments.

**Observational data.** Observational data allows for researchers to have first-hand knowledge of events that involve participants (Creswell, 2014). Observations, recorded as field notes, allow for researchers to witness activities and interactions while also noting their own perceptions of the events (Spickard, 2017). It is important to know that this type of data collection, while allowing for direct immersion within the setting in question, is highly subjective, as it depends on the perceptive abilities of the researcher (Merriam, 1998). This type of data collection is useful because it allows researchers to be present in the setting without being in control of the occurrences. Observing events in which the participants are involved also provides a reference point for the research during the interview process.

Small University hosts a Transfer Welcome Day in the summer prior to student matriculation in the fall. Having been invited by the Associate Dean who oversees undergraduate affairs for the institution, I attended this event in order to collect observational data that would serve to inform my study. During this time, I attended the informational sessions for students and parents to learn about the beginning process of transfer student matriculation. I utilized this information in formulating face-to-face interview questions that were posed to junior and senior students who volunteered to participate in this study.

**Survey.** In order to purposefully select a population as part of a first level of sample selection (Merriam, 1998), I administered a survey via Qualtrics. Qualtrics is a survey platform provided by the College of William & Mary that allows for data

collection in survey form. In this study, I utilized the platform to collect data for sampling purposes rather than using the data for analysis. I emailed this survey to students using email addresses provided by the University Registrar. I did not use this survey to collect data for analysis; instead, I asked students if they would like to be involved in the case study and whether they have declared a major in a STEM program. I used basic demographic data as the basis for selecting interview participants (Appendix A). Within the survey, I asked students to identify whether they had declared a major and, if so, what specific major they had declared. I then utilized the requirements, established by the governing body of higher education in the state where the university is located to select participants who are in STEM programs. STEM programs are designated by a Classification of Instructional Programs code. The following departments are considered STEM at Small University: Biology, Chemistry, Computational and Applied Mathematics (CAMS), Computer Science, Geology, Mathematics, Neuroscience, and Physics. Of these, CAMS and Neuroscience are interdisciplinary degree granting programs. For the purpose of this study, I sought to have participants in each department proportional to the number of students declared in each major, as shown in Table 1. Table 2 shows the information provided by each participant regarding demographic details and major information. The participants are listed by their self-selected pseudonyms. The group of participants was equally divided into six junior students and six senior students. No students from the Chemistry department were included due to my insider knowledge regarding the single student who volunteered from this department.

Table 2

*Interview Participants*

<b>Name</b>	<b>Status</b>	<b>Major</b>	<b>Gender</b>	<b>Race/ Ethnicity</b>	<b>Age</b>	<b>Origin Institution Type</b>
Sis	Junior	Biology	Female	White	50+	Community College
David	Senior	Biology	Male	White	18-22	Community College
James	Junior	Applied Mathematics	Male	White	30-39	Community College
Micah	Senior	Mathematics & Computer Science	Non- Binary	White	23-29	Community College
Rick	Junior	Computer Science	Male	White	18-22	Four-Year University
Jeff	Senior	Computer Science	Male	White/ Asian	18-22	Four-Year University
Marie	Senior	Geology	Female	Native Hawaiian	23-29	Dual Enrollment, Community College, Four-Year University
Samm	Senior	Neuroscience	Female	Asian	18-22	Four-Year University
Greg	Junior	Neuroscience	Male	White	23-29	Four-Year University
Samantha	Junior	Physics	Female	White	23-29	Community College
Alice	Senior	CAMS	Female	Asian	18-22	Community College, Four-Year University
Daenarys	Junior	Biology	Female	White	18-22	Four-Year University

*Note.* CAMS = Computational and Applied Mathematics

Table 2 presents the participants on this study which were divided equally into juniors and seniors. Of the 12 participants, six were female, five were male, and one identified as non-binary. Amongst the participants, two main racial and ethnic backgrounds were represented, including those who identified as Asian and White, with one student being of Native Hawaiian heritage. Five of the participants attending community college prior to transfer while five attended a four-year university. Two of

the participants attended both a community college and a four-year institution prior to transferring to Small University.

**Interviews.** I utilized study data to establish a heterogeneous group of 12 participants, as shown by the criteria in Table 1 and the participants in Table 2. As previously explained and in keeping with Creswell's (2014) recommendation, I chose a diverse group of participants. All participants were juniors or seniors within STEM departments, with self-reported demographic data used to identify a sample that was diverse in major, gender, and race.

The interview process was broken into two sections. The first portion of each interview included phenomenological questions about the individual's transfer experiences. This portion of the interview protocol was based on the Smith's (2018) outline on phenomenology in the Stanford Encyclopedia of Philosophy. The phenomenological questions were aimed at understanding the unique experience that each student had through the transfer process. The second section of interview questions were formulated following Merriam's (1998) recommendations for conducting case study interviews. Questions were open-ended in nature, and I avoided asking multiple choice questions with a narrow range of options, yes-no questions that do not provide insight as to perceptions around events and interactions, or questions that may lead interviewees to answer in a certain way. I used an outline of questions to guide interviews (Appendix C) that allowed for follow-up questions to be asked when warranted. Merriam (1998) indicated that follow-up questions can aid researchers in achieving a deeper understanding of a participant's perspective, which is ideal in gaining insight into socially constructed realities that students have around academic advising. Probing questions

were prepared with the interview questions in order to encourage students to expand or clarify their responses (Appendix C).

Based on Merriam's (1998) prescriptions for questions that elicit an individual's perceptions of an event or phenomenon, three main types of questions were utilized. First, I sought to ask questions that were structured to provide information to the participants and allowed them to provide a perspective on the given subject. Second, I asked questions that allowed for me, as the researcher, to verify my own understanding while also allowing the participant to voice perceptions, information, and opinions on certain topics that relate to academic advising. Finally, some questions were asked in a way that allowed participants to react to and share their opinions of events or practices that may be controversial within academic advising (Merriam, 1998).

I conducted pilot interviews with two individuals. The first pilot interview was conducted with a graduate from the institution who transferred multiple times before entering Small University. The second interview was held with a current non-STEM lateral transfer student enrolled at Small University. Pilot studies, in general, are a means of testing a protocol prior to conducting a study in order to determine if any improvements should be made prior to interacting with study participants (Bloomberg & Volpe, 2019). The purpose of the pilot interview was to determine if there were any interview questions that should be adjusted prior to interviewing the study participants. No data were utilized from the pilot interviews. Minor adjustments were made following the pilot interviews in order to improve the flow of questions that were asked. No modifications were made to the content of the interview questions.

Prior to conducting interviews, I examined the available information on Small University's website as it pertains to major advising in STEM departments. Additionally, I reviewed the information provided to transfer students on the institution's website to determine what type of materials are published regarding transfer credit, major declaration, and degree fulfillment. These items helped to frame the questions that were used in the face-to-face interviews.

### **Data Analysis**

Two forms of data were analyzed for this phenomenological study. The first analysis was of the field notes collected during observations of the university's transfer student orientation and welcome day. The second form was coding of the transcribed interviews. The transcribed interviews were summarized and provided to student participants for their review. An outside evaluator also reviewed the summaries to determine the appropriateness of assigned codes. No adjustments were made to the coding schemes following review, as the reviewer and students confirmed the coding utilized. Below, I outline how each item was analyzed. The participant selection survey, administered by email, was not included in the data analysis, as it was solely for the purpose of sample selection.

**Observational data.** I collected observational data in the form of field notes taken during the transfer student orientation and during the interviews conducted with volunteers. Field notes, in following Merriam's (1998) recommendations, included descriptions of activities that occurred, the content of participant comments, and observations that I, as a non-participant, made during the event. These notes made during the orientation were used to frame the interview questions that were posed to participants.

The notes made during the interviews served as a backdrop for considering the students' perspectives and understanding the statements they made during the interviews. Additionally, I compared the information gleaned during the orientation to the perceptions of transfer students. Observational data also served as a source of triangulation (Creswell, 2014), as it was another form of data collection that could be used to support the findings from the participant interviews.

**Interviews.** All interviews were transcribed using Temi, a speech-to-text transcription service. I reviewed all transcripts following the use of Temi to ensure accuracy. Following transcription, I formed a summary of each interview to send to participants, via email, for member checking. This summary included a general statement that summarized themes from all of the interviews as well as the information specific to each individual. Member checking, as explained by Creswell (2014), is important in qualitative research because it allows study participants to review the data and comment on the accuracy of the recorded statements. This material provided all participants the chance to comment on the content of the interview or clarify any items that may not have been conveyed as desired in the original interview. Minor changes were made to reflect the correct timeline for each student, with the largest change occurring due to a student deciding to remain on campus for an additional semester after the interview had been completed. I conducted interviews with a diverse group of participants as a means of triangulation of perspectives (Creswell, 2014).

Values coding fits phenomenological studies grounded in social constructivism well, as this method of analysis focuses on values, beliefs, and attitudes that are associated with the construction of meaning through interactions (Saldaña, 2011). When

analyzing the interviews, I used internal coding, a method that allows researchers “to understand the respondents’ ideas as clearly as possible” (Spickard, 2017, p. 142) and focuses on the viewpoints as stated by the respondent. The method of coding was based upon Tesch’s (1990) Eight Steps of Coding. The following steps were taken in the coding process. In certain instances, multiple steps have been combined, as there is overlap between the individual steps, and adjustments have been made to reflect the practice of values coding (Saldaña, 2011).

1. All transcripts were carefully reviewed. I made notes of personal observations during this initial review.
2. Interviews were reviewed a second time. During this review, I made notes about the content of the interview. This provided a basis for clustering interviews that were similar in nature.
3. Values coding was applied by using abbreviations for each portion. Specific coding designations were determined based on themes that emerged from interviews. Pre-determined codes I used included transfer experience, feelings of familial support, or lack thereof, academic advisor support, and student community support. Other codes were determined as they emerged from student responses (Appendix D).
4. I reviewed specific wordings that fell into one of the three values categories (values, beliefs, or attitudes) to make connections between the responses of different individuals. Coding was also peer-reviewed by an individual familiar with transfer students in order to evaluate the coding scheme.

5. The data were categorized based on commonalities of comments. Further analysis or coding schemes was applied as necessary.

Following the coding process, each interview was examined for a final time in order to determine the type of advising that each participant had experienced in their declared major. I looked for statements that indicated a developmental approach, a prescriptive approach, or a combined advising approach, as explained in the proactive or intrusive advising models. These were then grouped by the different advising models in use to determine any commonalities or differences that existed within the perceptions of students in the eight STEM degree programs at Small University.

### **Ethical Considerations**

In order to protect all participants in this study, I took necessary measures to ensure their privacy. All students who chose to participate in this study were given the opportunity to create a pseudonym to be used in research presentations or publications. I utilized self-reported demographic data within this study to allow for a diverse sample population. Students self-reported this data in the participation survey in order to prevent selection based on researcher assumptions about demographics.

Creswell (2014) indicated the importance of all participants receiving the same treatment. Prior to beginning the interview process, I provided all participants an informed consent form that informed them of the nature of the study and measures that were in place to protect their privacy (Appendix B). This study was submitted to the William & Mary Institutional Review Board (IRB) for approval, which was granted.

Interview questions were consistent for all participants, except in the event that follow-up questions were necessary for clarification, in line with Creswell's (2014)

recommendation for standard treatment across participants. I also stated prior to beginning the interview that I was an impartial researcher, acting as neither judge nor therapist in this role (Merriam, 1998).

Ethical considerations were made regarding the analysis of the data so that multiple perspectives were explained in the findings of this study, if present. Contrary findings from any participants were reported as a means of comparison (Creswell, 2014). Reporting was done honestly through the use of unbiased language. Copies of the report were made available to all participants and stakeholders at the university.

### **Assumptions, Bias, Limitations, and Delimitations**

In conducting research, I recognize the importance of understanding the values, perceptions, or beliefs that I as the investigator inevitably bring to the study. In the following section, I outline the limitations and parameters of this study as well as clarify assumptions that I hold and any bias that may have influenced the study.

**Assumptions and biases.** In conducting qualitative research, it is imperative that assumptions are brought to light in order to effectively carry out the study. Assumptions are defined as any beliefs or pre-conceived ideas that the researcher holds prior to beginning the study (Bloomberg & Volpe, 2019). Merriam (1998) indicated that qualitative research is inherently biased due to that fact that each participant, whether researcher or subject, brings their own unique lens to the project. Creswell (2014) explained that it is best practice for the researcher to be aware of and state any factors that could lead to bias within a study. In the case of this study, I strived to remain cognizant of my own bias as someone who works in the field of academic advising and therefore has beliefs and opinions around the general process.

In this study, I assumed all participants were giving true accounts of their own experiences in academic advising. By limiting to a sample of transfer students in STEM departments, I also assumed that this population of students had shared experiences that would be evident in each interview, even while acknowledging the multitude of perspectives. I also assumed that transfer students experienced common phenomena related to the academic advising processes at Small University as they relate to mitigating the stress or hardships of the transfer process. By only examining STEM departments, I expected there to be some commonalities in practice and perceptions that might not be observed in other departments at this institution.

**Limitations.** A limitation is defined as “things that [the research project] cannot discover” (Spickard, 2017, p. 22) and an explanation of why they might not be discovered. Limitations are the items in place for the study that limit transferability of findings (Bloomberg & Volpe, 2019). As a qualitative study, this research is not intended to be applied to other individuals or institutions (Creswell, 2014). Rather, this study applies to the circumstances presented at Small University. For the purpose of this research study, the findings are limited to the experiences of the transfer students participating in this study at small, public, liberal arts institutions. What is not included in this study are students in majors outside of STEM. As well, the students in this study are current students and over time post-graduation may come to understand their experiences differently given the passage of time.

I recognize that the experiences of the participants in this study may be unique to the type of institution they attend, thereby limiting the application to other transfer student populations. By using a single institution that is not in a metropolitan area, it is

also likely that many of the students came from the same institution of origin due to geography, thereby further limiting the results to understanding patterns of transfer from all types of institutions.

Small University is also unique in that it is highly selective and admits students who are high achieving and highly motivated in their academic endeavors. This limits the applicability of the study in that not all institutions seek to admit only those who can achieve success within an institution with challenging academic standards. For this reason, transfer shock in this study should be understood as the experience of students who have transferred but who also have a history of outstanding academic achievement. With an understanding of these limitations, it is important to note that the findings of this research may not be applicable for all students, or for students in departments that are not designated as STEM.

**Delimitations.** Delimitations are the parameters that have been set for this particular study. According to Bloomberg and Volpe (2019), “delimitations are those characteristics that define and clarify the conceptual boundaries of your research” (p. 207). This study sought to understand only the perceptions of academic advising held by junior and senior transfer students in STEM departments at a small, highly selective, public university in the Mid-Atlantic. I did not investigate the perceptions of students who are non-transfer, those who are not in STEM departments, or those who transferred but have not yet declared a major. Additionally, other components of the transfer process were not considered as a key focus of this work; for example, the orientation day served as a backdrop for understanding the student experience rather than a main focus.

## **Researcher Statement**

As a faculty member at an institution of higher education, I am greatly interested in the role that academic advising plays in student success. Though not a transfer student myself, I have spent much of my advising time working with transfer students who are interested in pursuing careers in STEM after earning a degree at my institution. As a STEM graduate, I also understand the demands that STEM degree programs place upon a student, regardless of transfer status. Having worked with transfer students, I have had the opportunity to speak with this population first hand to learn of the unique pressures that transferring into an institution brings.

I currently work at a four-year institution, but prior to this appointment, I worked at a community college, instructing STEM students in biology. Due to my interaction with many students who wished to transfer to four-year institutions in order to earn a bachelor's degree, I became interested in the success of this population. As I have worked in both two-year and four-year institutions, I am able to better understand the path that some transfer students follow in order to earn a four-year degree. This background provided a frame for my interest in the experiences of transfer students in STEM departments.

In an effort to remove researcher bias from this study, I attempted to bracket and bridle the project. Bracketing is defined as the researcher removing personal beliefs about a phenomenon with the goal of understanding the participants' points-of-view without personal influence (Laverty, 2003). While I do not share in the transfer student experience, I do share in the experience of being a STEM graduate, and I participate in advising. In order to prevent these experiences from influencing my view of the

participants' experiences, I focused on the participant experiences as described in their interviews without considering my own experiences. The themes that emerged from the interviews were established based only on the responses from the participants in this study, with my own experiences not being considered in the designation of themes.

In addition to bracketing the study, I also sought to bridle the study, which is defined as allowing for reflection to occur in the midst of the study (Dahlberg, 2006). This was essential because this study was based on social constructivism, which is related to the perceptions that the participants had based on the activities of advising. Through bridling, I allowed for space in viewing the interview transcripts to understand and reflect upon the ways that the perceptions of each student were communicated and how this may have influenced each student's experiences as a transfer student, a STEM major, and as a participant in the academic advising relationship.

Though I do not currently advise or teach within a STEM program, I often advise students who intend to declare majors within a STEM program. For this reason, I am greatly interested in the perceptions that juniors and seniors who have declared in a STEM program have regarding academic advising. My aim in conducting this research was to improve my practice as an academic advisor in light of what students express about the practice of academic advising. I maintained a researcher's journal to help bracket my assumptions about the advising process for STEM students.

## **Summary**

A phenomenological case study is a qualitative study aimed at understanding a lived experience that is common to a group of individuals (Spickard, 2017). Through the lens of social constructivism, I sought to understand how junior and senior STEM

transfer students construct reality and knowledge through the practice of academic advising. This case study took place at Small University, a unique location in that it is a highly selective public institution with a predominantly residential campus community.

A preliminary survey allowed for the selection of participants that represented diverse academic programs, genders, and racial or ethnic backgrounds. Participants were selected on the basis of having declared a STEM major, being a junior or senior, and in a proportion by major that aligns with the overall proportion of enrollment that a program has relative to the greater campus community. Interviews were conducted with each participant and then coded to determine common themes that STEM junior and senior transfer students experience at Small University. Through this study, I sought to understand the lived experience of transfer students at Small University and examine how they perceive the practice of academic advising as a mediator of transfer shock and as it impacted their overall transition into Small University.

## **CHAPTER 4: SMALL UNIVERSITY**

Small University is a small, highly selective, public institution within the Mid-Atlantic region. This university is one of several public institutions in its state. It is characterized by a high level of academic rigor, which brings in a population of high-achieving students. Barron's Educational Series (2016) characterizes Small University as one of the country's most competitive institutions. This ranking is related to the low admittance rate, the fact that admitted students are ranked top 20% in high school and have a B+ or greater GPA, and the fact that admitted students scored above a 655 on the SAT or above a 29 on the ACT (Barron's Educational Series, 2016). Over 70% of admitted students at Small are from the top 10% of their high school class, categorizing the university as highly selective. The university prides itself on having a student to faculty ratio of 12:1, with 70% of students participating in undergraduate research with faculty members. The following sections will highlight certain characteristics of Small University as found in a document review of the university's official website. In 2019, over 14,000 traditionally aged students applied for undergraduate admission, and over 800 students applied for transfer to the institution.

The 1,000-acre campus is located in a suburban area. Approximately 75% of the student body live on campus or in campus housing. This high residency rate is due in part to the fact that all freshman and sophomore students are required to live in campus housing. Campus housing ranges from residence halls located on the main part of

campus to fraternity or sorority housing. Additionally, the university has expanded housing options with the purchase of buildings near the campus. The renovated buildings now offer housing off campus, but these new residence halls are within walking distance to the main portions of campus. Overall, all of the residence halls and campus buildings are connected by walking paths or sidewalks to allow for ease of travel between the different parts of the school.

In terms of the local community as it relates to transfer, there are several community colleges within an hour of Small University, which account for a large amount of the transfer students at the university. Within 15 minutes of Small University is a satellite campus of one of the larger community colleges in the area. This institution also occasionally employs faculty from Small University, allowing students to become more familiar with Small University prior to transfer.

### **Academics**

Small University describes itself as an “academic powerhouse,” promising that potential students will find an environment that is challenging yet rewarding. The university offers 41 undergraduate degree granting programs and over 40 graduate and professional programs, with 15 types of degrees conferred each year. In each of these programs, the university promises students a small class size and direct interaction with the faculty of each respective school.

### **Demographics**

Small University enrolls students from across the United States, the U.S. territories, and over 60 countries. Of the 8,000 undergraduate and graduate students, 60% of the students are White. Table 3 provides a listing of the different racial ethnic

groups and their representation within the population. Small University also enrolls mostly female students, with 57.8% of the undergraduate student body identifying as female and 42.2% identifying as male. The gender demographics align with national averages that were found in 2017 using a 2011-12 cohort (54% women, 46% men; Arbeit & Horn, 2017).

Table 3

*Racial/Ethnic Groups at Small University in Fall 2018*

<b>Race/Ethnicity</b>	<b>% of Undergraduate Population</b>
American Indian/Alaska Native	0.16%
Asian	7.61%
African American/Black	7.15%
Hispanic	9.36%
Multi-Race	5.02%
Pacific Islander/Hawaii Native	0.06%
Non-Resident Alien	6.04%
Unknown	5.50%
White	59.09%

**Transfer Students**

Most of the transfer students at Small University enter from two-year institutions, specifically community colleges, within the state. In the past five academic years, the proportion of entry from two-year to four-year universities has fluctuated between a 3:1 and 2:1 ratio for in-state students. Over those five years, over 500 transfer students have

been admitted from two-year institutions, while slightly fewer than 200 students have transferred from four-year universities. Regardless of the initial college from which the students transfer, in-state transfers are more common although out-of-state students do also enroll. Interestingly, when looking at the transfer of students from institutions outside the state, the ratio is actually reversed, with transfer from four-year universities outweighing transfer from two-year institutions at a ratio of 3:1 or greater out of the 400 total out-of-state transfers that have entered in the past five academic years.

**Website information on transfer.** On the Small University website, there are different informational pages for transfer students. The landing webpage for students interested in transfer provides several links to other informative portions of the university's website. For example, on the main transfer page, there are links to various resources, such as a checklist of required items and deadlines that must be met in order to apply as a transfer student. There is also a link that provides information specifically for students who plan to transfer from the local community college system or from a local two-year college that has a separate articulation agreement for guaranteed transfer.

In addition to providing links to information about how to transfer, the general information website also has links to more webpages. For example, students can find information regarding an open house day when interested students can come to campus, information for students who wish to enter specific disciplines within the university, and information for international transfer students. The page concludes with information directed at students who have applied or been accepted to Small University. The university also provides a webpage on commonly asked questions that students have after applying for transfer. This section covers information about deadlines, admissions

announcements, and directions for where to send items such as financial aid requests or recommendation letters.

Once students have been accepted, there is a link on the main page that points them to campus resources, including a small paragraph on the Office of Academic Advising. The information within this section provides directions for completing a survey so that students may be matched with a pre-major faculty advisor. The website does not explain what happens for students who neglect to fill out the survey, but ultimately these students are matched as well. The purpose of the survey is to find an advisor that aligns with the student's interests, therefore those who do not fill out the survey may find that their advisors are not matched well to their specific interests. This website section also provides links for information on required courses for all students. A final link from the main webpage explains the general education requirements to transfer students, as some of these courses are not able to be fulfilled via transfer credit.

Interestingly, there are multiple webpages throughout Small University's main website that include information for transfer students and links to other sections of the main website. Upon reviewing these, I found quite a lot of redundancy in the information and the links that exist. Many of the links across multiple pages bring the student to the same webpage of specific information. In order to access the information on the webpage, students must search for transfer information. If a student were to arrive at the website and look at a specific department page, it is highly unlikely that they would encounter the information about the process involved in transferring to the university. The repetitive nature of the links provided could be helpful in directing students, but only if they have located the general transfer page first upon arriving at the website.

## **Student Summaries**

For the purpose of this study, I interviewed 12 individuals who were transfer students at Small University. In order to fully understand the experience of being a transfer student at this institution, I chose a sample of individuals from different departments and of diverse backgrounds (see Table 2 in Chapter 3). In the following sections, I provide a brief summary of each participant and their path to Small University.

**Samm.** Samm, a senior majoring in Neuroscience, came to Small University from a large, public, four-year university in the Mid-Atlantic region. At Small University, the Neuroscience program is interdisciplinary, drawing courses from Applied Science, Biology, Chemistry, Kinesiology & Health Sciences, and Psychological Sciences. A motivating factor for Samm to leave her prior institution was a lack of engagement with the campus culture and the social environment, as she found her peers preferred to party instead of dedicating time to their studies. Samm's experience at her prior institution was marked by extreme competition among students within her major and by a social environment that she did not enjoy. Samm entered Small University during her sophomore year and hopes to graduate in May 2020, which will be a year earlier than her expected graduation date. Samm has accomplished this by taking as many credits as she can during each semester she has been enrolled.

After experiencing the Neuroscience department at her previous institution, Samm found the program at Small University to be more intimate and less competitive. One aspect that has aided Samm in the transition is the personalized attention that students receive from the Neuroscience faculty. In deciding to transfer to Small University, Samm considered the distance of the university from her home, as travel to Small

University adds another two hours to her visits home. Ultimately, Samm determined that the environment and academic rigor of Small University would be a better fit regardless of the increased distance from her family.

**Sis.** Sis entered Small University from a local community college where she had completed a portion of her major requirements prior to being accepted to Small University. Sis is a non-traditional junior student who, at the age of 50, is seeking to earn her degree in Biology. Sis has been well acquainted with Small University for some time, having lived in the same town and enjoyed the campus over the past nine years. She learned of the Biology program through her neighbor who had retired from teaching in the Geology department at Small University. The feedback she received about the university from the neighbor demonstrated to Sis that the faculty were committed to their work and that they enjoyed the campus community. Hearing this positive feedback, Sis was excited to enter the university. Prior to applying for transfer, Sis visited the university's website several times, making up her plan of coursework in the event that she gained acceptance.

At the community college, Sis noted that the faculty often seemed overworked and unable to dedicate time to helping individual students due to their large course loads. At Small University, Sis has enjoyed the level of involvement between the students and faculty members, beginning with her pre-major advisor and continuing with her time in the Biology department. One key aspect of Sis's decision to enter Small University was the ability to enroll as a part-time student. As a non-traditional student, this option was crucial, so she could continue to work while going to school to offset the cost of tuition.

As a part time student, Sis is taking a lighter course load than other students and therefore will take longer than two years to complete her degree.

**Marie.** Marie is a senior student who is seeking a degree in Geology at Small University. Marie originally attended a large, public four-year institution in a large city in the Mid-Atlantic region. Marie did not enjoy her time at this institution, citing the fact that after spending a year at the institution, she had not made any new friends due to the lack of community at the school. After her first year at her prior university, Marie was unable to pay the tuition costs that had accrued and therefore had to leave the institution and work to pay off her debt. While working to pay off the debt, Marie entered a community college in the local area of Small University and earned her Associate of Science degree.

At the community college, Marie found a closer community and discovered her interest in Geology. A professor at the community college who was a Small University alumna encouraged her to visit Small and consider transferring there. While this was not her first encounter with the university, Marie enjoyed the atmosphere and applied after her visit. In the semester following her community college graduation in 2018, Marie entered Small University. Having spent time working throughout her education experience, Marie entered at a slightly older age (24) than a traditional student, and she was able to transfer in 54 of her original 80 credits earned at her previous institutions. Marie lives with her mother approximately 30 minutes from Small University. Marie's mother also attended the university but majored in a different subject. While Marie is

glad to have her mother's insight on the institution, she feels that her experience has been a more positive one than what her mother experienced.

**Jeff.** Jeff traveled across the United States to come to Small University. He entered following enrollment at a four-year institution located in the northwestern United States. His family is located in the central part of the country. Jeff entered as a sophomore and is now a senior student who is pursuing a degree in Computer Science. During his freshman year, Jeff became dissatisfied with the Computer Science department at his first institution. In looking for a change, Jeff learned of Small University through online research and through a friend from high school who attended the university. At Small University, Jeff has found the Computer Science program to be a better fit, but he feels the social aspects of campus are a bit of a challenge due to his transfer status. In his first semester at Small University, Jeff lived in a university dorm that was off-campus, which he believes increased the disconnection he felt from the campus community. While the social component of college has been a challenge for him during his time at Small University, he has found the Computer Science department to be a better academic fit.

**Alice.** Alice came to Small University after attending two other institutions. The first was a large institution in Asia that was heavily focused on research and lacked a focus on undergraduate teaching. After spending a year at this four-year institution, Alice decided to move to the U.S. and attend a community college on the west coast. This choice was intentional to allow her to transfer to a four-year institution within the U.S., with the time in community college serving as a step towards her final educational home at Small University.

Prior to applying to Small University, Alice was familiar with the institution through her acquaintance with two people who attended. She was able to connect with these individuals to learn about the academic culture of Small University prior to entering the university. Since transferring, Alice enjoys the small class size and the ease with which she can contact her professors. One aspect she has noticed in her time at Small University is that many of the students come from similar backgrounds, leading to a lack of diversity in the student body in terms of demographics and in terms of where the students come from. She also noted a lack of diversity of experiences among transfer students as well, pointing to the fact that most of the students she has encountered all come from a similar background and followed a similar path to enter Small University.

At Small University, Alice is majoring in CAMS in the Math/Biology track. She has found that the small size of this interdisciplinary degree-program causes some confusion across campus. For example, Alice mentioned that past professors have been confused by the CAMS major, thinking she meant she was majoring in Chemistry but was using an incorrect abbreviation. Another fact Alice pointed out about the CAMS Math/Bio track is that there are very few students in her cohort. This lack of critical mass has led to her taking classes throughout the institution with students outside of her specific major, which is in contrast to the experience she has heard about from other students who take classes with groups of friends. Alice also feels she has had a different experience in terms of developing a friend group due to the importance of the freshman

residence hall experience at Small University. She feels that by missing this due to transfer, she has missed an important part of the institutional experience.

**James.** James is a non-traditional student who transferred into Small University at the age of 35. He had previously attended a local community college to earn his associate's degree. James had a different path to Small University than the other participants. A decade ago, James was arrested, so because of the criminal record, he was unable to utilize the transfer articulation agreement between the community college he attended and Small University. In order to enter the institution, James was required to complete an associate's degree, write a letter explaining the events of his past, and apply with the general transfer population.

After successfully entering Small University, James declared a Mathematics major with the intent of pursuing admittance to the accelerated master's program in Computer Science. He has found that the academic rigor at Small University is vastly more challenging than he experienced at his community college, which has led him to re-evaluate how he approaches his studies. When he first entered, James chose not to use accommodations for his courses even though this was something he had access to, because he wanted to earn a degree on his own merit. Following his first exam, however, James realized that the academic culture was much more rigorous and that he needed to utilize the resources available in order to be successful at the university.

Although he is enjoying the coursework at Small University, James feels that he is not a part of the student body. He mentioned that he is not seeking to experience campus as a traditional student might, but that he also feels like he is outside of the accepted

norms on campus. This feeling began for James, who is now a junior, during the application process and has continued throughout his time at Small University.

**David.** David originally applied to Small University in high school. Having grown up in the local area, he had planned to attend the institution with a group of his local friends. After receiving a rejection letter during his senior year of high school, David chose to attend a local community college in order to earn an associate's degree so he could transfer later. This pathway allowed him to fulfill much of the pre-requisite work prior to entering the institution, but David did not utilize the transfer articulation agreement between the two institutions, which has stricter requirements for GPA and for timeline of transfer than general transfer. Instead, David applied as a general transfer student for competitive admission and was accepted to the university.

David entered Small University and quickly declared Biology as his major. He found that because he had completed so many of the pre-requisite courses, he could focus on degree specific requirements. One thing that has been difficult during David's past year at Small University has been fitting in courses that are offered in a staggered pattern. At Small University, certain courses are offered only once a year and are sometimes offered in an order that differs from the traditional way that other institutions offer them. For instance, at Small University, the chemistry sequence is offered in an unusual order and each class in the two-and-a-half year sequence is only offered during a specific semester. The unusual timing caused David to take summer courses in order to complete his degree in the allotted two-year time period following transfer.

David has enjoyed the campus culture at Small University, citing that this is one of the main aspects that attracted him to transfer from the community college. He came

into the university and reunited with the friend group he had known since high school, which he believes helped him better acclimate to the university. David lives and works off campus in the town where he grew up, which allows him to save money while still obtaining an excellent education. One downside he finds in this arrangement is that he is not on campus to experience the informal gatherings that occur in the residence halls at Small University. He feels that his physical separation from campus leads to missing out on certain experiences such as gathering with others at night to socialize.

**Rick.** Rick first enrolled at a large, urban four-year research university after graduating from high school. He entered with the intent of pursuing a degree in computer science and was able to start taking the initial classes for this degree during his freshman year. Though Rick enjoyed the academic culture of the institution, he felt that his focus on learning was not shared by the other students he encountered. This led him to transfer to Small University for his sophomore year, where he believed the academic culture would be a better fit for his needs.

After entering Small University, Rick began taking courses in the Computer Science department. Initially, he was aware that his introductory courses at his original four-year institution were taught based on a different programming language. This, however, has not been an issue as he has continued taking higher level courses within the major. One issue that has presented some difficulty is forming social networks within the department. Rick mentioned that many students found a friend group through taking introductory courses together, and those groups were hard to enter as a transfer student.

Academically, Small University has been a great fit for Rick. Having taken many Advanced Placement courses in high school, Rick felt prepared for the academic rigor of

the institution. In comparison to his previous institution, he is aware that Small University requires a greater amount of work, although it is not necessarily more difficult than what he expected or had encountered at his first institution. Additionally, he enjoyed the orientation process, as it allowed him to meet many of the people that he considers close friends at Small University.

**Micah.** Micah entered Small University after completing an Associate of Computer Science degree at a community college in the Mid Atlantic. Micah entered intending to declare a major in Computer Science, but they found that satisfying a Mathematics degree would also be possible in their timeline for graduation. Upon entering, many of Micah's courses in computer science did not transfer in, which caused them to have to retake many classes that were previously taken at the community college level. Despite this difficulty, Micah is on schedule to graduate a semester early. Micah was able to accomplish this by entering with an associate degree that satisfied the majority of the general education requirements, allowing them to focus solely on fulfilling the requirements for the two degrees. Many of the classes Micah had planned to take to support the Computer Science degree were fulfilled through the Mathematics department and allowed them to complete both degrees within the shorter timeframe.

Micah has been pleased with their time in the Computer Science department and the Mathematics department but has found that Computer Science is more straightforward in terms of degree requirements, whereas Mathematics presents a more open-ended degree path for students. This open-ended path requires that students receive more individualized instruction in order to successfully navigate the curriculum. Micah

has experienced a close connection to the faculty, particularly their advisor, as a result of the nature of the major.

Micah entered Small University and was assigned to an off-campus residence hall, an experience they did not enjoy. Micah has since moved into a residence hall on campus and has greatly enjoyed this change. Micah indicated that the decision to move transfer students off campus should be re-evaluated due to the impact it can have on the students and their success at the institution.

**Daenaerys.** Daenaerys, who was born in the U.S., chose to travel to the United Kingdom after graduating high school. She originally applied to Small University but was waitlisted, and therefore chose to enroll in a three-year STEM program in the UK. Daenaerys found her experience abroad quite different from the U.S. system of higher education, including the fact that all of her classes were centered in Biology with no liberal arts focus. At her first university, Daenaerys experienced a different instructional style in which professors rotated in two-week periods based on their expertise in the subject matter that was being covered in the courses. At Small University, on the other hand, she has the same professors for a full semester and is therefore able to become better acquainted with her professors.

Upon entering Small University as a sophomore, Daenaerys was able to successfully advocate for herself in order to have all of her course credits transfer to the university. Due to the difference in the curriculum and course structure in the UK, courses did not directly transfer for equivalent credit. Through working with the registrar's office at Small University, Daenaerys was able to see all of her credit counted, although some courses transferred differently than expected, requiring that she complete

some general education requirements in a different way than a traditional student. Ultimately, her discussions with the registrar led to most of her Biology degree being completed via transfer after one year in the biology program abroad. Currently, Daenaerys is focusing on the general education requirements because the program she was enrolled in for a single year did not allow her to take these credits.

Daenarys has enjoyed her time thus far at Small University. She has particularly appreciated the fact that Small University has an advisor specifically for pre-medical students, as she hopes to attend medical school after graduating. Daenaerys met this advisor early in her time at the university, during a transfer luncheon. The advisor has been instrumental to Daenaerys' understanding of how her previous educational credits will be accepted by various medical schools and how to proceed in light of the differences that exist in the universities in the U.S. and the UK. As Daenaerys continues to pursue this path with the help of professors and advisors on campus, she hopes to graduate a semester early, which will likely be possible due to the amount of credits she was able to transfer into Small University.

**Samantha.** Samantha came to Small University through a guaranteed transfer agreement with the community college system in the state where Small University resides. This agreement allows students to transfer if they have successfully completed an associate degree and have taken 45 credits at the community college while maintaining a 3.6 overall GPA. The 45-credit portion of the agreement is to prevent students who have completed their associate degree with their high school diploma from entering as a transfer student. Additionally, in order to utilize this option, students must earn a grade of "A" in English and a grade of "B" in courses that transfer as general

education courses at Small University. There are required application dates for entry in the fall or spring, and the capacity of the receiving university is also taken into consideration.

Samantha earned an Associate of Liberal Arts degree prior to transfer. She shifted to this particular degree after finding that her original path, with no concentration for her degree, would have led to a fall graduation. If Samantha had not altered her path, she would not have been eligible for the guaranteed transfer path. After entering Small University, Samantha chose to alter her intended degree. She chose to move away from her originally intended major options of Government or English to Physics. Following this change, Samantha realized that she may have to spend more time at Small University, but she has decided that it is worth the time to earn a degree in something that is of true interest to her.

Samantha entered the university in fall 2019 and is still adjusting to life at the institution. Samantha lives off campus and therefore has not connected to the campus community to a great extent in this initial semester, which she attributes to the adjustment of study habits and a longer commute. She has found that the environment at Small University is encouraging of a good work ethic, something she hopes will encourage her in her study habits. Additionally, members of Samantha's family have been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), leading her to worry that this could affect her own studies. In light of this, Samantha has connected with the counseling center on campus to aid her in adjusting to the new environment and developing good study habits. She is aware that she may have to take additional courses

during the summer, but she is confident that pursuing a degree in Physics will be worth the additional time on campus.

**Greg.** Greg is a non-traditional student who came to Small University after working as a junior executive in the healthcare field. Greg has taken courses at two four-year institutions in pursuit of entrance to a medical school but found that trying to juggle a career and school part-time would not be conducive to being successful in this pursuit. Following a discussion with his wife, Greg decided that enrolling at Small University as a full-time student would be the best option for realizing his goal of entering medical school. Greg and his wife are now both enrolled in school but are currently residing in different states; his wife is living in Georgia while attending dental school. Greg chose Small University due to its proximity to his wife in the south and his family in the northeast.

Prior to being admitted for transfer, Greg was waitlisted and asked to take chemistry and statistics at a community college as a condition for his admittance to Small University. After completing this course, Greg was admitted to Small University where he is now pursuing a degree in the Neuroscience program. Greg is currently a junior who does not wish to take a gap year prior to entering medical school. He chose to major in Neuroscience because it presented the quickest path to a degree that would also help to fulfill the medical school requirements. Although the length of the degree was a motivating factor in his decision, Greg enjoys the course offerings that will allow him to successfully complete this degree.

Greg lives on campus at Small University but expressed that he does not feel a great connection to his fellow students due to being in a different stage of life. Greg has

felt a greater connection to the professors and graduate students. He also expressed frustration that registration, parking, and housing for transfer students are based on the status of entering with the freshman class, which he found inconvenient and prohibitive during his initial time on campus. Despite these drawbacks, Greg is enjoying his time at Small University and looks forward to completing his degree and entering medical school. Greg is currently a junior, so he hopes to graduate next year to maintain his timeline.

### **Academic Advising**

The following information was gleaned through a review of the documents available on Small University's website. The Office of Academic Advising's website provides information directly to faculty about the advising process. The purpose of this review was to determine whether the office provides faculty with instruction specifically related to the methods of advising. This review was conducted to determine whether any materials were provided to advisors regarding methods of advising that are prescriptive, developmental, or intrusive/proactive in nature. In addition to reviewing any faculty resources provided by the Office of Academic Advising, this review also included examining STEM departmental websites to determine the type of information available to students who are looking to declare a STEM major.

The Office of Academic Advising at Small University is the touch point for three types of academic advisors: pre-major advisors, major advisors, and professional academic advisors. Pre-major advisors meet with students before a major has been declared, while major advisors work with students who have declared within their department or degree-granting program. Academic advising varies by department, with

some faculty members having the option to be a pre-major and major advisor while others may elect not to participate in either advising role. Additionally, it is important to note that the number of advisees, whether pre-major or major, is at the discretion of the faculty member in each department. In addition to faculty advisors, Small University also employs three professional academic advisors. The professional advisors work in a staff capacity and are available for students to meet with outside of meetings with their official academic advisor. The website does not provide a great deal of information about the professional advisors except to provide their contact information for students. The website offers an online option to schedule an appointment with one of the professional advisors but does not directly indicate the role or areas of expertise that the three advisors have as part of their professional capacity.

On the Office of Academic Advising website, there is a section dedicated to resources for faculty members who serve as advisors. This portion of the site, which is aimed at aiding pre-major advisors specifically, includes information about how to access student information for an advising appointment, how to determine whether a student is on track for graduation, and how to find classes that may have open seats for students during registration. A small section on the page is dedicated to obtaining help when necessary, including contact information for the office, information regarding the data produced about students or courses, and a contact for technical questions. There is mention of a Blackboard, or course management system, page that all advisors are enrolled in when they agree to serve as a pre-major advisor. According to the website, this Blackboard page offers resources for students and faculty to use in consultation, but does not specifically mention any resources related to the prescriptive, developmental, or

intrusive/proactive methods of academic advising. Additionally, this web page, which is accessible through a general search of the institutional website, provides information to individuals who serve as pre-major advisors, those who meet with students prior to declaring their major. Even though this also would include some major advisors due to an overlap between the two groups, not all major advisors conduct pre-major advising, and therefore would not have access to the Blackboard page.

The website information described is specific to the resources provided to faculty through the Office of Academic Advising at Small University. Additionally, each STEM degree-granting program provides students with specific information about academic advising in their department. In the sections below, I outline the academic advising information that students can access on the websites of each STEM degree-granting program. Some degree-granting programs, such as CAMS and Computer Science, do not have any information directly related to academic advising for students.

**Biology.** In order to find advising information, students must search for information about majoring in this department. There is no web page dedicated solely to academic advising in the Biology department, despite the fact that it is the largest STEM department at Small University. Students are directed to review the faculty list linked to the majoring information page, and to choose a professor to serve as their advisor. According to the website, this selection should be based on finding a faculty member who has listed interests that are similar to those of the student seeking an advisor. One helpful item included on this website is a set of step-by-step instructions for contacting and setting up a meeting with a faculty member. There is also a link on the main biology

webpage to the paperwork that should be completed prior to meeting to declare a Biology major.

**Chemistry.** The Chemistry department has a specific web page dedicated to major advising. This page, while quite simple to locate, provides very little information for students who wish to declare a Chemistry major. The web page includes a list of four steps that must be taken for students to successfully declare, including a form that must be completed and a link to the list of faculty. The only other information provided on this landing page indicates that students must meet with their major faculty advisor to have the required form signed and then drop the form off at the Registrar's office. This form finalizes the agreement between the student and faculty member to proceed as advisee and major advisor, respectively.

**Geology.** The Geology department has a web page dedicated to advising within the department. Similar to that of the Chemistry department, this page contains a list of items that a student should complete in order to declare their major; however, it includes much more detail. The first item listed directs students to make an academic plan, and it provides links to a form describing the major requirements. Additionally, the department provides students with a list of courses offered in the upcoming semester with a warning that some classes are not offered each semester or each year. Students are then directed to choose an advisor from among the Geology department faculty, and to be prepared to have conversations with several faculty advisors in order to find one who is available to accept student advisees. The final two items listed for students provide the official form for major declaration and a description of how to submit the form to the Registrar's office.

**Mathematics.** The Mathematics department has a web page dedicated to advising within the department. Unlike other pages that include lists of tasks to be completed, this page provides a general overview for students. Information provided includes a link to a list of faculty members who serve as advisors, with mention that a student can change their advisor after declaring the major. The official university form for major declaration is also provided via a link. Finally, the Mathematics department includes a link to course descriptions and the undergraduate catalog, which lists the sequence of classes required to complete the major.

**Neuroscience.** Neuroscience has a specific web page dedicated to major advising for students. This site is easy to find through a general search of “academic advising” on the university’s main website. This page includes contact information for the interdisciplinary program, including an email list of all advisors within this degree-granting program based on their specific departments at the university. This listing is especially important for this interdisciplinary program because the faculty are divided among several departments at the university. This web page also includes a brief description of the process a student should follow to choose an advisor as well as a link to the course catalog that lists the specific requirements of the Neuroscience major.

**Physics.** The Physics department’s web page provides advising information related to major declaration, similar to the information on the Biology department’s web page. This department’s page also lists four items that students must complete, beginning with checking the major requirements. This section of the web page indicates that courses are not all offered every semester or every year. Students are directed to choose from any of the faculty members in the department, and it is suggested that students may

want to choose a faculty advisor whom they know or have interacted with during their time taking courses in the department. Students are instructed to set up an appointment to officially declare their major with this advisor, and a link is provided to the official form that should be submitted to the Registrar's office.

### **Summary**

Small University requires that all students, traditional or transfer, participate in academic advising at two points, prior to and after declaring a major. In some cases, the faculty advisor may be the same person, although this is left up to the discretion of the student who pursues a major advisor and to the individual faculty who must agree to serve as the student's major advisor. Pre-major advising is an activity that faculty members may participate in if they so choose, and many pre-major advisors will advise students who do not declare within the faculty member's department. Transfer students are distributed among the pre-major advisors throughout campus, although not all pre-major advisors choose to work with transfer students. In terms of pre-major advising, Small University includes an Office of Academic Advising that is responsible for assigning students to faculty advisors and for supplying the advisors with information and resources related to the advising process.

Major advising at Small University is far less consistent from department to department, evidenced by the document review of academic advising materials on each of the eight STEM department websites. There is a wide range of the depth of material provided, ranging from no evident information, such as on the CAMS and Computer Science webpages, to a large amount of structured materials, as seen on the Geology section of the website. A few of the degree-programs include itemized lists for students

to follow when preparing to find a major advisor. Mathematics provides students with a listing of items in paragraph form that explains the steps that must be taken in order to successfully find a major advisor and declare a major. The Chemistry, Geology, and Physics degree-programs take this a step further and provide clear numerical lists, so there is little confusion for students on the exact steps to follow. The Physics program provides the greatest detail for students, but all three departments utilize a similar format of providing links to relevant documents and a list of possible faculty advisors.

Neuroscience and Biology utilize a narrative method of guiding students, with Neuroscience giving greater direction than Biology. The Biology program does not have a designated advising section on the webpage, but rather describes how a student should approach the process in the midst of a webpage filled with major related information for the degree program. This department, which is the largest STEM program at Small University, provides a great deal of information without clear divisions by topic. Neuroscience, alternatively, while using a narrative format to guide students, has a page dedicated to advising information. The interdisciplinary degree-program includes a link to the coordinator of the program in case of questions about the process. Additionally, the catalog is linked to direct students to the course requirements for the major. Finally, the program includes a list of advisors that students can work with and links to their respective faculty pages for contact information.

Overall, Small University does not seem to have a great deal of structural requirements for departmental listings of advising information. Rather, it seems to be at the discretion of the individual degree programs to determine what they think will best guide the students through the major declaration process. While some provide lists of

directions and some provide narratives of the process that is required of students, the sites do seem to provide clear information, but it is unknown the degree to which students understand and utilize the information presented.

## **CHAPTER 5: FINDINGS**

The purpose of this phenomenological case study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within STEM programs at Small University, a small, highly selective, public institution in the Mid-Atlantic region. This study was broken into two parts: the first examined the transfer experience of STEM students at Small University, and the second investigated how academic advising plays a role in the transfer process of this population. To aid examination of these two themes, I conducted face-to-face interviews with 12 junior and senior students currently enrolled in one of the seven STEM departments at Small University. The interviews included two parts that allowed for consideration of the transfer process separately from the advising experience. Each interview was coded based on the method of Value's Coding (Saldaña, 2011), using the codes of transfer experience, familial support, academic advisor support, general instructor support, student community support, reason for transfer, and orientation experience. An analysis of the responses from each participant helped determine the expressed values, beliefs, or attitudes.

Common themes relating to the transfer experience and academic advising emerged from the interview responses even though the participant group consisted of individuals from diverse backgrounds and different STEM programs. The essence of the transfer process as well as within the advising practices of the various programs and

departments emerged from the participants' descriptions of their experiences. In the sections that follow, I describe the common themes that were evident throughout the 12 interviews and explain how they were expressed. Table 4 is a summary of the two main themes that emerged from the interviews and the elements of the shared experiences that were common among students.

Table 4

*Themes and Experiences from Participant Interviews*

<b>Theme</b>	<b>Shared Experiences</b>
Transfer Student Experience	Outsider perception Concerns of transfer students
Perceptions of Academic Advising	Check List Advising Relational Advising Combination Advising

**Transfer Student Experience**

Whether transferring vertically or laterally, transfer students experience a transition as they enter into a new educational environment. In this study, the participants reported the type of transfer through the participant selection survey. The participants in this study all completed their own unique transfer processes, but certain shared experiences and themes were commonly expressed during the interviews. For example, many of the participants expressed that they felt alienated from the general student population, though the means of this alienation varied by participant. Participants felt alienated through many processes on campus including the admissions process, the

housing assignment process, and registration. Several participants also discussed concerns they had during the transfer process, ranging from experiences related to mental well-being to the fairness of the transfer process. Participants were sent a statement that was created based on the main themes that emerged throughout all of the interviews (Appendix E). This statement included the common items that many participants described during their interviews. There were minor corrections made by participants for timeline purposes, but the common statement was accepted by all. In the following sections, I discuss the common experiences of the interview participants in the transfer process from their original institution to Small University. The two areas central to the essence of their experience was feeling like an outsider and areas of concern regarding the transfer process.

**Feeling like an outsider.** Several participants shared the perception of being an outsider on the campus of Small University, some even directly using the term *outsider*. For example, James, a junior in the Applied Mathematics program who is older than the majority of students at Small University, stated, “I am definitely an outsider as far as the school is concerned. I am an outlier student.” Alice, a senior in the CAMS program, said she and her transfer student friends on campus feel like they are outsiders among the traditional student population. While many of the participants felt alienated in some ways due to age differences from the traditional population, Alice felt this way even though she was the same age as most students at the university. For her, the outsider status emerged because she had missed the common activity of spending the first few years on campus. This outcome points to the fact that transfer students of any age may

face difficulties simply because they entered at a different time than traditional students at the institution and missed the common first year experiences.

Even though James and Alice discussed this outsider concept generally, many participants described similar feelings and perceptions around specific details or events. From the application process to orientation, these transfer students felt disconnected from campus life and the traditional students who started as freshmen at the university. In the following sections, I describe examples of specific processes or experiences at Small University that led these transfer students to experience the feeling of being an outsider.

***Application process and transfer of credit.*** James, a junior Applied Mathematics major who generally felt like an outsider at Small University, named the application process as the starting point of this perception: “I felt like when in the transfer, like in the application process, I felt like Small University was trying to not accept me. I feel like Small University was trying to go more towards a traditional student.” One key belief that stood out from James’ comments about the process was, “I should have access to the same education as everybody else.” In applying to Small University, James hoped to enter an institution that would allow him to earn a degree that would lead to a successful career; yet he felt the system was set up in a way that put him at a disadvantage from the beginning.

Micah, a senior student in Computer Science and Mathematics, expressed frustration over the fact that many of their transfer credits were not accepted. Micah stated, “I am still very bitter that, except for one class, none of my computer science credits from [Rural Community College] transferred.” In fact, this led Micah to believe that Small University “still think[s] that they're better than Rural in terms of teaching data

structures and computer architecture.” A common thread through many of Micah’s thoughts was that the university did not accept the credits because they came from a community college, even though the courses seemed to align in terms of content.

Marie, a senior Geology major, also felt disadvantaged in terms of credits that were accepted. “I transferred in with about 54 of my 80 credits. I have an associate’s degree. I thought I’d get 60 credits to my 120,” she said. Marie believed she should have entered Small University at 60 credits since this is half of the amount required for a degree. Instead, Marie found herself six credits shy of that mark, despite the fact that she had earned a two-year degree prior to transfer. By entering with fewer credits than she expected, Marie has had to compact more classes into each semester. During the semester in which this study was conducted, Marie decided to extend her time at Small University due to the stress of fitting everything into a two-year timeframe. She was aware that the added time would present additional tuition costs, but she felt that taking the time to earn a degree while decreasing her own stress level was worth that sacrifice.

Even though these examples illustrate negative perceptions of the application and transfer process, one participant had quite a different experience. It is notable and concerning for the institution that only one of the twelve participants noted a positive experience when discussing transferring credits into the institution. Daenaerys, a junior who spent her first year of college enrolled in a STEM program in the UK, had all of her transfer credits accepted, allowing her to fulfill almost the entirety of her degree requirements in the Biology program. This transfer of credits will hopefully allow Daenaerys to graduate one semester early, in the fall of 2021. One challenge Daenaerys noted about the process of transferring credits was that she had to “be an advocate for

myself for transfer credits because it was a different system and there's actually a cap on how many credits you can bring from the UK.” By working with the university registrar, Daenaerys was able to receive credit for transfer courses that, on paper, did not appear to match perfectly, but did actually fulfill the requirements. Daenaerys emphasized that it is important for transfer students to be aware that “there's a contact that you can just go in, have a discussion about how things work.” Daenaerys’ story demonstrates the importance of transfer students knowing the resources that exist and that they are able and allowed to utilize those resources to aid in the transfer process. While not all courses may be negotiated for transfer, it is important that transfer students be made aware that they are able to work with the registrar to determine if there are different ways to approach the transfer of credit. One important conclusion that comes from Daenaerys’ experience is that students should work with the academic officials in order to achieve the best outcome.

*Missed freshman experience.* Many of the participants in this study indicated that by transferring, they had missed out on the freshman experience that traditional students have at Small University. Rick, a junior in the Computer Science program, said that upon coming to the institution, he found that “people have relationships, like already ‘cause freshman orientation is apparently really good here.” Alice echoed this, “a lot of people I know that have been here since freshman year, their group of friends are from the freshman dorm. So I think that was something that I don't have.” Alice voiced a strong belief that missing out on this experience had impacted her ability to connect to people she met on campus. A common thread throughout the interviews was that living off campus or missing the freshman dorm experience made many of the participants feel

disadvantaged from connecting to the greater campus community at Small University. Interestingly, the two individuals who noted this did, at one point in their educational career, attend a four-year institution where they would understand and have experienced the importance of bonding in the first year. Alice, additionally, has experienced a more complex path due to transferring from a four-year institution in Asia prior to entering a community college in the U.S. The fact that these students were aware of missing out on this experience indicates that transferring from a four-year institution may be associated with feeling a loss of experience as compared to those who vertically transferred from a non-residential institution.

***Living arrangement.*** A few of the participants expressed concerns regarding the living arrangements that transfer students find themselves placed in after transferring to Small University. Micah described the transfer residence hall a mile off campus as “transfer jail.” While not all of the participants used this term to describe the residence hall, those who had the experience of living in the building did not enjoy the experience. Jeff commented, “You’re already trying to fit in with the new place and then you’re essentially living off campus.” He also stated, “It was a really terrible dorm.” Samm, a senior in the Neuroscience program, lived in the transfer residence hall when she first came to campus. She said, “It was kind of difficult to like feel part of Small University because I wasn’t living *right* there.”

All of the participants who lived in the transfer student residence hall believed that placement in housing outside of the main campus interfered with their ability to connect. All of them have since relocated to on-campus housing or to off-campus apartments. Other students in the study lived in residence halls on the main campus of

Small University; notably, those students did not share the same negative experiences described by James, Samm, and Micah.

*Differences in introductory level courses.* Even though not shared by the majority of participants, two students noted a distinct difference in the language and content of the introductory courses offered at Small University compared to their previous institutions. In higher-level courses, they were unaware of concepts being discussed when professors referred to the content of pre-requisite courses. Samm described the experience as confusing, pointing out, “It's kind of difficult for me, because they talk about concepts that I may or may not have learned a while ago but are not really familiar, like the procedures that they've done here.” Rick shared that in Computer Science “they teach a different programming language at the start here.” Fortunately, he mentioned that this has not continued through the higher-level courses, as they have switched to a more common language. Neither student indicated that they experienced lower grades as a result but did express that they had to work to compensate for missing the initial classes in the major. Interestingly, Rick indicated that after his first semester, the courses switched programming language, allowing him to be on a level playing field with the other students.

*Increased course difficulty.* A common experience shared by many participants was a decrease in academic performance during their early time on campus. The increased academic rigor of Small University challenged the participants in their initial time on campus, but all who noted this have recovered in the time since the experience. Samantha, the only participant who is currently in their first semester at the institution,

has noticed a clear difference in the work assigned and expectations at Small compared to her previous community college:

[Community colleges] don't assign as much, which I've been trying to adjust my study habits to keep up with the course work. My grades might take a little bit of a hit this semester, but once I sort of adjust, I think I'll be able to manage it a lot better. [Samantha, junior, Physics]

Greg has also noted a difference in the difficulty of his courses, and this is compounded by the fact that he has been out of high school for quite some time. He explained, "I'm 11 years removed from high school biology, so, I know that isn't really saying much, but it makes things more difficult in the sense that I have a lot of remedial work that I have to do." Greg went on to say, "It's been really difficult. I mean, the academics are just not easy compared to what I've experienced previously." The gap in time since Greg was in school was an exacerbating factor in his experience.

Jeff also struggled during his initial semester on campus, to the point that he considered leaving the school. He explained, "The coursework's been a lot more rigorous and intellectually challenging than it was in my first school. My second semester here I was actually thinking of dropping out after that, but I stuck with it." His advisor played a key role in Jeff's staying, which will be addressed in the second section of this chapter. By persisting at the university, Jeff was able to bring his grades up and perform well in his later courses. Jeff's story is similar to many others in that he struggled initially due to the increased rigor and new environment, but he was able to recover in subsequent semesters.

**Orientation.** The transfer students had mixed feelings about the orientation process; some greatly enjoyed it, whereas others felt it was overwhelming and felt it should be constructed differently for transfer students. All students who enter Small University, whether as transfer or traditional students, are required to attend orientation prior to the start of the term. The event takes place over several days, including weekend days. Marie had an issue with this fact, as she works off-campus in order to pay for school and had to miss orientation. She said, “I had to skip a Sunday because I couldn't get that work off. They ended up giving me a Blackboard assignment to watch some videos and I was like, alright, this is a problem.” Marie’s frustration over this was evident in her further comments:

My mom went here and I've toured it myself, [so] I didn't need to do any of that. And the stuff that they showed me, most of it I don't use. Maybe I've been to the Rec like twice. I don't go to the dining halls.... They had activities after, which would be fine if I was, you know, living on campus and had a dorm and I was super excited about college, but I was just excited to finally be here and completing my degree. I wasn't looking to go bowling, you know, on a work night, so I had to blow them off. [Marie, senior, Geology]

Even though Marie expressed strong negative feelings about the orientation process, other students shared feelings and attitudes about the process that ranged from confusion to enjoyment in the process. For example, Samm and Rick both enjoyed their orientation experience, saying that it was a great opportunity to become acclimated to the university. Rick added that he thought it would be more welcoming to transfer students to alter the composition of the orientation groups:

It's kind of weird because I know a lot of the people I've been friends with from the transfer thing, they're kind of only friends with transfers because that's kind of their introduction to the campus. And so maybe mixing those groups up a little having it be 50/50 or something, so there could be more interaction between different class levels because we're all going through the same thing. [Rick, junior, Computer Science]

Sis, a non-traditional part-time junior in Biology, also noted the composition of the groups, "I'm pretty sure they had intentionally arranged it that way because we were all in the same transfer group. All non-traditional people." Daenaerys, who is from the U.S. but traveled abroad for her first year of college, was placed in a transfer group with other students from outside the U.S., which she enjoyed, but she found that those students went back to Europe after a year on campus. The structure of the orientation groups led to her developing a great friend group initially, but when these students returned home prior to finishing their degrees, Daenaerys was left with a gap in her social group.

A few of the participants mentioned the content of orientation specifically and provided feedback for how this might be altered to be more inclusive and make the process easier for transfer students. Samantha, a junior in the Physics program, felt overwhelmed by the sheer amount of information presented at orientation:

Orientation was really quite a lot. So I feel like, especially for a transfer student, some traditional students were also feeling that orientation was demanding. So, I'm not sure how that would be addressed exactly, but just that it was kind of stressful. [Samantha, junior, Physics]

Daenaerys also spoke about the content, noting that some concepts should be left until after students have had some time on campus. For example, one component of the orientation schedule includes a discussion of diversity and inclusion on campus.

Daenaerys felt the conversations were affected by the fact that students were just meeting the members of their orientation group. She commented, “All people had very complicated experiences, which was wonderful to learn, but maybe that should have been like maybe a week later.”

Overall, the perceptions of orientation were mostly positive, with many students indicating that they enjoyed some, if not all of the experience. The majority of students enjoyed being paired with students who shared a similar experience, though some expressed a belief that the shared transfer experience is not enough to create a lasting bond between individuals. Additionally, the participants commented that they would enjoy being paired with non-transfer students instead of being isolated into their own groups based solely on the commonality of transfer.

**Concerns of transfer students.** The students expressed several concerns about the handling of the transfer process during their initial time on campus. The concerns expressed include a range of matters, such as the impact of the transfer process on the overall well-being of the students, to the way the university handles registration, and the order of class offerings in the academic year. Following are some specific examples cited by the participants.

***Mental health.*** Mental well-being was a concern raised by several of the students; they believed the transition into the university presented them with challenges that affected their mental health. Samm thought the mental health of a student could be

greatly affected by the transfer process, and therefore is something the university should consider in facilitating the transfer process. She expressed:

It's that you're leaving a place that you've been into along with other freshmen but now suddenly you're transferring to a different place. There's so much stress about keeping up with all these new curriculums that you have to complete as a new student along with classes and figuring things out on your own. I feel like it would be helpful also if more thought was given to transfers and how it's going to affect them socially and mental health wise too. [Samm, senior, Neuroscience]

Samm's thoughts point to the fact that entering a new environment and navigating that environment successfully can be challenging and therefore affect the mental health of students, so the university should consider this in the practice of admitting transfer students.

Micah and Samantha also discussed the stress of transfer and the impact it can have on mental well-being. Micah experienced a tough time during their second semester on campus. Micah indicated that Small University presented "a ripe environment, I guess, for mental health issues to come up that had kind of been under the surface for high school and my associates because I was at home." During this time, Micah was able to connect with their instructor, who provided guidance for them and aid in navigating the stressors that were contributing. Alternatively, Samantha indicated that while she experienced stress in her initial time on campus, she "tend[s] to go more towards the counseling center" for support. Whether students turn to faculty or other university resources, the statements above point to the fact that a focus on mental well-being is a concern of transfer students.

*Financial aid and resources.* Four of the participants spoke about financial matters, as they were or are currently working in order to fund their education. Their comments related to the fact that Small University provides a good, but expensive education. For three of the participants, this means they need to work in order to afford living and educational expenses beyond their financial aid, which removes them from campus and therefore from participating in campus functions to the same degree as a traditional student who does not work. Two of the students, Greg, a junior in Neuroscience, and David, a senior in Biology, discussed that they had worked prior to entering the institution. Greg had worked in healthcare prior to entering Small University and was able to establish “enough of a nest egg built up and talked my wife into just going back full time.” David, in comparison, is currently working in a nearby town, where he lives and commutes from each day.

Marie and Sis expressed the struggle of paying for their education. Marie, who experienced financial difficulty at her first institution, was forced to leave school in order to pay off her debt to the institution. Now she works in order to afford the tuition costs. “I’m paying I think about 30% out of pocket every semester because financial aid only goes so far,” she stated, also indicating that her outside work prevents her from becoming more involved on campus. Recall too, her job also prevented her from attending portions of orientation as she was unable to take days off from work. Sis discussed the part-time option that has allowed her to attend Small University while not placing her and her husband in a substantial amount of debt. Sis expressed that she almost did not come to the university due to the overwhelming cost of full-time tuition, saying:

I almost didn't apply because even though I had worked there and I just was heartbroken when I actually looked at what it was going to cost me to come to Small University. I'm going to dig us another \$30,000 in debt and we're in our sixties, but then I found the part-time program and I can work at the same time and just pay for credits. [Sis, junior, Biology]

Marie and Sis's accounts, in particular, demonstrate the difficulty that some transfer students can face in funding their education. Sis was not sure that all students were aware that attending part-time was an option. Marie additionally indicated a belief that her needing to work prevents her from connecting on campus, but that she must prioritize working in order to stay at the university.

***Parking.*** Greg and David expressed concerns over the parking situation at Small University. Greg, a non-traditional student, lives on campus because he and his wife are living in separate states while both are pursuing degrees. Because Greg commutes across several states quite often, he decided that living in campus housing would be the easiest option. When he entered Small University, he was classified as a freshman for housing assignments, which also meant that he was not allowed to have his car on campus. Greg was able to petition to keep his car and therefore be able to travel to see his wife, but he was forced to keep it at one of the school's off campus locations. He saw this as a major hurdle, expressing, "I was pretty salty about being classified as a freshman. It was a particular inconvenience based on not being able to get a parking pass. Being a transfer student, you're disadvantaged." Despite entering in a higher class year from being a transfer, Greg was treated like a new freshman student by the housing policies.

David, who also expressed frustration over parking, was concerned about the amount and placement of day-student parking. David commutes from a town approximately 30 minutes from campus, and therefore has to park each day in order to attend classes. David stated:

I feel like transfer students, a lot of them maybe commute and they don't commute from exactly nearby. So then the day pass is a little unfair 'cause if they're a student that's living in [Small Town] and it's just technically off campus, [they] can still take a [local transit] bus or ride their bike, they'll be here. I'm 15 miles, 30-minute drive, and I don't have a [local transit] bus. My only option is to pay for the day pass to come here. [David, senior, Biology]

David also commented that his classes are quite far from where he is required to park and that he often has to rush to class in order to arrive on time. Within David's comments was a clear expression that fairness in parking should be considered, particularly because many transfer students are living in locations that are not close to campus, and therefore are disadvantaged by the parking situation on campus.

**Registration status.** Almost all of the students commented on the registration process and the fact that they are required to register with the freshmen during their initial semester on campus. When transfer students enter into the university, they are unable to register for a full schedule until the day prior to classes beginning. For true freshmen, there are plenty of course offerings, but transfer students face the difficulty of trying to enroll in courses for their potential majors, which may be full by the time they register. James explained, "When I went to register, all the computer science classes were full because we registered late. Even though technically I'm a junior, I'm registering as a

freshman so I don't get the priorities that the juniors do.” James also discussed the fact that he reached out to professors during this time to obtain overrides for classes that were full, but he had multiple professors not respond to his request. Rick mentioned, “You’re registering after everyone's already registered; you're basically getting the dregs. We have to sit here and hope our computers don't crash. The moment it turns we'll click and we'll hope it goes well.” Greg used the strongest language in his discussion of this, saying, “the first thing that I was pretty salty about was being classified as a freshman. It's pretty crazy that they do that, and I honestly think that it's borderline unethical.”

Daenaerys was the sole student who did not experience any negative outcomes as a result of registration; she was able to register early due to accommodations. She feels that this allowed her to take the courses she wanted to take and therefore provided a better experience during her initial time at the university. She suggested:

Have the transfer students get a window of registration before everyone else where they get first dibs on [General Education Requirements]. That was one of my most positive experience in my first semester; some people didn't get to take something that they loved, and I feel like that's just such a missed opportunity.

[Daenaerys, junior, Biology]

Daenaerys emphasized the positive experience that she had in her general education course during that initial semester. She felt that by registering for something she was interested in, she was able to enjoy the initial semester more than students who were left to register for classes they may not be interested in, due to a lack of available seats.

One of the main concerns expressed by the participants was a belief that Small University was disadvantaging them in the registration process so that they had to spend

additional semesters, and therefore more money, to complete their degree. It was clear in almost every interview that participants viewed the registration process as being unfairly arranged. Many of the students commented that coming in with 50 to 60 credits should be positive, but that when registration is handled as it is at Small University, they are positioned to be at a disadvantage in building their schedules and maintaining their timeline for graduation.

*Ordering of courses and transfer options.* A final concern for many of the participants was the order in which certain courses are offered at Small University. In STEM disciplines, it is common to find that classes must be taken in a sequential fashion. For instance, the chemistry sequence, which must be completed by Chemistry majors as well as most Biology majors, is offered in an unusual order. The school requires that the two Organic Chemistry courses be offered in the middle of the General Chemistry sequence. Additionally, each course is only offered in a single semester and in a single summer session. David found this particularly challenging:

There's classes that are staggered and it doesn't quite match up. When I came over here I would have had to have taken [Organic I] in the summer before I transferred so I could take Orgo II in time to take Biochem and then take the electives. So what I ended up doing is taking Organic I in summer and I had to take Orgo II in Summer I and Biochem Summer II and I'm doing the electives now. [David, senior, Biology]

Rick had an issue with registration due to the timing that certain general education requirements must be taken. He experienced difficulty in arranging his schedule because of the requirement to take the general education course during his first year. Rick

explained, “My schedule was kind of weird because the timing for [the general education course] didn't match up with some of my classes and I had to change those classes around.” Had he been able to register earlier, Rick may have been able to arrange his schedule in order to take a different general education course and his major courses at the same time.

Daenaerys experienced an issue with her general education requirements because she fulfilled most of her degree requirements abroad but was not able to satisfy the general education requirements with transfer credit. In her specific case, Daenaerys will have to find another route to satisfying this, because the normal method that students use to fulfill these requirements is through their freshman introductory courses in Biology. She said:

I either need to petition the university to give me [general education credit] for some other version of biology, which [my advisor] said that they might do, I just need to get around to doing that. But that's kind of been annoying. [Daenaerys, junior, Biology]

This ordering of coursework has been challenging for Daenaerys because the courses that fulfill the credit she is missing are most often taken early in a student's program. Additionally, because she has earned transfer credit for the equivalent general education course, she is not able to take it at Small University due to the needed class being a duplicate credit. These examples illustrate a common experience of the transfer students in that they are coming in and are unable to take courses in the desired order or due to their transfer credits and are therefore having to spend extra time and money at the university or find a different path to completing the degree requirements.

## **Perceptions of Academic Advising**

Academic advising is a practice that all undergraduate students participate in at Small University. Even though there are multiple forms of academic advising, the focus for this study was the advising experience that each student had within their declared major. When students arrive on campus, whether as traditional or transfer students, they are assigned a pre-major advisor that will aid them in selecting their initial courses and transitioning into the campus community. Once students declare their major, they then select a major advisor who they work with for the remainder of their time on campus. The major advisor may be the same person who served as the student's pre-major advisor, or it may be another faculty member within the student's major. Additionally, Small University has professional advisors within the Office of Academic advising who aid students with questions outside the realm of knowledge of the faculty. The advising office also meets with students who prefer to meet with someone other than their faculty advisor.

The participants in this study answered questions about their advising experience and how they interacted with their advisors. The questions aimed at understanding how the student and advisor communicated, what issues were discussed in the advising meetings, and what type of relationship was established between the faculty advisor and the student. Based on the responses of each participant, I found the participants experienced one of two types of advising; most students experienced a checklist style of academic advising, while some experienced a relational approach. A few of the participants experienced combination advising, a blend of these two styles, though this

was seen more often in advising experiences the students had with faculty who were not their major advisor.

**Checklist advising.** Checklist advising was the method that most of the participants experienced. In this type of advising, the advising relationship is limited to the sharing of a prescribed checklist of courses that the student must fulfill in order to successfully complete a degree and graduate from the institution. Sis explained that this was the method of her advising in Biology:

[My advisor] looked at the courses that I'd chosen so far for the next few semesters and he was pretty happy with what I had chosen. He said if I had any questions, come back or if I needed to change it, or if I was interested in something else, to let him know. [Sis, junior, Biology]

While her advisor also showed her around the department and discussed research interests with her, Sis did not mention any relationship-building within the advising experience.

Other students who described the checklist approach mentioned that this advising approach may have been due to the fact that they did not see the need to meet with their advisor for guidance. Marie explained that she “didn’t really find that I needed to meet with him, just because I can read the website and it will tell me the classes” that were required to complete the Geology program. Rick experienced a similar situation in Biology, commenting that he “hasn’t contacted him in a while because I kind of know what's happening” concerning the degree requirements. Rick’s advisor had assured him that he did not need to worry about his timeline, as he would have the ability to take all necessary classes within the three years he will spend at Small University. Rick has not

met with his advisor since their initial meeting to declare the major. In general, it seemed that students who experienced checklist advising did not see the importance of meeting with their advisors because they were able to chart a path on their own. As students are not required to meet with the advisor after filling out the major declaration form, there was no compelling reason for this population to meet with the advisor at any other point in time.

Daenaerys and Samantha expressed that they did not have a great need to meet with their major advisors. For Daenaerys, this is a result of entering Small University with the majority of her major completed. She described the relationship as “more on paper right now” due to the fact that she has “already done essentially all my biology credits.” Samantha’s scenario is the opposite in nature because she just entered the university. She met with her Physics advisor and found him quite helpful in determining her future courses, but in her initial time on campus, she has not had a great deal of interaction with him. “He walked me through the declaration of major process. He helped me put together what my schedule would look like and what classes I would be taking, and what classes he would recommend me take each semester,” she explained. In line with the practice of checklist advising, Samantha was presented with a listing of courses that she should follow and was then sent on her way. She was and is able to return to her advisor, but due to being told the plan for successfully graduating from the university, she has not seen the need at this point.

Samantha also mentioned that she has felt some confusion around the major advising process, commenting:

I guess part of me was unsure exactly what I'm supposed to go to my major advisor for and what I'm supposed to go to other resources for. So mostly I've been talking to him about the bare bones requirements and structuring my semester and the more technical stuff. He seems pretty open to answering any questions that I might have. [Samantha, junior, Physics]

Samantha's comment points to the fact that students are not educated in what resources an advisor should provide them. In checklist advising, students are provided with a roadmap for completing a degree but are not typically given information about other resources. Additionally, the participants were not contacted by their advisors regularly in order to check-in about their progress. It seems that the students who received this type of advising are not aware of items that can and should be discussed with the advisor.

**Relational advising.** Relational advising allows for relationship-building to occur between the advisor and the student. In this method of advising, the faculty advisor seeks to understand the student's story to a greater degree as a part of the advising process, as evidenced by the individual attention described by the students. This type of advising was discussed much less frequently in the interviews, with only four participants indicating this type of advising. It was evident that relational advising was impactful for the students because they were able to describe, in great detail, the times in which the advisor aided them through challenging circumstances. In some cases, this type of advising happened with a separate faculty member who was not the student's faculty major advisor.

Some students developed a relationship with their advisor that extended beyond the discussions of course listings. For example, Jeff said of his advisor, "I feel a little bit

more like it's a peer to peer interaction,” he explained. As Jeff is a traditionally aged student in the 18-22 age range, this comment indicates that the advising relationship is based on mutual trust between the two parties as opposed to being based on a commonality of age between the advisor and student. This relationship turned out to be instrumental in Jeff’s career at Small University.

I was actually thinking of dropping out after [my initial semester], but I stuck with it. Part of it was actually talking with my advisor. I didn't really tell many people I was considering that, but he was one of them and he really discouraged me from doing that. We were talking about what my career might look like if I left school and then just tried to define a job after that. [Jeff, senior, Computer Science]

In Jeff’s experience, that advisor was instrumental in mentoring him through his decision to stay on campus. Jeff had developed a relationship with the advisor and trusted him enough to discuss that he was struggling at Small University to the point that he considered leaving the institution. Through the relationship the two had developed, Jeff was able to weigh his options and ultimately decide to remain at the school.

James experienced relational advising as well when he sought out information about joining a research lab within the Mathematics department. James was particularly concerned that being older and starting at Small University later would prevent him from being able to conduct any research prior to graduation. His advisor encouraged him in the process, advising him that he could join a research team. “He said, ‘don’t let age deter you. You’re more than welcome to jump on somebody's research. It's no problem.’ So I thought that was awesome,” James commented. James, a student who has struggled with the culture of Small University, in part due to the fact that he is older than most of

the students, felt encouraged that his advisor acknowledged his age but pointed out that this should not be a hindrance.

Micah also experienced a relational approach to advising with their Mathematics faculty major advisor. Micah found this relationship important, saying, “I’m not confident in myself.” The faculty major advisor pushed Micah to take courses that were more challenging because they had the ability to succeed in those courses. The advisor told Micah, “this set of classes that you plan to take looks like you should challenge yourself more.” Micah continued, “He’s been encouraging me to take more challenging classes, which has been good.” For this student, having a faculty major advisor who pushed them to reach their full potential was key in establishing their academic course plan. Micah’s faculty advisor, knowing the mental health struggles that Micah experiences, also was able to aid Micah during a tough time by understanding the troubles they were having and offering to aid in whatever way possible.

While the focus of this study was to understand the type of advising experienced within a student’s major, some advising experiences were so impactful for students that they mentioned them in the interview. For example, Marie, who experienced checklist advising within her major, has experienced a relational approach to advising beyond her faculty major advisor. Marie has a thesis advisor with whom she meets regularly, who is overseeing her undergraduate honors project. The research site for this project is based at a separate campus that Marie travels to a few times a week to conduct research and meet with her thesis advisor. Marie attributes the relational aspect of the interactions with her thesis advisor to familiarity. “I think it’s kind of given that my thesis advisor would [know me more personally] because we not only spend more time together, but we go on

fieldwork and do things that a major advisor would never do,” she explained. In this specific scenario, Marie believes that time spent together is key to developing a relationship between students and any type of advisor.

**Combination advising.** Combination advising describes an advising relationship based on the faculty advisor actively pursuing a working relationship with the student. This type of advising encompasses the checklist and relational approaches; there is a focus on the course requirements, but that focus is framed through an understanding of the student’s personal story. Additionally, in this type of advising, the advisor actively seeks out working with and communicating with the student as a part of the advising process.

Greg experienced a combination advising approach in the Neuroscience program. His advisor is a faculty member in Psychological Sciences who also serves as a faculty member and advisor in the interdisciplinary Neuroscience program. Greg said his faculty advisor has sought to understand his personal situation of having a wife living in another state, and this has aided in working together to form an academic plan. In Greg’s case, the advisor sought him out and offered to serve as his major advisor after hearing his interest in the program. “I can't even begin to tell you what a relief that was, to not have to find a major advisor, to just have her jump out and be so willing to help somebody that was a transfer,” he stated. Greg emphasized this occurrence throughout his interview, stating that having an advisor that was so willing to work with him and seek him out made the declaration process much easier than if he had navigated it alone. Greg also noted that his advisor was interested in how his personal life affected his studies, such as

how he and his wife were doing with the distance and how Greg would navigate applying to medical school in light of having a family.

As with relational advising, one student experienced proactive advising outside of their major. Daenaerys experienced combination advising outside of her major advising while working with Small University's pre-medical advisor. This advisor serves the population of students who wish to gain entry to medical school after graduating from Small University. In this role, the pre-medical advisor serves students from across campus disciplines in addition to advising those within their own department.

Daenaerys met the pre-medical advisor at a luncheon for transfer students, where she was seated at the same table as the advisor. At one point during the conversation, Daenaerys mentioned transferring back to the U.S. after spending a year in the U.K., and that she wished to apply to medical school after graduation. Upon hearing this, the pre-medical advisor immediately offered to work with Daenaerys and aid her in the process, explaining that transfer from abroad can make fulfilling the medical school requirements quite difficult. Daenaerys indicated the importance of the pre-medical advisor, saying that "there was a voice that was knowledgeable about pre-med that would respond promptly and was there with expertise in the area was very helpful." In our discussion, Daenaerys emphasized that having the pre-medical advisor offer to help before she could even ask and bringing such expertise to the relationship has been a very positive experience. She mentioned that her transfer process could have complicated matters with the medical school application process, but due to the involvement and proactive nature of this advisor, she feels confident about fulfilling the requirements and applying.

## Summary

The transfer experience encompasses more than the activity of students registering for classes and successfully graduating from the institution. As evidenced in the findings above, the transfer student process and story is complex and involves many activities and issues that can directly affect the experience and success that transfer students have at an institution. Transfer students work with advisors in order to chart a path through the institution. In the interview process, three types of advising were described by the participants. Nine of the 12 students experienced checklist advising in their major, with one of the nine being a double major. This type of advising is characterized by the students receiving a checklist of items to complete in order to graduate but were not provided with other supports or resources from their advisor. Four of the participants experienced relational advising within or outside of their major. In this type, the students felt supported and were in regular contact with the advisor. Finally, three individuals experienced a combination approach, which is characterized by a blending of checklist and relational advising. It is important to note that some participants experienced multiple advising experiences, due to double majoring or utilizing other advisors on campus.

In the case of Small University, transfer students seem to experience some academic struggles, but overall, they are able to bounce back from these after their initial time on campus. Additionally, most students do not seem to use their academic advisor as a support in this process, although some did note the importance of this relationship in their successful transfer. In general, most of the participants felt that there were clear issues that Small University could consider or improve in order to better serve transfer

students. The concerns that the participants expressed were not isolated to a single department or discipline, which suggests that these issues may extend beyond the STEM fields to the greater transfer student population.

## **CHAPTER 6: DISCUSSION**

Academic advising is an activity that all students in higher education encounter at some point during their educational career. This commonplace activity is characterized, at its base, by interactions between faculty members and students around charting an educational path. Even though it is a familiar, required activity, academic advising has the potential to influence students in remarkable ways. For example, Schriener (2010) indicated that academic advising carried out by faculty members can play a role in student perceptions of an institution and directly relates to student satisfaction and retention. Additionally, faculty advisors can play a role in directing a student's path at the institution and increasing student happiness while in higher education (Frost, 2003; Light, 2001). Clearly, advising serves an important function in students' college experiences.

Even though all students participate in academic advising, it is important that faculty and staff involved in the activities of advising are aware of the specialized populations within their institutions that may have different advising needs compared to traditional students who enter the institution during their freshman year and persist until graduation. Transfer students are one such population that could have additional needs beyond those of traditional student populations. Transfer students are defined as students who have attended multiple institutions in pursuit of an undergraduate degree (Binkley, 2015). Due to the rising cost of higher education, transfer student populations are

growing as students seek out lower cost options such as beginning their educational careers in community colleges and then transferring to a four-year university (SCHEV, 2016). Additionally, STEM transfer student populations are also increasing due to a greater focus on STEM careers in the U.S., and a corresponding greater demand for individuals with degrees in these fields (Moody, 2019; The White House, Office of the Press Secretary, 2015). Like other transfer students, more STEM students are utilizing transfer pathways to complete their degree. In fact, the National Science Board (2014) estimates that nearly 50% of all STEM graduates will transfer between institutions in pursuit of a degree. Thus, transfer students are a growing population at four-year institutions. Additionally, it is important to realize that native students may experience different graduation rates than transfer students, which was observed in 2017 at Small University. For the expected class of 2017, there was a four percent difference between native and transfer students, with native students graduating in higher numbers. This difference grew to a nine percent difference when looking at the six-year graduation rate.

As transfer student populations increase, four-year universities must seek to serve this new population of students, and academic advising can serve as a main connection point for students, increasing their satisfaction and retention (Schreiner, 2010). Pointedly, working with faculty advisors brings about positive outcomes for students in higher education (Lester et al., 2013; Light, 2001; NSSE, 2019). As transfer students enter into a new four-year institution, they face numerous barriers during the transition period, such as a decrease in academic performance and the navigation of a new institutional and social environment (Binkley, 2015; Chin-Newman & Shaw, 2013; Hills, 1965; Lester et al., 2013). These challenges make it increasingly important for

institutions to listen to students in this population and try to aid them through the transition time (Townsend, 2008). What remains unknown is how transfer students view the academic advising process and the influence that advising has on their transition into a new institution.

### **Purpose of the Study**

The purpose of this study was to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly-selective, public institution in the Mid-Atlantic Region, referred to here as Small University. I utilized a phenomenological case study to ascertain the ways in which STEM transfer students at Small University experience transition and the role that academic advising plays in a transfer student's transition process. In order to understand students' perceptions about this process, I interviewed both vertical and lateral transfer students, those who had entered the university from two-year institutions and four-year institutions, respectively.

The following research question was used in order to fully understand the transfer student experience and the role that academic advising plays in the transition process:

- How do junior and senior transfer students within STEM departments perceive the influence of academic advising on their transition to Small University?

Underlying questions of this research focus include:

1. What perceptions do transfer students have of their initial academic advising experiences during their first year on campus? How does this experience change over time?

2. How do transfer students in STEM departments perceive the influence of academic advising on their academic success at the new institution?
3. What practices do STEM transfer students perceive to be the most valuable in combatting transfer shock at the new institution?

### **Conceptual Framework**

In order to understand the transfer student experience, it is important to understand the transition process that occurs when a student enters into a new institution. Schlossberg's (2011) theory of transition explains the scenario of a student's life at the time of transition as well as their ability and resources to cope with the change. Within this theory, Schlossberg provided four *S*'s to denote each stage. The first stage is *Situation* and relates to the events and circumstances that are occurring within the individual's life at the time of transition. The second stage is *Self*, relating to the individual's ability to cope with change. The final two *S*'s used in the theory are *Supports* and *Strategies*. These two stages relate to the support system that an individual has in place during the transition and the strategies or tools that the individual may use to cope with transition (Schlossberg, 2011). Though this theory does not exclusively relate to the transition process of transfer students, it aids higher education practitioners, specifically academic advisors, as they work with transfer student populations.

Social constructivism outlines how individuals socially construct knowledge and reality through interactions with others (Bloomberg & Volpe, 2019). Within this study, I sought to understand the reality that transfer students experience based on their interactions with those at Small University, and specifically based on the exchanges that occurred with their major academic advisor, as explained in Figure 1 (Chapter 1). As

highlighted in this model, the interaction between the faculty advisor and the transfer student is central to the students' constructed knowledge and reality. This relationship is reciprocal, and the faculty advisor also participates in knowledge and reality construction as a result. Additionally, external influences affect both parties in the relationship. The faculty advisor and student bring socially constructed information from their backgrounds into the advising relationship and therefore affect the advising function through information they learned in previous experiences.

While the advising relationship is the key focus in this study, it is imperative to realize that transfer students encounter numerous individuals throughout their new institutions and that the interactions with many different people in many different roles can play a role in the reality and knowledge they construct. In this study, I sought to understand how STEM transfer students experienced the transfer process and socially constructed knowledge and reality through their interactions with others at the institution, and in particular with their faculty advisor. As this population of students continues to grow, it is imperative that practitioners in higher education seek to understand the hardships that transfer students face in order to best advise them as they navigate institutions on the path to earning a degree. By looking at the unique experiences of STEM transfer students at Small University, I attempted to find commonalities of experience and instances in which academic advising helped to mitigate negative outcomes in the transition process.

### **Background Literature**

Transfer students, as previously stated, are a growing population in higher education (SCHEV, 2016). Overall, an estimated 37% of all students will transfer during

their time pursuing a degree (Binkley, 2015), with an estimated 50% of STEM students transferring at least once (National Science Board, 2014). As students who have spent time in multiple settings of higher education enter into new academic homes, it is important for practitioners of advising to recognize that these students may have needs that differ from a traditional student population. Wang, Lee, and Prevost (2017), in their work on understanding the access that transfer students have to STEM, emphasize that for transfer student success, it is critical that academic advising play a role in the pathway to a degree. Additionally, transfer students may be older than a traditional student population, and therefore may have a different experience than students who enter college at 18 years old (NCES, 2002). Academic advising, while an activity that all students participate in, may be of even greater importance for transfer students because they must navigate degree requirements while also attempting to learn a new environment. As transfer students navigate a new environment of higher education, they may encounter various barriers (Mamiseishvili & Deggs, 2013) that academic advisors could aid in navigating.

**Transfer students.** Transfer students are defined as students who have spent time in multiple institutions during their path to completing an undergraduate degree (Binkley, 2015; Simone, 2014). While this population is increasing in higher education, the phenomenon of students transferring between institutions is not new. In the 1960s, *A Master Plan for Higher Education in California* (California State Department of Education, 1960) had the intention of clarifying the transfer process in light of a growing population. As California saw a higher rate of transfer at that time, it was important for state leaders to offer guidance on the somewhat new phenomenon of transfer (California

Competes, 2017). The importance of understanding the transfer process is still critical today, as many students transfer and many lose academic credits during the process (Leavitt, 2015). If higher education professionals seek to help transfer students, they must understand the reasoning behind transfer, the policies and procedures that apply to this population, and the methods of aiding transfer students in their transition.

As was seen in the 1960s in California, transfer rates have continued to increase over time. In 2008, an estimated one third of students transferred between institutions, and of this population, 45% transferred multiple times (Leavitt, 2015). In fact, instances of multiple transfer have increased to the point that it is now identified as a sub-phenomenon within transfer, known as “student swirl” (Borden, 2004; Selingo, 2015, para. 1). Some multiple-transfer students may be working to supplement courses from their home institution, while others may be seeking an academic home that suits their needs or may be using different institutions as stepping stones to transfer into their final desired academic home (McCormick, 2003). Another important reason contributing to transfer rates is the increased cost of higher education. Selingo (2015) explains that students are increasingly looking to decrease the cost of a degree and therefore are entering community colleges prior to transfer to a four-year university due to the cost savings. In the transfer process, it is also important to note that students sometimes transfer in pursuit of finding a campus culture that suits their needs (Tinto, 1975).

***Vertical transfer.*** Vertical transfer is defined as transfer that occurs from a two-year institution to a four-year institution (Townsend, 2001). This may occur after a student earns an associate degree, but this is not a defining factor of vertical transfer (Hossler et al., 2012). It is estimated that only 20% of students who vertically transfer

will earn an associate degree prior to transfer (Hossler et al., 2012). Those who do often earn more transfer credits at their new institution than their counterparts who do not earn degrees prior to transfer, but it has not been established that an associate degree is indicative of greater final success in earning a bachelor's degree (Turk, 2018).

Vertical transfer is becoming increasingly more common, because it allows students to save significantly on the cost of higher education. SCHEV (2016) reported that students who utilize a vertical transfer path after earning a degree at the community college level save on average \$14,000 on the cost of education. As the cost of higher education continues to increase, it is likely that this path will become increasingly more common.

***Lateral transfer.*** Lateral transfer is the path taken by students who transfer between institutions of the same nature. For example, lateral transfer may occur when a student transfers between two-year institutions or when a student transfers between four-year institutions (Bahr, 2009; Shapiro et al., 2015). This path is utilized less often than the vertical transfer path, and the vast majority of these students enroll at another four-year institution as opposed to transferring between two-year institutions (Shapiro et al., 2015). Another scenario in lateral transfer relates to students taking courses at multiple institutions simultaneously (Bahr, 2012). Students may take a course at a different institution while enrolled at their home institution in order to supplement their transcripts. This may be a student at a community college taking courses at a separate community college or a student at a four-year institution enrolling at a separate four-year institution or community college without moving their total enrollment to a new school.

Lateral transfer often occurs when a student is seeking an academic home that better suits their needs as a student. For example, lateral transfer may occur between two-year institutions if a student is moving from a rural area to an urban area. Often, there are more institutions in urban areas than in rural areas due to a higher level of education in urban areas as compared to rural areas (Bahr, 2012). Any type of lateral transfer may occur as students seek an institution that better suits their academic or personal needs (McCormick, 2003).

*STEM and transfer.* A research focus on transfer patterns in the STEM disciplines emerged as a result of the Obama Administration's call for increased activity in STEM education, and due to the growing demand for individuals skilled in these fields (Moody, 2019; The White House, Office of the Press Secretary, 2015). Additionally, a large percentage of those who earn STEM degrees transfer between institutions while completing a bachelor's degree (National Science Board, 2014). Due to the ever increasing nature of transfer for a multitude of reasons and the increased number of students seeking degrees in STEM, it is imperative that institutions make an effort to reach this population (Townsend, 2008). Academic advising represents one such way of utilizing university personnel to reach these students. STEM students, in order to be successful, should have "aspirational momentum" (Wang & Wickersham, 2019, p. 84), or a commitment to pursuing their goals in higher education, in order to be successful post-transfer. Advising has been noted as one practice that can serve to aid students in building aspirational momentum and therefore being successful in their transfer path to earn a STEM degree (Wang & Wickersham, 2019).

**Academic advising.** Academic advising is an activity that each student participates in after entering into an institution, whether as a traditional student or as a transfer student. This activity, which in this paper is framed as a faculty and student interaction, involves a faculty member aiding students by providing information and advice that is academic, social, or personally related (Kuhn, 2008). While advising is an activity that all undergraduate students participate in, they do not necessarily experience the same type of advising, even within a single institution. Below I outline the three main types of advising that are recognized in the literature on this topic.

***Prescriptive advising.*** Prescriptive advising, the most traditional of the three approaches (Crookston, 1994), is characterized by the faculty advisor providing a list of tasks and courses that the student should complete in order to successfully complete a degree at the institution (Drake, 2011). In this relationship, the student is provided with a prescription for what will provide the best results at the institution without considering any individual characteristics. This historically common type of advising is no longer thought to be the best practice in advising (Crookston, 1994; Drake, 2011). Currently in advising, practitioners are encouraged to use a developmental or proactive/intrusive approach due to the impersonal nature of prescriptive advising.

***Developmental advising.*** Developmental advising is a more recent model in which the student and the faculty member work as a team to determine the best course of action for the student's tenure in higher education (Crookston, 1994; Xyst, 2016). In this method, students and faculty members come together in a relationship that allows them to work together toward the common goal of ensuring student success at the institution (Crookston, 1994; Grites, 2013; Winston et al., 1982). Additionally, this type of advising

is characterized by the two individuals working in the sense-making process that students must go through as they navigate the academic and personal demands of higher education (Crookston, 1994; Xyst, 2016). Instead of looking at the student as only needing to complete a pre-determined list of items, developmental advising seeks to consider the entire person in order to best formulate a plan for the student's journey in higher education.

***Proactive/Intrusive advising.*** Proactive advising is a blend of prescriptive and developmental advising practices that seeks to be relational while also providing structure for the student during the advising process (Donaldson et al., 2016). This form of advising differs from the other two types in that the advisor intentionally leads the advising process in the attempt to ensure student success and student persistence (Varney, 2007). In this model, faculty members are charged with reaching out to students in order to check in on academic and personal matters through open communication (Varney, 2007). Proactive advising has been demonstrated to be more effective with minority groups and female students (Jeschke et al., 2001). This individualized approach to advising may also benefit transfer students, as it provides a stable working relationship for students in the midst of transition and ensures that the advisor is in continuous contact with the student (Glennen et al., 1985).

### **Methodology of Study**

This study was designed with the intent of understanding the transfer student experience and determining the impact that academic advising had on the individual students throughout their transition process. Using qualitative research, I sought to understand the participants in their academic setting and to understand their experiences

through the firsthand accounts they provided (Bloomberg & Volpe, 2019). The advantage to utilizing a qualitative approach for this study was the benefit of collecting information from the participants in their educational setting without the use of outside investigators or impersonal methods of data collection (Creswell, 2014).

**Phenomenological case study.** This study was completed as a phenomenological case study, as I sought to determine the lived experiences of the student participants throughout their transition into Small University (Mertens & Wilson, 2012). As Spickard (2017) emphasizes, it is imperative that the researcher in a phenomenological case study considers how “*the experience presents itself to their consciousness*” (p. 233, emphasis in the original). In order to allow for the students’ perceptions of transition to be fully expressed, interviews were utilized for this study. Open-ended interview questions provide the benefit of allowing participants to speak on the designated topic without the constraint of pre-conceived notions (Spickard, 2017). Because social constructivism, the guiding principle of this research, relates to understanding how individuals construct knowledge through social interactions, interviews also allowed the students to express their feelings and attitudes about the transition process and academic advising. By having the students provide direct accounts of their journey, I was able to view their statements in light of the greater context of the institution (Mertens & Wilson, 2012; Spickard, 2017; Yin, 1984).

**The case.** The case for this study was Small University, which is a small, highly selective, public university. This highly residential campus sits on 1,000 acres of land in a rural part of the Mid-Atlantic region. At this institution, transfer students represent a small proportion of the total undergraduate population. At Small University, all freshmen

and sophomore students are required to live on campus, but this does not necessarily apply to all transfer students who may enter after the first two years of study. Within the local region of Small University, there are quite a few community colleges that provide means of transfer for students. Additionally, the close proximity of one branch campus of a community college allows for some transfer students to understand the Small University climate and campus prior to transfer.

There are approximately 8,000 students at Small University from across the U.S. and its territories as well as from 60 different countries. Small University enrolls approximately 58% female and 42% male students, which aligns with the national averages for all institutions found in 2017 (Arbeit & Horn, 2017). In terms of the ethnic and racial makeup of the university, Small enrolls a majority White students (60%), with Hispanics accounting for the next largest population at 10%. Asian students make up 7.61% of the total population, African American students comprise 7.15%, and unknown race or multi-race make up 5% respectively. Finally, the smallest population at Small University are Pacific Islander/Hawaii Natives, which account for less than 0.1% of the total population. Over the past five years, a total of 500 students have been admitted as transfers. Of the in-state transfers, the majority enter Small University from two-year institutions, while the out-of-state transfers more commonly enter from four-year institutions.

For the purpose of this study, only students who had declared a STEM major were asked to participate. In order to be designated as STEM, a degree granting program must be granted a certain code by the state that designates it as such. Of the 40 total degree granting programs at Small University, seven are classified as STEM degree granting

programs: Biology, Chemistry, Computational and Applied Mathematics and Statistics (CAMS), Computer Science, Geology, Mathematics, Neurosciences, and Physics. Of these programs, CAMS and Neuroscience are interdisciplinary, meaning they are comprised of teaching faculty from across several departments at the university. In this study, six of the seven departments were represented; no participants from the Chemistry department were included, due to insider knowledge on the part of the researcher.

***Participant description.*** This study included 12 participants who had transferred to Small University and had declared a STEM major. These students were junior or senior students, aligning with the fact that these populations have declared a major since arriving at Small University. An email list for all current transfer students was obtained from the university registrar in order to distribute a survey for participant selection (Appendix A). This survey was used to collect self-reported demographic and major data in order to select participants. Once the survey data was collected, participants were determined using purposeful sampling (Merriam, 1998). Following the determination of this criteria, I selected participants who represented the STEM departments in proportion to the enrollment percentage by department of the total student population at Small University. Additionally, I selected a diverse group of students based on race/ethnicity, gender, and age, as conveyed in Table 1 (p. 61). A full listing of the participants and their demographic information can be found in Table 2 (p. 64).

***Data collection protocol.*** The first portion of data collection took place during the summer of 2019. I collected observational data at the university's Transfer Welcome Day. This event is held each summer in order to welcome incoming transfer students and to introduce them to the campus culture prior to entering in the following semester. At

this event, I was able to gain firsthand knowledge of the introduction that transfer students receive prior to enrolling at Small University.

I also reviewed information from the Small University website related to academic advising and transfer in order to provide background for the interview process. I reviewed each STEM department website in order to determine what information each degree program presents to students prior to the major declaration process. Additionally, I reviewed the Small University website to determine what information is provided to transfer students about the process of entering the institution. The website review and observation of the Transfer Student Welcome day, along with the interview data collected, served as a means of triangulation in my data collection.

Interviews were the main source of data collection for this project. In order to conduct this study as a phenomenology, interview questions were open-ended, allowing participants to freely express their unique experiences throughout the transfer process (Merriam, 1998; Smith, 2018). The interviews were conducted in two stages. In the first stage, the participants were asked general questions about transferring to Small University and were asked to provide examples relating to their transfer decisions and path since entering the institution. The second stage of the interview focused on the students' academic advising experiences since declaring a STEM major. The questions in this portion were more directed in order to allow for a clear understanding of how the student and their faculty advisor interacted at Small University. A full list of interview questions can be found in Appendix C.

**Coding.** After all interviews had been conducted and transcribed, Values coding (Saldaña, 2011) was applied to each transcript. Following this, each transcript was read

to ensure the accuracy of the interview and to formulate a summary that was then emailed to each participant for member checking (Creswell, 2014). Each participant also received a general statement that was created based on the overall themes observed in each interview.

Values coding, which is based on determining the values, beliefs, and attitudes expressed by participants around a designated topic (Saldaña, 2011), provided the basis for the coding process. Coding was conducted based on several emergent themes, including transfer shock and experience, academic advisor support, faculty support, familial support, student community support, reason for transfer, and orientation experience. The responses were grouped based on those themes and then coded to determine the expression of values, beliefs, and attitudes about the different themes. Finally, each interview was reviewed to determine whether the student experienced a checklist method of advising, a relational method of advising, or a combination of the two types, in line with the methods of advising outlined in the literature.

### **Findings Summary**

The findings of the study were grouped into two main categories: transfer experience and academic advising experience. The responses of each participant were transcribed and coded in order to determine the main themes that emerged and to find any commonalities between the experiences of different individuals. Below I provide a summary of the main topics and themes that were observed in the interview process.

**Transfer experience.** The transfer experience of each individual was a focus of the interview protocol (Appendix C) and therefore was a topic that each participant spoke on thoroughly. Across the participant group, it was evident that, while each has

experienced their own unique transition, many factors were similar since all participants had transferred to Small University and were earning STEM degrees. Themes that emerged included the feeling of being an outsider, difficulty in the transfer experience, and varying degrees of student community support and familial support. While all students had positive experiences, it was also evident that the transfer process was not without difficulty.

*Feeling like an outsider.* Throughout the interviews, each student spoke about their initial time on the Small University campus and how they acclimated to the new environment. Many of the participants expressed that they often felt like outsiders to the general student population during that initial period. Jeff, a senior in Computer Science, represents a typical expression of this feeling: “I don’t feel that much of a connection to the school.” He also explained that the campus had been quite challenging to enter due to the social climate he had encountered in the student body, even mentioning that he had friends who were transfer students who had left Small University due to the “social challenges” that exist. Greg, a junior in Neuroscience, also expressed that he had not immediately fit into the campus culture but attributed that to being older than most of the student population. He explained, “I’m sure I could connect with them, but I just think I’m in a different stage of life.” Similarly, James, a non-traditionally aged junior in Applied Mathematics, said, “I’m not here to make friends, I just need a high paying job and a nice degree.” This type of comment was quite common among the non-traditional students.

*Difficulty in the transfer experience.* In terms of the transfer experience and how this affected each individual academically and socially, it was clear that not every

participant had the same overall experience. For example, Micah, a senior in Mathematics and Computer Science, Samm, a senior in Neuroscience, and Jeff, all had negative experiences during their initial semester that they attributed to being placed in “transfer jail,” the nickname of the off-campus residence hall where transfer students are grouped by the residence life office on campus. The negative experiences of residence life indicate that the difficulties of transfer extend past the realm of academic affairs and into student affairs as well.

You’re already trying to fit in with a new place, and then you’re essentially living off campus. I know some people switched dorms to move on campus and some people left the school entirely. It was a really terrible dorm. [Jeff, senior, Computer Science]

While some participants who lived in on-campus residence halls did not have the same experience as those who lived in the aforementioned residence hall, Alice experienced the feeling of being an outsider while in a residence hall on campus. Alice, a senior in the CAMS program, spoke about the fact that transfer students are not part of the freshman dorm experience, something that she has continuously heard throughout her time at the university. “It seems like people really bond through their freshman year experience, and a lot of people have been here since freshman year and have friends from their freshman dorm, and that’s something I don’t have,” she explained.

Another common experience among the participants was that the academic rigor at Small University was quite challenging, even if the content is not necessarily harder. Rick, a junior in Computer Science, said, “It’s more work but not harder work.” Samantha, a junior in Physics, also expressed, “It’s been a bit of an adjustment with the

workload,” going on to share that her grades had taken a bit of a hit during her first semester at Small University.

Daenaerys, a junior in Biology, who transferred most of her major credits from a university in the U.K., explained that being allowed to register early had greatly aided in her acclimation to the academic rigor of the institution: “I was actually able to pre-register my first semester, and that made it a lot easier as a transition, as I was able to take some really awesome classes that usually fill up.” She shared that being able to take courses that were of interest to her made adjusting much easier. All of the other participants were not able to pre-register, and they expressed that this greatly impacted their initial time on campus. David, a senior in Biology, has had to enroll in additional summer semesters due to classes filling and due to the nature in which sequential courses are offered. Due to late registration, James was also unable to enroll in the courses he needed and therefore would have to pack his schedule with extremely difficult courses in order to graduate on time. Marie, a senior in Geology, had to add additional semesters at Small University because she was not able to take the classes she needed in order to graduate in two years. She also commented on the struggles that she experienced in trying to maintain her coursework and work: “finding time to work and pay tuition on the payment plan and then also study” has been a challenge. Of the 12 students in this study, four noted working during their time at Small University and one described working prior to entering the institution with the distinct goal of developing savings to cover the tuition costs of the institution.

***Student community and familial support.*** Each student commented on the support they have felt from other students and their families, beginning before they

entered, through orientation, and throughout their time at the institution. It is important to note that while many of the students in this study did feel some support at the institution, the majority also felt like an outsider in the aforementioned ways. In terms of student community support, some have felt that the orientation group they entered with was a great introduction to the university. Samm explained that the orientation groups and leaders offered a good support system as she entered, commenting, “we had a small group of people that were very friendly, and the orientation leaders were really nice and helpful.” Jeff, on the other hand, felt that the orientation experience was quite forced: “I think they thought that by putting us all together that we would bond over the shared experience of transfer, but I don’t think that was really enough.” The university, in the case of orientation and the housing assignments, which fall under the student affairs side of the university, seeks to bring transfer students together, but as noted by Jeff, this is not enough to combat the feeling of being an outsider. In some cases, the grouping of transfer students separate from traditional students seems to reinforce rather than alleviate this feeling for transfer students.

Other participants have found on-campus connections since transferring to the university. Micah is on the autism spectrum and said this can present challenges when trying to adjust to a new environment. They discussed that finding a social group had been instrumental in acclimating: “we have a neurodiversity group, so that’s been a good social group.” Sis, a junior in Biology, commented that while she is a non-traditional student, she has felt accepted by her peers in Biology: “the students I’ve come across are really accepting and really supportive,” a fact that she has enjoyed about the university. Marie made similar remarks about the Geology department: “it feels like a family

because everyone knows everyone and everyone's trying to support you in getting a job after you graduate or in completing your senior project." Across all of the participants, it seemed there was a greater sense of support within the major than during the time prior to declaring a major.

Familial support was not a main theme that emerged but was key in the transfer experience of a few participants. Greg, for instance, is married and therefore discussed how this has affected his timeline and living arrangements. He has had to live on campus because his wife is in Georgia attending dental school. When we discussed his timeline and the potential for staying an extra semester on campus, he said his wife "would not go for that," and that he needed to find the quickest route to a degree as a result. Marie mentioned that her mother was a graduate of the Small University School of Business; but instead of being an encouragement to her, she has experienced negative feedback from her mother. "She would fill my head with 'these people are uptight, and you just have to prepare yourself, they are not going to care about you,'" but this has not been Marie's experience in Geology. Overall, the participants were much more influenced by the support within the school than the support they received at home.

**Academic advising experience.** Academic advising was a second focus of this study. During the interview process, I sought to understand the type of advising that each participant experienced through the discussions of how he or she and their advisor worked together. An overwhelming majority of the students experienced what they described as a checklist type of advising in which the advisor provides a list of courses and tasks for the student. Reminiscent of prescriptive advising, Samm commented that her advising relationship was comprised of "going through the courses and figuring out

what we wanted to do.” Sis did not feel a need to see her advisor often due to the fact that “I know what I need to take for the next few semesters,” having determined the list with her advisor after declaring the major. Alice mentioned that she has met with her advisor but that the advisor had not “helped much with transitioning” into Small University; rather, the advisor had merely directed Alice to the required coursework. In line with prescriptive advising, Alice was given a path to follow but was not provided access to any additional resources to aid her through completing her degree. While she was able to determine the best order of classes from the checklist, Alice did indicate having to work through the petition process on her own due to the fact that her advisor was unaware of how to navigate the process for petitioning for transfer credit. Additionally, the interactions with the advisor were not centered around her as an individual student, which is apparent in the fact that she did not see the advisor playing a role in mitigating the stress of the transition process.

Two students experienced relational advising, which involved the advisor basing the academic advising process on the personal needs of the individual student. In this developmental approach, their advisors sought to understand who they were in order to best direct them at Small University. Micah, who actually has two separate advisors, explained that the Mathematics advisor sought to direct them based on personal characteristics rather than curriculum paths alone. Micah explained that their advisor knew them from a course during the initial semester and therefore knew their abilities in the subject matter. As a result, Micah’s advisor pushed them to go beyond their comfort zone. Micah explained that the advisor’s encouragement led them to take “classes that I’ve enjoyed the most that were not on the original list” of courses. Micah greatly

appreciated being pushed out of their comfort zone by their Mathematics advisor, who understood them and their abilities. Micah did not have this same experience with their Computer Science advisor who practiced checklist advising. Jeff also experienced a relational type of advising, commenting that having this type of advisor as a “consistent and stable adult presence” made a great impact on him as a student, even keeping him from dropping out of Small University during his difficult first semester.

Two students experienced a combination approach to advising that involved their advisors using checklists, but also seeking out the students in order to meet their specific needs. This involved the advisor making the first contact with the students after recognizing that they could be of assistance to the students on their academic journeys. Only one of these experiences occurred within the student’s major advising relationship. Greg’s advisor sought him out, offering to work with him after finding out that he was a transfer student who was looking to complete a Neuroscience degree in a limited timeframe. “She took me under her wing,” Greg explained, saying it was a great relief to not have to worry about finding an advisor that would work with him. He shared that his advisor is open to meeting anytime and has said, “if you ever want to come by and vent about the struggle” she would be happy to listen and help him overcome the difficulties he may be facing.

Daenaerys, alternatively, experienced the combination model of advising outside of her major in her workings with the pre-medical advisor at Small University. “She heard I had come from abroad and said we need to meet because you need to do all of these different things. She was super throughout the whole thing,” Daenaerys explained. The pre-medical advisor had sought her out at a luncheon to work with her and has been

instrumental in Daenaerys navigating the transfer path and the medical school application process. In both of these examples, the students spoke highly of their advisors, indicating that having an advisor who sought them out was instrumental in aiding them to success on campus. For Greg, his major advisor recognized that he would be in need of support as he entered with the goal of pursuing a degree and applying to medical school.

Daenaerys' advisor recognized the fact that entering from an institution in the U.K. and attempting to enter medical school would present a challenging pathway. In both cases, the advisor presented a list of courses to ensure that each student was on the correct academic path, but also acted based on knowledge of the students' unique pathway.

### **Discussion of Findings**

Transfer students are not a new population in higher education; however, they represent a growing proportion of students that may need additional help in order to navigate the environment of four-year universities. Institutions need to be aware of the transfer experience and what difficulties this path may present while also working to prepare practitioners within the institution to better serve this growing population.

Interest in transfer students has been continual since the mid-20th century, notably with transfer shock being a central topic (Hills, 1965) throughout the literature. The experiences that were described by the students in this study, in many ways, reflect the transfer shock phenomenon and recovery that has continually been documented.

However, the findings of this study suggest that transfer shock, as defined by Hills (1965) may be too limited of a definition. In this study, it was evident that while students experienced a decline in academic performance, they experienced difficulty in other realms of their transition. Recent studies also reinforce this concept by noting that

community college transfer students tend to face greater challenges and barriers as they enter four-year institutions due to the complex transition process between two different types of institutions (Wang, 2009). Collectively, previous research points to the fact that practitioners in higher education should pay close attention to the challenges that transfer student populations face in order to ease the transition and help improve initial academic performance post-transfer.

**Transfer experience.** Transfer student experiences can vary widely based on the individual, as the participants in this study demonstrate; however, it has been long documented that transfer student populations tend to struggle in the initial time after entering an institution and are in need of institutional support in order to be successful (Hills, 1965; R. N. Miller & Durham, 2014). Representing this initial adjustment scenario, Jeff, James, and Samantha struggled with the social climate and academic rigor of Small University. Yet, the literature that university personnel can be instrumental in alleviating some of the stress that transfer students experience in their initial time on campus (Berger & Maloney, 2003) highlights how advisors could play a role in easing the transition period (Schlossberg, 2011). Through understanding the four S's, advisors can approach advising transfer students from a viewpoint of looking at the ability of the student to cope with change and the supports and strategies that the student has to cope with barriers and challenges that they will face at a new institution (Schlossberg, 2011). By looking at the student's situation and self, the advisor can better tailor the advising experience and knowledge that is shared based on the needs of the individual student. It seemed that the prescriptive advisors were not looking at the four S's in the students they encountered, rather, the interactions as described by the participants reflect a practice of

merely ensuring that the degree requirements were achieved regardless of the identity of the student. This limited support did not consider the *Situation* or *Self* and the impact that these have on a student's journey through higher education. Instead, the interactions were transactional and impersonal.

It is also important to consider that the participants clearly stated that they encountered social barriers. Alice, for example, commented several times in the interview that she felt alienated by traditional students due to the fact that she had not been a part of the freshman experience. In light of the various social barriers that can exist on campus (Binkley, 2015; Chin-Newman & Shaw, 2013; Lester et al., 2013), it is imperative that practitioners be aware of the needs that transfer students have and the difficulties they face upon entering a new institution (Townsend, 2008). In the case of Small University, each student is required to meet with their advisor at least once to declare a major, making the advisor a connection point that should be utilized in aiding this population of students as they enter into a new environment. Many of the participants in this study found their major advisor prior to beginning courses or stayed with the pre-major advisor that was assigned to them upon entry to the university. This demonstrates that the major advisor is in the optimal position for most transfer students to serve as such a connection point to the university as a whole.

**Checklist advising practices.** Checklist advising was by far the most common type of advising relationship that the students in this study described experiencing. For example, Marie indicated not needing to meet with the advisor who provided a list of courses, citing "I can read the website and it will tell me the classes [needed]." This type of advising, described in the literature as prescriptive advising, is characterized by the

advisor providing a prescribed list of courses or actions without consideration of the individual students' needs (Crookston, 1994). This type of advising, while allowing for students to have a clear picture of exactly what is required to successfully complete a degree, is no longer considered a best practice in academic advising. Yet, as Marie's quote illustrates, some students seek out such lists online to determine their course schedule. While much of the necessary information is available via the institution's website, the participants did have concerns, such as timing of registration and classes or finding resources that could have been discussed with an involved advisor to determine the best resources or best courses of action. In this study, however, checklist advising was associated with a lack of discussion of items outside of the required coursework, leaving students to look for solutions and answers elsewhere.

Prescriptive advising also does not consider that different students may need to follow altered paths based on personality and personal circumstances, and therefore does not best serve student populations (Crookston, 1994; Drake, 2011). Additionally, as transfer students enter with a varying number of credits, it is important that the advisor pay attention to each student's personal stories and needs in order to best tailor an academic plan. For example, representing the need for individualization in advising in this study, Daenaerys entered from a U.K. institution with the majority of her major credits fulfilled, while Marie entered with fewer credits than expected. The diversity of student needs as found in this study underscores the problem with using a checklist, prescriptive advising approach. If Daenaerys and Marie are treated in the same advising manner, through a scripted list of courses, neither would be best served or positioned to make the most of their time at Small University. This clearly illustrates the downfall of

prescriptive or checklist advising, in that it is unable to meet the needs of transfer students due to the fact that it is characterized by a lack of individualized attention to student needs and their different starting points.

In the STEM fields, there are clear cut requirements for obtaining a degree and entering into the workforce or graduate school following graduation. For that reason, there must also be clear-cut requirements for students to follow. However, it is also important for practitioners to realize that there may still be some variation in paths based on each individual student. At Small University, the STEM disciplines lean toward reliance on prescriptive advising, which may not be the best method to serve their student transfer population. If advisors are to fully understand the transfer student experience and help this population through the challenges of transitioning between institutions, it is imperative that they frame the advising practice through the lens of the four *S*'s, particularly as advisors can act as a part of the student's support system as they enter the institution (Schlossberg, 2011). This frame would provide a background for seeing the student's current situation and self while also allowing the advisor to remain cognizant of coping mechanisms and strategies that could be useful in advising (Schlossberg, 2011). Prescriptive or checklist advising practices leave out this critical piece of advising and therefore does not best serve student populations, particularly those who are going through a transition process as they enter a new academic home.

**Developmental advising practices.** Developmental advising (Crookston, 1994; Xyst, 2016), the practice of seeking to understand the individual student and make recommendations for an academic path based on the student's needs, was much less commonly observed in this study. In the few instances in which participants discussed

advising strategies that were not checklist in orientation, they emphasized the role of relationships with advisors. The focus on building a relationship for the advising practice, or developmental advising, was described when advisors actively sought to understand the student and their individual story and needs in order to help them develop an effective academic plan (Grites, 2013; Winston et al., 1982). Because transfer students are not only seeking to complete a degree but are also attempting to learn a new academic environment, developmental advising methods are necessary. This type of advising is represented by advisors serving as mentors to the students rather than merely being a contact to establish a map of the course requirements (Freije, 2008).

Within this study, the small portion of students who experienced developmental advising reported positive outcomes as a result of their relationships with their advisors. For example, Jeff encountered serious difficulties in his coursework and in the social climate of the institution during his initial time on campus to the point that he contemplated dropping out of the institution. His advisor, who established a peer-to-peer connection with him early in their advising relationship, was able to meet with him and discuss what was occurring based on the relationship they had established. Interestingly, this was not a case of a similarity in age between the student and advisor, rather, developmental advising resulted in this instance due to an expressed desire by the faculty member to better know and understand Jeff as an individual rather than seeing him as another number in the majors of the department. As a result of his advisor emphasizing his *Supports* and *Situation* (Schlossberg, 2011) at Small University, Jeff is now on track to graduate from Small University in spring 2020. Micah also experienced a developmental approach to advising within the Mathematics program. In this case,

Micah was experiencing mental health difficulties that were interfering with their coursework. Micah's advisor, who had initially pushed them to take more challenging courses due to a good understanding of Micah's *Self* and *Situation* (Schlossberg, 2011), was able to connect with Micah about the challenges and encourage Micah in the midst of the struggle. Due to this, Micah was able to be successful in the course and will also complete a Mathematics degree a semester early, graduating in January of 2020. Micah indicated that having an advisor that not only pushed them to take more challenging courses due to their ability to succeed, but also who was willing to work with them in the midst of mental health issues, was instrumental in ensuring their success at Small University. Having a strong relationship with an advisor provides support during the student's transition (Schlossberg, 2011).

In light of the academic and social difficulties that transfer students face, paired with the additional demands that a STEM degree can present, it is imperative that advisors work with students in order to create a personalized academic plan. Through the practices of developmental advising, characterized by the advisor seeking to know the student and work in a partnership rather than a hierarchy (Crookston, 1994; Xyst, 2016), advisors can better assist this population of students to being successful in earning degrees. While observed infrequently across the 12 participants, those who experienced developmental advising noted that the advisor made a positive impact on their time at Small University, and also ensured that they persisted through academic difficulties in the initial semesters on campus. Through a clear understanding of each student's self and situation, the advisors were able to work with students as a support and enabled the

students to use effective strategies to persist and succeed at Small University (Schlossberg, 2011).

**Combination advising practices.** Only two participants in this study experienced a combination advising approach that included the advisor assuring that the student took the required courses in the program, understanding their particular needs, and providing access to opportunities. Only a single participant noted receiving this more proactive form of advising within the major advising relationship. Combination advising is characterized by the advisor not only striving to know the individual student and understand their needs, but by the advisor checking in with the student and ensuring that they are following a correct path towards a degree. In the literature, this form of combined advising approach is coined proactive or intrusive advising (Donaldson et al., 2016). In proactive advising, the advisor is charged with making intentional contact with the students, as Daenaerys and Greg both experienced in this study. This crucial component of proactive advising aligns with the four S's (Schlossberg, 2011) in that the advisor is actively seeking out the student to understand their situation and self, prior to delving into the practices of advising through intentional contact. As the population for this study were all STEM students who are faced with the demands of ordered curriculum and, in many cases, graduate or professional school applications, proactive advising would have been a beneficial experience for them. Had more of the participants experienced proactive advising, they may have seen more positive outcomes earlier in their academic careers at Small University. All of the participants are currently doing well, but the question remains as to whether the challenges they described could have been lessened through a proactive advising approach. In this approach, the advisor takes

an active role in directing the student on his or her academic pathway. This approach relies on the advisor being attuned to the student's progress (Glennen et al., 1985; Varney, 2007). This method, while less commonly observed in this study, has been effective in aiding students that may not be successful otherwise. For example, it has been demonstrated that proactive advising can be more effective with minority populations and women, an important consideration due to the fact that transfer populations are often first generation students, who are more likely to be from minority groups (McGuire & Belcheir, 2013). Due to the increased challenges that transfer status can face, a proactive approach may be the best option for this group of students.

While it has been documented in the literature that women and minorities excel in a proactive advising model (Glennen et al., 1985), this study was unable to fully support or deny that claim due to the fact that only one white female student reported experiencing a proactive advising approach. What remains unknown is whether the female and minority students who experienced prescriptive or developmental advising would benefit from a proactive approach. It has been documented that minority groups in particular face higher levels of psychological and personal stress in higher education (Glennen et al., 1985), therefore having an advisor that seeks out a minority student in order to understand the self and situation of the student as a means of providing support and strategies for success may increase positive outcomes (Schlossberg, 2011).

Another noteworthy finding in this study is the fact that many students expressed that they most often seek out information from the university's website rather than asking an advisor. In some cases, this led to confusion, such as for Alice who found the petition for credit process confusing and complex. Without the aid of proactive advising, students

are left to their own to figure out the process. Even though Alice's advisor attempted to help her through the process, she was unable to answer certain questions about the process. Had the advisor been operating under a proactive model, utilizing Schlossberg's (2011) emphasis of *Situation*, she may have been able to aid Alice through the process and may have been able to connect her to resources on campus that could have aided her through the petition process. Had the advisor sought to understand the implications of Alice coming from an international institution and a community college prior to transfer into Small University, she may have been better equipped to aid in the petition process. Alice is one example of many that were given in this study in which students were left to navigate institutional processes without the support of their faculty advisor. Had the advisors utilized a proactive approach, characterized by the advisor contacting the students regularly to check in, the students may have felt better supported. While the students in this study have been successful in navigating the transition into Small University, many voiced that they knew transfer students who had not been as successful, which demonstrates that advising may be linked to student success and positive outcomes in higher education. Perhaps, if transfer student populations were advised in a proactive manner, more students would persist at institutions rather than entering and exiting within a brief time period.

### **Conceptual Model for Academic Advising**

Academic advising is a foundational practice in higher education that all students participate in during their time at an institution. For that reason, advisors should be better prepared to work with students, regardless of whether they are traditional or transfer. At Small University, a website review revealed little evidence of training provided to

advisors in how to approach the advising relationship. In fact, the advising information available online for pre-major and major advisors is limited to explanations of how advising is structured and the requirements for degrees. It seems that advisors are not offered resources or training on the different models of advising or the benefits that each present for students.

Based on the experiences of the transfer STEM students in this study, I propose an improved advising process for Small University to serve students better. The experiences related by the participants highlights areas in which advising helped them, and also areas in which gaps were experienced and could be improved (Figure 2).

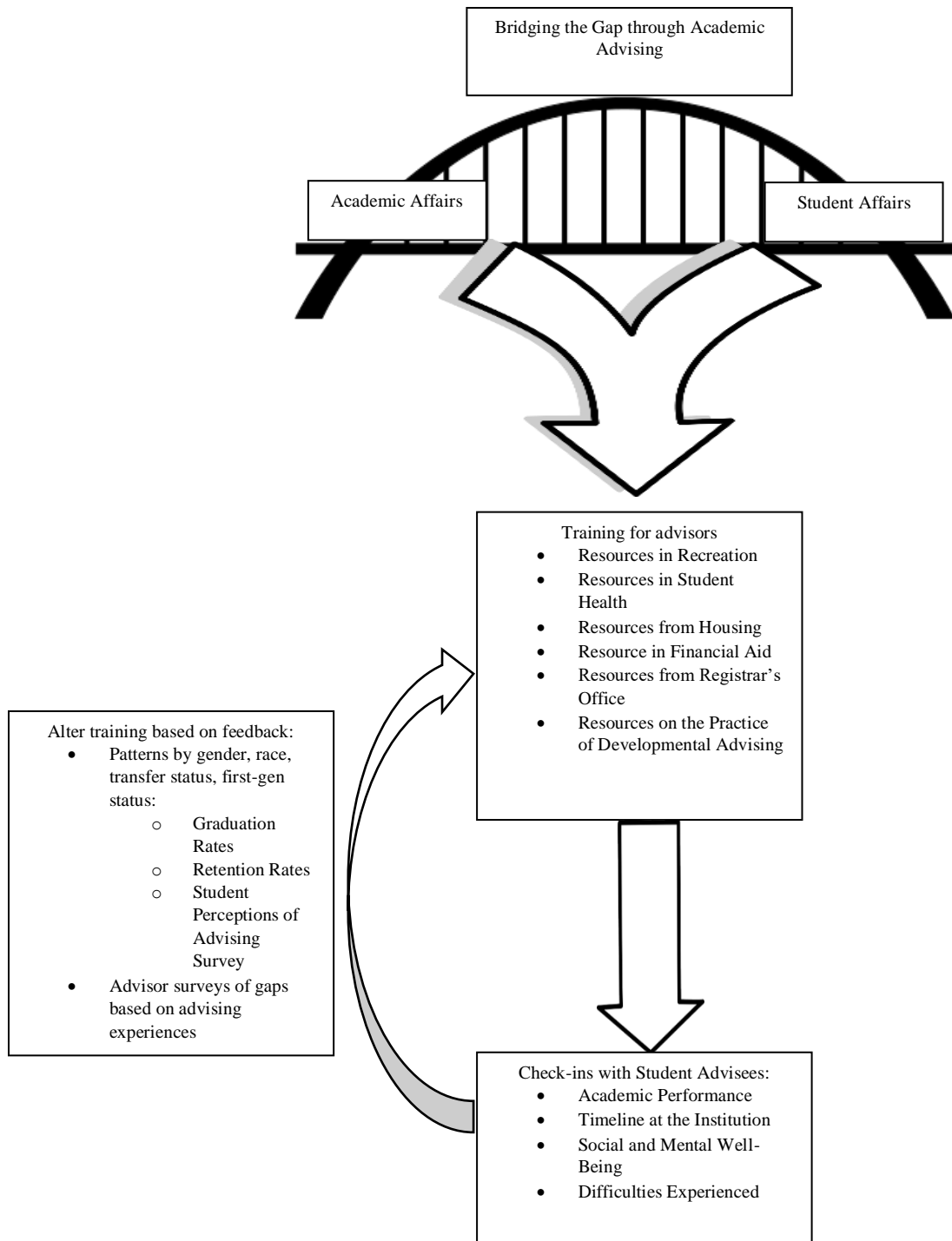


Figure 2. A model for academic advising.

I propose that the academic branches of the university and the student affairs office should work to bridge the gap that often exists between the two parts of the university. Kezar (2002) has demonstrated that a collaborative effort between academic

affairs and student affairs can be achieved through a shared vision for the organization. Interestingly, Small University has recently adopted new vision, mission, and values statements, providing a new rallying point for the two areas of campus to unite under, including an emphasis on providing an atmosphere on campus in which all feel as if they belong. In this study, participants noted that they had experienced difficulties related to their academic endeavors, but also with items outside of the classroom. Not only is the student affairs side responsible for aspects such as housing, they also include the departments with mental health resources, something the transfer students in this study mentioned a need for several times. Through a collaborative effort, utilizing the common language in the mission, vision, and values, academic affairs and student affairs could come together in order to better serve transfer student populations.

A key piece of this model that comes from the bridge between academic affairs and student affairs is the fact that both sides of the university should be involved in training faculty advisors. The Small University website does not show evidence of advisors receiving training on critical aspects of advising students. In fact, through my conversations with students, it was quite evident that the advisors are utilizing a checklist form of advising that is prescriptive. Most likely this approach is used in practice because the advisors are unaware of other methods that may be more effective in aiding students and due to the fact that in the STEM disciplines, there are typically clear cut course orderings that students must follow to be successful. The experiences of the participants in this study, however, demonstrate that the students who experienced a developmental or proactive approach felt more supported in their transition into the institution and in completing their degree requirements. Within the training proposed in

this model, advisors would learn about the different methods of advising, including the importance of developing relationships with students by engaging them in the advising sessions. When advisors engage with students, they become more attuned to student needs and can then become more proactive with their advice. Understanding campus resources is important so that advisors can refer students to other offices or areas based on needs. For example, financial aid was a concern for a few of the participants in this study, but each student also expressed that their advisor was unaware of the resources that exist. By training advisors on such matters, they would be able to point students to the resources on campus or offer advice on who may be able to aid the students in finding answers to issues.

Within this model, certain actions or requirements may present challenges to its adoption. A barrier that may exist in this training model is that faculty may not view this type of activity as part of their job descriptions. While tenured faculty are able to focus time outside of research and teaching, pre-tenure faculty members could see this as a hindrance to focusing on items that are necessary to achieve tenure. As advising is an additional role outside of teaching and scholarship, it may not hold the same importance for faculty members as other endeavors. Important in this case, however, is the fact that Small University prides itself on providing an excellent education with a high amount of faculty-student interaction inside and outside of the classroom. If this is to be a true claim of the institution, faculty at all levels must recognize the importance of guiding students through their time at the institution as opposed to advising through prescriptive methods, which are not tailored to meet student needs.

Another key component of this model is the advisor-student check-ins that should occur on a regular basis. Many of the participants in this study felt little need to meet with their advisor, often expressing that they could just as easily read the website on their own. Currently, students do not see the importance of meeting with an advisor, as they are able to obtain the needed information online. The value of an established relationship between the advisor and student is seen in the comments of students who have experienced developmental or proactive advising. The participants who were advised in these manners were clearly impacted positively through the experience and were able to navigate negative experiences with the help of the advisor, leading to a more positive outlook on advising than their counterparts who only experienced prescriptive methods. Within this model, the advisors and students would be expected to meet regularly to monitor the students' progress. Regular advisor meetings contribute to building relationships with student advisees and helps advisors better understand what students need to develop the best strategy for their academic pathway. A step beyond this relationship building base would be advisors being more proactive. Even though advisors would have the freedom to choose which method of advising they would like to utilize, based on the training they receive, check-ins should be part of the academic plan in order to ensure that students are effectively working toward their degrees. Currently, however, advisors are not equipped with the information that would allow them to utilize different methods of advising.

Feedback to the administrators, in the form of institutional data as well as student and faculty perceptions, is also essential within this model, as feedback allows for improvement in the process. In the model, I propose that several different factors be

considered in the feedback that is utilized to improve the advising process. This information should be utilized by the Office of Academic Advising in order to disseminate the information to faculty across campus, as this office has access to faculty in all disciplines at Small University. Data related to student success should be considered in this model, as this can aid the institution in determining the role that advising is playing in retention and graduation rates. This data should be considered based on the model of advising that advisors choose to use in working with students. For example, if data were collected comparing student GPAs across advisors who utilized different advising practices, then the institution would be able to empirically demonstrate which type of advising is most effective. This data should also be separated by gender, race, transfer status, and first generation status based on the literature that has demonstrated that different populations prefer different methods of advising (DeLaRosby, 2017). Interestingly, in this study, students tended to choose advisors based on familiarity rather than on gender, race, or advising practice, but, as the majority of advisors seem to be utilizing a prescriptive approach, students may not see one advisor's practices as superior to another. If one group seems to demonstrate higher retention, graduation rates, or report increased satisfaction from a certain model of advising, the training should then be modified to train advisors in the most effective practices by group. Advisors would then be tasked with implementing the correct model based on the qualitative information and student perception data and would be tasked with reporting the practices utilized and providing a report of how the advising processes were occurring in a practical setting. Additionally, students could also be contacted through a university survey to solicit information about the perception of advising after changes had been

implemented. The feedback from students and faculty could then be taken into consideration each year to improve advising throughout the university.

In addition to collecting student data, the perceptions and findings of the advisors should also be considered in the feedback loop for improving advising. Even though data are key in determining effectiveness, the perceptions and experiences of advisors who are actively working with students should also be considered in improving the advising process. Advisors are working with students directly and therefore will be best positioned to provide feedback on the effectiveness of one method of advising over another. Documentation of the advising activities, including what practices were included in individual advising sessions, would be required to effectively understand the type of advising in use. This could be a collection of emails sent to students, a memo of the items covered in an advising meeting, or the frequency of contact between the advisor and student. Additionally, advisors are separated by academic discipline, meaning they are best positioned to comment on what technique of advising works best for a specific discipline.

### **Implications for Practice**

Overall, this proposed method for more proactive academic advising can apply to all populations of students. I argue that changing advising to align with this model would be instrumental in ensuring success in transfer student populations. Transfer students enter a new institution and are expected to quickly understand the culture of their new educational environment, and they are also expected to maintain their academic performance in the midst of this major change. In practice, advising via a developmental or proactive approach should be seen in community college and four-year institutions, as

all institutions of higher education should seek to advise individuals rather than generalizing the experience across large student populations. Additionally, when considering transfer, all institutions that can be a starting point for students should consider their advising practices. As community colleges and four-year institutions can be the origin institution for a transfer student, they should seek to understand the reasoning for transfer and help to prepare the student for the new academic environment. Proper training in the methods of advising would allow for students to be better equipped for transfer and for successful degree completion. If this model were applied to transfer student advising, transfer students may be able to connect with resources on campus more easily through the direction of their advisors. Additionally, if the potential advisors could be made available to the transfer student in the months prior to entering, the links to different resources could be made available prior to the first week of class, a time which can be quite overwhelming to students. In general, I propose that advisors who are trained in the different methods of advising and who are educated on the different resources on campus could better aid transfer students in navigating the new educational environment and therefore help those students be more successful through their transition process.

Small University is known to be a highly selective institution with a high level of academic rigor that can be tricky for transfer students to navigate during their initial time on campus. In order to better serve the transfer student population, advisors should be educated in *how* to approach transfer students and what this population commonly needs to be successful. The participants in this study indicated feeling like an outsider, being overwhelmed by the demands of the institution, and experiencing difficulties due to the

registration system during their initial semester, regardless of being lateral or vertical transfers. The items that the participants struggled with during their initial time on campus are not limited to the concerns of academic affairs or student affairs, but rather, indicate difficulties in both areas of Small University. The Office of Academic Advising, along with Student Affairs, is perfectly positioned to provide training to advisors in order to equip them with the tools they need to better serve transfer students. Faculty advisors, likewise, must be committed to improving the advising culture, particularly for transfer students, in order to improve the transition experienced by this population. It also is imperative that students understand that they too should expect personalization of the advising experience. In this study, it was quite clear that students followed the lead of the faculty advisor, but in all actuality, they should advocate for their needs. Perhaps orientation should include an introduction to academic advising and prepare students for what they can expect from the relationship. As developmental and proactive advising are relationship centered, both the student and the advisor should hold some responsibility in the experience, but those who do not know that this type of advising exists may not pursue it. By educating faculty and students, institutions could recreate the academic advising culture into one that is built on mutual respect and trust and that truly seeks to foster student success.

At an institutional level, Small University could utilize the lessons regarding academic advising in this study to carry out the implementation of a policy related to faculty academic advising practices. It appeared that faculty advisors at Small University have the freedom to choose the number of advisees that they work with in their department. This could lead to uneven loads of advisees amongst faculty members,

causing students to experience different forms of advising based on the time that each faculty member is able to dedicate to the process. The institution, in an attempt to equalize the students' experience of major advising, could implement a policy that provides a range for the number of students each faculty member should advise. This, along with the training that was previously recommended, could serve to level the field in terms of advising load and ensure that each faculty has sufficient time to work with each student while implementing the practices from the advisor training.

### **Future Research**

The research presented in this study pertains to Small University and its specific transfer population. There are, however, general items that could be further investigated to better understand transfer student advising and to improve the transition period for transfer students. First, studies to understand the faculty perceptions of advising, particularly transfer student advising, could help institutions better understand the supports that faculty members need in order to successfully aid students toward success. Additionally, similar research could be conducted with other specialized populations, such as first generation students. First generation students often lack the familial support compared to traditional students due to the fact that they do not have family who can help them navigate higher education based on prior experience, leading to difficulties in being successful throughout their time at the institution. A similar study with first generation students could shed light on the best practices that should be used to serve this population. Finally, longitudinal research of pre-advising experiences as a transfer student's original institution as well as their experiences at their final institution could shed light on how all academic advising practices during their educational career play a

role in persistence and success. Quantitative data could also be included to reflect the academic progress of the students as a way of correlating academic results to the practice of advising.

In general, advising is central to ensuring student success, but it often is not treated as critical at institutions. Studies to improve the general and specialized practices of advising will be instrumental in improving the field of academic advising and therefore improving student success in higher education.

## **Conclusion**

Academic advising is an activity that all students will participate in during their tenure in higher education, and as such, it represents an opportunity for institutions to connect with and impact individual students. This research sought to understand better the experiences of junior and senior transfer students in STEM at a four-year university. The participants indicated that they did experience difficulties during their initial time on campus, however, all of the students who had been on campus for multiple semesters did report that they were able to adjust to the campus in order to continue to pursue their degrees. The majority of the participants experienced prescriptive advising within their STEM major, leading to the students finding supports and resources on their own. The students in this study who experienced developmental and proactive advising were more impacted by the experience and indicated that it did ease their transition into the institution. It seemed that having an advisor who seeks to connect with students and who is knowledgeable about campus resources and about navigating the processes and requirements of the university was desired by the participants. Again, those who had the

benefit of a developmental or proactive approach seemed to experience an easier transition due to the available support and direction to resources.

Imperative in the practice of academic advising is the recognition that not all students are identical, and as such, should receive advising that is personalized to them as opposed to a generalized experience across all students. Transfer students, additionally, have increased challenges compared to their traditional student counterparts and could greatly benefit from a tailored advising experience that seeks to meet their specific educational needs. At Small University, transfer students typically face an increased academic rigor when compared to their pre-transfer institution along with a new social culture that they must navigate. The challenges that transfer students face would be more easily handled if resources were provided to the students by advisors who are educated in the services that the specific institution has to offer. All institutions have their own unique culture that faculty must be educated in so that they can better serve their students, transfer and traditional.

In this study, I sought to understand how advising plays a role in the transition process of STEM transfer students. STEM students, in general, face great academic demands because the curriculum is sequential and builds upon itself. As students transfer to an institution, they are faced with having to follow a pre-determined order of classes that may not be easily taken because they have entered the institution at a later point. Additionally, challenges of late registration and a difference in the introductory language can present barriers to academic success. As this population faces the challenges of STEM and the challenges of entering a new academic home, they would benefit from an advising experience that is directed toward meeting their individual needs. In this study,

the students experienced a decline in academic performance and some difficulties transitioning into the social atmosphere of the campus. Having an involved advisor who is educated in the resources of the campus and who is interested in knowing the student beyond providing a checklist of classes could lead to an easier adjustment for transfer students. If an institution can bridge the gap between academic affairs and student affairs in order to equip advisors with information and resources that this population needs upon entry, transfer students may be better positioned to succeed earlier in their academic career post-transfer and may experience fewer negative outcomes in the early stages of transition.

## Appendix A

### Survey Questions for Participant Interest and Selection

#### **Purpose of the Study**

The purpose of this study is to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly-selective, public institution in the Mid-Atlantic Region.

#### **Participation**

Participation in this survey is completely voluntary and participants may exit the survey at any point.

1. Are you willing to participate in this study, which requires a face-to-face interview? Selecting yes will direct you to complete the remainder of the survey, which includes demographic questions for use in sample selection. Not all students who volunteer will be selected.
  - a. Yes
  - b. No
2. Please identify your gender:
  - a. Male
  - b. Female
  - c. Non-Binary
  - d. Prefer not to say
3. Please indicate your graduating class:
  - a. Freshman (Class of 2023)
  - b. Sophomore (Class of 2022)
  - c. Junior (Class of 2021)
  - d. Senior (Class of 2020)
4. Please indicate your racial or ethnic background:
  - a. White
  - b. Black
  - c. Asian
  - d. Native American
  - e. Latinx

- f. Other: \_\_\_\_\_
  - g. Prefer not to say
5. Which category below indicates your age?
- a. 18-22
  - b. 23-29
  - c. 30-39
  - d. 40-49
  - e. 50 or older
6. Please choose your previous institution(s) or educational experience. Choose all that apply.
- a. Dual Enrollment
  - b. Community College
  - c. For-Profit College
  - d. Junior College
  - e. Four-Year University
7. Please indicate your current major.
8. Have you officially declared the major indicated in the previous question with the University Registrar?
- a. Yes
  - b. No
9. The final sample for this study will include approximately 12 participants. The face-to-face interview will take approximately 60 minutes and will be scheduled at a time convenient for you. Please indicate the best email for contact to arrange for your interview:
- a. Email\_\_\_\_\_

## **Appendix B**

### **Research Participant Consent Form**

Understanding the Perceptions of Academic Advising  
Held by Junior and Senior Transfer Students in STEM Departments

#### **Purpose of the Study**

The purpose of this study is to understand the perceptions of academic advising held by junior and senior transfer students who have declared a major within the STEM programs at a small, highly-selective, public institution in the Mid-Atlantic Region.

#### **Importance of the Study**

As there is an increased call for STEM degrees in the Commonwealth of Virginia, this research will help shed light on the practice of academic advising that all transfer students experience. Academic advising often serves as a student's main connection to the greater campus community and, as such, is a vital component of the educational pathway. By understanding these students' feelings and perceptions about this process, we can better understand ways to aid STEM students toward a successful outcome at the institution.

#### **Procedure**

As a participant in this study, I request from you:

- Participation in an audio-recorded face-to-face interview in which I will ask you to describe your feelings and perceptions about the academic advising process.
- The option of having a follow-up interview if necessary to collect more information.

#### **Risks**

There are no known risks associated with participation in this study.

#### **Confidentiality**

Please be aware that:

- Your participation in this research project is confidential to the maximum extent allowed by law.
- Your name and identifying information will only be known to the researchers through the information you provide. You will be given the opportunity to select a pseudonym to be used in all research presentations or publications.
- You may refuse to answer any question asked during the face-to-face interview. Additionally, you may terminate your participation in the research project at any time. No penalties will result from either action.
- Participation in this research project is completely voluntary.
- A summary of the content of your interview will be sent to you to verify your responses via email. At that time, you may clarify or add to your responses.

**Contact Information**

Any questions regarding this research project should be directed to Ashleigh E. Queen aeverhardt@email.wm.edu at The College of William & Mary located in Williamsburg, Virginia. Any additional questions or concerns regarding your rights as a participant should be directed (anonymously if desired) to Dr. Tom Ward at 757-221-2358 EDIRC-L@wm.edu or Dr. Pamela Eddy at 757-221-2349 peddy@wm.edu.

By checking the *I agree to participate* option below and signing and dating this form, you are affirming your voluntary agreement to participate in this research and that you are at least 18 years of age.

\_\_\_\_\_ I agree to participate.

\_\_\_\_\_ I do not agree to participate.

Participant Printed Name: \_\_\_\_\_

Participant Signature: \_\_\_\_\_ Date:

\_\_\_\_\_

Researcher Signature: \_\_\_\_\_ Date:

\_\_\_\_\_

*Please keep a copy of this document for your records.*

## **Appendix C**

### **Interview Questions**

#### **Phase 1 – Phenomenological Questions**

1. Describe to me your experience at Small University so far.
  - a. Possible probes (additional details will be requested as needed):
    - i. What stands out to you about your experience?
    - ii. Can you describe a few examples of your experiences?
    - iii. What were aware during the experience?
2. Describe to me the experience of deciding to transfer to Small University.
  - a. Possible probes (additional details will be requested as needed):
    - i. What were you aware of during that time?
    - ii. Can you describe a few examples of your process?
3. Describe your experience of being in a STEM department at Small University.
  - a. Possible probes (additional details will be requested as needed):
    - i. Can you describe a few examples of your experiences?
    - ii. What have you been aware of in your time within a STEM department?

#### **Phase 2: Advising Centered Question**

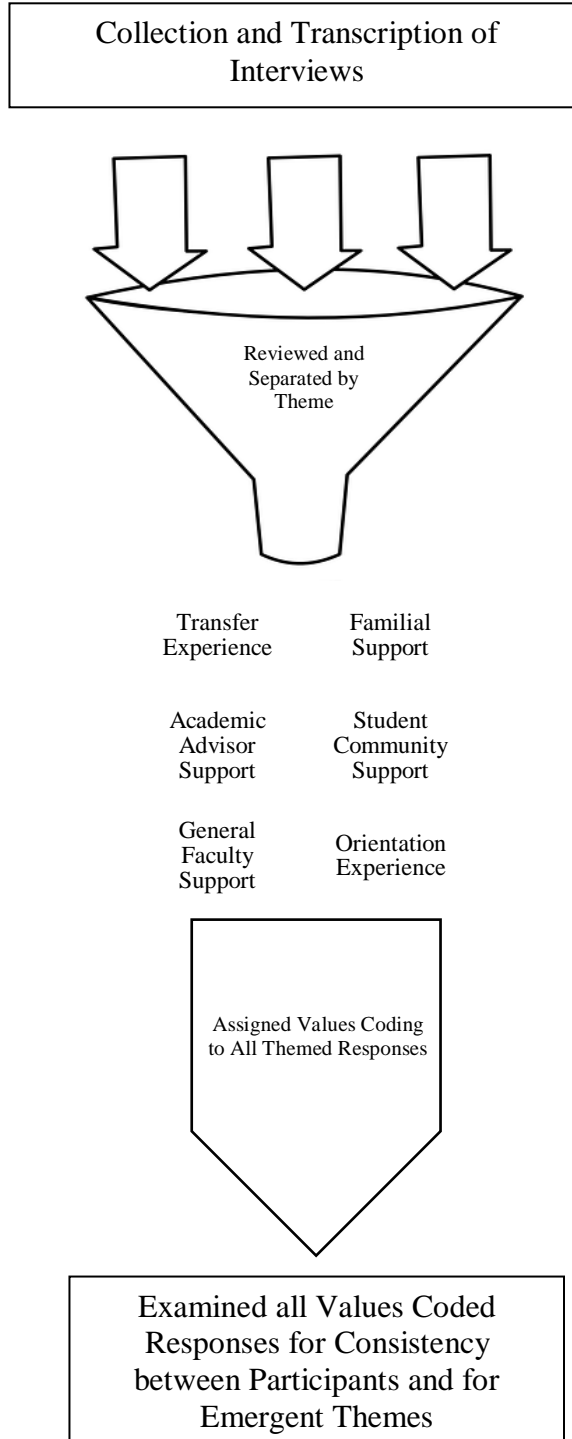
4. How did you learn about academic advising when you transferred to this university?
  - a. What type of information on advising was shared during the transfer orientation?
  - b. What type of information on advising did you receive via email/mail?

- c. What did you anticipate based on what your other institution (CC or 4-year) advisor might have prepared you for?
5. How did/do you and your advisor communicate?
  - a. How often did this occur?
  - b. Describe the various forms of communication, and how they may have changed over time.
6. Describe the first meeting with your academic advisor.
  - a. What type of information was shared?
  - b. How much of this information did you know before this meeting?
  - c. What type of questions did you have for this first meeting?
  - d. What do you wish was reviewed in your first meeting?
  - e. In this initial meeting, did you discuss your goals post-Small University?
7. In what ways did your academic advisor attempt to get to know you and understand your story?
  - a. Can you give me an example or two about this?
  - b. How has this story sharing evolved over the time you have worked with your advisor?
8. Describe for me your initial time on campus post transfer.
  - a. In what ways did you feel connected to the campus community?
  - b. Were there items that you felt prevented connecting to the campus community?
9. What items or experiences were you able to discuss with your advisor that helped your transition to the university?

- a. What items or experiences do you think were left out of the academic advising relationship?
  - b. What were some of the positive outcomes?
10. What experiences or discussions with your academic advisor, if any, aided you in successfully declaring your major?
- a. Did you have a choice of major advisor within your program?
  - b. What types of conversations, if any, did you have with your advisor prior to declaring your major?
  - c. Describe how these conversations have changed the longer you have been in your major.
11. How did your academic advisor best aid you in successfully transferring to the university?
12. If given the opportunity, what suggestions would you make about the transfer student advising process at Small University?
13. As I am trying to understand the experiences of transfer students and the advising function, is there anything I have missed that you want to share that will help me understand this experience better?

## Appendix D

### Method of Interview Response Coding



## Appendix E

### Transfer Student Essence Statement

Transfer students are defined as those who have attended one institution prior to entering into their current institution. Some students transfer vertically (from a two-year institution to a four-year institution), whereas others transfer laterally (between institutions of the same nature, e.g., a four-year university to a four-year university). Regardless of the path taken to their academic home, transfer students share one item in common: they are entering a new environment after learning the culture at one or multiple other institutions. Through interviews with transfer students, students have shared their experiences of coming into a new academic institution and working towards building a path to a four-year degree. These students' journeys have been marked by some difficulties that tend to be associated with the overall transfer process.

At Small University, transfer students most often enter the institution during the fall, beginning with student orientation that occurs in August. Additionally, students also attend a Welcome Day in July to help them navigate the new educational environment they are about to enter. During orientation, transfer students are placed in groups and participate in a range of activities. Many of the students I spoke with indicated that this was ideal in that they were able to meet people immediately upon entering the institution who also understood the transition process, and did not feel that they received this during the orientation. Students recommended a diversifying of the orientation groups, a greater focus on items such as financial aid, and an increased focus on activities that cater to those outside of the 18-22 age range and those who live on campus in order to improve transfer orientation.

When asked about their experience with their major academic advisor, students had mixed perspectives regarding the role of the advisor. Some indicated that they have a close relationship with their advisor, viewing them as a mentor, while others mentioned that they felt confident in completing their coursework without the continuous involvement of their advisor. In the cases of a less involved academic advising relationship, students indicated that they felt able to navigate the curriculum and therefore did not need to connect with their advisor as often. Some of the students that I spoke with were grateful for their advisor, as they saw this as someone whom they could approach with problems and who would work with them to find a resolution. Students felt this type of mentoring occurred because their advisor understood the challenges they were facing.

Students in this study also spoke about some of the difficulties they have encountered since transferring into the institution. One commonly expressed frustration is that the registration process forces this population to register with the freshman class instead of their class year. This late registration is problematic in that many transfer students enter with a junior status, but are not able to take the courses they need due to seats filling prior to their registration time. In many cases, override requests to faculty members were ignored, forcing the students to take courses that did not aid them in completing their degrees. In a few cases, the major academic advisor was able to reach out to faculty colleagues on behalf of the student.

In summary, the experiences that transfer students have in the academic advising process are varied. The ways in which each student connected with their advisor varied based on their past experiences and their individual needs as they entered the institution. The transfer experience and the role of academic advisors is not one that can be generalized to all students in this population; rather, it is a complex story that includes multiple dimensions of the individual experiences that students have prior to and upon entering Small University.

## References

- Abelman, R., Atkin, D., Dalessandro, A., Snyder-Suhy, S., & Janstova, P. (2007). The trickle-down effect of institutional vision: Vision statements and academic advising. *NACADA Journal*, 27(1), 4-21. doi:10.12930/0271-9517-27.1.4
- Abelman, R., & Molina, A. D. (2006). Institutional vision and academic advising. *NACADA Journal*, 26(2), 5–12. doi:10.12930/0271-9517-26.2.5
- Allen, J. M., Smith, C. L., & Muehleck, J. K. (2013). What kinds of advising are important to community college pre- and posttransfer students? *Community College Review*, 41(4), 330–345. doi:10.1177/0091552113505320
- Allen, J. M., Smith, C. L., & Muehleck, J. K. (2014). Pre-and post-transfer academic advising: What students say are the similarities and differences. *Journal of College Student Development*, 55(4), 353–367. doi:10.1353/csd.2014.0034
- Andres, L. (2001). Transfer from community college to university: Perspectives and experiences of British Columbia students. *Canadian Journal of Higher Education*, 31(1), 35-74.
- Arbeit, C. A., & Horn, L. (2017). *A profile of the enrollment patterns and demographic characteristics of undergraduates at for-profit institutions* (NCES 2017-416). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- Bahr, P. R. (2009). College hopping: Exploring the occurrence, frequency, and consequences of lateral transfer. *Community College Review*, 36(4), 271-298. doi:10.1177/0091552108330903

- Bahr, P. R. (2012). Student flow between community colleges: Investigating lateral transfer. *Research in Higher Education*, 53(1), 94-121. doi:10.1007/s11162-011-9224-5
- Bailey, D. S. (2003, December). "Swirling" changes to the traditional student path. *Monitor on Psychology*, 34(11), 36.
- Bailey, T. (2015, May 11). Rethinking the "cafeteria" approach to community college. *The Washington Post*. Retrieved from <https://www.washingtonpost.com>
- Barron's Educational Series. (2016). *Profiles of American colleges* (32nd ed.). Hauppauge, NY: Author.
- Baxter Magolda, M. B. (2008). Three elements of self-authorship. *Journal of College Student Development*, 49(4), 269–284. doi:10.1353/csd.0.0016
- Berger, J. B., & Malaney, G. D. (2003). Assessing the transition of transfer students from a community college to a university. *NASPA Journal*, 40(4), 1-23. doi:10.2202/0027-6014.1277
- Bess, J. L., & Dee, J. R. (2012a). *Understanding college and university organization: Theories for effective policy and practice* (Vol. 1, The state of the system). Sterling, VA: Stylus.
- Bess, J. L., & Dee, J. R. (2012b). *Understanding college and university organization: Theories for effective policy and practice* (Vol. 2, Dynamics of the system). Sterling, VA: Stylus.
- Binkley, C. (2015, July 07). Study: More than a third of US college students transferred. *The Associated Press*. Retrieved from <https://apnews.com>

- Bloomberg, L. D., & Volpe, M. (2019). *Completing your qualitative dissertation: A road map from beginning to end* (4th ed.). Thousand Oaks, CA: Sage.
- Borden, V. H. (2004). Accommodating student swirl. *Change*, 36(2), 10-17.
- Bridgen, S. (2017). Using systems theory to understand the identity of academic advising: A case study. *NACADA Journal*, 37(2), 9–20. doi:10.12930/NACADA-15-038
- Bryson, J. M. (2011). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement* (4th ed). San Francisco, CA: Jossey-Bass.
- Burr, V. (2015). *Social constructivism*. New York, NY: Routledge.
- California Competes. (2017, October). *Moving past the master plan: Report on the California Master Plan for Higher Education* [Policy brief]. Retrieved from <https://californiacompetes.org/assets/general-files/Master-Plan-Report-with-cover-for-hearing.pdf>
- California State Department of Education. (1960). *A master plan for higher education in California, 1960-1975*. Retrieved from <https://www.ucop.edu/acadinit/mastplan/MasterPlan1960.pdf>
- Carter, I., Coyle, J., & Leslie, D. (2011). Easing the transfer of students from college to university programs: How can learning outcomes help? *Canadian Journal of Higher Education*, 41(2), 10-27.
- Cedja, B. D., Kaylor, A. J., & Rewey, K. L. (1998). Transfer shock in an academic discipline: The relationship between students' major and their academic

performance. *Community College Review*, 26(3), 1-13.

doi:10.1177/009155219802600301

Chin-Newman, C. S., & Shaw, S. T. (2013). The anxiety of change: How new transfer students overcome challenges. *Journal of College Admission*, 221, 14–21.

Choy, S. (2002). *Nontraditional undergraduates: Findings from the condition of education 2002* (NCES 2002–012). Retrieved from National Center for Education Statistics website: <https://nces.ed.gov/pubs2002/2002012.pdf>

Clark, P. L. (2013). *Transfer students' satisfaction with academic advising services: A comparative analysis of the two-year community college and the four-year institution*. Retrieved from ProQuest Dissertations & Theses Global. (1461748942).

Cook, S. (2001). A chronology of academic advising in America. *The Mentor: An Academic Advising Journal*, 3(2001).

Cooper, M. (2010, October). *Student support services at community colleges: A strategy for increasing student persistence and attainment*. Paper presented at the White House Summit on Community Colleges, Washington, DC.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.

Crookston, B. B. (1994). Classics revisited a developmental view of academic advising as teaching. *NACADA*, 14(2), 5–9. doi:10.12930/0271-9517-14.2.5

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.

Czarnecki, K. (2012). What is systems thinking? *School Library Journal*, 58(2).

- Dahlberg, K. (2006). The essence of essence: The search for meaning structures in phenomenological analysis of lifeworld phenomena. *International Journal of Qualitative Studies on Health and Well-Being*, 1(1), 11-19.  
doi:10.1080/17482620500478405
- DeLaRosby, H. R. (2017). Student characteristics and collegiate environments that contribute to the overall satisfaction with academic advising among college students. *Journal of College Student Retention: Research, Theory & Practice*, 19(2), 145–160. doi:10.1177/1521025115611618
- Donaldson, P., McKinney, L., Lee, M., & Pino, D. (2016). First-year community college students' perceptions of and attitudes toward intrusive academic advising. *NACADA Journal*, 36(1), 30–42. doi:10.12930/NACADA-15-012
- Dougherty, K. J., & Kienzl, G. S. (2007). It's not enough to get through the open door: Inequalities by social background in transfer from community colleges to four year colleges. *Sociology of Education: A Critical Reader*, 108(3), 452-487.
- Drake, J. K. (2011). The role of academic advising in student retention and persistence. *About Campus*, 16(3), 8-12. doi:10.1002/abc.20062
- Fieldstein, M. (2016, February 2). Muy loco parentis: How 'freakouts' over student privacy hamper innovation. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Muy-Locho-Parentis-How/235132>
- Freije, M. (2008). Advising and the liberal arts: It takes a college. *Peer Review*, 10(1), 21–23. Retrieved from <https://www.aacu.org/publications-research/periodicals/advising-and-liberal-arts-it-takes-college>
- Frost, S. H. (2003). Academic advising in higher education. *Encyclopedia of Education*,

1, 2–5.

Glennen, R. E., Baxley, D. M., & Farren, P. J. (1985). Impact of intrusive advising on minority student retention. *College Student Journal*, 19(4), 335-338.

Grites, T. J. (2013). Developmental academic advising: A 40-year context. *NACADA Journal*, 33(1), 5-15. doi:10.12930/NACADA-13-123

Handel, S. J. (2013). The transfer moment: The pivotal partnership between community colleges and four-year institutions in securing the nation's college completion agenda. *New Directions for Higher Education*, 2013(162), 5-15.  
doi:10.1002/he.20052

Helgesen, S. (1995). Webs of inclusion. *Executive Excellence*, 12(4), 10-11.

Hills, J. (1965). Transfer shock: The academic performance of the junior college transfer. *The Journal of Experimental Education*, 33(3), 201-215.

Hossler, D., Shapiro, D., Dundar, A., Ziskin, M., Chen, J., Zerquera, D., & Torres, V. (2012). *Transfer and mobility: A national view of pre-degree student movement in postsecondary institutions* (Report No. 2, pp. 1-68). Herndon, VA: National Student Clearinghouse Research Center.

Hu, S. (2010). Reconsidering the relationship between student engagement and persistence in college. *Innovative Higher Education*, 36(2), 97-106.  
doi:10.1007/s10755-010-9158-4

Ishitani, T. T. (2008). How do transfer survive after "transfer shock"? A longitudinal study of transfer student departure at a four-year institution. *Research in Higher Education*, 49(5), 403-419. doi:10.1007/s11162-008-9091-x

- Jeschke, M. P., Johnson, K. E., & Williams, J. R. (2001). A comparison of intrusive and prescriptive advising of psychology majors at an urban comprehensive university. *NACADA Journal*, 21(1-2), 46-58. doi:10.12930/0271-9517-21.1-2.46
- Kezar, A. (2002). Organizational models and facilitators of change: Providing a framework for student and academic affairs collaboration. *New Directions for Higher Education*, 2001(116), 63-74. doi:10.1002/he.34
- Kuhn, T. L. (2008). Historical foundations of academic advising. In V. N. Gordon, W. R. Habley, & T. J. Grites, *Academic advising: A comprehensive handbook* (2nd ed., pp. 3-16). San Francisco, CA: Jossey-Bass.
- Larson, J., Johnson, A., Aiken-Wisniewski, S. A., & Barkemeyer, J. (2018). What is academic advising? An application of analytic induction. *NACADA Journal*, 38(2), 81-93. doi:10.12930/0271-9517-38.2.81
- Laverty, S. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3). 21-35. doi:10.1177/160940690300200303
- Leavitt, E. (2015, July 15). Study: More than 33% of undergrads transfer college at least once. *USA Today*. Retrieved from <http://college.usatoday.com/>
- Lee, P. (2011). The curious life of *in loco parentis* in American universities. *Higher Education in Review*, 8, 65-90.
- Lester, J., Brown Leonard, J., & Mathias, D. (2013). Transfer student engagement: Blurring of social and academic engagement. *Community College Review*, 41(3), 202–222. doi:10.1177/0091552113496141

- Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Mamiseishvili, K., & Deggs, D. M. (2013). Factors affecting persistence and transfer of low-income students at public two-year institutions. *Journal of College Student Retention, 15*(3), 409-432. doi:10.2190/CS.15.3.f
- McCormick, A. C. (2003). Swirling and double dipping: New patterns of student attendance and their implications for higher education. *New Directions for Higher Education, 2003*(121), 13-24. doi:10.1002/he.98
- McGuire, S. P., & Belcheir, M. (2013). Transfer student characteristics matter. *Journal of College Student Retention: Research, Theory & Practice, 15*(1), 37-48. doi:10.2190/CS.15.1.c
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Mertens, D. M., & Wilson, A. T. (2012). *Program evaluation theory and practice: A comprehensive guide*. New York, NY: The Guilford Press.
- Miller, A. (2013). Institutional practices that facilitate bachelor's degree completion for transfer students. *New Directions for Higher Education, 2013*(162), 39-50. doi:10.1002/he.20055
- Miller, R. N., & Durham, A. (2014). Supporting transfer students through a summer transfer transition program. *Summer Academe, 8*, 2-22.
- Monaghan, D. B., & Attewell, P. (2015). The community college route to the bachelor's degree. *Educational Evaluation and Policy Analysis, 37*(1), 70-91. doi:10.3102/0162373714521865

- Moodie, G. (2007). Do tiers affect student transfer? Examining the student admission ratio. *Community College Journal of Research and Practice*, 31(11), 847-861.  
doi:10.1080/10668920600851514
- Moody, J. (2019, January 24). A guide to STEM majors. *U.S. News & World Report*. Retrieved from <https://www.usnews.com/education/best-colleges/articles/2019-01-24/a-guide-to-stem-majors>
- National Academic Advising Association (n.d.). *Our mission and vision*. Retrieved from <https://nacada.ksu.edu/About-Us/Vision-and-Mission.aspx>
- National Academic Advising Association. (2006). *NACADA concept of academic advising*. Retrieved from <https://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/The-Advising-Relationship-is-at-the-Core-of-Academic-Advising.aspx>
- National Science Board. (2014). *Science and engineering indicators 2014* (NSB 14-01).. Arlington, VA: National Science Foundation
- National Science Foundation. (n.d.). About undergraduate education (DUE). Retrieved from <https://www.nsf.gov/ehr/ue/about.jsp>
- National Survey of Student Engagement. (2019). Engagement with faculty by sex and class level [Statistical tables]. Retrieved from [http://nsse.indiana.edu/html/sample\\_analyses/engagement\\_with\\_faculty\\_by\\_sex\\_and\\_class\\_level.cfm](http://nsse.indiana.edu/html/sample_analyses/engagement_with_faculty_by_sex_and_class_level.cfm)
- O'Connor, D. M. (2017). *A phenomenological study on academic advising: Perspectives of community college faculty* (Doctoral dissertation). Retrieved from Proquest. (ED577743)

- Orr, J. (2010). What is “systems thinking ”? *Machine Design*, 82(13), 53.
- Parker, P. (2015). The historical role of women in higher education. *Administrative Issues Journal: Connecting Education, Practice, and Research*, 5(1), 3-14.  
doi:10.5929/2015.5.1.1
- Patton, L. D., Renn, K. A., Guido, F. M., & Quaye, S. J. (2016). *Student development in college: Theory, research, and practice* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Peng, S. S. (1977). *Transfer students in institutions of higher education: National longitudinal study of high school seniors* (NCES 77-250). Washington, DC: National Center for Education Statistics.
- Peter, K., & Forrest Cataldi, E. (2005). *The road less traveled: Students who enroll in multiple institutions* (NCES 2005157). Washington, DC: National Center for Education Statistics.
- Powers, K. L., Carlstrom, A. H., & Hughey, K. F. (2014). Academic advising assessment practices: Results of a national study. *NACADA Journal*, 34(1), 64–77.  
doi:10.12930/NACADA-13-003
- Saldāna, J. (2011). *Fundamentals of qualitative research: Understanding qualitative research*. New York, NY: Oxford University Press.
- Schlossberg, N. K. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling*, 48(4), 159-162.
- Schreiner, L. A. (2010). The “thriving quotient”: A new vision for student success. *About Campus*, 15(2), 2-10. doi:10.1002/abc.20016
- Scott, T. P., Thigpin, S. S., & Bentz, A. O. (2017). Transfer learning community:

Overcoming transfer shock and increasing retention of mathematics and science majors. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 300–316. doi:10.1177/1521025115621919

Selingo, J. J. (2015, July 13). The student swirl becoming more of a norm in higher ed [Blog post]. Retrieved from <http://www.sr.ithaca.org/blog/the-student-swirl-becoming-more-of-a-norm-in-higher-ed/>

Shapiro, D., Dundar, A., Wakhungu, P. K., Yuan, X., & Harell, A. (2015). *Transfer and mobility: A national view of student movement in postsecondary institutions, fall 2008 cohort* (Signature Rep. No. 9). Herndon, VA: National Student Clearinghouse Research Center.

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P.K., Bhimdiwali, A., Nathan, A., & Youngsik, H. (2018). *Transfer and mobility: A national view of student movement in postsecondary institutions, fall 2011 cohort* (Signature Report No. 15). Herndon, VA: National Student Clearinghouse Research Center.

Simone, S. A. (2014). *Transferability of postsecondary credit following student transfer or co-enrollment* (NCES 2014-163). Washington, DC: National Center for Educational Statistics.

Smith, D. W. (2018). Phenomenology. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2018 ed.). Retrieved from <https://plato.stanford.edu/entries/phenomenology/>

Spickard, J. V. (2017). *Research basics: Design to data analysis in 6 steps*. Thousand Oaks, CA: Sage.

State Council of Higher Education in Virginia. (2016). *Aspects of student transfer and*

- post-transfer success at Virginia public institutions*. Retrieved from <http://www.schev.edu/docs/default-source/Reports-and-Studies/2016-reports/transferreport2016.pdf>
- Strikwerda, C. J. (2018). Why community colleges are good for you. *The Chronicle of Higher Education*, 64(21).
- Suvedi, M., Ghimire, R. P., & Millenbah, K. F. (2015). Undergraduate students' perceptions of academic advising. *NACTA Journal*, 53(3), 227–233.
- Taylor, J. L., & Jain, D. (2017). The multiple dimensions of transfer: Examining the transfer function in American higher education. *Community College Review*, 45(4). doi:10.1177/0091552117725177
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York, NY: Falmer.
- The White House, Office of the Press Secretary. (2015, March 23). *Fact sheet: President Obama announces over \$240 Million in new STEM commitments at the 2015 White House science fair* [Press release]. Retrieved from <https://obamawhitehouse.archives.gov/the-press-office/2015/03/23/fact-sheet-president-obama-announces-over-240-million-new-stem-commitmen>
- Thurmond, K. C. (2007). Transfer shock: Why is a term forty years old still relevant? Retrieved from NACADA Clearinghouse of Academic Advising Resources website: <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Dealing-with-transfer-shock.aspx>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

doi:10.3102/00346543045001089

Tobolowsky, B. F., & Cox, B. E. (2012). Rationalizing neglect: An institutional response to transfer students. *The Journal of Higher Education*, 83(3), 389–410.

doi:10.1353/jhe.2012.0021

Townsend, B. K. (2001). Redefining the community college transfer mission. *Community College Review*, 29(2), 29-42. doi:10.1177/009155210102900203

Townsend, B. K. (2008). “Feeling like a freshman again:” The transfer student transition. *New Directions for Higher Education*, 2008(144), 69-77. doi:10.1002/he.327

Turk, J. M. (2018). *The impact of earning an associate degree prior to transfer on bachelor's degree completion*. Retrieved from the American Council on

Education Center for Policy Research and Strategy website:

<https://www.acenet.edu/news-room/Documents/The-Impact-of-Earning-an-Associate-Degree-Prior-to-Transfer.pdf>

United States Department of Education. (n.d.). Science, Technology, Engineering and Math: Education for global leadership [Archived brief]. Retrieved from

<https://www.ed.gov/sites/default/files/stem-overview.pdf>

Varney, J. (2007, September). Intrusive advising. *Academic Advising Today*, 30(3), 11.

Vianden, J., & Barlow, P. J. (2015). Strengthen the bond: Relationships between academic advising quality and undergraduate student loyalty. *NACADA Journal*,

35(2), 15–27. doi:10.12930/NACADA-15-026

Wai-Ling Packard, B., Tuladhar, C., & Lee, J. S. (2013). Advising in the classroom: How community college STEM faculty support transfer-bound students. *Journal of*

*College Science Teaching*, 42(4), 14–20.

- Wang, X. (2009). Baccalaureate attainment and college persistence of community college transfer students at four-year institutions. *Research in Higher Education, 50*(6), 570-588. doi:10.1007/s11162-009-9133-z
- Wang, X., Lee, S. Y., & Prevost, A. (2017). The role of aspirational experiences and behaviors in cultivating momentum for transfer access in STEM: Variations across gender and race. *Community College Review, 45*(4), 311-330. doi:10.1177/0091552117724511
- Wang, X., & Wickersham, K. (2019). Women, community colleges, and STEM careers. *New Directions for Institutional Research, 2018*(179), 73-90. doi:10.1002/ir.20276
- Weinberg, D. (2014). *Contemporary social constructivism*. Philadelphia, PA: Temple University Press.
- White, E. R. (2015). Academic advising in higher education: A place at the core. *The Journal of General Education, 64*(4), 263–277. doi:10.1353/jge.2015.0024
- Winston, R. B., Jr., Ender, S. C., & Miller, T. K. (Eds.). (1982). Developmental approaches to academic advising. In *New Directions For Student Services* (No. 17). San Francisco, CA: Jossey-Bass.
- Xyst, K. (2016). Constructivism, Dewey, and academic advising. *NACADA Journal, 36*(2), 11–19. doi:10.12930/NACADA-14-027
- Yin, R. K. (1984). *Case study research: Design and methods* (Vol. 5). Beverly Hills, CA: Sage.

## VITA

Ashleigh Everhardt Queen

**Birthdate:** June 13, 1986

**Birthplace:** Charlotte, North Carolina

**Education:**

2020: Doctor of Education: Educational Policy, Planning, and Leadership,  
William & Mary

2013: Master of Science: Biology, University of North Carolina at Charlotte

2010: Bachelor of Science: Biology, Concentration in Cell Physiology; Minor in  
Interdisciplinary Health Studies, University of North Carolina at Charlotte

**Experience:**

August 2015 – Present: Faculty (Lecturer, August 2015 – May 2019; Senior  
Lecturer August 2019 – Present), Department of Kinesiology & Health  
Sciences, William & Mary

December 2013 – May 2015: Adjunct Faculty, Department of Kinesiology &  
Health Sciences, William & Mary

August 2013 – August 2015: Adjunct Faculty, Biology Department, Thomas  
Nelson Community College

June 2013 – December 2013: Adjunct Faculty, Department of Biology, University  
of North Carolina at Charlotte