ABSTRACT

An Explanatory Sequential Mixed Methods Study: Measuring and Exploring Community College Students' Perceptions of their Academic Advising Experience

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There is a gap in research about students' perceptions of their academic advising experience. Leveraging a mixed methods approach to community college students' perceptions of academic advising provides vital data to improve advising for students. Chickering and Reisser (1993) developed a theory of student identity formation known as the seven vectors, which was used in this explanatory sequential mixed methods study to measure and explore student satisfaction with their advising experience. It is essential for advisors to be knowledgeable about advising theories such as Chickering and Reisser's (1993) seven vectors of student identity in order to provide students with high-quality advisory services (Roufs, 2015).

The central research question of this study was: How do the student's survey responses (quantitative) and student interviews (qualitative) contribute to a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience? To answer the question the researcher distributed a survey and conducted

semi-structured interviews (Galletta & Cross, 2013) with community college students in an effort to gain a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven dimensions of student identity development and students' perceptions of their advising experience. Using the survey data, the researcher discovered that students' overall assessment of their advising experience was excellent; nevertheless, the satisfaction with the questions in vector four, establishing identity (Chickering & Reisser, 1993), was the lowest. It is critical to ensure that student satisfaction is met in all areas because it can have an impact on a student's overall college experience (Kuh et al., 2005). Four recurrent themes emerged from the student interview: (a) work challenges, (b) helpfulness, (c) time management, and (d) student engagement. Corresponding with the first phase of this study, once again, vector four—establishing identity (Chickering & Reisser, 1993)—was found to be the weakest area of advising sessions. According to the findings, knowing a student's identity development can increase the percentage of students' satisfaction, and therefore increase the likelihood that they will successfully continue their college education (Higbee, 2002; Kuh et al., 2005).

An Explanatory Sequential Mixed Methods Study: Measuring and Exploring Community College Students' Perceptions of their Academic Advising Experience

by

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A Dissertation

Approved by the Department of Curriculum and Instruction

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Submitted to the Graduate Faculty of
Baylor University in Partial Fulfillment of the
Requirements for the Degree
of

Doctor of Education

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August 2021

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LIST OF ABBREVIATIONS

CCSSE: Community College Survey of Student Engagement

NACADA: National Academic Advising Association

SENSE: Survey of Entering Student Engagement

THECB: Texas Higher Education Coordinating Board

ACKNOWLEDGMENTS

I wish to acknowledge everyone who played a role in my academic journey. First, thank you, God, for providing me the strength and perseverance to complete my doctorate degree. I am grateful to my loving husband, Deacon Santos, and son, Landon, for being patient, caring, and supportive during this entire process. Thank you to my parents, Felipe and Janie, for their continued support and endless sacrifices to ensure I had the best.

Thank you to the Baylor faculty that taught my classes and to shared their knowledge, expertise, and encouragement. Finally, I thank all my extended family, colleagues, friends, and teachers who never stopped believing in me even when I did not believe in myself.

DEDICATION

To my husband and son, who always show me love and support, and encourage me to pursue my dreams.

CHAPTER ONE

Introduction to the Problem of Practice

Introduction

Academic advising has been around for decades, yet few mixed methods research studies examine students' perceptions of their advising experience (Zhang et al., 2019). Students' perceptions are important because academic advising influences important factors, such as student retention, overall college experience, and academic success (Metzner, 1989; Tinto, 1999). Academic advising is frequently the only support service that guarantees ongoing interaction between students and academic advisors. This continued interaction makes the advisor an essential element for positive relationships and experiences (King, 1993). Quality advising is impossible to achieve without first understanding students' satisfaction with their advising experiences. This explanatory sequential mixed methods study examines quantitative and qualitative data from students at a rural community college in Southeast Texas regarding their academic advising experiences.

Academic advising has existed in higher education for decades and has evolved through a variety of models and approaches; however, students' perceptions of academic advising are limited (Zhang et al., 2019). Chickering and Reisser's seven vectors of student identity development serves as the theoretical framework for this study to explain students' perceptions of their advising experience and what drives students' academic decisions, directly connecting to how they perceive their interactions with their advisors.

Statement of the Problem

Students seek guidance from advisors to help them navigate their way through college to graduation. Therefore, advisors need to understand students' advising perceptions to improve this necessary support service. The general problem is the lack of quantitative and qualitative data on students' satisfaction with their academic advising experience, which could negatively impact overall student academic success. National surveys indicate that academic advising ranks lowest in student satisfaction (Allen & Smith, 2008). Without knowing why students are rating advising with a low satisfaction rate, colleges cannot address advising issues. Low-quality advising has proven to demonstrate negative attitudes in students, resulting in adverse outcomes, such as low academic achievement and social withdrawal (Grites & Gordon, 2000; Tinto, 1994). In addition to low-quality advising, researchers have confirmed a positive correlation between satisfaction with academic advising and student retention (Crookston, 2009; Drake et al., 2013; Tinto, 1993). *The National Survey of Student Engagement* (2019) report also revealed that students indicated that academic advising quality is of great significance. Additionally, the report affirmed that students who received low-quality advising were less likely to return the following year (NSSE, 2019). Studies consistently show that academic counseling has a major impact on students' decisions to continue and to complete college. (Pascarella & Terenzini, 2005).

The source of concern is a 2017 report by the National Center for Education Statistics' (2017) that reported two-year college graduation rates were only at 22%; this statistic indicates that students face significant barriers to college completion. The College—the pseudonym for the primary research site in this study—addressed this concern by developing a student success plan that included a dedicated developmental

advising component to enhance the partnership between advisors and students (The College, 2013). Research shows that students who have a strong partnership with their advisors are more likely to graduate and achieve academic success (Creamer & Creamer, 1994; Drake et al., 2013; Habley, 1995; Tinto, 1993). The College students participated in the *2014 SENSE Survey*; only 24.7% of student respondents indicated they have never seen an academic advisor (SENSE, 2104). This fact is concerning because research acknowledges that academic advising is one of the most essential academic and social components of the college experience (Cuseo, 2014). Academic advising is comparable to being part of good interpersonal relationships: both constructs rely on solid communication, which is crucial to maintain. This explanatory sequential mixed methods study will improve the analysis of the delivery of academic advising to students, along with the analysis of student perceptions; without it, there will be a significant decrease in retention and greater student dropout rates (Tinto, 1994; Zhang et al., 2019b).

Purpose of the Study

To address the issue of the lack of data on academic advising and student satisfaction, the purpose of this explanatory sequential mixed methods study was to explore and quantify students' perceptions of the advising experience, and to close the gap in the literature on this critical subject. Both the study's empirical metrics and students' subjective data suggest that how they perceive their overall and varied experiences are among the most influential indicators of overall campus satisfaction (Kuh et al., 2005). Moreover, interactions between students and advisers promote motivation, student happiness, college attitudes, and social integration (Chickering & Reisser, 1993; Gordon & Habley, 2000; Grites, 2013). Along with these positive outcomes, academic

advising can be one of the most effective support services in promoting students' success, especially when they are integrated into academic support services and understanding their needs (Kramer, 2003). In recent years, academic advising has become even more critical, as it plays a vital role in enrollment, persistence, and completion of the entire college experience (Tinto, 1994; Zhang et al., 2019).

This explanatory sequential mixed methods study surveyed community college students' advising experiences and used semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) to understand their advising experiences better. Upon collecting the survey results, the researcher interviewed students and collected narrative data about their experience. When analyzing the students' perceptions, the researcher employed a mixed strategy (Bergin, 2018; Creswell & Plano-Clark, 2017; Creswell & Creswell, 2018) and examined the quantitative and qualitative data to draw inferences from the data collected through a survey and interviews using the Chickering and Reisser's seven vectors of student identity development as the framework. The seven vectors' framework (Chickering & Reisser, 1993) allowed the researcher to discover how the students' perceptions aligned with their identity development.

This explanatory sequential mixed methods study's research questions were organized in the following manner and included three types of questions: a central mixed methods question, a quantitative question, and a qualitative question (Tashakkori et al., 2020). These questions helped the researcher gain a better understanding of how students perceive their academic advising experience. The mixed methods question was:

1) How do the student's survey responses (quantitative) and student interviews (qualitative) contribute to a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience?

The researcher highlighted the findings by comparing quantitative survey data on student satisfaction with advising and narrative qualitative data on students' perceptions of their advising experiences.

In the first phase, the researcher collects data through a survey from students enrolled in Spring 2021 courses to answer quantitative questions about their overall satisfaction with advising. The quantitative research question was:

2) Which vector of Chickering and Reisser's (1993) student identity development theory elicited a low rating on the satisfaction survey based on gender?

The second phase involves the collection of qualitative data. The researcher collected data from students by conducting semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) with them in order to better understand their survey responses, which supplemented the follow-up questions based on the theoretical framework. The qualitative question was:

3) Which of the seven vectors of student identity development identified by Chickering and Reisser (1993) influenced students' perceptions of their academic advising and college experience?

The final stage of this study involved mixed methods analysis; the researcher used quantitative and qualitative data to explain the findings. The results of comparing the outcome of the quantitative data on students' perceptions with their advising experience and narrative qualitative data from the student's perceptions demonstrated the use of descriptive and inferential statistical procedures.

Theoretical Framework

The theoretical framework for his explanatory sequential mixed methods study was based on Chickering's identity development theory of seven vectors (Chickering & Reisser, 1993). These vectors, known as the "ones," proposed by Arthur Chickering in

his book, "*Education and identity*," first came to prominence in the late 1960s. The history of identity development theory explains how it affects students' perceptions of the advising they receive. This theoretical model involves seven vectors that describe how a student's identity changes as he or she progresses through identity formation that includes "developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, development purpose, developing identity" (Chickering & Reisser, 1993, p. 35). In 1993, Chickering and Reisser revised the theory, indicating that the vectors need not be sequential; however, the student must resolve all aspects of the particular vector before moving any vectors regardless of order. Students who have increased confidence in the advising process will have a more positive advising experience (Cuseo, 2014; Gordon & Habley, 2000). Advisors should be familiar with student development theories because they can help strengthen the advising partnership and students' perceptions of their advising experience. The seven vectors (Chickering & Reisser, 1993) are illustrated in Figure 1.1., along with discussion topics for advisors to coordinate with the student identity development phase (Hudson, 2010).

Academic advising was founded on a variety of theories, including student development, cognitive development, retention, moral development, and adult development (Creamer & Scott, 2000); however, this study focused on the student development theory that is most appropriate for this study regarding perception. Many in the student affairs field have used this theoretical framework for academic advising.

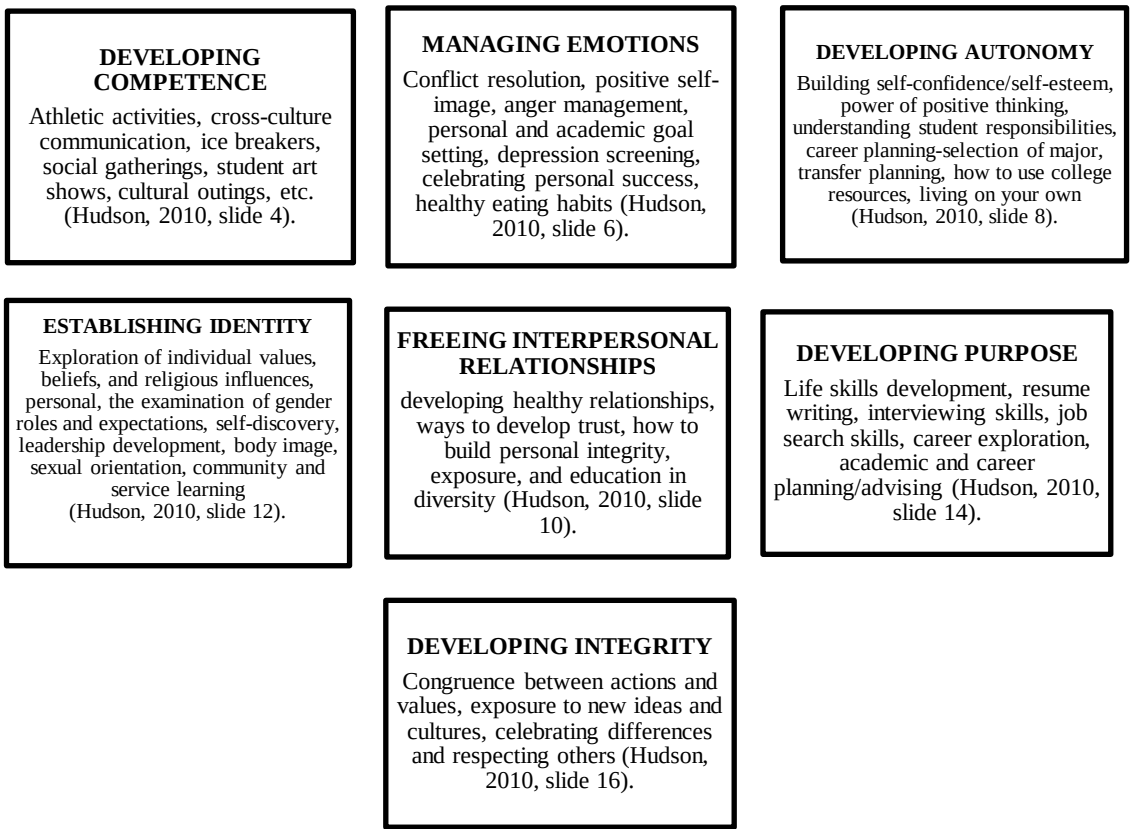

Figure 1.1. Theoretical framework applied to practice.

In Chickering's 1984 work, he stated, "student affairs professionals as an audience were not in mind at all it was entirely by chance that 'Education and Identity' made a significant contribution to those professionals" (Patton, 2016, p. 297). Academic advising has worked to develop a normative theory for some time with the assistance of groups formed with NACADA (Himes, 2014). Lowestein (2014) argued that while students' development is essential, it is not the only theory that can be applied to advising.

Moreover, he believed "a theory of advising is normative does not describe, explain, or predict the behavior of advisors or students but articulates a vision of what advising could and should be" (p. 2). This explanatory sequential mixed methods study applied Chickering and Reisser's theory (1993) to understand better how students'

identity development can affect the advising process, specifically their perceptions of their advising experiences. However, other theories could be applied to this and be considered for future research.

Research Design and Methods

This research was conducted at a medium-sized rural community college in southeast Texas using a combination of quantitative and qualitative methods. The participants attended the College and were registered for classes for the Spring 2021 term. The College enrollment is primarily made up of dual credit students taking courses at their high school through the College. The College has a centralized advising model in which the advisors are located in one central area for students; they use a developmental approach to advising. Due to the global pandemic, students opted to enroll in online courses instead of the few in-person courses offered; therefore, the dissemination survey for this study was sent via email. All participants in this explanatory sequential mixed methods study were bound by geographical location as they all attended the same community college and visited with the College's advisors.

For this study, both quantitative and qualitative data were collected using a sound theoretical framework guided by the study's research questions. Participants completed a 24-item scale (Teasley & Buchanan, 2013) to evaluate advising and to help the researcher better understand the students' perceptions of their advising experience (see Appendix B). Quantitative data "generates numeric data that are analyzed statistically" (Tashakkori et al., 2020, p. 189). The researcher analyzed and answered the research questions using descriptive and inferential statistics. Along with the 24-item scale, students were purposefully selected to participate in a 15 to 20-minute semi-structured interview

(Ayres, 2008; Galletta & Cross, 2013) to elicit how they perceived their advising experience to establish connections between the theoretical framework and the student's perceptions. Qualitative data "generates narrative data that are analyzed using thematic analysis" (Tashakkori et al., 2020, p. 189). The researcher employed various research analysis techniques to uncover emerging themes and to answer the qualitative research question. After analyzing quantitative and qualitative data, the researcher utilized meta-interference techniques to arrive at the student's central question. Combining quantitative and qualitative data resulted in a robust sequential mixed methods study.

Definition of Key Terms

Advising approaches: Recognized advising session structures derived from a variety of social, educational, and humanities theories. Advising strategies enable advisors to work with students more efficiently (Drake et al., 2013).

Associate degree: "Specifically refers to the associate of arts, an associate of science, an associate of applied arts, an associate of applied science, an associate of arts in teaching, and associate of occupational studies degrees" (THECB, 2017, p. 42).

Career technical education major: When a major of study is declared a career technical field (i.e., welding, dental hygiene, law enforcement).

Centralized advising model: When professional and faculty advisors are centralized within a single academic or administrative unit (Pardee, 2004).

Decentralized advising model: Advisors, whether professional or faculty, are located within their respective academic departments (Pardee, 2004).

Developmental advising: A systematic process founded on a close student-advisor relationship and designed to assist a student in achieving education, career, and

personal goals through the effective use of all institutional and community resources (Winston et al., 1984).

Explanatory sequential design: "A two-phase mixed methods design in which the researcher starts collecting and analyzing quantitative data, which is them followed by the collection and analysis of qualitative data to help explain the initial quantitative results" (Creswell & Plano-Clark, 2007, p. 448).

Intrusive (proactive) advising: "Approach that is used to get to the heart of what is causing difficulty for a student and recommending the appropriate intervention" (Earl, 1988, p. 27).

NACADA (National Academic Advising Association): is the global community for academic advising, founded in 1977 and chartered in 1979. NACADA is a professional organization comprised of over 12,000 advisors, administrators, counselors, faculty, and other interested individuals (NACADA, 2006).

Nontraditional students: students who are over the age of 24.

Pathways: "is a project to collect data to support faculty of the Local Vertical Curricula Alignment Pilot Projects among secondary and postsecondary institutions" (THECB, 2017, p. 47).

Prescriptive advising: is when the information is one-sided, with the advisor sharing the exact answer without further explanation (Drake et al., 2013).

Shared advising model: "where some advisors meet with students in a central administrative unity (i.e., an advising center), while others advise students in the academic department of their major discipline" (Pardee, 2004, para. 3).

Conclusion

This explanatory sequential mixed methods study is critical to improving arguably one of the most essential student services used in colleges today, which assists students in staying in college and completing their chosen degree. Without understanding how students perceive and develop their identity throughout college, advising programs will not provide students' quality advising that will help them succeed. When students receive high-quality academic advising, they are retained and complete college (Creamer & Scott, 2000; Cuseo, 2001; Tinto, 1993). Because the higher education system anticipates that students will stay in college for the long-term benefit of receiving a degree, for professional preparation, or for a deep understanding, little is done to prevent students from dropping out (Tinto, 1999). For the sake of retention, graduation, and success rates of students, it is more important than ever to examine narrative data and survey responses to learn how students interpret their experiences to enhance the critical support service of academic advising.

Chapter One identified the problem: lack of research on the range of student satisfaction combined with narrative data concerning students' perception of their advising experience (Tinto, 1994; Zhang et al., 2019). If this problem is not addressed, it could lead to a significant decline in student retention, graduation, and overall student success. The theoretical framework served as the foundation for the research questions and instrument selection. This explanatory sequential mixed methods analysis resolved the literature gap surrounding this topic by providing quantitative and qualitative data.

Chapter Two provides a comprehensive review of the literature, divided into four sections: selected academic advising history, academic advising in practice, and the key characteristics required for advisors to provide quality academic advising. The last

section of the literature review offers context for the theoretical framework, assisting the reader in understanding how the theory of student identity development (Chickering & Reisser, 1993) can be applied to the academic advising experience. Literature regrading academic advising describes and analyzes what students' experience were during their advising session and what they gained from the visiting with their advisor.

CHAPTER TWO

Literature Review

Introduction

This literature review discusses and evaluates research directly related to the argument about why it is critical to understand how to provide high-quality advising, which translates into high student satisfaction with their advising experience. Colleges that prioritize improving their academic advising services should also focus on student satisfaction with academic advising, directly impacting retention and degree completion (Cuseo, 2014). As a result, the argument of this literature review is divided into four parts: the selected academic advising history, academic advising methods, the key characteristics of an academic advisor and the role of Chickering & Reisser's Seven Vectors (Chickering & Reisser, 1993). The literature review examines studies on the history of academic advising to demonstrate why academic advising practices and student progress are key components of student perception. Both of these critical factors contribute to the basic characteristics of an effective adviser that students value the most, resulting in high student satisfaction (Frost, 1990; Gordon et al., 2008; Winston et al., 1984).

Selected History of Academic Advising Approaches

This section analyzes how the evolution of academic advising may have altered students' opinions of their advising experience between 1970 and 2020. Prior to the 1970s, advising was autocratic; students had little input and were told which courses to

take each semester (Cook, 2009). Academic advising was not regarded as a systematic procedure or a profession (Padak & Kuhn, 2009). Academic advising has developed as a result of enrollment patterns, student demographic diversification, increased student engagement in the advising process, and economic trends (Grites, 1979). Finally, the survey of literature analyzes key historical developments in academic advising, specifically the involvement of students in advising throughout history.

In the early1970s, there was a noticeable shift in the advisor-advisee relationship and emphasis on student attrition and retention efforts; advising shifted from a purely informational to a more holistic approach (Grites, 1979; Winston et al., 1984). Students required a positive advising experience, with student attrition being at an all-time high during this time period. Crookston (1994) conducted research about developmental advising elements and, emphasized the critical nature of understanding students' personal and educational goals in order to support this new advising approach. Along with the evolution of more holistic approaches, the field of academics gained prominence. The National Academic Advising Association (NACADA) was founded during this time period. The association offered professional development opportunities for advisors and published an academic advising journal (Aiken-Wisniewski et al., 2015; Grites, 2013; NACADA, 2006). In contrast to the emerging trend toward involving students in the advising process, some institutions have favored an authoritarian, prescriptive advising approach, which negatively affects students, especially when the degree plans are not accurate (Creamer & Scott, 2000). Along with the introduction of developmental advising, various psychosocial theories were applied to advising (Chickering & Reisser, 1993). In higher education, students' "psychological development, social responsibility,

and occupational futures" are all taken into consideration (Grites, 1979, p. 15). Efforts were made to improve the advising process and its understanding of student and their needs. Melvene Hardee (1970) asserted that when advisors develop a partnership with their advisees, the students are more likely to persist and complete college; this implies that academic success is linked to high-quality advising. Along with prescriptive and developmental approaches, there was also an emergence of other academic advising approaches during this time period, including intrusive, vocational advising, and educational advising (Gordon et al., 2008). However, developmental advising appears to take center stage in the majority of most literature during this time period. Crookston (1994) supported this assertion by stating that developmental advising is concerned with "facilitating the student's rational processes, environmental and interpersonal interactions, behavioral awareness, problem-solving, decision-making, and evaluation skills" (pp. 12–17). Additionally, the concept of faculty advising was introduced to the field of advising (Gordon & Habley, 2000; Habley, 1995; Kramer, 2003). Historically, faculty members had little to no involvement with academic advising and other student services; however, Hardee and Mayhew (1970) shared their perspective on the faculty advisor role. They stated, "the faculty adviser is the coordinator of learning experiences for students" (p. 15), which could easily be applied to an advising setting. Outside of the classroom, faculty-student interaction is limited (Hardee & Mayhew, 1970b); however, Grites (2013) was the first to develop a "comprehensive set of observations about the importance of student-faculty interactions was facilitated through the academic advising process" (p. 4). Crookston (1972) and O'Banion (1994, 2009) were proponents of faculty advising and urged against the establishment of silos between instructional units and

student services divisions (Grites, 2013). They believed that involving the student in the academic advising process could make a significant difference in students' decision to continue their chosen path of higher education. Additionally, O'Banion (1972) and Crookston (1994) define developmental advising in a time period when academic advising was merely a data-entry function of enrolling students in courses. They shared,

> Developmental advising stimulates and supports students in their quest for an enriched quality of life; it is a system-in 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. (Winston et al., 1982, p. 8)

In the 1980s, college enrollment declined. Centra (1979) predicted that by 1985, first-time student enrollment would decline among students ages 18–21 years old because of economic turmoil. Despite the implementation of student-centered advising strategies, the student attrition rates appeared bleak. Grites (1979) noted that military recruitment efforts increased in the 1980s, while college enrollment decreased. As a result, students received high-quality advising in order to educate themselves about the benefits of pursuing a college degree. Increased attention to student' special populations, such as low-income students, veterans, and transfer students, as well as best practices for serving special student populations, began to emerge (OECD, 2012). However, Yale University (1978) observed an increase in the admission of transfer students, but they were the first to drop out.

Additionally, in the 1980s, as scholarly research in the field of academic advising increased, the term "academic advising" became a descriptor for the Educational Resource Information Center, commonly referred to as ERIC (Cook, 2001), a significant development for scholars. Academic advising and how students' perceptions of the

advising process were received increased; Metzner (1989) identified three reasons for this increased awareness during this period: (a) the ability to connect with students' personal goals and college resources; (b) the apparent need to expand advising services and acknowledge of the link between advising and student retention; and (c) the increased awareness of the student advising experience, as academic advising was likely to be the most frequently used student services function. There was little change in research on the effectiveness of academic advising in the1980s and 1990s. The academic advising praxis was developed in the 1990s. Boyer (1990) described the praxis as how to academically advise through discovery and teaching; this concept may be advantageous for academic advisor development. Finally, prior to the turn of the twenty-first century, Frost (2000) grouped academic advising into three eras: pre-academic advising in higher education, defined but unexamined academic advising, and defined and examined academic advising.

In the twenty-first century, academic advising developed into a flourishing industry driven by the constant change in academia. However, in a recent mixed methods study conducted by SENSE in 2011, 56% of new students reported an advisor helping them with their educational goals; this increased by 11% by 2016 (CCCSE, 2018). The data shows that students want to enlist the help of advisors and; that more students are content with their educational goals. According to Kim and Feldman (2011), effective advising requires a positive working relationship between students and advisors. Academic advising scholarship has evolved, and it is now more critical than ever to truly understand students' perceptions of their advising experiences in order to improve academic advising and avert a decline in academic success and enrollment in colleges.

Academic Advising in Practice

The preceding section of the literature study established the foundation for understanding the historical backdrop of academic advising and how students were involved in the process. This section examines the research on academic advising practice and its potential impact on students' opinions of their advising experience. The most popular advising models have been thoroughly studied, as well as academic advising approaches that may influence student satisfaction, including how a student's identity development may influence student contentment.

Advising Models

Advising models provide a framework for the organization of academic advising services. According to Pardee (2004), student satisfaction is highly dependent on the effectiveness of the advising program. Students' academic advising experiences vary according to the advising model and modality used. The following three organizational structures are used to classify advising models: centralized, decentralized, and hybrid (Pardee, 2004). When advisers are concentrated in a single central place, such as an advising center, the centralized advising structure, also known as the Self-Contained Model, occurs. Chiteng-Kot (2014) conducted a quantitative study to investigate the influence of centralized academic advising on first-year GPA persistence and found that when centralized advising was adopted, students increased their GPA. This appears to be the most popular of the three models. Decentralized advising, often known as the faculty-only approach, is the second style of advising. When students are allocated a faculty advisor in a specific discipline, they are using a decentralized model (e.g., welding students are assigned the welding instructor as their faculty advisor). Finally, the hybrid

advising model, sometimes known as the shared model is observed when advising is divided between professional and faculty advisors. Non-professional advisors are frequently trained by professional advisors. Students with declared majors are assigned an advisor under the hybrid approach. When students do not have a declared major, however, this model may present challenges since students may be assigned at random to an advisor who is unfamiliar with their field of study (e.g. an English professor advising an automotive student).

Advising Approaches

When assessing how students perceive their advising experience, advising approaches should be considered (Grites & Gordon, 2000). Numerous approaches can either enhance or detract from the experience. This section summarizes the major approaches, which are ways advising sessions derived from varied theories and strategies which help advisors efficiently work with students (Drake et al., 2013).

The first approach is considered information-based is referred to as "*prescriptive advising*" (Crookston, 1994; Drake et al., 2013; Williamson et al., 2014). Prescriptive advising is frequently described as a one-way communication style in which the advisor directs the student to take specific courses to complete the chosen degree plan; the approach is a scripted process with a limited amount of time. This authoritarian style of advising precludes students from discussing any academic goals with their advisor, preventing advisors and students from developing an advisor-advisee relationship. Nonetheless, Brown (2017) reported 58% of students experienced a more prescriptive advising style, indicating that this advising style is still prevalent in institutions today. When students visit an advisor who practices prescriptive advising (Crookston, 1994;

Drake et al., 2013; Williamson et al., 2014), the advisor's primary objective is to solve a problem or answer a question but there is little interest in developing an advising relationship with the student and learning about their educational goals. The prescriptive advising approach is criticized for its application because it is not considered student-centered (Appleby, 2001).

The second approach is intervention-based advising, also known as Proactive Advising. This strategy focuses on providing advice as a preventive measure against academic difficulties that a student may face (He & Hutson, 2016). This approach strengthens the student-advisor relationship by providing immediate assistance to students. Students typically receive advising during the pre-registration period when this approach is used regularly; this allows the student to ensure the courses they need will be available. This strategy is communicated frequently with students who are identified as at-risk or members of special population subgroups.

The third approach is Developmental Advising, or Holistic Advising (He & Hutson, 2016). Coll (2008) found a positive relationship between developmental advising and advising satisfaction by examining the relationship between worldview, student academic confidence, and advising satisfaction. This mixed methods study supports the positive impact of this approach to advising. Developmental advising enables the advisor and the student to establish a trusting relationship and enables the advisor to guide the student with purpose and clarity. Winston et al. (1984) argue that if developmental advising is done properly, it can have a significant effect on students He stated:

> Developmental advising has the most significant impact by supporting and challenging students to take advantage of the multitude of learning opportunities outside of their formal classes and use the human and programmatic resources designed to promote their talents and broaden their cultural awareness.

> Developmental advising has a multiplier effect that increases students' involvement in institutional programs and services; this positively influences retention for the institution and increases the overall impact of students' educational experience. (p. 114).

This approach considers both cognitive and noncognitive aspects of student development, which corresponds with Chickering and Reisser's revised theory of student identity development. Advisors and students form a collaborative partnership in which the advisor supports the student's academic, moral, and personal development.

The fourth advising approach is Advising as Teaching; this approach is based on the student learning outcomes approach. The emphasis of this approach is on teaching and learning throughout the advisor–student relationship. Students gain knowledge inside and outside of the classroom setting. According to Lance (2009), "academic advisors and teachers strive to equip students with the tools necessary to succeed in their college endeavors" (p.1). Students learn about degree plans, college policies and procedures, and life skills from advisors. The advisor acts as a beacon of hope for many students by referring and connecting them to resources to help them overcome obstacles. According to Tinto (1999), "advising should be woven into the fabric of the freshman year in ways that promote student's development" (p. 9). The advisor–student relationship is not transactional; it extends beyond the basics of registration but can educate students to make informed choices about their higher education journey.

The final approach to advising is Appreciative Advising, also known as strength and asset building. The advisor is interested in identifying and utilizing the students' strengths during an advising session and developing their assets (Bloom et al., 2008). Students can recognize opportunities to leverage their assets and reach their full potential. This strategy is based on relationship development and positive interactions between

advisors and students. Just as teachers approach a classroom lesson with an asset-based mindset, the same holds true for an advising session. Students who feel appreciated are more likely to be satisfied with the advising services they receive (Cuseo, 2014; Wyckoff, 1999).

Core Qualities of an Effective Advisor

Cuseo (2014) identified three overarching characteristics that an advisor must possess in order to provide effective advising to students: "available and accessible, knowledgeable and helpful, and personable and approachable" (p.15). The effectiveness of an advising program can make the difference between a positive and negative advising experience for a student. According to Light (2001), advising is "the most underestimated characteristic of a successful college experience" (p.81). Researchers have continued to emphasize the value of academic advising and the positive impact of providing high-quality academic advising. The next section will describe each of the core characteristics of an effective advisor to help readers understand how these characteristics can impact students' overall satisfaction with their academic advising experience.

Available and Accessible

The advisor's availability may influence students' perceptions of their advising experience. Creamer and Scott (2000) agreed that availability is one of the characteristics of effective advisor behavior. A study conducted by Klepfer and Hull (2012) revealed that at two-year institutions, students who met with an academic advisor frequently had a "43% higher persistence rate than those never met with an advisor" (Cuseo, 2003, p.6). Students must understand that their advisor is available to them at all times during work hours (Lynch, 2004). There are numerous modalities of advising, including face-to-face,

telephone advising, and virtual advising. Academic advising assists the students in developing a sense of connection to their college experience; thus, consistent communication is critical for student persistence and for a positive advising experience. When advisors are available in multiple modalities, they can be more accessible to students.

The first modality of advising to be highlighted is face-to-face advising. Students frequently prefer to meet with academic advisors in–person. According to Robbins (2010), "face-to-face meetings build student confidence" and foster a sense of community on campus. When there is a high volume of students waiting for an advisor and a limited staff of academic advisors, this modality of operation can be frustrating for students. It may have a detrimental effect on student retention and graduation rates. To alleviate students' lengthy wait times, Aiken-Wisniewski et al. (2015) suggested that institutions examine current trends from colleges across the country where advisors interact with students' environments. For instance, advisors could visit the residence halls and advise students in the lobby. As a result, going where the students are is more convenient for the students. Unfortunately, face-to-face meetings have been limited due to the COVID-19 global pandemic. The research is limited to face-to-face advising sessions and advisors must enforce social distancing; advisors and students must also wear face coverings during an in-person advising session.

The next modality is telephone advising; when students cannot meet with their advisor in-person, telephone advising is effective in some cases. To be successful in this modality, the advisor's voice tone and straightforward style must engage students and avoid using academic advising jargon. The advisor can ascertain students' advising needs

through questioning and further discussion. Research demonstrates that one strategy that can be used with telephone advising is the use of humor. According to Wrench and Punyanunt-Carter (2008), there is an "a positive statistically significant relationship between an advisee's perception of his or her advisor's use of humor and level of nonverbal immediacy, social support, mentoring and relationship satisfaction" (p. 13). One telephone conversation with a student could be the deciding factor in their decision to stay in college.

The third modality is virtual advising which refers to the practice of communicating with students via email, synchronous chat platforms, and videoconferencing. Ohrablo (2016) emphasized the importance of being mindful of students' access to technological resources such as computers, microphones, and webcams when providing virtual advising. Colleges have shifted to operating in a virtual advising world due to the current global pandemic. There is a significant gap in the literature for providing academic advising for students affected by a pandemic. The NACADA, a global community for academic advising, assists colleges with virtual advising resources to serve students when face-to-face advising is not an option.

Knowledgeable and Helpful

Academic advisors must be knowledgeable about their field and about students' identity development (Chickering, 1969; Erickson, 1968) to better understand better students' stages of self-identification process (Chickering & Reisser, 1993). According to Ruffalo Noel Levitz (2020), "providing knowledgeable advising to students in addition to building solid relationships with students and advisors or faculty can help with overall student success efforts" (p. 12). The connections between advisors' personal experiences

and scholarly theories can positively affect the advisor-student relationship, resulting in student satisfaction with the advising experience (Drake et al., 2013). Advisors must be familiar with the institution program's policies and procedures in order to be effective during the advising process. Habley (1995) has created training that can be adaptable to any advising program and that can be used for professional development sessions. Professional development is required to provide high-quality academic advising. Institutions place a higher priority on disseminating factual information and less emphasis on the goals and objectives of advising and how to develop effective advising strategies (Habley, 1998). Colleges should devote professional development time to providing ongoing training for advisors to enhance their advising skills.

In higher education, there are two types of advisors: professional advisors and faculty advisors. Professional advisors are primarily concerned with academic advising of students, whereas faculty advisors are primarily concerned with teaching, with advising constituting a minor part of their job function (Hemwall, 2008). Schulenberg and Lindhorst (2010) asserted that advising serves three purposes: to initiate discussions with students about their educational goals, to educate students about higher education, and to encourage students to develop self-awareness, including responsibility. First, academic advisors have become more critical to higher education institutions because of research linking advising to student development and even satisfaction with the overall advising process (Chickering & Reisser, 1993; Frost, 1990; Gordon, 2006). Professional advisors provide additional services and course selection and registration, such as career advising, transfer advising, and providing additional resources when needed. According to researchers, professional advisors devote more time to integrating support services into

advising sessions than faculty advisors (Lynch & Stucky, 2000). Second, faculty advisors are hired for their expertise in a particular discipline, not for their advising abilities. Hunter and White (2004) argued that "some faculty members may be unaware that they will be expected to advise students when they accept a teaching position" (p. 4). As a result, Allen and Smith (2008) asserted "faculty are responsible for 75% to 90% of the academic advising in American colleges and universities" (p. 397). Numerous studies demonstrate why professional development is necessary for providing high-quality advising, particularly for faculty advisors. Providing high-quality advising sessions requires time, and the faculty advisors should be realistic about their availability (Baker & Griffin, 2010).

Personable and Approachable

Academic advisors interact with students outside of the classroom, Cuseo (2014) explained that frequent interaction with students is vital for advisors, who must be as personable as possible. Students who are comfortable with seeking assistance from the same academic advisor have repeatedly offered that the advisor possesses the necessary skills to form a productive advising relationship with the students (Yale, 2019). Student success is directly related to high-quality advising (Tinto, 1994), which is essential to demonstrate Roger's (1983) qualities of genuineness, trust, acceptance, and empathic understanding (p. 14). When an advisor is approachable and accessible, student satisfaction with their advising experiences improves.

Colleges have programs available to assist the advising department with pre-advising functions. Mentoring programs are available at colleges throughout the state; however, recruiting mentors and maintaining a large-scale mentoring program can be

challenging (Redmond, 1990). Literature suggests that academic advisors who serve as mentors; can remedy the difficulty of sustaining a mentoring program (Walker & Taub, 2001). Advisors are often the people the students seek out when they need support or resource referrals. Cuseo (2014) referred to the advisor as an "experienced guide" who helps the student navigate their way through higher education (p. 15). Mentoring qualities are essential for any academic advisor because they regularly "engage students in thinking critically about their academic decisions and helping plan effectively for their academic and professional careers" (Wiseman & Messitt, 2010, p. 1). The advisor and student's relationship must be grounded in trust to feel comfortable expressing their true feelings (Rogers, 1983). Baker and Griffin (2010) described three advising roles, including the role of a "mentor," which is more of an ongoing relationship with students; this relationship supports students academically and psychosocially. When a student prefers to visit an advisor more than once, there is a good chance a mentoring partnership can develop. When an advisor becomes a mentor, the advisor invests time in a student's personal and professional interests (Baker & Griffin, 2010).

The Role of Chickering and Reisser's Seven Vectors in Advising

The seven vectors of student identity formation established by Chickering and Reisser (1993) have had a major impact on how students' perceptions of their college experiences may be used to academic advising practices. As Lowenstein (2014) pointed out, ideas such as the theory of student identity development "may aid in explaining and predicting the conduct of advisors, as well as suggesting new strategies and techniques for advisors to experiment with" (p. 1). According to Chickering and Reisser (1993), a good academic adviser must comprehend student growth to provide high-quality

academic counseling to students. Throughout this study, the seven vectors of student growth serve as the theoretical framework for the explanatory sequential mixed methods approach. The significance of this idea in the advising process is discussed in this portion of the study. Table 2.1. provides an overview of the Seven Vector (Chickering & Reisser, 1993), followed by an example of how it relates to academic counseling in the classroom.

For instance, suppose the student struggles to navigate the College's registration system. In that case, the advisor can show the student how to navigate the system. Once the student has mastered the new abilities, they may take on the role of peer mentor and assist other students in learning how to use the self-service platform. Students can acquire the second subcategory of physical competence by becoming more involved on campus; during the advising session, the possibilities accessible range from recreational to artistic activities.

The advising area may have varied and visible information regarding co-curricular activities for students to engage in. In the third sub-category of interpersonal competence, students develop communication, leadership, and how to work with others. During a high-quality advising session, the advisor will understand when a student is starting to develop interpersonal skills and match them by ensuring they are active listeners (Neal, 2015).

The second vector is managing emotions, which can be a challenge for some students. Students may experience frustration with the advising process or with the advisor; the student and advisor need to manage their emotions to have an effective advising session. During this vector, students learn how to manage their feelings and remain in control of their emotions (Chickering & Reisser, 1993). Often, people may

think of traditional-aged college students in this vector, but Neal (2015) pointed out that during this vector, "age does not necessarily correlate with emotional maturity, as emotional baggage plays a role in development" (p. 1). The student's perceptions of their advising experience can weigh heavily on this vector if they cannot manage and control their emotions.

Table 2.1.

Seven Vectors of Student Identity (Chickering & Reisser, 1993)

Vector	Description
Vector 1: Developing Competence	This vector encompasses the development of intellectual, physical, and interpersonal competence. The learner gets confidence in his or her abilities to achieve in the aforementioned areas. (Chickering & Reisser, 1993).
Vector 2: Managing Emotions	This vector's development includes learning to recognize, accept, and express emotions in a flexible manner. (Chickering & Reisser, 1993).
Vector 3: Developing Autonomy	The pupil develops emotional independence, self-awareness, problem-solving abilities, and perseverance. Self-awareness and interdependence are developed in collaboration with the greater community. (Chickering & Reisser, 1993).
Vector 4: Establishing Identity	This vector necessitates the development of a "solid sense of self" (Chickering & Reisser, 1969, p. 80), which comprises body and appearance comfort, gender, sexual orientation, and so on. Self-acceptance is an essential component of this vector. (Chickering & Reisser, 1993).
Vector 5: Freeing Interpersonal Relationships	Despite diverse cultural ideas, the student develops mature interpersonal connections; they must recognize and respect all. Students in this vector form and maintain good relationships. (Chickering & Reisser, 1993).
Vector 6: Developing Purpose	This vector appears when a student begins to build a distinct academic or technical field. (Chickering & Reisser, 1993).
Vector 7: Developing Integrity	Students confirm and clarify a system that is consistent with their ideas and serves as a guide for their behavior in this vector. (Chickering & Reisser, 1993).

The third vector is moving complete autonomy through interdependence. This vector includes three sub-categories: emotional interdependence, instrumental interdependence, and interdependence (Evans et al., 1998). As the student and advisor master the vector of *managing emotions*, shifting from autonomy to independence, students gain more confidence in the advising process and begin to define their pathway to success; however, regular advising sessions keep this momentum. Students may visit their advisor less in the first sub-category of emotional interdependence because they want to do things independently without prior approval. When the advisor acknowledges this stage's student characteristics, the advisor should allow the student to lead with the advising questions and even explore various answers or perspectives to their problem.

The fourth vector of establishing identity can be difficult for students. During this vector, students become more comfortable with themselves (i.e., appearance, gender, etc.). This vector can help the advisor understand students as they relax into their identities. High-quality academic advising allows students to express their identity without fear of judgment. When students feel comfortable, they are more likely to show academic success (Tinto, 1993). For example, a female student may decide to pursue a welding degree, typically a male-dominated field; this decision demonstrates that she is comfortable with their gender and identity.

The fifth vector is freeing interpersonal relationships. This vector explains how students came to recognize and accept the differences and viewpoints of other people (Evans et al., 1998). Advisors that are aware of this vector may discover that students are begin to develop a greater sense of confidence within the advising partnership. In order for students to know that this advising relationship can help them achieve their higher

education goals, the adviser should display “unconditional positive regard” for them during the advising process (Neal, 2015, p. 1). The potential for advisors to discuss co-curricular activities that involve their new selves and relationships with their peers may also present a valuable opportunity.

The sixth vector is creating a sense of purpose; the student identifies goals, makes plans, and establishes priorities during this phase (Evans et al., 1998). This level of development is acknowledged by the advisor in a high-quality advising session, which includes employing career planning tools and cementing their selected degree plan. Students begin to discover what kind of commitment they are prepared to accept in order to maintain a healthy balance between themselves and their families at this time (Chickering & Reisser, 1993). When advisers are able to empathize with students' diverse life experiences, the goals can be updated and the students' attention can be drawn back to their objectives.

The final and seventh vector is developing integrity, which is divided into three stages: humanizing values, personalizing values, and developing congruence (or congruence with values) (Evans et al., 1998). It was necessary to clarify a legitimate set of beliefs that have some internal consistency and that serve as at the very least a preliminary guide to action in the course of constructing this vector (Chickering & Reisser, 1969, p. 17). All three stages of this vector are critical to offering high-quality advice, especially when the advisor recognizes that students are developing social responsibility and defining their basic values during their time in college.

Conclusion

Academic advising has advanced significantly over the years and will continue to assist institutions in retaining and graduating students on time; however, the advising process is not without flaws. This comprehensive review of the literature delves into the chronological history to demonstrate why academic advising approaches and student development are critical in shaping students' perceptions of advising. Tinto (1999) found a correlation between student retention and advising, but few studies use narrative and statistical data to examine students' perceptions of advising. Additionally, the literature review demonstrated how critical student development is to the ways students perceive their advising experience. By examining students' academic advising experiences, the reader understands more about academic advising's historical context and benefits of academic advising.

The literature gap is exemplified by the scarcity of studies that examine the advising experience through eyes of students. This literature presented here explained the history of academic advising, how it has been practiced over the decades, and how the theoretical framework applied to the research on students' perceptions. Chapter Three describes how the students' perceptions of their advising experiences were explored and quantified to close this critical research gap. Additionally, the researcher explains how the theoretical framework is integrated into the research, acting as a guide for the study.

CHAPTER THREE

Methodology

Introduction: Research Questions

In light of the extensive review of the literature presented in Chapter Two, this current work reveals the connection between academic advising practices and student development. The impact on student perception and the core characteristics of an effective advisor students value the most, results in high student satisfaction (Frost, 1990; Gordon et al., 2008; Winston et al., 1984). This explanatory sequential mixed methods study assessed and investigated students' perceptions of their academic advising experience at a rural community college in Southeast Texas. The quantitative data were gathered by administering a survey adapted from a survey titled *Survey for Measuring Student Satisfaction with Academic Advising* (Teasley & Buchanan, 2013). The qualitative data examined narrative data about students' advising experiences at the College. This chapter summarizes the methodology of this study, which was grounded in the literature.

This explanatory sequential mixed methods study addressed the research questions by demonstrating how the "qualitative data help explain the results from the initial quantitative phase of the study" (Creswell & Tashakkori, 2007, p. 138). The research questions were based on Chickering and Reisser's (1993) theoretical framework for student identity development, which consists of seven vectors: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing a purpose, and developing integrity. The vectors

are not linear and can occur in any order and sometimes at the same time. The researcher examined students' perceptions of their advising experience using the seven vectors (Chickering & Reisser, 1993). The purpose of this study was to determine student satisfaction by examining how students' current identity development may have affected their perception of advising. The researcher stressed the importance of mixing and integrating quantitative and qualitative methods (Creswell & Plano-Clark, 2007). By incorporating quantitative and qualitative components, the researcher aimed to connect the methods and procedures to the research questions (Creswell, 2007). In this study, the research questions were based on a single central mixed methods question:

1) How are the student's survey responses (quantitative) and student interviews (qualitative) associated with Chickering and Reisser's (1993) seven vectors of identity development theory?

The researcher emphasized the findings from a comparison of quantitative survey data on student satisfaction with advising and narrative qualitative data on students' perceptions of their advising experiences in order to create a rich and robust research study.

In the first phase, the researcher collected data through a survey from students enrolled in Spring 2021 courses that answered quantitative questions about their overall satisfaction with advising. The quantitative research question was:

2) Which vector of Chickering and Reisser's (1993) student identity development theory elicited a low rating on the satisfaction survey based on gender?

The second phase involved the collection of qualitative data. The researcher collected data from students by conducting semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) with them in order to better understand their survey responses, which

supplemented the follow-up questions based on the theoretical framework. The qualitative question was:

3) Which of the seven vectors of student identity development identified by Chickering and Reisser (1993) influenced students' perceptions of their academic advising and college experience?

The mixed methods analysis phase is the final stage of this study; the researcher used quantitative and qualitative data to explain the findings. Comparing the quantitative data's outcome on students' perceptions with their advising experience and narrative qualitative data from the student's perceptions allowed the researcher to employ descriptive and inferential statistical procedures.

Researcher Perspective and Positionality

The researcher's perspective and positionality were important to this explanatory sequential mixed methods investigation. Because she has completed doctoral-level courses on several research methods, including quantitative, qualitative, mixed methods, and research strategies, the researcher possessed the essential knowledge and abilities to undertake an explanatory sequential mixed methods study. This section examines the researcher's point of view and positionality in relation to this research investigation.

As an administrator, the researcher is responsible for academic advising services at the College. Greene (2014) defines insider research as "research conducted within a social group, organization or culture of which the researcher is also a member" (p. 1). Insider advantages include direct access to data from the Office of Institutional Effectiveness, from study participants, and from institutional knowledge, all of which contribute significantly to this study. As an insider, it can be challenging to set aside institutional history and maintain an unbiased perspective throughout the research study;

therefore, the researcher employs multiple validity protocols. The researcher had sixteen years of higher education experience, working to help diverse students gain access, persist while enrolled, and graduate from college. The researcher's views and beliefs about higher education shaped her experiences as a result of the various roles she has held at the College, including Counselor, Director, Assistant Dean, to now Dean. The researcher's multiple positions in student support services at the College provided insight into various departments, specifically how different college departments, such as Admissions, Financial Aid, Business Office, and Housing, can affect students' college experiences.

The researcher's views are strikingly similar to those of the transformative worldview. Her entire career has been dedicated to assisting marginalized student populations with gaining access to higher education and achieve academic success. The researcher approached this explanatory sequential mixed methods study from a constructivist perspective, with the "goal of research to depend on the participants' views of the situation being studied" (Creswell & Creswell, 2018, p. 7). All college departments collaborate through a constructivist lens to ensure students persist and complete their intended degree or certificate at the College. Unfortunately, some institutions of higher education operate in silos, and administrators constantly attempt to build bridges; this study provides the necessary information to assist college leadership in making decisions about their academic advising programs. This research design enabled the researcher to present quantitative and qualitative data to college leadership regarding college student's development through the lens of her own experience, as measured by the seven vectors of student identity (Chickering & Resisser, 1993).

The researcher's objective was to effect positive change at the College and to enhance academic advising quality based on student feedback and experiences. In conjunction with the national surveys (i.e., CCSSE Survey) administered to students, this study assisted the College in understanding their perspective on their advising experiences. Academic advising services must be of high quality as research consistently indicates that academic advising can influence a students' decision to persist and his or her likelihood of graduating (Pascarella & Terenzini, 2005). When the findings of this study are used to improve advising services, it will directly affect persistence, retention, graduation rates, and, most importantly, student success.

Theoretical Framework

Chickering and Reisser's theory of student identity development served as the theoretical framework for this explanatory sequential mixed methods study. The seven vectors of the framework include: "developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, development purpose, developing identity" (Chickering & Reisser, 1993, p. 35). This research study incorporated Chickering and Reisser's (1993) seven vectors of student identity development in a variety of ways by connecting the vectors with students' perception of their personal advising experience. The vectors classified the quantitative and qualitative data and allowed the researcher to make meaningful connections between the vectors and the research questions. Apart from incorporating narrative data, this research study established a link between psychosocial development (Chickering & Reisser, 1969; Erickson, 1968) and academic advising. Chickering and Reisser (1993) modified the theory, noting that the vectors need not be sequential; however, the student

must resolve all aspects of the vector prior to moving to the next. This section discusses how the theoretical framework influenced students' perceptions of their academic advising experience by explaining the application to data collection, analysis, including the formation of research questions.

The theoretical framework guided the data collection process by addressing both the "what" and "why" of common occurrences, such as the seven vectors (Chickering & Reisser, 1993) in an advising session; providing a foundation for prediction; and aiming to learn from the participants' experiences (Polit & Beck, 2004). The research questions were connected to the theoretical framework and examined how student identity development (Chickering & Reisser, 1993), including external factors, can affect a student's satisfaction with academic advising. This explanatory sequential mixed methods study identifies areas of improvement to provide students with high-quality advising sessions that are both satisfying and beneficial to student success.

The theoretical framework influenced the data analysis process in a variety of ways, including the use of the quantitative instrument to categorize the survey questions in Qualtrics (Qualtrics, 2021); this setting enabled the researcher to view the seven vectors with a low to high rating. Knowing the vector ranking helped the researcher identify areas where the advising program could improve in order to meet students' psychosocial needs better. The theoretical perspective also allowed the advisor to understand better students' potential barriers in terms of "how they define themselves, their relationships with others, and what to do with their lives" (Evans et al., 1998, p. 32). The advisor-student relationship can have a detrimental effect on the students' futures

(Lunsford, 2012) if not nurtured correctly. The theoretical framework was aligned with the research questions, data collection, and analysis, as demonstrated in Table 3.1.

Table 3.1

Theoretical Framework Alignment Table

Section Title	Explanation of Section
Theoretical Framework	Chickering and Reisser's Identity Development Theory of Seven Vectors (1993)
Research Questions	*Mixed Methods Research Question (Main Research Question)* How do the student's survey responses (quantitative) and student interviews (qualitative) contribute to a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience? *Quantitative Research Question (Sub-Question)* Which vector of Chickering and Reisser's (1993) student identity development theory elicited a low rating on the satisfaction survey based on gender? *Qualitative Research Question (Sub-Question)* Which of the seven vectors of student identity development identified by Chickering and Reisser (1993) influenced students' perceptions of their academic advising and college experience?
Data Collection	Quantitative: Likert-format survey; questions are categorized by Chickering & Reisser's seven vectors (see appendix B). (1) developing competence (2) managing emotions (3) developing autonomy (4) establishing identity (5) freeing interpersonal relationships (6) developing purpose (7) developing integrity Qualitative: convenience sampling (Creswell, 2007) was used to determine the interviewees based on whether they indicated interest on their survey. The researcher asked follow-up questions to survey responses aligned with Chickering and Reisser's (1993) seven vectors of identity development theory to learn about their experience.
Data Analysis	Quantitative Analysis: Statistical data were entered into SPSS (IBM Corp., 2020) to run descriptive and frequencies for gender, age, classification, program, major, and vectors. Qualitative Analysis: Coding, pattern-matching with the seven vectors (Chickering & Reisser, 1993), framework analysis, and thematic analysis. This analysis used Microsoft Office and NVivo (NVivo12, 2021). Mixed Methods Analysis: Both the quantitative and qualitative data were analyzed to answer the study's central question drawing from meta-interferences.

The alignment of the theoretical framework served as a guide for the researcher throughout the study. Finally, the theoretical framework proved that when an academic advisor is acutely aware of a student's psychosocial maturity (Chickering & Reisser, 1969; Erickson, 1968), it directly affects the student's expectation for advising satisfaction. Admittedly, when students have a negative experience with their advising session, they may choose to drop out of college (Cuseo, 2001; Hardee & Mayhew, 1970a; Tinto, 1993).

Research Design and Rationale

The purpose of this explanatory sequential mixed methods study was to ascertain students' perceptions of their advising experience through the collection and analysis of quantitative and qualitative data. Students' perception of their advising experience was addressed by measuring quantitative data and exploring narrative data through a qualitative approach. The QUAN → qual approach began with collecting quantitative data first and concludes with a detailed qualitative data description of the quantitative results. The two-phase process combined quantitative and qualitative methods to collect and analyze data (Creswell & Tashakkori, 2007). The quantitative data results display the detail of the survey responses, followed by the qualitative data from the interviews, which used rich descriptive data about students' advising experiences. According to Creswell and Creswell (2007), the most fundamental design type is the explanatory sequential mixed methods design (see Figure 3.1).

In the first phase, a quantitative survey was distributed to students at the College regarding their advising experience. In the second phase, semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) were conducted and used as a follow-up of the 24-

item scale survey (Teasley & Buchanan, 2013) in order to gain a more nuanced understanding of students' narrative perceptions of their advising experience. This explanatory sequential mixed methods study took place at a medium-sized rural community college. After collecting responses, the researcher used a non-probability sampling method of convenience sampling (Creswell, 2007) to identify students who have indicated an interest in being interviewed via email. Student interviewees were asked about their advising experiences with questions that have been chosen based on the seven vectors and the quantitative survey data. After the interviews were complete, the interviews were transcribed and analyzed. The researcher illustrates the students' advising experiences through both quantitative and qualitative methods. The narrative structure enables the research to explain the identified themes and phenomena adequately. This study provides data-driven findings that may help improve the quality of advising services at the College. Because quantitative data was collected first, statistical methods determine that the findings should be supplemented in the subsequent phase (Driscoll et al., 2007).

Site Selection and Participant Sampling

The researcher was specifically interested in academic advising in a rural community college context. The selected research site was a medium-sized community college with an average enrollment of roughly 4,500 students every academic term. The community college was designated as a Hispanic Serving Institution (HSI), meaning that the institution had at least 25% full-time students identified as Hispanic. Because of the global pandemic, the College took precautions. Thus, there were not many students on campus during this study, making it harder to reach students. The survey captured first-

hand information crucial to this study and offered data to effect change; therefore, the researcher might find additional concerns related to the research questions to actually improve students' achievement (Creswell, 2003; Creswell & Plano-Clark, 2007).

A non-probability sampling method of convenience sampling (Creswell, 2007) was used to due to unforeseen circumstances of the global pandemic and the historic winter storm that occurred during this research study. The student interviewees selected indicated on the survey that they were interested in being interviewed about their academic advising experiences in narrative form. Even though the sample size was small, the survey responses and interviews were very thorough and provided the necessary information to achieve data saturation to answer the research questions. Consent was obtained from each participant before the survey and the interview. Interviews took place in a variety of formats, according to the student's preferences. Interviews took place in-person, over the phone, or via videoconference. The interview questions were formulated in conjunction with the survey responses and Cuseo's (2001) *Advisor Assessment*.

Data Collection Procedures

The seven vectors of the student identity development theory (Chickering & Ressier, 1993) were examined in this study to determine whether or not students were satisfied with their advising experiences, and how that satisfaction played a role in their advising experiences. This occurred as a result of a two-phase process that began with the collection of quantitative (QUAN) data and ended with the explanation of quantitative (qual) results using qualitative data (see Figure 3.1)

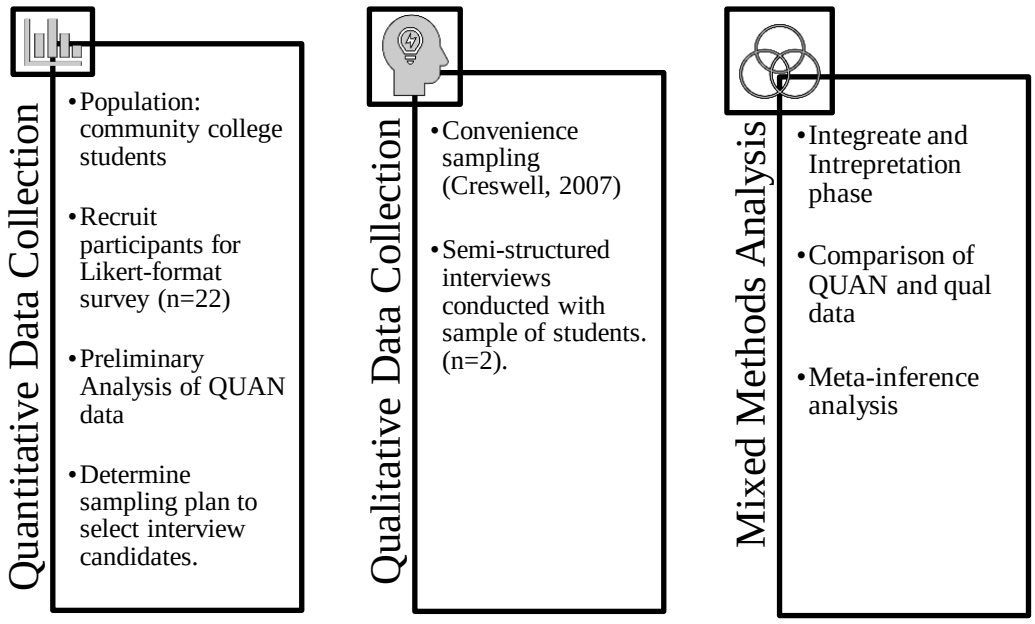

Figure 3.1. Explanatory sequential data collection process.

The first phase of this explanatory sequential mixed methods study collected quantitative data via a survey adapted from a newly developed instrument for assessing students' satisfaction with advising; the instrument was validated and proved to be reliable (Teasley & Buchanan, 2013). The 24-item scale (see Appendix B) was chosen for this study because this type of survey is appropriate for evaluating students' perceptions of their academic advising service provided to them (Teasley & Buchannan, 2013). The scale uses a seven-point Likert-type scale (1-strongly disagree, 4-neutral, and 7-strongly agree). Scales with more than two points have been shown to be more reliable (Bendig, 1954); thus, the researcher proceeded with the instrument. The researcher solicited participation from students via the Qualtrics (Qualtrics, 2021) platform. The survey link was added to the College's advising learning management system (LMS) as a homepage announcement inviting students to participate in the survey, and an email was sent to all students via Qualtrics (Qualtrics, 2021). All students had access to the online

survey; in order to proceed, informed consent was obtained prior to the start of the survey. Prior to posting the survey, the College's Institutional Review Board (IRB) approved the use of the instrument to survey students at the College. The first component of the survey asked participants for demographic information; then they responded to a series of questions meant to answer the study's research questions. The questions on the instrument were congruent with the theoretical framework of the study's seven vectors of student identity formation (Chickering & Riesser, 1993). A two-factor, 24-item scale survey (see Appendix B) developed from Teasley and Buchanan (2013) was validated and shown to be reliable for measuring student satisfaction with advising for two factors: "generic advising concerns and outreach functions" (Teasley & Buchanan, 2013, p. 10). The survey results were then compared to the idea of student identity development proposed by Chickering and Reisser (1993). Qualtrics (Qualtrics, 2021) emailed the invites to the online survey (see Appendix F). The survey takes about 15 minutes to complete.The survey includes a broad range of questions focused on two factors with “general advising concerns and outreach functions” (Teasley & Buchanan, 2013, p. 10). Additionally, demographic questions were asked to identify age, gender, major of study, academic classification, and advisor type; these are used as variables during the analysis process. The researcher was permitted to utilize the survey’s developer (see Appendix B). The survey developers, Teasley and Buchanan (2013), conducted a “confirmatory factor analysis (CFA) to deemed replicable and the two-paired 24-item scale (two-factor, 24-item scale) to estimate replicability, and the analyses showed excellent fit values.

The second phase of this explanatory sequential mixed methods study involves collecting qualitative data; the researcher conducts semi-structured interviews (Ayres,

2008; Galletta & Cross, 2013) to delve deeper into the findings of the quantitative results (Creswell, 2007). The students who indicated an interest in participating in an interview during the qualitative data collection phase were purposefully chosen based on their responses to the question. Semi-structured interviews were conducted once they were scheduled with participants. Prior to the interview, the participants and the researcher reviewed the informed consent aloud and enabled participants to ask questions. The researcher performed semi-structured interviews in accordance with the interview methodology once the individual indicated they were ready to begin (Ayres, 2008; Galletta & Cross, 2013). The researcher allows the participants to share their advising and college experiences and the chance to elaborate on their survey responses. The researcher asked a series of questions guided by the research questions and the quantitative survey responses. The researcher encouraged the participants to speak freely in order to elicit authentic responses (Vaughn et al., 1996). Once the data has been collected, the study can move to the data analysis phase of the study.

Data Analysis Procedures

The quantitative data was analyzed first in this explanatory sequential mixed methods study, which follows the design of the study. The researcher used SPSS (IBM Corp., 2020) to ascertain each survey question's frequency and satisfaction ratings. Each assertion was assigned to one of the seven vectors (Chickering & Ressier, 1993). For each survey question, a mean score and standard deviation were calculated. Independent variables such as gender, age, classification, academic classification, major of study, and advisor type were identified at the beginning of the survey.

Along with identifying the variables, the theoretical framework aligned with independent variables, including all seven vectors (Chickering & Reisser, 1993) which corresponded to the research questions. The categorization of the survey questions into the seven vectors (Chickering & Reisser, 1993) also, aligned with the theoretical framework used to develop the quantitative instrument shown in Table 3.2. The survey's developers previously conducted a confirmatory factor analysis (CFA) to verify scale construction, reduced the number of variables in regression models, and explained the interrelationship between the two factors (Field, 2018; Teasley & Buchanan, 2013). The researcher used descriptive and inferential statistics to analyze the quantitative data.

Following the quantitative analysis, the researcher analyzed the qualitative data using NVivo software (NVivo12, 2021) for the following analyses: pattern matching, theoretical framework analysis, thematic analysis, and cross-case analysis. The data analysis included the following: (a) data transcription, (b) transcript review, (c) data coding to create a codebook, (d) identifying themes and connections, and (e) interpreting the meaning of the data (Creswell, 2003; Creswell & Plano-Clark, 2007; Creswell & Tashakkori, 2007). The validity, reliability, and trustworthiness of this study was increased by incorporating the above processes. The qualitative strategy of inductive and reflective analysis provided an in-depth examination of students' perceptions of the academic advising experience. The inductive and reflective analysis aimed to reveal themes supported by the study's theoretical framework of Chickering and Reisser's seven vectors (Chickering & Reisser, 1993). Figure 3.2 illustrates the qualitative data analysis procedures used for this study and how all of the components intertwine.

Table 3.2

Seven Vectors (Chickering & Reisser, 1993)
Categorized by Survey Questions and Factors

Vector	Interview Questions
Factor 1	*General Advising Concerns*
V3	Advising appointments are worth my time.
V5	My advisor listens to what I have to say.
V1	My advisor is knowledgeable about course offerings.
V6	My advisor has helped me develop a long-term education plan.
V2	My advisor is prepared for my advising appointments.
V5	My advisor is concerned about my overall development as a student.
V1	My advisor considers my interests and talents when helping me choose courses to take.
V6	After my advising appointments, I feel that every course in my new schedule has a purpose.
V3	My advisor makes sure that I get the best possible educational experience.
V1	My advisor is knowledgeable about graduation requirements.
V1	If my advisor does not know the answer to one of my questions, he/she makes an effort to connect me to someone who does.
V5	My advisor encourages me to speak freely in our appointments.
V5	I am given the time I need during my academic advising appointments.
V5	My advisor and I work together as a team.
V2	My advisor acts professionally.
V5	I can trust my advisor.
V1	I feel like I will graduate in a reasonable amount of time, thanks to my advisor's planning.
V7	I would recommend my advisor to a friend.
V7	My advisor is ethical.
V3	I find academic advising appointments to be a positive experience.
Factor 2	*Outreach Functions*
V1	My advisor lets me know about the importance of our public affairs (student services) mission.
V4	I learn about different student organizations during my advising appointments.
V4	My advisor tells me how I can obtain leadership experiences on campus.
V4	I learn how I can contribute to the surrounding community during my advising appointments.

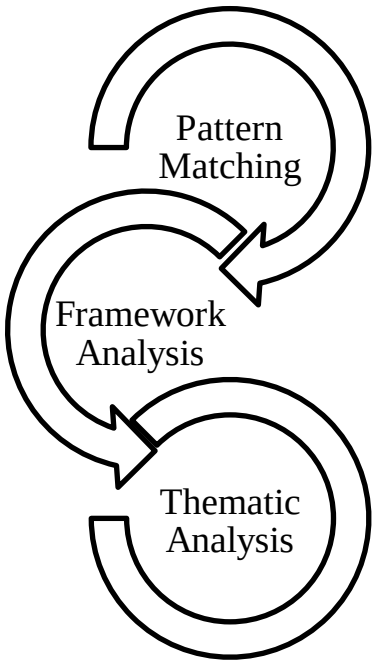

Figure 3.2. Qualitative mixed methods data analysis process.

Pattern Matching

The researcher's thought process provided insight into the research study's design and analysis processes. This iterative process enabled the researcher to establish critical connections within the qualitative data collected during the interview process. The pattern matching technique was then used to determine whether the seven vectors of student identity development (Chickering & Reisser, 1993) were present in the responses provided by students during their interviews. After conducting interviews with the students, the researcher performed pattern matching (Creswell, 2007; Creswell & Creswell, 2018; Creswell & Plano-Clark, 2007; Trochim, 1989) by compiling a list of keywords mentioned in the interviews.

Framework Analysis

According to the theoretical framework, this section linked the seven vectors (Chickering & Reisser, 1993) of identity development to the quantitative instrument. A collection of codes was organized into categories for the purpose of data analysis. After the interview transcription, the responses were classified according to the seven vectors (Chickering & Reisser, 1993). All extrinsic variables were coded. The theoretical pattern that corresponds to the interview questions is depicted in Figure 4.1. Following that, the participants' responses were coded using the seven vectors (Chickering & Reisser, 1993), and additional codes were derived from the semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008). Table 3.3. summarizes which vector (see Table 2.1) corresponds to the interview questions, allowed the researcher to comprehend and interpret the data.

Table 3.3

Seven Vectors (Chickering & Reisser, 1969, 1993) Categorized by Interview Questions

Vector	Interview Questions
V1, V3	What are your name and major of study?
V1	How will the courses you are taking this semester help you beyond college?
V2	What is the most challenging experience you have faced while attending College?
V2	What if your number one stressor at this time?
V5	Are you involved in any student life activities?
V3	Do you think the student has a role in the academic advising process?
V4, V5	What do you think the role of an academic advisor is?
V6	What attracted you to this College?
V1	Do you find answers when you need them? If no, please explain.
V7	What are your advisor's major strengths?
V7	What could your advisor do to improve the quality of his/her advising?

Thematic Analysis

In this study, NVivo software (NVivo 12; 2021) was used to conduct thematic analysis, in which common themes among the students' responses were identified and discussed. Several of the questions used were from a questionnaire developed by Dr. Cuseo (2014) with his permission. Coding techniques were applied to the transcriptions of semi-structured interviews (Galletta and Cross, 2013; Ayres, 2008); then the data was coded. Creswell (2017) explained, "Coding is fundamental to qualitative research," and "it requires making sense of text received through interviews, observations, and documents" (p. 190). Figure 3.3 depicts the four-stage theme analysis technique for comprehending narrative data, which was used to understand narrative data (Aronson, 1995).

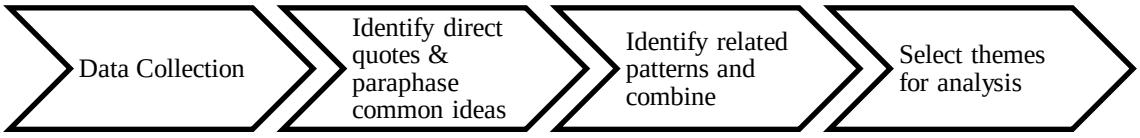

Figure 3.3. Four-stage thematic analysis process.

The mixed methods section of the study, the concluding phase, is where the data connect. Using a connected data analysis, which is frequently used in mixed methods research, the researcher used descriptive data from SPSS to identify low and high satisfaction ratings from survey results (Creswell & Plano, 2011). The researcher employed meta-inference techniques to explain the qualitative data's richness by analyzing quantitative and qualitative strands (Creswell & Plano, 2017). Tashakkori and Teddlie (2008) defined meta-inference as "an overall conclusion, explanation, or understanding developed through an integration of the inference obtained from the

qualitative and quantitative strands of a mixed methods study" (p.101). The analysis enables the researcher to address the research questions by elucidating how external factors influence the community college students' perceptions in accordance with Chickering and Reisser's student identity development theory. Figure 3.4 illustrates the mixed methods concurrent triangulation strategy visually (Creswell & Plano-Clark, 2007; Johnson & Onwuegbuzie, 2004).

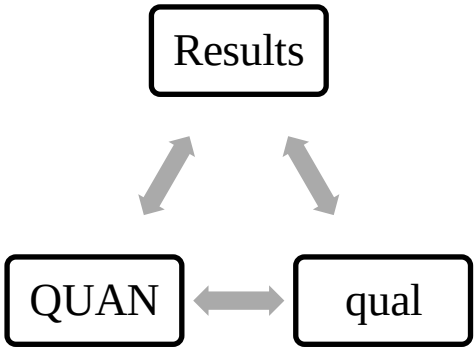

Figure 3.4. Mixed methods concurrent triangulation strategy.

Ethical Considerations

Prior to initiating this explanatory sequential mixed method study, the researcher thoroughly investigated any potential concerns, with ethics being the researcher's primary focus. All research studies must take ethical considerations into account. Yin (2018) substantiated stating, "any good case study researcher, like any other social scientist, strives for the highest ethical standards which doing research" (p. 87). To protect participants' identities in this study, the researcher used pseudonyms for all participants, including the research site. All data collected was stored electronically in a password-protected, encrypted Microsoft OneDrive folder. Paper documents were stored in a locked cabinet at the researcher's home office. Apart from pseudonyms, the

participants voluntarily reviewed, signed, and submitted the participant agreement form prior to participating in the study. This data from this study was collected from consenting students at the research who all identified as adults. The researcher adhered to all retention policies. Permission to conduct this research study was obtained from the Baylor University Institutional Review Board (IRB) prior to data collection. Permission to conduct research that occurred on campus was also granted from the College President and the Director of Institutional Effectiveness. The researcher collaborated with the College's Office of Institutional Effectiveness to request and inquire about institutional data reports. Including those regarding student enrollment data and other pertinent data.

To limit the probability of future confidentiality violations, data will be destroyed five years after the final approval of Baylor University's retention requirements have been received. After the data is no longer required, all email contact, including participant responses and any other follow-up communication between the participants and the researcher, will be deleted from the system. All participants were told that information acquired for this study will remain completely confidential, and that the information would be aggregated to ensure anonymity of the participants. It will then be input into a computer system and evaluated to determine the validity of the information acquired from the interviews.

Trustworthiness and Reliability

The qualitative data was checked and completed by utilizing a member checking and triangulation procedure in the second phase of this study; this also guaranteed that the data was accurate and trustworthy. Creswell and Plano-Clark (2017) asserted, "member-checking is a commonly utilized approach in which the investigator takes summaries of

the findings back to key participants in the study and asks them whether the findings are an accurate portrayal of their experiences" (p. 217). Additionally, in order to ensure that the students' experiences were accurate, the researcher visited with the participants to confirm that the narrative data obtained was correct. Using member checking (Creswell, 1998; Lincoln & Guba, 1985), we can guarantee that the data is credible and that it can be transferred, relied on, and confirmed (Bergin, 2018; Creswell, 2007, 2007; Creswell, 2003; Holloway, 1997). The interviewees were given a copy of the transcript to check and ensure that the material they contributed was appropriately documented; there were no transcription problems found. Interviewees were given the opportunity to provide any extra information they considered useful for this study. Triangulation, according to Creswell and Plano-Clark (2017), is "data taken from various sources (e.g., transcripts) or several individuals such that the inquirer builds evidence for a code or theme from these sources or individuals during data analysis" (p. 217). Lastly, the researcher employed the triangulation approach to guarantee that the data was as accurate as possible. In triangulation, the goal is to discover convergence, corroboration, and correspondence between the results of different methods (Creswell & Plano-Clark, 2017). The different phases of this explanatory sequential mixed methods study converged through the interpretation of results, resulting in the triangulation that was used for this investigation.

Limitations and Delimitations

The purpose of this explanatory sequential mixed methods study was to investigate and quantify students' perceptions of their advising experience at a rural community college. The study was constrained by its setting, because all participants attended one community college. Because the study was conducted exclusively with

students at this College, the advising practices may vary from other colleges and universities. Although this study's objective limited its applicability to other institutions, it can be replicated. Lincoln and Guba (1985) noted that the single location of a study is a common limitation when qualitative data is involved. The second limiting factor in this study was the type of advisor evaluated by the student. Students may have been assigned advisors in their specific programs, which meant they were more likely to have an established advisor-student relationship, as opposed to students with undeclared major students met with an advisor for the first time. The level of the advising may have varied depending on the training. The third limitation was the sample size of survey respondents and interviewees, as data collection was complicated by the current global pandemic and historical winter weather events that occurred during this study. For a period of time, the College was closed, preventing students from being readily available to complete a survey and be interviewed. Finally, this explanatory sequential mixed methods study had a limitation in terms of non-responders. The researcher had no control over who participated in the survey, resulting in estimation errors for specific populations (Turk et al., 2019). Examining student satisfaction presented a challenge because the study was subjective; students have been dissatisfied for a variety of reasons, including having a bad day, having a personality clash with an advisor, or experiencing an uncontrollable service. The transformative lens can be imprecise, resulting in research limitations (Sweetman et al., 2010).

Delimitations defined the boundaries of this study and guided the decision-making process for limiting and binding a mixed methods design, which included semi-structured interviews (Ayres, 2008; Galletta & Cross, 2013;) to assess students' academic

advising experience at the College. Despite the fact that more students completed the survey, the findings were limited due to the small sample size at the College. Additionally, the research was limited to a single rural community college in a single state. Finally, this explanatory sequential mixed methods study did not incorporate the advising approach used by the advisor. The survey respondents who experienced dissatisfaction could have met with an advisor who used a particular advising approach that did not work well with students.

Conclusion

This chapter described the technique and procedures used in this explanatory sequential mixed methods research study, as well as the results obtained. The significance of the theoretical framework is that it draws attention to this investigation of students' perspectives of their advising experiences. In Chapters One and Two, the researcher discussed how providing high-quality academic advising and understanding student's psychosocial development (Chickering & Reisser, 1969; Erickson, 1968) can influence their long- and short-term college success. Chapter Four will discuss the research findings and provide, a description of the integration of the quantitative and qualitative data. The chapter will also indicate ways the academic advising process at the College can be improved.

CHAPTER FOUR

Results and Implications

Introduction

The purpose of this explanatory sequential mixed methods study was to assess and explore students' perceptions of their advising experience using Chickering and Reisser's framework of the seven vectors of student identity development (Chickering & Reisser, 1993). By collecting and analyzing data, the researcher examined the quantitative and qualitative correlations and relationships between satisfaction and how students perceived their advising experience. According to Zhang et al. (2019), "future research was needed to examine students' satisfaction with their advising experience that included narrative data" (p. 22). This study helped to close the gap in the literature by examining students' satisfaction using a mixed methods approach. This section summarizes the assumption checking and data cleaning procedures, quantitative and qualitative data findings, mixed methods findings, and research implications.

Data Cleaning and Assumption Checking

The quantitative data was cleaned in the first phase of this study before it was used for analysis in the second phase. The data file was transferred from Qualtrics (Qualtrics, 2021) to SPSS (IBM Corp., 2020) in order to identify any missing data using the frequency function of SPSS (IBM Corp., 2020). The frequency table provided the researcher with the ability to discover out-of-range values, extraneous columns, and to validate the overall accuracy of the data. After checking that the variables were accurate,

the researcher examined their mean, values, and dispersion, and found that all of the values fell within the range of feasible results. For the Shapiro-Wilks test (Shapiro and Wilk, 1965), the researcher made model assumptions and used the results to determine whether or not the variables were normal ($p > .05$). The researcher used a histogram and Q-Q plots in addition to the Shapiro-Wilks test to seek for outliers, or extreme values that were not identified using the Shapiro Wilks test (see appendix A). The data looked to be distributed in a normally distributed manner (Cramer, 1998; Shapiro & Wilk, 1965). It was then determined whether the participant response rate was accurate, and the accuracy of the participant response rate was utilized to calculate the overall response rate.

Quantitative Findings

The quantitative findings are discussed in the section that responds to the quantitative research question, which was:

1) Based on gender, what vector of Chickering and Reisser's (1993) student identity formation theory resulted in a negative rating on the academic advising satisfaction survey?

The quantitative research question in the second phase of this explanatory sequential design served as a model for the qualitative research questions in the first phase (Creswell, 2003). To address the quantitative research question, this section is separated into two sections: the demographic analysis and the numerous statistical analyses. The demographic analysis examined the demographic variables with the primary variables of the seven vectors (Chickering & Reisser, 1993) to determine whether or not there were any correlations.

Demographic Analysis

The survey was administered through Qualtrics; students were invited to participate throughout the quantitative data gathering phase (Qualtrics, 2021). It was distributed to 1,689 students registered in Spring 2021 classes at the College; 42 students responded to the survey link, resulting in an approximate response rate of 40.21% (42 students responded to the survey link). The survey had a completion rate of only 1.07%, which means that only twenty-two (22) people answered all of the questions in full on the survey. The ages of those who responded ranged from 18 to 48 years, with the average being 27. The bulk of those who answered the survey questions were female (77.3 percent), and 22.7% were male. Fifty percent of the students were classed as freshmen, and fifty percent as sophomores. Student majors were categorized as general transfer education (77.3%) and career technical education (22.7%), with general transfer education accounting for the vast majority of students. A comparison of the demographic features of survey respondents is shown in Table 4.1. After analyzing the demographic data, the researcher transformed and computed the Likert scale data in SPSS (IBM Corp., 2020) to determine which question scored the lowest rating.

Normality was determined through a series of statistical calculations, including a Shapiro-Wilk's test ($p>.05$), which showed a visual of histograms and normal Q-Q plots (see Appendix A). In addition, the Shapiro-Wilk's test revealed that factors were normally distributed for both the advising and outreach functions, with a skewness of .1.17 (*SE* = .491) and a kurtosis of .240 (*SE* = .953) for the advising function (vectors 1, 2, 3, 4, 6, & 7) and a skewness of .978 (*SE* = .491) and a kurtosis of .978 (*SE* = .953) for the outreach function connected directly to the fourth vector, establishing identity (Chickering & Reisser, 1993).

Table 4.1

Comparison of Demographic Data for Academic Advising Satisfaction Survey Respondents, N=22

Category	Variable	Frequency (Percent)
Gender	Male	5 (22.7)
	Female	17 (77.3)
Age	21 and under	7 (31.7)
	22 and over	14 (63.4)
Ethnicity	White	7 (31.8)
	Hispanic	15 (68.2)
Classification	Freshman (1-40 hrs.)	11 (50.0)
	Sophomore (40+ hrs.)	11 (50.0)
Major Class	General Ed. Transfer	17 (77.3)
	Career Tech. Ed.	5 (22.7)
Major	Declared	16 (72.7)
	Undeclared	6 (27.3)
Advisor Type	Staff Advisor	12 (54.4)
	Faculty Advisor	10 (45.5)

Statistical Analysis

The data results from the descriptive statistics analysis tool in SPSS (IBM Corp., 2020) is discussed in this section. Prior to any statistical analysis, the researcher checked for normality in the data and categorized survey questions with the seven vectors to examine the lowest and highest levels of satisfaction. The sample size, mean score, and standard deviation of the survey questions are included in Table 4.2. The data shows that

the *SD* for vector four (Chickering & Reisser, 1993), establishing identity, was farthest from the mean (*M*), suggesting that the advising sessions we are lacking in some areas.

Table 4.2.

Descriptive Statistics for Each Survey Question (N=22)

	Question to Corresponding Vector	*M*	*SD*
1.	Advising appointments are worth my time—Developing Autonomy.	1.55	.963
2.	My advisor listens to what I have to say—Freeing Interpersonal Relationships	1.64	1.17
3.	My advisor is knowledgeable about course offerings—Developing Competence.	1.64	1.09
4.	My advisor has helped me develop a long-term education plan—Developing Purpose.	1.86	1.39
5.	My advisor is prepared for my advising appointments—Freeing Interpersonal Relationships.	1.73	.985
6.	My advisor is concerned about my overall development as a student—Freeing Interpersonal Relationships.	1.77	.973
7.	My advisor considers my interests and talents when helping me choose courses to take—Developing Competence.	1.86	1.17
8.	After my advising appointments, I feel that every course in my new schedule has a purpose—Developing Purpose.	1.64	1.14
9.	My advisor makes sure that I get the best possible educational experience—Developing Autonomy	1.59	1.01
10.	My advisor is knowledgeable about graduation requirements—Developing Competence.	1.55	.912
11.	If my advisor does not know the answer to one of my questions, he/she makes an effort to connect me to someone who does—Developing Competence.	1.61	1.09
12.	My advisor encourages me to speak freely in our appointments—Freeing Interpersonal Relationships	1.64	1.05
13.	I am given the time I need during my academic advising appointments—Freeing Interpersonal Relationships	1.73	1.16
14.	My advisor and I work together as a team—Freeing Interpersonal Relationships	1.86	1.28

Question to Corresponding Vector	*M*	*SD*
15. My advisor acts professionally—Developing Integrity.	1.32	.568
16. I can trust my advisor—Freeing Interpersonal Relationships	1.59	1.01
17. I feel like I will graduate in a reasonable amount of time thanks to my advisor's planning—Managing Emotions.	1.73	1.01
18. I would recommend my advisor to a friend—Developing Integrity.	1.82	1.26
19. My advisor is ethical—Developing Integrity.	1.5	.802
20. I find academic advising appointments to be a positive experience—Developing Autonomy.	1.77	1.11
21. My advisor lets me know about the importance of our public affairs (student services) mission—Developing Competence.	1.86	1.23
22. I learn about different student organizations during my advising appointments—Establishing Identity.	2.05	1.36
23. My advisor tells me how I can obtain leadership experiences on campus—Establishing Identity.	2.09	1.51
24. My advisor encourages me to speak freely in our appointments—Freeing Interpersonal Relationships	1.64	1.05
25. My advisor encourages me to speak freely in our appointments—Freeing Interpersonal Relationships	1.64	1.05
26. I am given the time I need during my academic advising appointments—Freeing Interpersonal Relationships	1.73	1.16
27. My advisor and I work together as a team—Freeing Interpersonal Relationships	1.86	1.28
28. My advisor acts professionally—Developing Integrity.	1.32	.568
29. I can trust my advisor—Freeing Interpersonal Relationships	1.59	1.01
30. I feel like I will graduate in a reasonable amount of time thanks to my advisor's planning—Managing Emotions.	1.73	1.01
31. I would recommend my advisor to a friend—Developing Integrity.	1.82	1.26
32. My advisor is ethical—Developing Integrity.	1.5	.802
33. I find academic advising appointments to be a positive experience—Developing Autonomy.	1.77	1.11
34. My advisor lets me know about the importance of our public affairs (student services) mission—Developing Competence.	1.86	1.23

Question to Corresponding Vector	*M*	*SD*
35. I learn about different student organizations during my advising appointments—Establishing Identity.	2.05	1.36
36. My advisor tells me how I can obtain leadership experiences on campus—Establishing Identity.	2.09	1.51
37. I learn how I can contribute to the surrounding community during my advising appointments—Establishing Identity.	2.05	1.50

When examining the data in vector one, it is clear that the advisor recognizes the value of the students' identity development. Table 4.3. shows the percentage of responses for each question categorized in vector one, developing competence; in this stage, students develop intellectually, physically, including their competence levels. The highest dissatisfaction, which was "somewhat disagree" and "disagree" combined, points to the importance of the advisor sharing the mission and purpose of Student Services; by sharing this information, knowledge base of college terms can increase for both student and advisor. The department's mission is not often discussed, but when the student is aware of the mission and purpose of advising, it builds their competence level and can impact their satisfaction because they understand the role of advisor and advisee.

Awareness of course offerings and graduation requirements received the highest satisfaction rating, which was a combination of "strongly agree" and "somewhat agree." This is the knowledge of course offerings and graduation requirements. Policies, protocols, and requirements are essential for the student and advisor to develop competence in their respective areas; this suggests that the majority of the respondents are generally satisfied with the advising session regarding sharing information to build overall competence for students.

Table 4.3.

Vector One (Chickering & Reisser, 1969, 1993): Developing Competence (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
My advisor is knowledgeable about course offerings.	15 (68.2 %)	3 (13.6 %)	1 (4.5 %)	3 (13.6 %)	0
My advisor is knowledgeable about graduation requirements.	15 (68.2%)	3 (13.6%)	3 (13.6%)	1 (4.5 %)	0
If my advisor does not know the answer to one of my questions, he/she makes an effort to connect me to someone who does.	15 (68.2%)	2 (9.1%)	3 (13.6%)	2 (9.1%)	0
My advisor lets me know about the importance of our student services mission.	13 (59.1%)	3 (13.6 %)	3 (13.6 %)	2 (9.1 %)	1 (4.5%)

In Table 4.4, vector two—managing emotions—there was is only one question linked to this category; in this stage, students gain the ability to recognize, accept and appropriately express their emotions (Chickering & Reisser, 1993). The respondents appeared to be satisfied with the question about whether they believed they would graduate within a reasonable timeframe as a result of their advisor's planning with the student. This data demonstrates that advisors employ techniques and procedures to ensure that the students have a clear pathway to graduation (Jabbar et al., 2019; Jenkins et al., 2018; Jenkins & Cho, 2013).

Table 4.4.

Vector Two (Chickering & Reisser, 1969, 1993): Managing Emotions (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I feel like I will graduate in a reasonable amount of time, thanks to my advisor's planning.	13 (59.1%)	4 (18.2%)	4 (18.2%)	0	1 (4.5 %)

The percentage of responses for each answer were classified in vector three, developing autonomy, shown in Table 4.5. In this vector, students develop emotional independence, self-awareness, and problem-solving skills (Chickering & Reisser, 1993).

Table 4.5.

Vector Three (Chickering & Reisser, 1969, 1993): Developing Autonomy (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Advising appointments are worth my time.	15 (68.2 %)	4 (18.2 %)	1 (4.5 %)	2 (9.1 %)	0
My advisor makes sure that I get the best possible educational experience.	15 (68.2 %)	3 (13.6%)	3 (13.6%)	1 (4.5 %)	0

The highest level of dissatisfaction, which was defined as “somewhat disagree” and “disagree” combined, showed that students found the advising session worthwhile of their time. This was a small percentage of respondents, so this data point should not be dismissed lightly, as it may deter students from completing college if they feel the advising is not worth their time. The other question inquired whether the advisor

contributed to a positive educational experience; the majority of the respondents indicated that the advisor provided a positive experience. When students develop the ability to become self-aware of how others can assist them on their journey, this can positively affect how they feel about specific events and resources shared with them during advising sessions. Students face a variety of challenges while in college (Applegate, 2012; Goldrick-Rab, 2010); therefore, developing autonomy is a critical component of identity development as this vector will assist students in problem-solving and becoming independent thinkers with informed thoughts.

In Table 4.6, vector four, establishing identity (Chickering & Reisser, 1993), the highest levels of dissatisfaction, were a combination of "somewhat disagree" and "disagree," associated with the advisor not sharing information about student organizations and leadership opportunities on-campus.

Table 4.6.

Vector Four (Chickering & Reisser, 1969, 1993): Establishing Identity (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I learn about different student organizations during my advising appointments.	12 (54.4%)	2 (9.1 %)	5 (22.7%)	1 (4.5%)	2 (9.1%)
My advisor tells me how I can obtain leadership experiences on-campus.	13 (59.1%)	1 (4.5%)	4 (18.2%)	1 (4.5%)	3 (13.6%)
I learn how I can contribute to the surrounding community during my advising appointments.	13 (59.1%)	2 (9.1 %)	3 (13.6%)	1 (4.5%)	3 (13.6%)

36.3 percent of respondents indicated “strongly disagree,” meaning the students were not informed of student life opportunities. This vector is associated with a critical developmental stage in a college student’s experience as they establish their identity and find groups where they can share interests with others (Chickering & Reisser, 1993).

The percentage of respondents for each response classified in vector five, freeing interpersonal relationships, is shown in Table 4.7; during this stage, students develop mature interpersonal relationships regardless of others’ perspectives, as well as self-acceptance and appreciation for others’ roles and responsibilities (Chickering & Reisser, 1993). The highest level of dissatisfaction, which was defined as “somewhat disagree” and “disagree” combined, was about the question of whether the student and advisor work collaboratively; this is critical because the student should feel a sense of involvement in the advising process (Creamer & Creamer, 1994; Grites, 2013; Grites & Gordon, 2000). By and large, respondents expressed satisfaction with the student-advisor relationship.

Table 4.7.

Vector Five (Chickering & Reisser, 1969, 1993): Freeing Interpersonal Relationships (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
My advisor listens to what I have to say.	16 (72.7 %)	1 (4.5 %)	3 (13.6 %)	1 (4.5 %)	0
My advisor is prepared for my advising appointments.	13 (59.1 %)	3 (13.6 %)	5 (22.7 %)	1 (4.5 %)	0
My advisor is concerned about my overall development as a student.	11 (50.0 %)	7 (31.8 %)	2 (9.1 %)	2 (9.1 %)	0

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
My advisor encourages me to speak freely in our appointments.	15 (68.2%)	4 (18.2%)	2 (9.1 %)	0	1 (4.5 %)
I am given the time I need during my academic advising appointments.	14 (63.6%)	3 (13.6%)	3 (13.6%)	1 (4.5 %)	1 (4.5 %)
My advisor and I work together as a team.	13 (59.1 %)	4 (18.2%)	1 (4.5 %)	3 (13.6%)	1 (4.5 %)
I can trust my advisor.	14 (63.6%)	5 (22.7 %)	2 (9.1 %)	0	1 (4.5 %)
My advisor considers my interests and talents when helping me choose courses to take.	12 (54.4 %)	5 (22.7 %)	1 (4.5 %)	4 (18.2%)	0

The highest level of dissatisfaction described as “somewhat disagree” and “disagree” combined, was in Vector Six, found in in Table 4.8. This vector is about developing purpose, and the question asked whether the advisor supported the student with their long-term educational goals.

Table 4.8.

Vector Six (Chickering & Reisser, 1969, 1993): Developing Purpose, N=22

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
My advisor has helped me develop a long-term educational plan.	14 (63.6 %)	3 (13.6 %)	1 (4.5 %)	2 (9.1 %)	2 (9.1 %)
After my advising appointments, I feel that every course in my new schedule has a purpose.	15 (68.9 %)	3 (13.6 %)	2 (9.1 %)	1 (4.5 %)	1 (4.5 %)
I find academic advising appointments to be a positive experience.	12 (54.5 %)	6 (27.3 %)	2 (9.1 %)	1 (4.5 %)	1 (4.5 %)

This data could mean the advisor was focused on short-term goals only, versus long-term after college graduation. The information could indicate that the advisor was only concerned with short-term goals rather than long-term goals. This vector is crucial because it allows the students to begin to gain a clear view of their degree plan and goals (Chickering & Reisser, 1993). Overall, the students were pleased with the advisor's assistance in helping them build a sense of purpose for their educational plans. Developing a purpose will assist students in making their goals more attainable in most cases.

The question with the highest levels of dissatisfaction in Table 4.9, vector seven, establishing integrity (Chickering & Reisser, 1993), was whether the student would recommend their advisor to a friend. It is worth noting that while this data point represented a small percentage, it demonstrated that not every student regarded their advising experience or advisor as excellent. Perhaps the student was having a bad day or held preconceived ideas about the advisor, as mentioned in the limitations. The student confirms and clarifies their belief systems at this point in development, which helps guide their actions and perceptions (Chickering & Reisser, 1993). The data shows the majority of respondents were pleased with their advising experience once again, just as the previous vectors. Integrity is closely linked to character (Simpson et al., 2014), so the advisor and student can draw on this key characteristic throughout this vector.

Finally, inferential statistics of binary logistic regression analysis were performed in SPSS to determine if there was a connection between gender and the lowest elicited vector, vector four, establishing identity (Chickering & Reisser, 1993). Vector four fell

into the category of the survey's outreach factor; this factor served as the dependent variable for the calculation.

Table 4.9.

Vector Seven (Chickering & Reisser, 1969, 1993): Establishing Integrity (N=22)

Statements	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
My advisor acts professionally.	16 (72.2%)	5 (22.7%)	1 (4.5 %)	0	0
I would recommend my advisor to a friend.	14 (63.6%)	2 (9.1 %)	3 (13.6 %)	2 (9.1 %)	1 (4.5 %)
My advisor is ethical.	15 (68.2%)	3 (13.6 %)	4 (18.2 %)	0	0

Gender, the predictor variable, was evaluated a priori to ensure there was no breach of Logit's linearity assumption. In the binary logistic regression analysis, the predictor variable of gender was discovered to contribute to the model. The unstandardized Beta weight for the Constant 1.207, *SE*= .921, Wald = 1.72, p <.001. The unstandardized Beta weight for the predictor variable: *B* = .008, *SE* = .383, Wald = .000, p. <.001. The estimated odds ratio favored an increase of nearly [n%] [Exp (B) = 3.34, 95% CI: [.476–2.12] for vector four each unit increased for gender type.

Summary of Quantitative Findings

However, when aligned with the framework, the quantitative data revealed that the respondents scored lower satisfaction with questions regarding the disbursement of information about student organizations, which were linked to vector four, establishing identity. The qualitative phase of this study confirmed that the majority of the College's students were satisfied with their overall advising experiences. In order to improve the

overall advising experience, it is necessary to bring this information to the forefront. Because establishing one's identity as a college student is an integral part of the student's development (Chickering & Reisser, 1969, 1993; Evans et al., 1998; Higbee, 2002; Strayhorn, 2016). The most significant variables that emerged from the data analysis were that the majority of survey respondents were female (77.2%), that the majority of respondents had already declared their major of study (72.7%), and that the advisor type portion of the survey showed that both faculty and staff advisors were active. Final results revealed a link between gender and the lowest evoked vector in the binary logistic regression model. Students' perceptions of their advising experience, regardless of the individual variable, indicated that they had positive outcome.

Qualitative Data Findings

The researcher used the theoretical framework of Chickering and Reisser's (1993) student identity development as the lens for this research analysis (*a priori*). The results from the two semi-structured interviews (Ayres, 2008; Galletta & Cross, 2013) were analyzed. In this section, the qualitative findings are discussed. The researcher also addresses the qualitative research question for this explanatory sequential mix methods design: Which of the Chickering and Reisser's (1993) seven vectors of student identity development impacted the students' perceptions on their academic advising and college experience? The data were entered into NVivo (NVivo12, 2021), a data analysis software to arrive at data saturation (Glaser & Strauss, 1967). This section will explain the qualitative findings with the pattern matching technique, theoretical framework analysis, and thematic analysis using the transcribed data from the semi-structured interviews (Ayres, 2008; Galletta & Cross, 2013).

Pattern Matching

Based on her fieldwork experience, the researcher proposed that the Student Identity Development hypothesis developed by Chickering and Reisser (1993) may be used to better understand students' perceptions of their advising experiences. It is necessary to use pattern matching in explanatory sequential studies because it allows the researcher to acquire knowledge by comparing extrinsic observations with individual's internal moods (Hammond et al., 1966). Pattern matching is essential to this type of research because it allows the researcher to "make sense of the world by comparing observations with internal mental moods" (Hammond et al., 1966). To ensure that the semi-structured interviews (Ayres, 2008; Galletta & Cross, 2013) were consistent with the quantitative instrument, the researcher reviewed the transcriptions of the interviews (Galletta & Cross, 2013). Using the theoretical framework of the seven vectors, both qualitative and quantitative data were compared (Chickering & Reisser, 1993). In addition to providing a rich example of students' impression of their advising experience, the excerpts from the interviews helped to create the development of themes and patterns. By examining the narrative data from the student interviews, the researcher was able to identify some patterns in their responses. After being asked if the classes they had signed up for would serve a purpose after graduating, the students agreed that the information they had gained from the courses could be applied to their everyday lives. They stated that they found out about student organizations through a college announcement or an email, rather than through their advisor. The subject of student groups and leadership possibilities centers on a vital period in a college student's growth as a person: the time between high school graduation and college graduation (Chickering & Reisser, 1993). Lastly, the students made a connection to vector five, which is about developing

interpersonal ties with people; they expressed gratitude to their advisor for listening to them, which is something many students desire. In many ways, pattern matching is comparable to hypothesis testing; as Trochim (1989) points out, "pattern matching encourages the adoption of more complicated or comprehensive hypotheses and treats observations from a multivariate rather than a univariate perspective" (p. 357).

Table 4.10.

Pattern Matching Table

Quotations from qual data interviews	Corresponding Survey Item
Participant 1: "student government is like my first student life activity. It was on Blackboard, so I got a message there, but I kept on seeing it on Blackboard." Participant 2: "I didn't see it online but received an email.".	I learn about different student organizations during my advising appointments -Vector 4 (establishing identity).
Participant 1: "I just think I'm like more aware, I guess of the way things like are and the of course they're challenging, but like psychology, you learn all kinds of things about. People and the way that they like, like the way that people like everybody is different and like how certain things could affect them." Participant 2: "They are very helpful and whenever I graduate, at least for me, especially for psychology and for philosophy."	After my advising appointments, I feel that every course in my new schedule has a purpose- Vector 6 (developing purpose).
Participant 1: I've had like three advisors here. OK, so I notice, like the past advisors, the third one was the most helpful. I kind of got like misguided somewhere at the beginning whenever. I was taking courses that didn't need."	My advisor is knowledgeable about course offerings and My advisor is knowledgeable about graduation requirements – Vector 1 (developing competence).
Participant 2: when I see an advisor, they seem more like a life coach in my life. Participant 2: I appreciated her[advisor] listening skills, like she can listen. She's [advisor] able to share you out and give you the best advice.	My advisor listens to what I have to say – Vector 5 (freeing interpersonal relationships).

The experienced pattern was found in Chickering and Reisser's (1993) student identity development theory when it was applied successfully to understand student's perception of their advising experience. The pattern that emerged through pattern matching mirrors the predicted pattern, which was grounded with the theoretical framework of this explanatory sequential mixed methods study.

Theoretical Framework Analysis

Using the study's theoretical framework as a guide, this section explores the universal explanations for the semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) that were done in the study. The researcher connected multiple methods in this study, which contributed to a better understanding of how the seven vectors of the student identity theory (Chickering & Reisser, 1993) intersect with the perceptions of advising held by students. Students' perspectives of their advising sessions may differ depending on the vector they are experiencing at the time; as a result, advisors must be familiar with the vectors in order to serve students effectively. Student interview questions about their overall advising experience were analyzed using the framework of the seven vectors of student identity theory developed by Chickering and Reisser (1993).

This section also investigates which vectors have the most prominent emergent themes, as well as all of the vectors with the lowest customer satisfaction ratings. By matching the interview questions to the corresponding vector, the following vectors were discovered: vector one (developing competence), vector three (developing autonomy), vector four (establishing identity), and vector seven (developing integrity).

Both students agreed that the first vector, "developing competence," had the lowest satisfaction rating; yet this vector was a common theme amongst the two students.

Vector one is separated into three components, which were discussed in detail in Chapter Two: intellectual, physical, and interpersonal competence. Both students discussed their first-year experiences and the difficulties that came with adjusting to college life, which included navigating the advising process and knowing the roles and responsibilities of both the student and the adviser. According to Participant 1, it may be good for the adviser to review the student's and advisor's responsibilities, as well as any college jargon that may have been utilized during the advising session, before the session begins (i.e., degree plan, office hours, etc.). Emphasis must be placed on the fact that advisors should provide additional support to students throughout their first year of college to assist them in developing all of the necessary skills for success (Chickering & Reisser, 1969, 1993; Drake et al., 2013; Tinto, 1999).

The interview question associated with vector three, developing autonomy, received the lowest satisfaction rating as a result of the following vector. While making the shift from independence to interdependence, the two students demonstrated that they had difficulty with time management skills and online learning issues. The move from competence to interdependence becomes more achievable once competence has been established, despite the fact that the vectors are not linear in nature. According to the researcher's previous job experience at the College, the College provides student success workshops that focus on time management skills and online learning support. By sharing these abilities with students, the advisor should create interdependence among the students.

The fourth vector, which dealt with establishing one's identity, brought the least satisfaction. Student participation helps pupils develop a sense of belonging and a sense

of community. Advisors have a unique ability to disseminate information about service and leadership possibilities to their clients. According to O'Banion and Tinto (1994), developmental advising is a comprehensive method in which advisers collaborate with students to help them achieve their goals. According to Roger Winston (1994), the following is true:

> Developmental advising has the greatest impact by supporting and challenging students to take advantage of the multitude of learning opportunities outside of their formal classes and use the human and programmatic resources designed to promote the development of their talents and broaden their cultural awareness. Developmental advising has a multiplier effect that increases student' involvement in institutional programs and services; this positively influences retention. (Winston, 1994, p. 114)

In conclusion, while vector seven, developing integrity, was not linear and did not occur in a sequential order according to the research findings, it appears that the non-traditional student proceeded to this stage of student identity development. The learner in this situation is able to assign values to themself and utilize those values to guide their actions (Chickering, 1993). Figure 4.1 indicates that the codes correlate directly to the seven vectors for both students who were interviewed utilizing the NVivo (NVivo12, 2021) project map feature (Chickering & Reisser, 1993; NVivo12, 2021).

Thematic Analysis

Prior to the development of emerging themes and the beginning of thematic analysis, the following steps were taken: The demographic information was acquired by a quantitative survey and occurred at the beginning of each interview with the participants. Participants choose their pseudonyms before the audio recording of the interview was began. Table 4.11 summarizes the demographic characteristics of the two individuals who were interviewed for this investigation. Most of the students did not know that one

of them was a non-traditional student, she did not immediately enroll in college after graduating from high school. When it comes to family, job, and finances, nontraditional students may encounter more obstacles than their traditional counterparts (Fairchild, 2003).

Table 4.11.

Demographics of Interview Participants

Pseudonym	Age	Gender	Classification	Major	Type
Participant 1	34	Female	Sophomore	Associate Degree	Non-Traditional
Participant 2	20	Female	Sophomore	Associate Degree	Traditional

Next, the researcher analyzed the transcripts of both interviews for emerging themes based on the framework analysis. The purpose of this thematic analysis was to assess how interview participants perceived their advising and overall college experience. Convenience sampling (Creswell, 2007) was used to select students for interviews based on whether they indicated interest on the survey. Both interviewees had varied experiences with advising. Thematic analysis identified four common themes: work challenges, helpfulness, time management, and student engagement. All themes will be discussed, and the interview content will be referenced in the following sections.

Work Challenges

Whether they were laid off or worried about their suitability for the job, both participants experienced work-related difficulties. The framework analysis indicated that vectors one and six can be connected with students gaining competency in a career field,

and that the work can occasionally assist students in gaining a sense of direction in their lives. Participant 1, a non-traditional student, expressed:

> I have been in the workforce for about fifteen years; I worked in oil and gas. Whenever the downturn and everything else that comes with that industry, I chose to go back to school. Once you have been in the workforce for like X number of years, you are probably overqualified, or you know you lack that education to be able to go into other fields, so that is difficult starting all over again.

Participant 2, a traditional-aged college student, discusses her professional concerns with the group. She said, "in all honesty, I was unsure whether I would do satisfactorily on the job. I was unsure whether or not I would be good enough for that."

Helpfulness

As examples of how they collaborated with competent advisors who assisted them throughout their undergraduate years, both participants offered detailed examples of their experiences. To provide high-quality advising, advisors must acquire proper training (Habley, 1998). Vectors two and five align with the trait of being of assisted. The students can accept feedback and assistance from others if they are working on creating freeing interpersonal relationships and regulating their emotions. Participant 1 shared that she originally encountered some difficulties with the advisors with whom she had been working. She had faith that her advisor had guided her in the right direction, but it turned out that she had taken courses that were not necessary for her degree plan. She mentioned that the most recent advisor she met with you made sure she was on the correct track and was quite helpful. According to participant 1, "the third one was the most beneficial." It's just that it's taking me a little longer to graduate because I got a little off track with my first two advisors for a little while." Students seek assistance from knowledgeable advisers for assistance with degree planning and decision-making, and if they feel

encouraged, they are more likely to persist in their studies and complete their degrees (Cuseo, 2003). While Participant 2 described an excellent advising experience from the start, she also expressed her gratitude for her advisor, saying, “My success coach [advisor] is amazing all around; she's there for the students when they need help, and also there to listen and guide them further into their careers.” For me, an advisor is more of a life coach than anything else.” A freeing interpersonal relationship with the advisor (vector five) is critical because research demonstrates “academic advising can play a role in students' decisions to persist and in their chances of graduating” (Pascarella & Terenzini, 2005, p. 404).

Time Management

Both participants stated that time management was a difficult to achieve. Time management is integrally tied to the first two vectors, which are concerned with competence and emotion management, respectively. When people strive to manage their time, it is necessary for them to be able to arrange activities throughout the day in order to accomplish their objectives successfully. Additionally, being intentional with time commitments, whether they are assignments or appointments with an adviser, requires the ability to manage emotions. Participant 1 described how it can be difficult to strike a balance between the responsibilities of student and a parent; he underlined how important the advisor's role is in supporting the student to succeed and persevere through difficult times. As Participant 1 pointed out, “trying to be a mother, trying to be a teacher, and trying to be a student were all difficult.” The participant viewed the advisor's responsibilities as “someone like I think to advise you, I assume, and point you in the proper route.” As a parting piece of advice, Participant 1 stated, “I believe it would be

better if [the College] were more accessible for your [non-traditional] college students, such as older folks." She went on to say, "I assume that the instructors are using new programs; therefore, they should be cognizant of the amount of time that is actually required to complete the assignments." Professors and professional advisers can collaborate to gain a thorough understanding of the student's current skill level, allowing them to assist in acquiring the abilities they need to be successful. Additionally, Participant 2 stated that finding time in her day to devote to online learning proved to be a difficult task. Below is how Participant 2 explained why face-to-face education and advising was the most effective method for her:

> Right then and there to understand and be there in person, and I feel like it is very stressful for me 'cause you know you have a life you know, and sometimes you put it to the side a little bit. Alternatively, you say I will do that later, or I will do it in a little bit, and then a later comes too fast.

Because of the global pandemic, the College had to develop strategies to support students virtually rather than face-to-face services.

Student Engagement

Academic advisors are the most effective source of information for students seeking information about student activities and leadership positions. Engagement of students were aligned with vectors four (establishing identity) and six (developing purpose), which ultimately establish students' identity and purpose in the college setting. Participating in student organizations with similar interests and goals can aid in the development of a student's identity during these stages of growth. Student organizations were introduced to both participants through emails and announcements posted in the College's learning management system, rather than during their advising sessions. In the following excerpt, Participant 1 appeared to be overjoyed, saying:

> SGA was my first student life activity. Well, with this pandemic, everything was out of control. We sat down, and we spoke about it, and we worked on the bylaws until they were finalized, and then we held elections. Now we're collaborating with PTK and attempting to expand our organization's footprint.

In addition, Participant 2 discussed her experiences as a student mentor and demonstrated her progress in determining her life's purpose through video. Participant 1 shared that her involvement as a student mentor, particularly at her high school, had a positive impact on her life and given her a sense of purpose. “It breaks my heart that some students want to follow in my footsteps.” she said. Student mentors frequently report an increase in their sense of personal significance and worth as a result of their involvement (Schlossberg et al., 1989).

Braun and Clarke (2006) stated, a “thematic analysis should be considered a basic method for qualitative data analysis since it provides core abilities for doing many other types of qualitative data analysis” (p.78). A summary of the code themes developed from the data to represent themes and vector alignment is provided in Table 4.12. (Chickering & Reisser, 1993).

Table 4.12.

Interview Themes with Vector Alignment

Theme	Vector
Work Challenges	V5
Helpfulness	V1, V4
Time Management	V1, V3
Student Engagement	V4, V5

Cross-Case Analysis

By conducting a cross-case analysis with NVivo (NVivo12, 2021), the researcher discovered that the two individuals questioned had a number of common themes detected in the thematic analysis. These topics included job problems, helpfulness, time management, and student involvement. Figure 4.1 depicts the alignment of the transcriptions from both interviews with the seven vectors of student identity formation and themes, as well as the themes themselves.

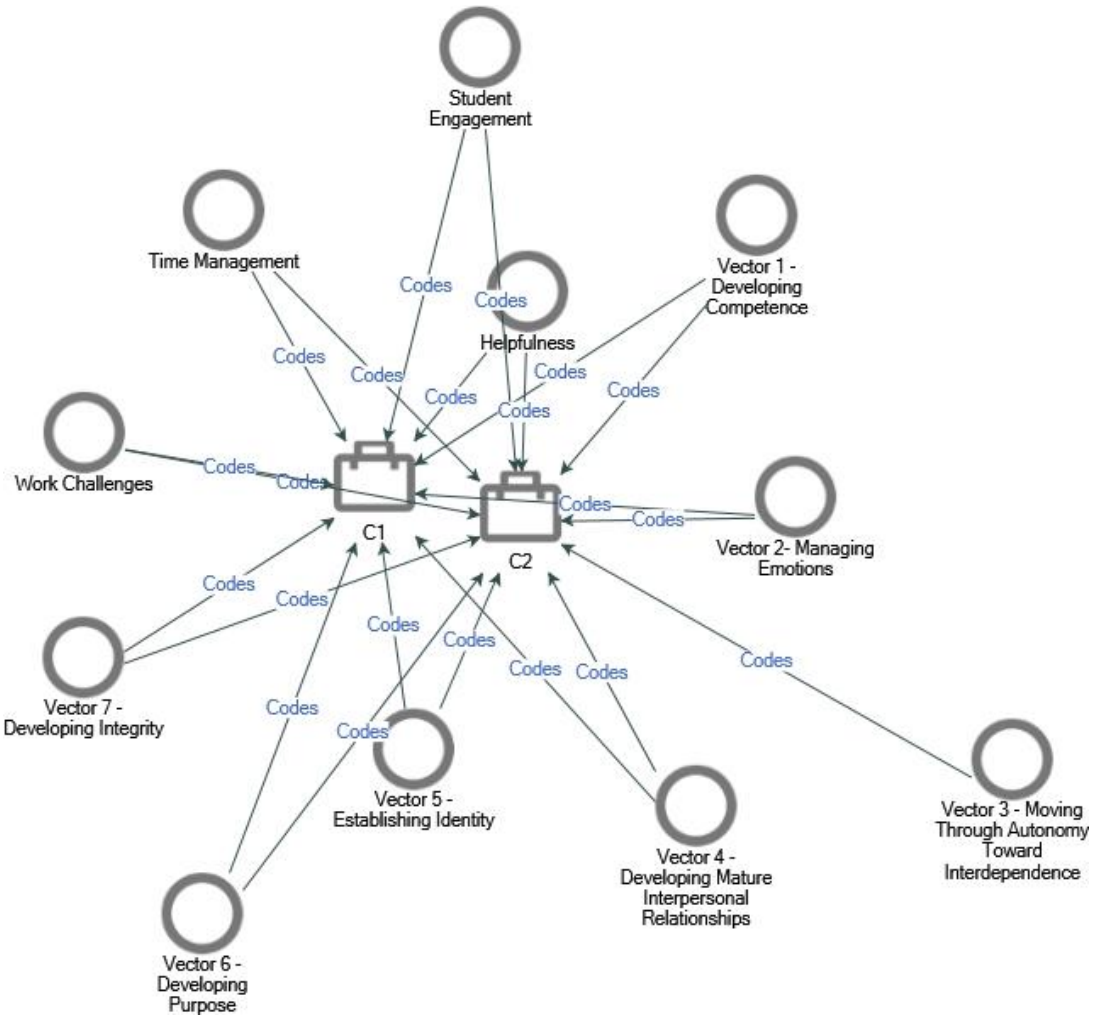

Figure 4.1. Cross-case analysis (Chickering & Reisser, 1993).

In both cases, the participants shared their narratives of personal struggles they encountered during their college years, revealing fifteen statements (see Appendix B) connected to vector two, managing emotions. Managing emotions is a stage of identity development in which students learn to recognize, express, and control their emotions during difficult situations (Chickering & Reisser, 1993; Higbee, 2002; Hudson, 2010). An advisor's role in assisting students through this vector is to refer them to support services that can assist them during difficult times. The advisors must be aware of student challenges and assist them in providing quality advising (Applegate, 2012; Bedker & Young, 1994; NSSE, 2019).

The second most frequently shared response was vector one, developing competence (Chickering & Reisser, 1993), with thirteen connections (See Appendix B) indicating that a significant part of the college experience was developing students' confidence in various situations. Both participants demonstrated an understanding of their degree plans and their path to graduation. As discussed in Chapter Two, one of the core characteristics of an advisor is the knowledge of their craft (Cuseo, 2014), which enables them to acquire their knowledge necessary to help students plan for their path to college success. Both participants demonstrated an understanding of the college process and procedures and even expressed a willingness to assist others on their journey. The cross-case analysis enabled the researcher to assess both interviewees and the extent to which they overlapped with the theoretical framework and one another. Because of similarity of their cases and responses, the research reached data saturation (O'Reilly & Parker, 2013) with the two participants. Throughout all analyses, the research question was addressed and validated.

Summary of Qualitative Findings

The qualitative data for this explanatory sequential design complimented the data findings during the quantitative phase. The student satisfaction survey questions revealed that generally, students were satisfied with their academic advising experience, which matched the narrative data from the semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008). The qualitative findings showed that the theoretical framework aligned with the interview responses, which emphasized the need for advisors to be aware of students' identity development through the seven vectors (Chickering & Resisser, 1993), particularly how they impact students' perceptions of their advising experience. In the interview with Participant 1, she explains that she met with three advisors, and it was not until the third advisor that she was placed on the right track and began to develop competence and confidence in her advisor (vector one). Participant 2 shared that her advisor was like a "life coach" to help her through the good and bad times (vector five), making her advising experience positive. The researcher chose not to interview more participants for this study because all aspects of the research question were addressed with the two participants and the quantitative response. Upon completing the interviews, the researcher coded the data and aligned the responses to themes and the seven vectors (Chickering & Reisser, 1993) and included external factors (Barney G Glaser, 2008).

Mixed Methods Data Findings

The qualitative data gathered during the quantitative phase of this explanatory sequential design were used to supplement the quantitative data collected during the qualitative phase. Student satisfaction with their academic advising experience was typically high, which matched the narrative data gathered through semi-structured

interviews. Based on the qualitative findings, it was determined that the theoretical framework corresponded to the interview responses, emphasizing the necessity for advisors to understand how the seven vectors of student identity development identified by Chickering and Reisser (1993) influence how students perceive their advising experience. After interviewing the participants and recording their responses, the researcher categorized the information, aligned it with the seven vectors and themes, and factored in external influences (Glaser, 2008). Table 4.13 illustrates the process by which quantitative and qualitative findings were combined and how they related to the seven vectors of the student identity development (Chickering & Reisser, 1993). Students report higher levels of satisfaction when their advisors understand them. By determining where a student is in their identity development, the satisfaction rate increases (Cuseo, 2014).

Table 4.13.

Mixed Methods Data Chart

Prominent Theme	Quantitative Corresponding Vector	Quantitative Corresponding Vector
Work Challenges (Advising Function)	V5—Freeing Interpersonal Relationships	V4—Establishing Identity
Helpfulness (Advising Function)	V1—Developing Competence and V5—Freeing Interpersonal Relationships	V1—Developing Competence and V5—Freeing Interpersonal Relationships
Time Management (Advising Function)	V3—Developing Autonomy and V5—Freeing Interpersonal Relationships	V1—Developing Competence and V3—Developing Autonomy
Student Engagement (Outreach Function)	V4—Establishing Identity	V4—Establishing Identity

It is worth noting that the vector with the highest level of dissatisfaction on the survey contained questions about student engagement in the outreach function category. This

implied that student engagement and leadership opportunities were not mentioned during advising sessions; however, both interview participants were involved in student life at the College. According to student interviews, the participants discovered the student engagement component on their own via campus emails from non-advisors. Throughout all of the vectors, students developed a greater sense of self-awareness and benefit from connection through student engagement activities. Advising is often viewed as a singular service for enrolling students in courses. Yet, the data indicated that students seek more than course selection; they seek ways to connect. Advisors can benefit from a perspective informed by student survey responses and narrative data.

Summary of Mixed Methods Findings

The combination of quantitative and qualitative enabled a more in-depth examination of how and when their identity development influences students' perceptions of advising. When properly implemented, a truly holistic approach to student advising takes place. The quantitative data indicated that students were generally satisfied, and the narrative interviews corroborated the survey results. The emerging themes, which included the core characteristics of an effective advisor (Cuseo, 2014) discussed in Chapter Two, were evident in the student responses. The richness of the narrative data bolstered the survey responses. Both the quantitative and qualitative findings underscored the theoretical framework, demonstrating the critical nature of viewing advising through the lens of the students and how their overall college experience could be tainted by low-quality advising in which the student is unsure of their path and more likely to drop out of college (Tinto, 1994). The central question was addressed through the mixed method

analysis process, and the fusion of both phases was necessary to have a more significant impact on the research.

Discussion

Throughout this mixed methods study, the researcher illustrates that listening to student feedback and understanding students' perceptions of advising satisfaction are crucial to improving the way academic advising services are offered in higher education institutions. Furthermore, this study indicates how incorporating student identity development theory might have an impact on how students evaluate their advising experience. It is essential for advisors to consider the development of students when providing academic guidance (Chickering & Reisser, 1993; Higbee, 2002; Hudson, 2010). This section will explain the significance and relevance of the findings, and provide information on how the research questions were answered in the study process.

In the course of the data analysis, all of the research questions were addressed, illustrating the relevance of combining quantitative and qualitative data to support the premise that students' opinions of their advising session are supported by the student interviews. For the sake of this study, the value of learning advising experiences seen through a student's perspective, with the theoretical framework of student identity formation as a foundation, serves as a constant reminder of the study's objective. As a result of unanticipated circumstances such as a global pandemic and historic winter occurrences, this study has several limitations, such as a limited sample size for both phases of the research; yet, the groundwork for future research has been laid by this study. In addition to highlighting the significance of this research, the literature review serves as a basis for the study's focus on understanding students' identity development in

order to improve the advisor's skills with the core attributes of a successful adviser (Cuseo, 2001, 2014). Develop a historical perspective on academic advising while emphasizing the importance of counseling the student as a whole person, as opposed to the traditional method (Creamer & Creamer, 1994; Grites, 2013; Winston et al., 1984). In both stages of the study, it was discovered that student opinions of the advising process were essential in influencing their students' entire college experience, as well as retention and graduation rates (Tinto, 1993). Because it will allow us to determine the strength of students' impressions of one of the most significant support services offered by colleges and universities, this explanatory sequential mixed methods design holds great significance (McClellan, 2007).

The quantitative question for this research was as follows: Which vector of Chickering and Reisser's (1993) student identity development theory elicited a low rating on the satisfaction survey based on gender? Female participants constituted the majority of those who answered the survey questions, and the only two students who agreed to be interviewed were also female; therefore, the researcher concentrated on their low satisfaction ratings. However, the small number of male participants who took the survey provided responses that were consistent with those of the female participants. The questions connected to vector four, creating identification, had the lowest satisfaction ratings in the quantitative component of the test. These questions emphasized the importance of the advisor explaining student engagement activities; however, the respondents expressed low satisfaction, indicating that either the advisor did not discuss various engagement activities with the student.

The qualitative question for this study asked: Which of the seven vectors of student identity development identified by Chickering and Reisser (1993) influenced students' perceptions of their academic advising and college experience? These patterns were visible in the interview questions that corresponded to vector one (developing competence), vector three (developing autonomy), vector four (establishing identity), and vector seven (developing integrity). This question was answered completely through in-depth interviews with the students, who each shared a wealth of information regarding their own personal experiences. Both students were able to identify, through their comments, how their impressions of their advising experiences were influenced by the stages of their own identity development that they were going through. Additionally, they discussed methods advisors might use to assist them in having better experiences, such as the advisor's knowledge of student development, and the advisor's professional advancement in their field of expertise.

The mixed methods questions inquired: How do the student's survey responses (quantitative) and student interviews (qualitative) contribute to a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience? Because quantitative and qualitative data were combined, this research study was able to successfully answer the central question by providing a full understanding of how the student development process has a direct impact on students' perceptions of advising. This study can be replicated in order to assess and investigate student satisfaction with academic advice at various educational institutions. Application of additional student development theories, which serve as frameworks for linking with the student experience,

may be advantageous. Research on this essential problem in higher education is detailed in the next section on implications, which will highlight possible next steps for further investigation into this crucial topic.

Implications

Academic advising is a popular topic explored in higher education; nonetheless, the student perspective is rarely heard, examined, and applied in the field. Most importantly, the study's research findings have substantial consequences for the profession of academic advising, notably student opinions of academic advising methods and processes. This research study emphasized the significance of observing the academic advising experience from the student's lens and the intertwining of student identity development throughout the study. This section includes academic advising recommendations for community college executive executives, student services or affairs administrators, and college advisors.

According to the quantitative data, students were most unsatisfied with the survey's outreach function, which focused on student participation and was directly tied to students developing their identity (vector four). As a result of this discovery, the College intends to create an advisor checklist to remind advisors to discuss various student organizations and leadership opportunities with students in order to aid them in creating their identity. The checklist will be geared not only to student groups, but also include questions strategically targeted around ways to assist students in developing in this specific vector of their identity.

Establishing purpose and identity before to graduating and entering a career field is critical in vector six. In response to this data, the College intends to revisit the career

exploration resources available to students to aid them in building a sense of purpose for their studies and careers. In addition to career exploration, the College is currently re-designing its advising methods, and these data insights will be useful in that process. The qualitative data revealed that, despite personal obstacles in school, students felt supported by their advisers and confident in achieving their goal to graduate. All vectors were prominent in the study's narrative, supporting the researcher in relaying the stories of the participants. One interviewee was the sole non-traditional college student who experienced all vectors during the advising process, including building integrity in the process, which built trust and supports others to achieve. Her overall perspective of her advising and college experience has been greatly influenced by experiencing a little bit of each vector.

Finally, the findings will help the College implement current efforts, such as the College's strategic plan, which may be used to help the College qualify for funds to improve student services. The mixed methods data results revealed that survey data support narrative data in expressing students' opinions of their advising experience, and how the student identity theory contributes the advising process for both students and advisors. The information gathered should aid in improving the quality of advising at the College.

Summary and Conclusion

As mentioned in Chapter Two, academic advising has been around for centuries. While some students prefer quick prescriptive advising methods, developmental advising is the most preferred advising approach (Cook, 2001; EAB, 2017; Gordon et al., 2008). Although the preferred type of advising has been determined, it is important to ask:

Which applied to academic advising? There are numerous theories; when applied to academic advising, Arthur Chickering's (1969, 1993) psychosocial theory strongly connects to how students perceive their experiences. The central mixed method research question was successfully answered throughout the data merging process. The data findings for the explanatory sequential mixed methods study indicate the importance of using a developmental and holistic approach to advising to better understand the students' development and needs to help them be successful in their college and in their future careers (Chickering & Reisser, 1969, 1993; Creamer & Creamer, 1994; Grites, 2013). Many theories have been applied to academic advising, but it is uncommon to see a mixed methods analysis to research the students' perception of academic advising based on the seven vectors of the student identity development theory (Chickering & Reisser, 1993). John Gardner (1981) shared the following words, originally from Carl Rodgers regarding the need for student mentors such as advisors:

> Students need authentic professional human beings who are worthy of emulation. They need models who exhibit professional behavior, a sense of commitment and purposefulness, and a sense of autonomy and integrity in a world that generates enormous stress. Students cannot be told how to do this; authenticity cannot be transmitted only through lectures. (p. 70)

It is critical for all students to have access to caring role models; however, this may be especially true for students from underrepresented groups. The majority of first-generation college students who have identified role models while in college are more likely to remain in college and achieve their objectives (Tinto, 1993).

CHAPTER FIVE

Distribution of Findings

Executive Summary

This explanatory sequential mixed methods study explored and quantified students' perceptions of the advising experience using Chickering and Reisser's seven vectors of student identity development as a theoretical framework (Chickering & Reisser, 1993). The study also emphasized the importance of viewing academic advising through the lens of an advisee. Without student feedback, service offered by college and universities cannot be improved. Often, advisors are so focused on enrolling students in a predetermined degree plan and prescribing which courses to register them for based on a sequence of courses, that they overlook the importance of developing a genuine and authentic student-advisor relationship (Creamer & Creamer, 1994; Evans et al., 1998; Grites, 2013; Rogers, 1983). When the advisor demonstrates an interest in getting to know the student and arranging a follow-up meeting, this can significantly impact student persistence and retention, resulting in higher satisfaction rates. As students progress through the seven vectors of identity with their advisor, they gain confidence and develop a sense of comfort with assisting others in navigating college, such as Participant 2, who is now a student mentor because of the positive advisor experience she shared in her interview. The executive summary provides an overview of the data collection and analysis procedures, a summary of key findings, and informed recommendations.

Overview of Data Collection and Analysis

The data collection and analysis procedures were sequential because the quantitative survey was deployed first and was analyzed using descriptive statistics. Then the narrative data was collected through semi-structured interviews (Galletta & Cross, 2013; Ayres, 2008) to better understand the student's advising experiences. Once the quantitative and qualitative data were analyzed, the method of mixing the data (Creswell & Plano-Clark, 2007) to answer the central research questions for this explanatory sequential mixed methods study was organized using a central mixed methods question, followed by a quantitative question, and a the qualitative question (Tashakkori et al., 2020).

The first phase was to collect and analyze the quantitative data, including a 24-item scale survey (Teasley & Buchanan, 2013) to measure students' satisfaction with their advising experience. The survey also measured factors such as the advising the outreach functions of advising to discover the impact of the degree of satisfaction in these two areas, which aided the data analysis process. The quantitative phase of this study used descriptive and inferential statistics to answer the research questions. There was a total of 22 survey respondents.

In the second phase, qualitative data was collected and analyzed using pattern matching, theoretical framework analysis, thematic analysis, and cross-case analysis to answer the qualitative research question. The semi-structured interviews used questions based on the quantitative results and that were aligned with the theoretical framework of the seven vectors of student identity development. Two students were interviewed; because of the rich data shared, data saturation was met (Creswell, 2007; Creswell, 2003).

Summary of Key Findings

The key findings of this study answered the research questions, particularly the central question:

> How do the student's survey responses (quantitative) and student interviews (qualitative) contribute to a better understanding of the anticipated relationship between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience, via integrative mixed methods analysis?

There was a connection between Chickering and Reisser's (1993) seven vectors of student identity development and students' perception of their advising experience based on the mixing of the quantitative and qualitative data findings.

The majority of the survey respondents were female (77.3%), including the two students interviewed. Five out of the 22 students indicated they were interested in being interviewed, and only two responded to the invitation. The combination of the quantitative and qualitative data findings indicates that there are connections between students' identity development and how they perceive their advising experiences. In each phase, there was evidence that most of the students were satisfied with their advising experience. This response elicited the lowest rating of satisfaction in vector four, establishing identity, with 49.8% of the survey respondents selected, "somewhat disagree" and "strongly disagree," which substantiates the need to share more student engagement opportunities with students during advising session to form their self-acceptance and awareness (Chickering & Reisser, 1993). Also, through descriptive and inferential statistics, the data revealed the connection between the seven vectors (Chickering & Reisser, 1993) for each survey question; during the qualitative phase, vector two, managing emotions, impacted students' perceptions of mainly their college

experience and not necessarily their advising experience. Students in this stage of identity development are trying to manage their emotions and not allowed them to hinder their success. The two participants shared that they overcame any doubt that they were both scheduled to graduate despite their challenges.

Both phases of this explanatory sequential mixed methods study revealed that, despite the fact that the vast majority of students were satisfied, there is still more work to be done in the area of academic advising at the College. The findings will aid in the identification of weak points in advising services, prompting the College to begin fixing them to benefit of students. The most important findings serve as confirmation that students experience genuine difficulties in their life. College students' satisfaction with advising and their overall college experience can be considerably improved by incorporating development and holistic advising approaches into their college experience.

Informed Recommendations

There is always a need for additional research on academic advising topics; because smaller community colleges typically lack researchers on their staff, scholars must continue to research availability for others to examine what their needs are as they work to promote student success. Academic advising requires additional research, particularly on the effect of various developmental theories on students' perceptions of their advising experience and their overall college experiences. The following points should be addressed in future research:

- Increasing the use of mixed methods research to assess and explore students' perceptions of their last semester of college experience based on various development theories.
- Replicating this study with a minority population and another theoretical framework such as Critical Race Theory (CRT).

- Using quantitative research on the retention and persistence effects based on Chickering & Reisser's seven vectors on rates.
- Employing mixed methods research examining the impact of student identity development on students living on-campus.

Findings Distribution Proposal

This explanatory sequential mixed methods study provides the College with the information necessary to evaluate their current advising program. The findings will be shared with a variety of stakeholders, including the President's executive leadership team, students, faculty, and staff. This research demonstrates how understanding students' perceptions of their advising experiences can significantly impact overall retention and graduation rates. This section discusses the target audience for the research findings, the proposed venue, and the materials that will be distributed.

Target Audience

The researcher will present the findings from this study to the College's executive leadership team in hopes that the data will be used to redesign academic advising services. The stakeholders, which include the students, faculty, staff, and community members, should have access to the data from this study in order to increase their awareness of the value of student services, particularly the advising component, because it may directly affect them or someone, they know who plans to attend college. The researcher is willing to share the findings with anyone committed to improving the support services available to college students, especially those attending community colleges.

Proposed Distribution Method and Venue

The outcomes of this study will be applied to the College's advising re-design plan and used as evidence for possible funding sources to better serve and support students. As a result of this study, we will be able to establish the additional support that may be required for students to receive high-quality academic advising. The findings will also be integrated into our annual program assessment and College's strategic plan to improving the quality of services provided to students. Academic advising of the highest caliber requires providing opportunities for academic advisers to participate in professional development activities that address the crucial role of theory in advising. In order to protect students' anonymity, only quotes from student interviews will be shared with the College's marketing department, which will use them in promotional materials for the College. The interviewees reported satisfaction with the existing advising services provided by the organization. As a result, the student provided suggestions for improving advising. This information will be shared with advisors in order for them to reflect on the suggestions and design an action plan that takes them into consideration. The researcher is certain that the findings of the study will have a positive impact on present and future students at the College.

Distribution Materials and Venue

The material will be disseminated through a variety of channels. For example, they will be condensed into a PowerPoint presentation to create infographics that will be published and made available to other researchers for use as a starting point for their own research. An abstract for a conference poster or a presentation proposal will be submitted to the NACADA annual conference. The findings will also be used to produce an article

for submission to higher education publications such as *University Business* and *Inside Higher Ed.*. The researcher will continue to conduct student affairs research because there is still more to learn about academic advising and what motivates students to achieve success. In addition to presenting the findings at student forums, executive leadership meetings, and local and regional gatherings of community members interested in the success of college students, the researcher plans to share her findings with other stakeholders of the College. It is the researcher's responsibility to submit a monthly newspaper piece, and the findings will be included in those submissions, so that the local community can comprehend the value of the advising process and its impact on students' achievement. However, one of the researcher's responsibilities is to explain the relevance of research to undergraduate students by sharing this explanatory sequential mixed methods study design with them.

Conclusion

The researcher intended for this work to educate community colleges about the importance of viewing one of the most central functions of the college, academic advising, through the lens of the students. Additionally, ensuring that all advising staff is adequately trained to identify students' developmental stages, particularly identity development, can significantly impact the student's advising experience. The researcher plans to replicate this study in the near future with a larger sample size and additional assessments as the College continues to improve its academic advising program.

The researcher believes that institutions of higher education should place a larger emphasis on students, and expects that the findings of this study will eventually lead to the provision of high-quality academic advising and support services to all students. The

achievements of Arthur Chickering (1969) to the field of higher education should be recognized, he provided the framework for education professionals and others to understand the core ideas of student development and their connection to student success through the seven vectors (Chickering & Reisser, 1993). Increased mixed methods research around the application of high-quality academic advising strategies and techniques will strengthen the mission of all student affairs professionals dedicated to assisting students in developing into lifelong learners as they navigate the college experience.

APPENDICES

APPENDIX A

Tests of Normality

The Q-Q plot below indicated that the outreach function has a normal distribution.

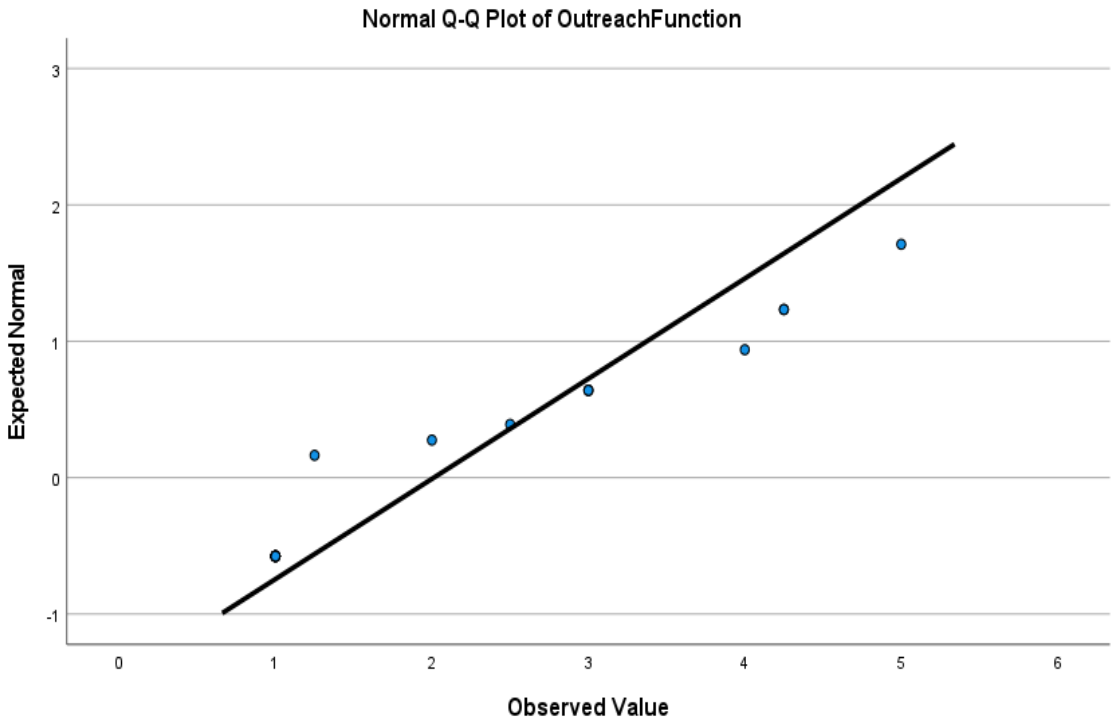

Figure A.1. Normality test for outreach function.

The Q-Q plot below indicated that the advising function has a normal distribution.

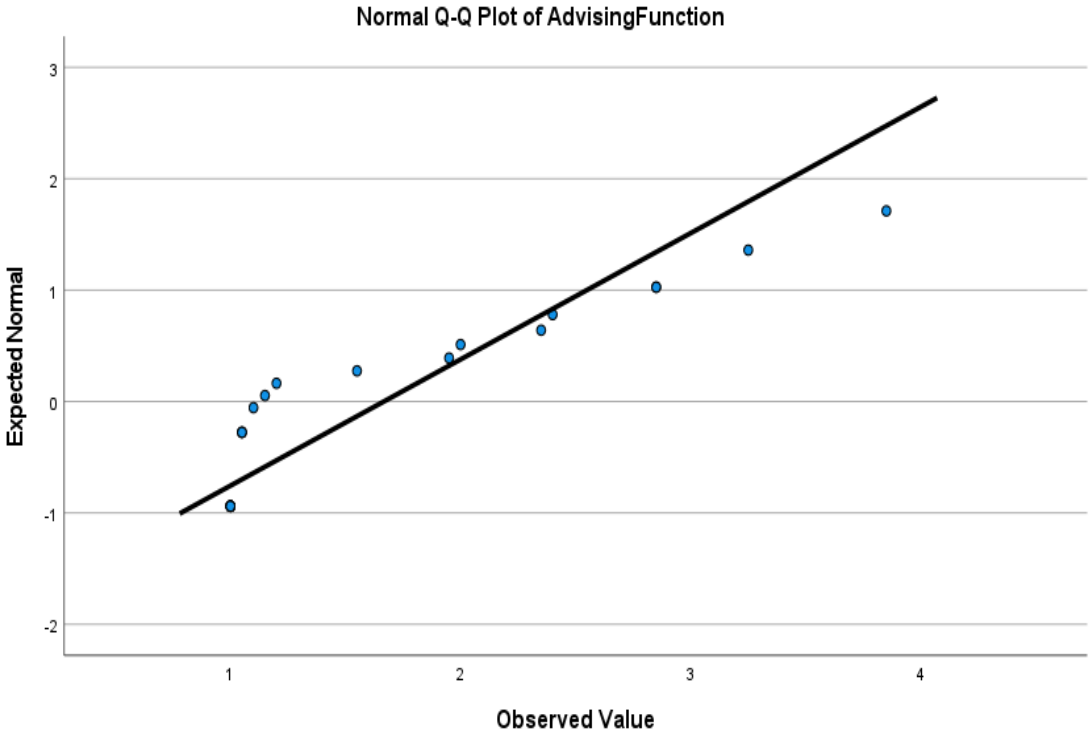

Figure A.2. Normality test for advising function.

The test of normality of both functions of the survey.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AdvisingFunction	.292	22	.000	.775	22	.000
OutreachFunction	.317	22	.000	.751	22	.000

a. Lilliefors Significance Correction

Figure A.3. Shapiro-Wilk test of normality.

APPENDIX B

Research Codebook

Table B.1.

Codebook Prepared with NVivo (NVivo12, 2021)

Codes	Description	References
Helpfulness	The participants referenced the advisors as being helpful.	10
Student Engagement	The participants referenced their involvement with student engagement activities (i.e., student clubs, service learning, etc.)	4
Time Management	The participants referenced challenges with time management.	6
Work Challenges	The participants referenced work challenges that they have experienced.	8
Vector 1 - Developing Competence	Developing intellectually and building confidence (Chickering & Reisser, 1993).	13
Vector 2- Managing Emotions	Ability to recognize, accept, and appropriately express emotions (Chickering & Reisser, 1993).	15
Vector 3 - Developing Autonomy	Gains emotional independence, self-awareness, and persistence (Chickering & Reisser, 1993).	5
Vector 4 – Establishing Identity	Comfort with oneself including appearance, gender, and self-acceptance (Chickering & Reisser, 1993).	6
Vector 5 - Freeing Interpersonal Relationships	Develops relationships despite differences of others (Chickering & Reisser, 1993).	6
Vector 6 - Developing Purpose	Develop clear academic and technical goals (Chickering & Reisser, 1993).	9
Vector 7 - Developing Integrity	Clarify systems aligned with their beliefs which guide behavior (Chickering & Reisser, 1993).	10

APPENDIX C

Informed Consent for Survey

Baylor University, Institutional Review Board
Informed Consent Document for Research

Principal Investigator: Kayla D. Devora-Jones
Study Title: An Explanatory Sequential Mixed Methods Study of Students' Perceptions of their Advising Experiences and Outcomes at a Rural Community College

You are invited to be part of a research study. This consent form will help you choose whether or not to participate in the study. Feel free to ask if anything is not clear in this consent form.

Why is this study being done?
This study aims to explain this explanatory sequential mixed methods study to explore and measure the students' perception of the advising experience and address the literature gap for this much-needed topic.

What will happen if I take part in this research study?
Suppose you agree to take part in this study. In that case, you will be asked for information regarding your academic advising experience at the College.

Are there any benefits from being in this research study?
You and future students at the College will benefit from being in this study because it will improve the College's advising services.

How will you protect my information?
A risk of taking part in this study is the possibility of a loss of confidentiality. Loss of confidentiality includes having your personal information shared with someone who is not on the study team and was not supposed to see or know about your information. The researcher plans to protect your confidentiality.

The participants were informed that all data used for this study would be strictly confidential, and data would be aggregated for anonymity purposes. The researcher will protect the participant's names using a code number or pseudonym rather than your name or other identifying information.

Will I be compensated for being part of the study?
You will not be paid for taking part in this study.

Your Participation in this Study is Voluntary
Taking part in this study is your choice. You are free not to take part or to withdraw at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you choose to withdraw from this study, the information you have already provided will be kept confidential. You cannot withdraw information collected before your withdrawal.
Contact Information for the Study
Kayla D. Devora-Jones
kayla_devora-jones1@baylor.edu
If you have questions about your rights as a research participant or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please

APPENDIX D

Survey for Measuring Student Satisfaction with Academic Advising

D1 Student ID

D2 Phone Number

D3 Email Address

D4 What is your gender?

- ○ Male (1)
- ○ Female (2)

D5 What is your age?

D8 What is your ethnicity?

- ○ Asian (4)
- ○ Black or African American (2)
- ○ Hispanic (5)
- ○ White (1)
- ○ Other (6)

D6 What is your classification?

- ○ Freshman (1-40 hrs.) (1)
- ○ Sophomore (40+ hrs.) (2)

D7 Academic Program Classification

- ○ General Transfer Education (seeking an A.S. or A.A.) (1)
- ○ Career Technical Education (seeking certification or A.A.S.) (2)

D9 Major of study

- ○ Decided (1)
- ○ Undecided (2)

D10 Advisor Type

- ○ Success Coach/Advisor (1)
- ○ Faculty Advisor (2)

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Advising appointments are worth my time. (1)	○	○	○	○	○
My advisor listens to what I have to say. (2)	○	○	○	○	○
My advisor is knowledgeable about course offerings. (3)	○	○	○	○	○
My advisor has helped me develop a long-term educational plan. (4)	○	○	○	○	○
My advisor is prepared for my advising appointments. (5)	○	○	○	○	○
My advisor is concerned about my overall development as a student. (6)	○	○	○	○	○
My advisor considers my interests and talents when helping me choose courses to take. (7)	○	○	○	○	○

After my advising appointments, I feel that every course in my new schedule has a purpose. (8)	○	○	○	○	○
My advisor makes sure that I get the best possible educational experience. (9)	○	○	○	○	○
My advisor is knowledgeable about graduation requirements. (10)	○	○	○	○	○
If my advisor does not know the answer to one of my questions, he/she makes an effort to connect me to someone who does. (11)	○	○	○	○	○
My advisor encourages me to speak freely in our appointments. (12)	○	○	○	○	○
I am given the time I need during my academic advising appointments. (13)	○	○	○	○	○
My advisor and I work together as a team. (14)	○	○	○	○	○
My advisor acts professionally. (15)	○	○	○	○	○
I can trust my advisor. (16)	○	○	○	○	○

I feel like I will graduate in a reasonable amount of time, thanks to my advisor's planning. (17)	○	○	○	○	○	End of Block: Block 2
I would recommend my advisor to a friend. (18)	○	○	○	○	○	Start of Block: Block 3
My advisor is ethical. (19)	○	○	○	○	○	Q23. Are you interested in being contacted for a possible follow-up interview?
I find academic advising appointments to be a positive experience. (20)	○	○	○	○	○	○ Yes (1)
My advisor lets me know about the importance of our student services mission. (21)	○	○	○	○	○	○ No (2)
I learn about different student organizations during my advising appointments. (22)	○	○	○	○	○	
My advisor tells me how I can obtain leadership experiences on-campus. (23)	○	○	○	○	○	
I learn how I can contribute to the surrounding community during my advising appointments. (24)	○	○	○	○	○	

APPENDIX E

Email Communication—Permission to Use survey

Gmail [redacted]

Re: Request Permission to Use Instrument -- BU Doctoral Student
1 message

Erin Buchanan [redacted]@gmail.com> Tue, Nov 3, 2020 at 11:26 AM
To: Kayla Devora-Jones <[redacted]@gmail.com>

Hi Kayla,

Of course! We would be excited if you would use the survey. Good luck!

erin

From: Joe Cuseo
To: Devora-Jones, Kayla
Subject: RE: Advisor Assessment Instrument
Date: Monday, September 21, 2020 2:40:47 PM
Attachments: image001.png
advising-advisor-needs-assessment.doc
Advising-Assessment-Closing-the-Loop.doc
advising-assessment-instruments-14.docx
advising-assessment-logistics.doc
advising-instrument-advisor-perceptions&needs.doc
Advising-InstitutionalSelf-Assessment-Instrument.doc
advising-institutional-organizational-self-assessment-16.docx
advising-program-assessment-advisor-questions.doc

Kayla,

Of course, you may use the instrument of mine that you found at the UNC Charlotte site. I wasn't sure which particular instrument of mine it was, so I've attached several of them plus a few documents relating to how the instrument may be administered and its results used to improve the advising process.

You have my full permission to utilize any of these documents, or parts thereof, in you doctoral research.

Best of Luck,
- Joe

APPENDIX F

Recruitment Email for Survey

Dear Student,

You were recently invited to participate in a survey regarding academic advising to determine your satisfaction with your personal advising experiences at [name of college]. Your feedback is crucial to my research in the field of advising.

As always, your responses are confidential, and only aggregate data will be reported for research purposes. Also, I would appreciate your consideration to be interviewed by me to follow up on some of the survey questions.

Follow this link to the Survey:
Take the Survey

Alternatively, copy and paste the URL below into your internet browser:
https://baylor.qualtrics.com/jfe/preview/SV_6XAVjJ3OvS0Kvkh?Q_CHL=preview

Kind Regards,

Kayla Devora-Jones, Doctoral Candidate
Baylor University

APPENDIX G

Semi-Structured Interview Protocol

Standard Procedures:

The participant will interview the video-conferencing program, Zoom, for at least 30 minutes. The interviewer will email the interviewee the consent form that needs to be signed and returned before the interview. Once the consent has been signed and returned, the interviewer will ask the interviewee if they have any consent questions. The interviewer will record the virtual interview at the start of the interview. Questions may be requested in any sequence and may be added as needed. Upon completing the interview, the interviewee will thank the participant for their contribution and stop the virtual recording. Next, a brief debriefing will follow. Lastly, the interviewer will gift the interviewee a $5 electronic Starbucks, which will be emailed to the participant as a thank you for their time and contribution to this research study.

Interview Questions:

The interview questions were adapted from Cuseo's (2001) Advisor Assessment

1. What are your name and major of study?
2. What attracted you to this College?
3. What is the most challenging experience you have faced while attending College?
4. What do you think the role of an academic advisor is?
5. Do you think the student has a role in the academic advising process?
6. What if your number one stressor at this time?
7. How will the courses you are taking this semester help you beyond college?
8. Are you involved in any student life activities? How did you learn about these activities or organizations?
9. At the college, do you find answers when you need them?
10. What are your advisor's major strengths or best features?

11. What could your advisor do to improve the quality of his/her advising?

12. Would you recommend your advisor to other students?

Thank you Statement:

Thank you for sharing your honest answers with me today. It will be instrumental in improving advising services and assisting students in the future at the College. If you think of anything else you would like to share, please feel free to contact me. Do you have any questions for me?

APPENDIX H

Semi-Structured Interview Consent Form

Consent to take part in the research study

□ I voluntarily agree to participate in this research study.

□ I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

□ I understand that I can withdraw permission to use data from my interview within two weeks after the interview. The material will be deleted.

□ I have had the purpose and nature of the study explained to me in writing. I have had the opportunity to ask questions about the study.

□ I understand that participation involves questions about my academic advising and college experience.

□ I agree to my interview being audio recorded.

□ I understand that all information I provide for this study will be treated confidentially.

□ I understand that in any report on the results of this research, my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the people I speak about.

□ I understand that disguised extracts from my interview may be quoted in my Problem of Practice, conference presentation, and possibly published papers.

□ I understand that signed consent forms and original audio recordings will be retained in a secure online database until the research conclusion.

□ I understand that my interview transcript, in which all identifying information has been removed, will be retained for two years after completing the research.

□ I understand that under freedom of information legalization, I am entitled to access the information I have provided at any time while it is in storage as specified above.

□ I understand that I am free to contact any research people to seek further clarification and information.

_____	_____
Signature of research participant	*Date*
_____	_____
Signature of researcher	*Date*

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