THE RELATIONSHIP BETWEEN COMMUNITY COLLEGE ACADEMIC ADVISING AND LATINO STUDENT PERSISTENCE, GRADUATION, AND TRANSFER

by

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Dedication

This dissertation is dedicated to my son, Jose Montelongo Jr, the most amazing person in my life.

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ABSTRACT

THE RELATIONSHIP BETWEEN COMMUNITY COLLEGE ACADEMIC ADVISING AND LATINO STUDENT PERSISTENCE, GRADUATION, AND TRANSFER

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Given the changing demographics of the Latino population in the United States, the purpose of this study is to analyze persistence, graduation and transfer among Latino students at community colleges. The research comes in response to the awareness that, despite the U.S.'s rapidly growing Latino population, Latinos have the lowest higher education attainment level compared to other ethnic groups. Through a mixed methods approach, this study focused on the relationship of community colleges academic advising and Latino students' performance measures (persistence, graduation, and transfer).

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CHAPTER I:

INTRODUCTION

There has been an increase in immigration and higher fertility rates among Latinos during the past years (Hernandez, Slate, & Joyner, 2015; Colby & Ortman, 2014). Latino immigrants tend to come to the U.S. from countries where the population demographics have lower socioeconomic backgrounds and less educational attainment (Hernandez, Slate, & Joyner, 2015). The country of origin affects the level of education attainment (Hernandez et al., 2015). While 64.0% of Latino immigrants to the U.S. are Mexican, only 76% have earned a high school diploma prior to their arrival (Hernandez et al., 2015).

On the contrary, immigrants from Cuba, Colombia and Perú tend to achieve the same educational attainment levels as U.S. born whites (Hernandez et al., 2015). Latinos who are of Cuban descent tend to have the highest educational attainment while Mexican and Salvadoran immigrants have earned the lowest educational credentials (Hernandez et al., 2015). According to the U.S. Bureau of Labor Statistics (BLS), an occupation can influence a person's physical and mental health and social networks (BLS, 2017). As of fall 2014, Latinos accounted for 16.1% out of the 146 million people employed in the U.S. and is expected to grow to 30.0% by 2050 (BLS, 2017; Greater Texas Foundation, 2017; Frey 2018). The ethnic breakdown of the Latinos in the U.S. workforce includes 61.0% Mexican, 10.0% Central American, 9.0% Puerto Rican, 7.0% South American, 4.0% Cuban and 8.0% other Latinos (BLS, 2017; Flink, 2017; Schak & Nichols, 2019).

Furthermore, the U.S. Latino population grew from 22.6 million in 1990 to 57.8 million in 2016 (Nation Center for Education Statistics, 2017). For the first time, a minority majority population leads the U.S. (Elliot & Parks, 2018; Frey 2018). Latinos, "one of the largest and fastest-growing minority groups" (Elliot & Parks, 2018, p. 10), has been projected to grow by 2060 to 129.0 million. On the other hand, Latinos' college

completion rates have lagged behind completion rates among other ethnic groups (Elliot & Parks, 2018). Despite gains in their postsecondary enrollments, Latinos' associate degree completion rates have been lower than all other ethnic groups (Gonzalez, 2015). Nationally, approximately only 6.0% of Latinos complete an associate's degree, 20.0% earn a four-year college degree, one-fourth (27.0%) earn a high school diploma, and one-third (35.0%) of U.S. Latinos do not earn a high school diploma (National Center for Education Statistics [NCES], 2017). The present study will be a contribution to former analyses that have been seeking answers to the potential impact of community college academic advising and Latino student persistence, graduation, and transfer.

Research Problem

As the Latino population continues to grow in the U.S., Latinos prefer to begin their education at community colleges (Arbona & Nora, 2017). However, the ability of Latino students to persist, graduate, and transfer can be challenging due to the obligations they hold outside of their college enrollment (Illoh, 2017). Some of the personal obligations that Latinos experience while enrolled include parenting, full-time employment, and family care giving, and paying bills (Illoh, 2017). Currently, 62.0% of American Latinos have earned a high school diploma or less (NCES, 2017), but by 2020, 65.0% of jobs will require education beyond high school (Center on Education and the Workforce, 2018). This presents a serious issue for the advancement of the Latino population especially in the face of the Texas higher education initiative, 60X30TX, where, in order to remain competitive in a global economy, 60.0% of Texans ages 25-34 will need a certificate or degree by the year 2030 (Texas Higher Education Coordinating Board [THECB], 2018). Nationally and in Texas, community colleges must be responsive to the needs of the growing number of Latina/os who may require higher levels of educational support (Rodriguez, Garbee, Miller, & Saenz, 2017).

In fall 2000, 58.0% of Latino students living in the U.S. were enrolled in community colleges, in comparison to 42.0% African American and 36.0% White students (Arbona & Nora, 2017). Yet, nationally only 6.0% of Latinos completed an associate degree (NCES, 2017). Moreover, gender differences exist among Latinos when it comes to college completion. In 2008, Latino women enrollment rates were 33.0% versus 23.0% for Latino men (Hernandez, Slate, & Joyner, 2015). Furthermore, previous studies have found Latinos often prefer to matriculate at community colleges due to their desire to live at home and stay close to their families (Ovink, 2016; Perezchica, 2017). Many Latino students who enroll at community colleges tend to be part-time students who work full-time and are thereby less likely to reach their educational goals (Hernandez et al., 2015). Aside from the gender completion inequities, Latinos who began their post-secondary education at a community college are also less likely to finish their postsecondary education (Carnevale & Fasules, 2017).

In alignment with national statistics, Texas Latino demographics also reflect a concerning trend. In the fall 2017, 41.0% of Texas community college students identified as Latino (THECB, 2018.). However, only 18.0% of Latinos in Texas have earned an associate degree (Excelencia in Education, 2018 a). This can be attributed to various issues that relate to noted inequities. Achievement gaps among diverse student populations can be reflected on the social and political injustices (Achieving the Dream, 2015). For reasons discussed at both the national and state level, there is a significant learning curve that students must manage before colleges can impact Latino student success for Latinos (Gonzalez, 2015).

Population growth trends also provide valuable insight into additional challenges faced by this demographic. For example, the growth of Latinos in Texas from 2010 to 2017 increased by 12.0% (U.S. Census Bureau, 2017). Additionally, the population in the U.S. has experienced a 40.0% increase in births from undereducated Latina women

(Hernandez, Slate, & Joyner, 2015). This is particularly impactful because Latinos can be identified from 20 different ethnic backgrounds, including descendants from Spain and Latin America (Hernandez et al., 2015). Specifically, the breakdown of Latinos in the U.S. is 7.9 million of Mexican descent, 222,000 Salvadoran, and over 1.1 million representing other Latino populations (Hernandez et al., 2015).

Poverty is another issue that affects the Latino population and its educational attainment. The identifiers that determine poverty include using food stamps, subsidized housing, and government medical expenses (Hernandez et al., 2015). Nationally, one in three U.S. Latino children lived in poverty in 2014 (NCES, 2017) and 63.0% of high school Latino graduates are economically disadvantaged and therefore, less likely to matriculate in college (Fletcher, Hernandez, Klepfer, & Wartel, 2018). In 2017, Texas had the 14th highest poverty rate in the U.S. (2018). In 2013, national poverty rates were consistent across Latino populations: Mexican at 25.0 %, Guatemalans at 25.0%, Puerto Ricans at 25.6%, and Dominicans at 26.3% (Macartney, Bishaw, & Fontenot, 2013) whereas the overall poverty rate in Texas in 2013 was 25.9% (Macartney et al., 2013). Poverty trends across Latino groups present a significant obstacle when it comes to educational advancement. Due to the lack of higher education, Latino families are four times more likely suffer the consequences of having a lower socioeconomic status than white families (Hernandez et al., 2015). The Latino poverty rate is the highest compared to all other ethnic groups (Hernandez et al. 2015; Iceland & Hernandez, 2017; Plucker & Peters, 2017).

Latinos lacking an education represent a large group that may be unable to maximize its participation in the workforce, and the nation's economic well-being, thus the U.S. is at risk of falling behind in the global competiveness marketplace. (Elliot & Parks, 2018). When examining the national educational attainment among Latinos, one can see that higher education achievement is low when compared to other populations.

Latinos who graduated with a bachelor's degree was 20.0% in comparison to 61.0% Asians who entered the labor force with a bachelor's degree (BLS, 2017). In addition, workforce data shows that the top occupations held by Latinos, include: farming, fishing, and forestry - 43.0%; building, grounds cleaning and maintenance – 36.7%; construction and extraction – 32.3%; food preparation and serving related – 33.2%; transportation and material moving – 22.1%; production – 21.9% (BLS, 2017).

The trend towards largely service-oriented work means lower unemployment rates; the overall unemployment rate for the U.S. was 4.4 % with Latinos having the highest unemployment rate at 5.1%. (BLS, 2017). The overall unemployment rate for adult Latino males was 4.2% and for Latino women was 5.3% (BLS, 2017). However, a person's educational attainment can have a strong impact on social outcomes, including income distribution. People with higher levels of education tend to secure higher paying jobs than individuals with less education (BLS, 2017). In a closer examination of higher education issues that influence Latino educational achievement, there is a lack of partnerships between community colleges and the workforce, which is vital in the success and college attainment goals (Miller, Fishman, & McCarthy, 2015). This is significant because if there is a continued educational gap persistence among Latinos, Texas will develop into a poorer and less competitive state (Hernandez et al., 2015; Plucker & Peters 2017).

Nationally, graduation and transfer rates are amongst the most common performance metrics for community colleges (Horn, Horner, & Lee, 2017). There is a significant research in Texas pertaining to the improvement of Latino success and transferability from community colleges to four-year institutions (Excelencia in Education, 2018 b). In a recent report, Excelencia in Education and Greater Texas Foundation have determined four main factors to be considered for improving transfer rates including: seamless transfer articulations to allow for up to date transfer credit

equivalencies, data sharing agreements, financial aid and scholarship support, and buy in from faculty (Excelencia in Education and Greater Texas Foundation, 2018).

Texas community college enrollment trends indicate that 70.0% of Latino students are pursuing a transferrable degree plan, but only 35.0% of these students transfer (Excelencia in Education, 2018 b). In addition, nationally, only 38.0% of Latinos who enroll at community colleges transfer earn a credential or transfer to a four-year institution (Horn, Horner, & Lee, 2017). One example that demonstrates Texas is at the forefront to create pathways for Latinos include the following four Texas community colleges and universities: Alamo Colleges and the University of Texas in San Antonio; Austin Community College and Texas State University; El Paso Community College and the University of Texas, El Paso; Houston Community College and the University of Houston (Excelencia in Education, 2018 b) have paired up to create best practices to increase the completion, transfer and success of Latinos. It is imperative to study the influence of community college advising and Latino students' persistence, graduation, and transfer with degree, to expand awareness of low completion rates, while improving state and national policies to improve Latino student success (Horn, Horner, & Lee, 2017).

Academic advising can be one of the most effective retention strategies employed by American community colleges and universities. Community colleges tend to have less than favorable transfer outcomes and completion rates (Martinez & Elue, 2020). Overall, scholars have acknowledged the importance of academic advising, but the advising literature is not very robust (Mu & Fosnacht, 2019). Cook (2009), Gillispie (2003) and Gordon (2004) have documented the development of postsecondary academic advising profession in the United States. The evolvement of academic advising over decades of student personnel work, led to the creation of the National Academic Advising Association (NACADA) in 1979.

During the 17th and 18th centuries, it was the responsibility of the college president, and the faculty members to provide academic advising to students regarding extracurricular activities, moral lifestyle, and intellectual habits (Cook, 2009; Gillispie, 2003; Gordon, 2004). During the 19th century, Kenyon College introduced the first formal advising model. Every student was paired with a faculty member who served as the student's advisor (Cook, 2009; Gillispie, 2003; Gordon, 2004). Next, during the 20th century, advising saw three different specializations: (1) personal, (2) vocational, and (3) academic advising. Due to the record number of students enrolling in college, but high attrition rates, student demand resulted in the development of academic advising programs as a student support service. The 21st century is currently experiencing many shifting forces changing the country such as aging demographic, diverse demographics, and globalization. As such, academic advisors must be equipped to view the world from a multi-perspective. Advisors will need to continually develop new technical skills, expand their knowledge of career advising, and learn new skills as communicators and interpreters of complex information (Cook, 2009; Gillispie, 2003; Gordon, 2004).

Furthermore, for the past 130 years, the college's environment and delivery of advising has changed. There are some basic advising issues that remain such as how to connect with students (Cook, 2009; Gillispie, 2003; Gordon, 2004). The three advising themes have been identified in the history of advising: (1) advising needs, (2) freshman student concerns, and (3) changing roles of academic advisors. Advising needs have changed over time and have been influenced by the level of enrollment at the institutions. Many college and universities have restructured their academic advising to meet the needs of the students. Freshman student concerns stems from the continuous level of academic preparedness and developmental needs that students may come to campus with. Students may enroll in college undecided without knowing what degree or program they want to pursue. To alleviate the lack of clarity and provide support, many colleges

provide students with a college freshman course (Cook, 2009; Gillispie, 2003; Gordon, 2004). This course has been proven an effective mechanism to provide group advising to freshman students. With the changing roles of academic advisors over the years, faculty advisors remain an important resource for students. Today, many colleges have expanded the delivery and implementation of advising. More institutions are investing in technology so that advisors can relate with their student caseloads (Cook, 2009; Gillispie, 2003; Gordon, 2004).

Today, there are multiple examples of robust, dependable and effective advising models at community colleges, but these efforts usually exist on a small scale and are limited to certain programs and students (Martinez & Elue, 2020). The institution's mission, vision, and culture influences the policies and practices established to carry out their advising work (Martinez & Elue, 2020). Additionally, advising models adopted by colleges are dependent to the organizational capacity and infrastructure (Martinez & Elue, 2020). Depending on the organizational capacity of the community colleges, some community colleges have centralized advising, while others have decentralized or shared advising models. Centralized models refer to having an advising office where all students are referred to receive professional advising support. Decentralized models can be led by faculty members only, and students are referred to their faculty member. Finally, shared models are when a student has the ability to seek advising help from their faculty member and the advising office. This model is the most commonly seen structure in community colleges and universities (He & Hutson, 2016).

For instance, community colleges have adopted various reforms to improve student outcomes such as guided pathways. Guided pathways provides students with a pathway model that is clear and intentional that has been built in supported services such as academic advising (Martinez & Elue, 2020). Though there are multiple reforms and advising models, the most common advising approaches are mentioned next (He &

Hutson, 2016). Holistic advising is an advising model that has been adopted by some institutions. Both, Achieving the Dream (ATD) and the Community College Research Center (CCRC) have suggested that advisors cannot look at students purely through an academic lens, but rather they must see students as a whole person. Advisors should have a personal connection with the students because whatever is occurring in the students' lives can affect their academic success. Additionally, advisors should be familiar with their students' goals and aspirations to help them gain strategies to make good decisions and persist during difficult times (Kardash, 2020).

Intrusive or proactive advising is a way of getting to the bottom of the cause of when a student is experiencing a certain difficulty and finding the appropriate intervention (Varney, 2007). This advising model is an action oriented approach which includes motivating students to seek assistance when they need it. Intrusive advising involves proactive interactions with students, with the intention of connecting with them before a situation occurs that cannot be fixed. Intrusive advising is an active concern for students' academic preparedness and the ability to help students explore services and programs to help them achieve their goals, improve their skills and increased their academic motivation (Varney, 2007). Some ways that advisors can use intrusive advising is by hosting mandatory new student orientation where they can make face-to-face contact with their students. Another way advisors can proactively monitor students is by checking students' mid-term and final grades. Advisors should proactively schedule appointments with students to help students whose grades are low and help students improve their study skills and strategies to connect with their faculty members. Finally advisors can proactively connect with students on campus whenever possible (Varney, 2007).

Appreciative advising offers a comprehensive education framework for the students that promotes cognitive, metacognitive, and affective development of students

(He & Hutson, 2016). The appreciative advising model allows for individualized development views of students with different backgrounds that may be unique and define their success through their own pathways rather than the pre-established pathways set for the students (He & Hutson, 2016). Learner centered advising emphasizes the student learning outcomes in the advising process (He & Hutson). The learner centered advising model promotes the importance of setting clear objectives, and setting standards of performance, providing input, modeling, checking for understanding, offering guided support and practice, providing systematic feedback, and guiding the advising session through the appropriate closure by reviewing and clarifying key elements and opportunities to practice outside the advising session (He & Hutson).

As community colleges continue to experience a diverse college climate, college leadership should foster inclusive environments that promotes the hiring of diverse advisors who match the students' backgrounds to establish trusting and empathetic relationships (Chow, 2019). Regardless of the advising model or reform that each community college chooses to use, college leaders should provide advisors with professional development opportunities so they can engage with students who have various interests and academic goals (Martinez & Elue, 2020).

Significance of Study

The societal impact of the lack of Latinos earning a college degree has been well researched. Nationally, from 2000 to 2007, the percentage of 25 to 29-year-old Latinos who earned an associate degree increased from 15.0 % to 28.0%. (NCES, 2018). However, the 26.0% attainment gap between Whites and Latinos does not measure any different in 2017 than it did in 2000 (NCES, 2018). In Texas, Latinos make up 41.0% of Texas population between the ages of 25 and 34, and only 25.0% of those have earned a degree or certificate (Paredes, 2018). One of the targets for the Texas Higher Education Coordinating Board (THECB) 60X30TX includes increasing the number of Latino

students who complete a credential to 285,000 by 2030 (Paredes, 2018). The future of Texas economy will depend on how well educated the Latino population is (Paredes, 2018).

Although Latinos are the fastest group enrolling at community colleges, they are very unlikely to transfer to a four-year university (Paredes, 2018). Because Latinos will outnumber the Anglo workforce by 2050, it is imperative that Latinos get educated in order for Texas to remain competitive in the global economy (Paredes, 2018). If this does not happen, "we will have created a permanent underclass without hope of integrating into the mainstream realizing their potential to contribute to the American society" (Gándara & Contreras, 2009, p. 13). Attaining a postsecondary credential will impact Latinos social mobility and economic competitiveness (Horn, Horner, & Lee, 2017). It is therefore incumbent among higher education institutions to begin to measure the effect of support factors such as academic advising on the persistence, graduation, and transfer of Latino community college students.

As U.S. higher education institutions continue to adjust their focus from access to completion, academic advising is going to continue to be an important key player in shifting the equity outcomes for underrepresented students (Lawton, 2018). Colleges and universities will need to begin implementing systemic changes instead of creating standalone improvements (Lawton, 2018). The advising-advisee relationship has proven to be a significant positive indicator in the students' experience. Lawton (2018) shares that although there is not one particular manner to deliver academic advising services that include an equity lens for all student populations, there are certainly several methods that institutions can implement. It does require financial, institutional, personal commitment and continuous assessment for improvement.

For instance, Excelencia in Education (2019) has a growing database of 190+ nationwide programs that are targeting the completion rate of the Latino population.

Among some of the noted programs that work include Alamo Advise (Excelencia in Education, 2019). The intentional, intrusive advising program that began fall of 2013 serves approximately 62% Latino students out of 60,000 student population. The purpose of Alamo Advise is to provide adequate support to prospective students until they complete a certificate or an associate's degree. Advisors meet with students at various key points such completion of 15, 30, 45+ semester credit hours. Advisors are trained within the first year of employment, and are tasked with students' persistence and degree completion.

Another program featured on Excelencia in Education (2019) is City Colleges of Chicago - Truman College, Transitional Bilingual Learning Community (TBLC). This program has been in existence for over 15 years and it provides financial support, an assigned advisor during the length of the students' studies. Additionally, it includes a bilingual learning community for the first two semesters of enrollment to help transition recent Latino immigrants from high school to college. The overall completion for TBLC participants is 80% compared to 21% of non-participants. This national database provides community college administrators, practitioners, and institutional leaders with best practices to improve Latino students' persistence, graduation, and transfer. Considering this reality, it is imperative to understand the impact of academic advising and Latino student's persistence, graduation, and transfer.

Research Purpose and Questions

The purpose of this study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer. The following questions will guide this study:

- 1. Is there a relationship between community college academic advising and Latino persistence?
- 2. Is there are a relationship between community college academic advising and

Latino graduation?

- 3. Is there a relationship between community college academic advising and Latinos transfer?
- 4. What are the perceptions of community college presidents and/or chancellors on the relationship between academic advising and selected performance outcomes of Latino students?

Definitions of Key Terms

Academic Advising: The process of exchanging information that empowers students to realize their education potential (NACADA, 2003).

Community College: Centers that provide higher educational opportunities near home. (American Association of Community Colleges [AACC], 2019).

Community College System: a locally controlled and autonomous community college or group of community colleges organized to serve a local community and governed by their own board (Chambers & Coons, 1961).

College Dropout: A person who leaves college and never received a degree (Spady, 1970).

Economically Disadvantaged: A student who is eligible for free or reduced meals (Texas Education Agency, 2008).

Graduation: Defined for community colleges as the number of students who complete an Associate's degree or certificate within three years (Burton, 2017).

Latino or Hispanic: People whose origins are from Spain, Mexico, the Spanish-speaking countries of Central or South America, the Dominican Republic, or Mexican American (U.S. Census Bureau, 2017).

Latino Student Success: Success for Latinos needs to be redefined as a process of small steps that build toward academic persistence to reach a graduation outcome. It is the monthly, weekly, daily or hourly successes (Murphy & Murphy, 2017).

Persistence: The number of students who return to college at any institution for their second year (National Student Clearinghouse Research Center [NSCRC], 2015).

Postsecondary baccalaureate degree: A degree granted upon successfully completing a bachelor's program, with a minimum of four years of full-time college coursework (National Center of Education Statistics [NCES], 2018).

Retention: Continued enrollment or degree completion at any higher institution — including one different from the institution of initial enrollment — in the fall semesters of a student's first and second year (NSCRC, 2015).

Transfer: The number students who complete a certificate or an associates degree at the community college, and then transfer to a four year university (Shapiro, Dundar, & Huie, 2017).

Conclusion

In conclusion, in order for the U.S. to remain competitive in college degree attainment, Latinos will need to earn a total of 6.1 million more college degrees by 2020 (Excelencia in Education, 2018a). In Texas, only 18.0% of Latino adults (25 and older) have earned an associate degree or higher in comparison to 35.0% of all adults who have obtained a postsecondary credential (2018). Knowledge and understanding of the growing heterogeneous Latino population will prepare community colleges to create clear pathways to their education (Illoh, 2017). Rodriguez, Parrish, and Parks (2017) have recommended administrators create a knowledgeable and inclusive environment that could potentially increase Latino persistence, graduation, and transfer. They exhort administrators to begin by learning about Latinos and what factors contribute to their academic success (2017). The literature review in Chapter II substantiates the salient factors affecting the relationship between topics for this study.

CHAPTER II:

REVIEW OF LITERATURE

When considering the pipeline of Latino students enrolling in higher education, 50% of them will not graduate from high school (Rodriguez & Arellano, 2016). The vast majority of the existing literature is based on four-year institutions persistence and retention models (Saenz & Ponjuan, 2008). To address the Latino completion rates at community colleges, the literature reviewed focused on: (a) academic advising, (b) persistence, (c) graduation, and (d) transfer.

Academic Advising

Martinez (2017) conducted an intrinsic case study about the opportunities and challenges community colleges are facing as they expand their educational offerings from associate's degrees to bachelor's degrees. Sixteen participants composed of faculty and administrators responded to 40-60 minute semi-structured interviews. Findings concluded that as community colleges expand their offerings, they must also be ready to provide adequate support to students. In particular, intrusive, holistic college advising has to be a top priority in order to promote student success. This study lends to the idea of promoting student success (Martinez, 2017).

In Florida, where Senate Bill (SB) 1720 was passed to allow students to skip placement testing and developmental education despite their true academic preparedness, it forced community colleges to revisit their advising model to promote student success (Woods, Richard, Park, Tandberg, Hu, & Jones, 2016). A quantitative descriptive study was conducted to review Florida Community College system administrators' perceptions and execution of SB 1720 pertaining to the efficiency of academic advising. A survey was administered to 32 administrators across 28 community colleges in Florida. The findings concluded that academic advising uses multiple tools and methods to assist students navigate their college experience. Although some areas require further review

such as "meta majors" and new student orientations, adequate staffing and proper timing is essential when implementing change (Woods et al., 2016).

As higher education continues to face state mandates, it is vital to remain focused on the needs of the student populations. Alvarado (2017) states that as college demographics shift in higher education, particularly in community colleges, it is important to note that Latinos have the lowest completion rates nationally. The purpose of Alvarado's study was to determine the impact of cultural competency among advisors and the effects of Latino student persistence due to the advisor/advisee relationship.

Alvarado's (2017) quantitative descriptive study involved 211 students, ages 18-75, and 34 academic advisors from 58 North Carolina Community Colleges (NCCC) during the 2016 academic year. Students received a Multicultural Competence in Student Affairs Survey – Preliminary 2 (MSCA-P2) via e-mail. A Chi-squared test and regression analysis were used to compare academic advisors' cultural competence among the 58 NCCC as well as Latino retention rates. Findings concluded that cultural competence does affect the advisor/advisee relationship, and it influences the persistence, graduation and transfer of Latino students at NCCC. Even the more prepared college students require academic advising, according to research (Alvarado, 2017).

Another special population that requires adequate academic advising is honor college students. Johnson, Walther, and Metley (2018) phenomenological study focuses on how to better understand the needs of high achieving students through the view of academic advisors. Participants for this study were recruited through various social networks: National College Honors Council (NCHC), National Academic Advising Association (NACADA) Commission for Advising High Achieving Students and Student Affairs Professionals in Higher Education. Twenty-two participant who came from various institutions across the U.S. were part of the study. Seventeen out of 22

participants identified themselves as females while five identifies as males. The ethnic background of the participants were 19 Caucasian, one Latino, and one Black.

Participants joined in a 19-57 minute semi-structured one on one phone interviews. Jonson et al. (2018) findings of this study concluded that honors' advisors see themselves as one stop shop for their students. Additionally, honor advisors see themselves as relationship builders and connecting students to faculty, research, and other opportunities to help students become well rounded. Furthermore, honor advisors often find themselves helping honors students as early as new student orientation with planning and setting goals accordingly. Honor advisors often saw themselves as a layer of support to help students balance their commitments while maintaining a mental health awareness. Finally, honors advisors indicated that they spent more time with their advisees and thus made a significant impact on retaining students.

Another relevant study that adds value to the importance of community college academic advising and student persistence, graduation, and transfer is discussed next. Hatch & Garcia (2017) conducted a quantitative study utilizing a 2010 Survey of Entering Student Engagement (SENSE) data to determine how student activities led by academic advisors during the first three weeks of school influenced student persistence, graduation, and transfer. There were 2,856 full-time student responses captured at 13 different colleges. Using a multinomial logistic regression, Hatch and Garcia (2017) studied the students' intentions during their first three weeks of school. The results of this study concluded that there were three main areas to determine students' persistence: (a) students' goals determines the relationship between engagement and persistence; (b) the various types of advising techniques have a diverse on different student types and (c) long term, the connection that students build with their academic advisor has long impact results (2017).

In another impactful study that delineated the relationship between academic advising and persistence. A comparative case study conducted by Lucenford, Sondergeld, and Stretavski (2017) with a sample size of 836 total high school cohorts was conducted to compare the impact of Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) participants n = (378) and non-GEAR UP participants n = (458) and their subsequent post-secondary enrollment. Although GEAR UP participants outperformed non-GEAR UP participants regarding high school attendance, behavior incidents, and GPA, neither group met the state attendance requirements of 94%. Additionally, the study found that the college selection of those GEAR UP participants did not have a significant impact. According to Lucenford et al. (2017), differences in educational access remain similar to those that existed during the 1960s. Additionally, people from low socio-economic backgrounds tend to attend community colleges instead of four-year institutions. The next section will examine the factors that influence Latino students' persistence.

Persistence

Despite the extensive literature on student persistence, the overall student retention rates have not improved over time (Bingham & Solverson, 2016). Few studies have examined the role of campus resources and the persistence of Latino males at community colleges (Tovar, 2014). From a policy perspective, there is a need to close the achievement gap that exists among Latino males in community colleges including certificate attainment, associate degree completion, and transferring to complete a bachelor's degree. Research shows that Latinos often find themselves in academic probation at their institutions, thus holding a lower GPA affecting their intent to persist (Tovar, 2014). A national longitudinal study focusing on 6-year completion and persistence rates for Latinos who began their education at community colleges showed that 53% of students had left without obtaining a college credential (Tovar, 2014).

Hatch and Garcia (2017) conducted an impactful multinomial logistic regression study with 13 colleges from five different accrediting regions, with representation from rural, urban, and suburban communities with an average number of 7,084 students who responded to the SENSE survey. The purpose of the study was to understand the relationship of new students' persistence intention during the first three weeks of college along with engagement, and academic advising. The results of this study indicate that there are three factors that affect student persistence: engagement and students' goals, advising styles have different effects on students, and the role of academic and social networks matter to the students throughout their educational journey. First engagement, and students' goals. Second, different advising styles, have a different effect on students. Third, the role of academic and social networks matters to the students throughout their educational journey.

Lori Jean Spencer (2017) conducted a qualitative case study to determine college persistence factors of 12 recent Latino graduates from a two-year, postsecondary private career college in West Tennessee. The sample population consisted of 2 males and 10 females, aged 20-32 years, with 67% of the students being from Mexico and the rest being from other countries represented include Colombia, Cuba, Guatemala, and Spain. Each student participated in a one to two-hour semi-structured interview that were scheduled according to the participants' availability. Additionally, artifacts were collected from participants to have a deeper understanding about the participants' culture. Spencer (2017) conducted data analysis by organizing responses into six different categories: campus influence, out of class experiences, curricular experiences, teacher influences, influential people, and precollege preparation. The results of this study concluded that there are multiple internal and external influences that affect student persistence.

In another compelling phenomenological study, Harris (2017) gathered research from eight participants ranging in ages from 20-23, with a minimum required grade point average of 3.5, who successfully transferred from a community college honors program and transferred in their junior or senior year to a Tier 1 institution. The purpose of the study was to understand what aspects best support the transition of Latino students enrolled at a community college to a Tier 1 institution. Interviews that range from 35-60 minutes were videotaped and transcribed to find emerging themes (Harris, 2017). The findings concluded that there were six themes that were critical in the persistence of Latino students: institutional support, transfer experiences, strategies for persistence, money and financial issues, study skills, and family and community support. As Harris (2017) noted, some of strategies for persistence include a student's ability to ask for help, knowing that to achieve success, struggle and setback is inevitable, have a list of goals, and work hard to achieve them.

Sáenz, García-Louis, Drake, and Guida (2017) conducted a study using Yosso's community cultural wealth framework, researched the experiences of Latino male students enrolled at community colleges and how they balanced family obligations while navigating the community college pathway. Saenz et al., (2017) conducted a phenomenological qualitative study that included 23 semi-structured focus groups with 130 Latino male students enrolled full-time or part-time at seven different community colleges in Texas. The findings of this study concluded that family "familismo", identified as being a strong commitment to extended family, played an important role in the educational journey of Latino male students. Family members are the ones who typically encourage their children to attend and persist in college.

Additionally, the findings of this study show that Latino students feel underprepared for navigating the college journey, which makes it complex as they prepare to navigate the college experience (Saenz et al., 2017). Sáenz et al (2017)

discovered three major implications for higher education practitioners. The first recommendation was for practitioners to consider creating welcoming spaces where Latinos could feel safe. Second, colleges should consider hiring faculty and staff that reflect the student population. Third, create professional development programs that incorporate cultural awareness. Since many Latino students tend to work, colleges should consider having programming events during evening hours if possible.

Longwell-Grice et al. (2016) conducted three independent studies on first-generation students classified as graduate, undergraduate, and two- year college students. The first qualitative study consisted of 90-minute interviews conducted at a four-year public university in the Northwest with nine students consisting of five men, four women; seven of them self-identified as White and two self-identified as biracial. The study's findings concluded that there are several factors that contribute to first-generation students' success. The first is attending secondary schools that offer Advance Placement courses and having teachers who expected their students to attend college. A strong work ethic and making their parents proud are other factors that adds to a first-generation student's resiliency.

The second qualitative study conducted by Longwell-Grice et al. (2016) examined the experiences of 14 first-generation college students enrolled in three different private institutions in the Northeast region through semi-structured interviews. Each participant completed two to four individual interviews of 30 to 45 minutes each. Through the data analysis, participants reported struggling at school with the institutional values, culture, and social capital, while at home they struggled with adopting the values of the institution without creating a sense of distance. The results of this study concluded with three themes. The first theme that emerged was that participants had to learn how to navigate the campus and learn the institutions' rules inside and outside the classroom. Second, participants had some sense of resiliency as they managed the college and home

experience. Finally, managing their personal identities as they evolved through their college experiences. Although first-generation students are obtaining access to higher education, if they do not have the necessary support systems to be successful, they are less likely to achieve their potential (Longwell-Grice et al., 2016). In particular, advisors must have a good understanding of the challenges faced by these students as they transition from their households who lack knowledge about college, to their college experience (2016).

The third qualitative study conducted by Longwell-Grice, Adsitt, Mullins, and Serrata (2016) examined the experiences of 40 first generation Latino American men attending a public two-year community college in the Southwest. The group of first-generation students were selected after they had successfully stayed in college after the official day of record and were assigned to four different focus groups consisting of four to six students each that lasted approximately one hour each. Additionally, 18 of the original students agreed to participate in a one-hour follow up interview. The results concluded with the following three themes: transition from high school to college barriers, lack of financial aid coverage and home and college life balance. The three research studies indicated that higher education leaders cannot ignore the obstacles that first generation students face. One way that higher education practitioners can contribute to the success of this population is by incorporating the students, families, and societies when it comes to academic advising (Longwell-Grice, Adsitt, Mullins, & Serrata, 2016).

Although there are multiple advising styles, intrusive advising should be considered as a model to assist first-generation students (Longwell-Grice, et al., 2016). Academic advising has a positive influence on student persistence and retention (2016). Advisors are encouraged to build strong relationships with their caseloads and help students at every point of their academic career. Some institutions may offer appointments, while others may be set up on a walk-in basis. Advisors can help students

with selecting their courses, support programs, and living learning centers where students can come in for assistance. This particular advising style requires direct and ongoing support by advisors. In fact, with adequate training, advisors are key role models to help students navigate the educational system while making progress toward their degree completion (Longwell-Grice et al., 2016).

In another comparative qualitative case study conducted by Mauro Ivan Peña (2017) at two large California community colleges, it examined First Year Experience (FYE) programs and how they promote transfer opportunities to Latino male students. One-hour semi-structured interviews were conducted with a total of 24 participants composed of students, alumni, counselors, and program coordinators. The two community colleges were both Hispanic Serving Institutions (HSI) and 25% of the Latino students interviewed were enrolled full-time. The first community college had a total enrollment of 19,163 with 48% of students being Latino males. A total of 69% of students enrolled were 24 years or younger. This institution ranked among the top ten in transfer institutions in California amongst 113 community colleges in the state. The second college had 66% of Latinos enrolled of the total student population with 50% being male Latinos. The institution ranked among the top 15% in transfer institutions in California. The researcher used a coding process to develop themes, site observations, and field notes to capture accurately the FYE programs and their transfer opportunities.

The findings from the Peña (2017) study revealed five main themes. First, student difficulties asking for help. Second, the long journey to transfer. Third, balancing work and financial aid. Fourth, having culturally responsive staff. Fifth, program independence and institutional support. The study results reveal Latino male students have a difficult time asking for help. As well, Latino male students tend to experience many barriers before they can transfer to a four-year institution. Latino male students are expected to work, and as a result, this impacts their overall academic progress and

eventually their financial aid eligibility. The research indicated that Latino male students are more likely to seek help from those who provide supportive environment such as FYE programs. Lastly, the greater the institutional support is given to FYE programs, the more likely the success of those programs and the students it serves (Peña, 2017).

Although student persistence is difficult to study at the community college level for two reasons: First, there are minimum data sets that provide adequate information on all students. Second, persistence data without student goals' have little meaning (Hatch & Garcia, 2017). However, faculty, staff, and administrators play an important role in the persistence of Latino students and fostering an inclusive environment that encourages Latino students to persist, graduate, and transfer to a four-year institution (Sáenz, García-Louis, Drake, & Guida, 2017). The next section will explore the factors that influence Latino students' graduation.

Graduation

Although community colleges have traditionally been open access institutions, today's community colleges are being held to different standards when it comes to completion and job placement (Wilcox, Liguori, & Postle, 2018). Bergen Community College (BCC) enrolled approximately 14,000 students enrolled during the fall 2016 semester. Bergen Community College's diverse campus included 29.9% White, 24.3% Latinos, and 25.0% unknown ethnic background (Wilcox, Liguori, & Postle, 2018). Bergen Community College's case study utilized multiple change theories to develop student completion initiatives. The four different strategies BCC undertook to increase their 6.5% graduation in fall 2013 to 21.8% by fall 2016 (Wilcox, Liguori, & Postle, 2018).

The approaches included: graduation awareness, completion initiatives, system and process improvements, and data mining (Wilcox, Liguori, & Postle, 2018).

Graduation awareness meant to shift the mindset of graduation as a one-day celebratory

event to an ongoing student celebration which included advising throughout the campus. Additionally, BCC established a 100-day countdown celebration which included a series of fun events up to the actual graduation date. Among the completion initiatives included outreach to those students who had completed either 32 credit hours or they were in their last semester. The next approach system and process improvement eliminated unnecessary steps for the students eliminating the graduation application. The college sent a congratulatory letter to the student regarding graduation and then it involved various fun activities until commencement day. The last approach implemented by BCC included data mining and sharing between Information Technology, Institutional research and student affairs (Wilcox, Liguori, & Postle, 2018). These results suggest that other community colleges can undertake the low-cost approach that Bergen implemented to improve completion and graduations of Latinos.

Another impactful study conducted by a large Canadian community college utilized a cross-sectional survey to gather data that are pertinent to student persistence, graduation, and transfer. In the fall of 2015, 875 part-time business students were sent an email invitation to participate in the survey which consisted of 22 questions that contained a mixture of Likert-type scale ranking and closed and open-ended questions. The results concluded that part-time students sustain various challenges including, academic, person al and financial. Additionally, almost a third of the students who participated in the study did not feel like they belong in college and the most significant challenge that resonated among 82.0% of the participants was balancing their family, work and school (Wilcox, Liguori, & Postle, 2018).

Another study that used data from the 2006 Educational Longitudinal Study which is a survey that tracks students at the beginning of high school through their post-secondary experience study the relationship between college selection factors and persistence for Black and Latino males in community colleges (Wood & Harris, 2015).

There were 16,200 high school students who participated in the survey over a four-year period. The findings of this study found five factors for community college selection among Latinos and Blacks: (a) degree opportunities, (b) courses and curriculum, (c) availability of financial aid, (d) academic reputation and (e) low expenses. These results indicate that Latino students select community colleges as their preferred post-secondary destination; thus, it is important to provide adequate resources for completion.

In a compelling study looking to analyze the cost benefit of Accelerated Study in Associate Programs (ASAP) completion at City New York University (CUNY) system Levin & Garcia (2017) found that the three-year completion rate for the ASAP cohort increased from 24.1% to 54.9% and the cost per graduate decreased significantly. The study found three costs that community colleges incur (tuition, books, and transportation) which decreased from \$21,000 to 13,000 for the ASAP cohort. The benefits of the ASAP resembled higher income and opportunities for its students and society in general and a more productive and educated workforce. Additionally, the study found that individuals with an associate's degree are more likely contribute \$106 in federal taxes and \$45 in state taxes over their lifespan.

Another study conducted by (Tyndorf & Martin, 2018) used longitudinal analysis of macroeconomic growth in data from 2005 to 2016 from all 50 states. The data was obtained from the Bureau of Economic Analysis and Integrated Postsecondary Education Data System (IPEDS) for all colleges and universities with a time span of 11 years. The results of this study concluded with previous research regarding the positive impact higher education has on the economic growth in the short (certificates), medium (associates) and long term (bachelor's and above). Especially in community colleges, the long-term benefits add up to 10.0% increase on labor market. Community colleges bridge the educational gap by offering affordable, accessible and short-term education

that adapts to the market demands. The next section will examine the factors that affect Latino students' transfer behaviors.

Transfer

Community colleges tend to enroll a large number of Latinos who live in the surrounding geographic areas. Community colleges are beginning to realize the importance of working with local school districts, and four-year institutions to build stronger policies and curriculum together (Miller, Fishman, & McCarthy, 2015). There has been an increased number of students enrolling at community colleges and transferring to four-year institutions; therefore, more policies will be focusing on reverse transfer where students who began their education at a community college can receive their associate's degree while taking courses at a university (Sponsler, Pingel, & Anderson, 2015). Fifteen states have endorsed specific transfer policies, which include common core numbering, guaranteed admissions and transferability of the associate's degree (Sponsler, Pingel, & Anderson, 2015).

Hu, Ortagus, and Kramer (2018) conducted a study to determine the expenses connected with attending a community college prior to transferring to a four-year institution, degree attainment, student loan ratio, and overall time for completion.

Longitudinal archival data from 2004-2009 that included 2,410 college students who began their studies at a community college and 4,640 college students who began their education at a four-year university, was used to determine the price of attending a community college instead of a four-year university and student completion (Hu, Ortagus, & Kramer, 2018). A logistic regression technique was used to determine students' bachelor's degree completion. To avoid any prejudice towards community college or four-year institution attendees, the study included a matching approach.

Findings suggested that although students who enrolled at community colleges before

attending a four-year institution have less student loans, they tend to take longer to complete a bachelor's degree.

Horn, Horner, and Lee (2017) conducted a study to determine the reliability and validity of institutional effectiveness metrics for community colleges. Longitudinal, archival data from 2009 to 2011 from 875 community colleges was retrieved from IPEDS website. A multi-level and multi-year linear mixed regression analysis was used to determine community colleges' national expected performance metrics (transfer rates and graduations) based on several factors including structural demographic, financial, and contextual. The findings concluded that community colleges with larger enrollments are at a hindrance as it relates to reporting transfer and graduations as key performance indicators.

Andrade (2019) conducted a longitudinal study that included a total of 71 Latino students, between 18-22 years of age, who transfer from a California Community College to a California University. The purpose of the qualitative study was to examine the experiences Latino students and transfer programs from community colleges to four-year universities. Phone or in person, interviews were used to seek students' responses. A thematic analysis was used to group the responses in common themes. The findings concluded that the most valuable services provided in the transfer process included frequent academic advising, workshops, and support meetings.

Nuñez and Yoshimi (2016) conducted a phenomenological study to address the following research question: How do transfer students describe their experiences during and after their transition to the receiving institution? The study was conducted at a large four-year public research institution located in the west in a rural underserved region with limited access to higher education. Lake University has more than a 25% Latino enrollment and is considered a Hispanic Serving Institution (HSI). A purposeful sample of 11 transfer students who transitioned to Lake University in the fall of 2005 were

chosen for the study. Seven of the 11 participants would eventually complete a degree at Lake University. All participants were female with five being first generation and six under the age of 25. All study participants were enrolled full-time their first semester being commuter students with one being employed.

Each of the 11 study participants were interviewed individually via semistructured interviews for approximately one hour during the spring and summer of 2008, within an anticipated graduation within two years. Participants had the option to complete either an in-person or by phone interview, depending on their preference. The 11 participants had previously attended a community college, with three of the participants having attended another four-year institution and one participant indicated who dropped out of college over 10 years ago. Data collected from the interviews was preliminary analyzed by coding interview transcripts to identify meaning to patterns and similarities across responses from participants. Then, a pattern matching technique was used to compare patterns in the data to existing research on college student experiences and the transfer process. The findings of this study concluded with Lake University students' descriptions of their academic and social adjustment to a four-year institution during transfer. First, participants focused on using technical tools when discussing the transfer process. Second, supportive interactions with institutional agents helped them navigate the new environment of the participating university. Third, participants described their academic projects and career goals as a priority (Nuñez & Yoshimi, 2016)

In another impactful longitudinal qualitative study conducted by Jabbar, McKinnon-Crowley, and Serrata (2019), the purpose of the study was to view students' experiences or conditions that contributed to their transfer to a four-year institution. The sample for this study was selected from two large institutions in Texas with over 30,000 enrolled students. A total of 61 intended transfer students were asked the following question: What combination of conditions, if any, are necessary and

sufficient for a successful transfer? The 16 students who agreed to participate were interviewed during the fall of 2015 and fall 2016 semesters. The interview data was reviewed and coded into common themes for the transfer conditions: (a) social/cultural capital, (b) institutional advising support, (c) particular issues facing non-traditional students, and (d) psychological factors.

Findings concluded that 16 out of 61 students had successfully transferred during the time of this study. Some of the participant's encountered similar barriers, but with different outcomes during the transfer process. For some students, the logistics of transferring were a barrier, and sometimes life just got in the way that deterred the students' academic plans. Family can be both a support and a barrier depending on the family, knowledge about education, and support given. Social capital impacted the way students were financially position and their prior access or knowledge about higher education. Social capital (the students' ability to access higher education based on family relationships) was not the only indicator for a successful transfer as the quality of advising students received helped with the successful transfer process (Jabbar, McKinnon-Crowley, & Serrata, 2019).

Another impactful study was conducted by Zilvinskis and Dumford (2018) to measure the relationship between transfer students' status, student engagement, and participation in high impact practices. The sample was composed of 22,994 senior students who responded to the 2014 administration of the National Survey of Student Engagement (NSSE, 2014). The NSSE measured the association between students who transferred from a two-year to a four-year institution (vertical transfer) compared to non-transfer students, and the high impact student engagement practices. The demographics of this study were: 41% transfer students, 36% male, 68% white, 7% Black, 8% Latino, 6.0% Asian, 4% multi-racial, and 45% first- generation. The results of this study

indicated the importance of faculty advocating for supporting transfer students in order to integrate academically at the receiving four-year institution.

Summary of Findings

Even though there is extensive literature geared towards retention, Latinos are still lagging behind with college attainment (Bingham & Solverson, 2016). Few studies have focused on Latinos' persistence at community colleges (Tovar, 2014). Although Latinos prefer to enroll at a community college, they tend to never complete their associate degree and not transfer to a university (Baker 2016). However, if Latinos start their postsecondary enrollment at four-year institutions, they are more likely to finish their education (Gonzalez, 2015). More community colleges are beginning to incorporate robust transfer partnerships to include reverse transfer, common core numbering, and guaranteed admissions policies (Sponsler, Pingel, & Anderson, 2015) to counter the effects of student withdrawal or incompletion.

Furthermore, in order for Texas to remain competitive, the state has set a goal of 60% of adults' ages 25-34 will need to complete a certificate or degree by the year 2030 (THECB, 2018). The future workforce of Texas depends on how community colleges will respond to the changing demographics by creating programming that supports the heterogeneous Latino population (Hernandez, Slate, & Joyner, 2015). Disaggregating Latino educational attainments by gender and ethnic group will be critical (Hernandez, Slate, & Joyner, 2015). After examining the community college constructs of academic advising, Latino student persistence, graduation, and transfer, the next section will explore the theoretical framework that augments this research study. Current academic advising and Latino student persistence and graduation research focuses primarily on four-year institutions. Therefore, this study seeks to close the gap in the literature at the community college level by examining the relationship between academic advising and Latino student persistence, graduation and transfer.

Theoretical Framework

Joan Robinson originally developed the production function theory in 1953. This theory is applicable to education because it shows a relationship between outputs and inputs in the production process. As the theory progress, it was used toward the joining the educational factors that influence student learning or inputs such as family, schooling, classmates, and communities to produce test scores, college enrollment, completion, and successful job placement (Baker, 2012).

Furthermore, James Coleman made additional improvements of this theory, which is documented in the Coleman Report (1966) where he included the notion of education production functions into his theory that some educational challenges affect students more than others. For instance, Coleman observed that students were highly influenced by relatives and friends rather than students. Subsequently, in 1989, Eric A. Hanushek, adjusted the theoretical framework comparison between the notion of production and certain academic accomplishments. Hanushek was more rigorous connecting aspects of student retention, limited English proficiency to outcomes that included graduations and achievement.

Berne (1996) defined the inclusive relationship between cost-function analysis and rate of return analysis as covered by Betts (2001). Both of the efforts, try to establish a mathematical relationship between the issues of expenses and knowledge outputs in a cost versus production style. In conclusion, this theory offers a persuasive framework for establishing the correlation between community college inputs like Latino student characteristics, and academic advising and their ultimate effect on student performance outcomes such as persistence, graduation, and transfer. This study is based from the educational production function theory.

Conclusion

This chapter offered a review of relevant literature regarding to the purpose of this study, which is to explore the relationship between academic advising and the persistence, graduation, and transferability of Latino students. In Chapter III, the methodological aspects of this dissertation are introduced which include theoretical constructs, proposed research and questions, research design, population and sampling selection, data collection procedures, data analysis techniques, privacy and trustworthiness considerations, and the research design limitations for this study.

CHAPTER III:

METHODOLOGY

The purpose of this study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer. This mixed methods study collected archived data for a purposeful sample of community college districts across Texas and interview data from a purposeful sample of community college presidents. Archived data were collected from the Texas Higher Education Coordinating Board (THECB), and analyzed using Pearson's product moment correlation (r). Data obtained from the interviews were analyzed using an inductive coding process to look for themes that emerged from the interviewee's responses. This chapter presents an overview of the research problem operationalization of theoretical constructs, research purpose and questions, research design, population and sampling selection, instrumentation to be used, data collection procedures, data analysis, privacy and ethical considerations, and the research design limitations of the study.

Overview of the Research Problem

Latinos prefer to begin their education at community colleges (Arbona & Nora, 2017). However, community colleges can be challenged with retaining Latino students due to the obligations they hold outside of their college enrollment (Illoh, 2017). Some of the personal obligations that Latinos experience while enrolled include parenting, full-time employment, and family care giving, and paying bills (Illoh, 2017). Currently, 62.0% of American Latinos have earned a high school diploma or less (National Center for Education Statistics [NCES], 2017), and by 2020, 65.0% of jobs will require education beyond high school (Center on Education and the Workforce, 2018).

Moreover, in order to remain competitive in a global economy, 60.0% of Texans ages 25-34 will need a certificate or degree by the year 2030 (THECB, 2018). Nationally and in Texas, community colleges must be responsive to the needs of the growing number of

Latina/os who may require higher levels of educational support (Rodriguez, Garbee, Miller, & Saenz, 2017). Community colleges are highly urged to adopt guided pathways to improve academic advising and Latino student persistence, graduation, and transfer (Horn, Horner, & Lee, 2017).

Operationalization of Theoretical Constructs

This study consisted of the following constructs: (a) academic advising, (b) persistence, (c) graduation, and (d) transfer. Academic advising is defined as the process of exchanging information that empowers students to realize their education potential (NACADA, 2003). This construct was measured using the number of advisors employed per community college, advisors' average salary. Persistence is defined as attending and staying in college (Murphy & Murphy, 2017) and measured by the percentage of students who return to college at any institution for their second year (NSCRC, 2015). Graduation is defined as a student who obtains a degree or certificate and is successfully conferred (IPEDS, 2019) and measured as the number of students who complete an associate's degree or certificate within three years per national metrics (Burton, 2017). Transfer is defined as a student who leaves the reporting institution and matriculates at another institution (IPEDS, 2019) and is measured as the number of students who complete a certificate or an associate's degree at the community college and then transfer to a four-year university (Shapiro, Dundar, & Huie, 2017).

Research Purpose and Questions

The purpose of this study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer. The study addressed the following research questions:

R1: Is there a relationship between community college academic advising and Latino persistence?

Ha: There is a relationship between community college academic advising

and persistence of Latino students.

R2: Is there are a relationship between community college academic advising and Latino graduation?

Ha: There is a relationship between community college academic advising and Latino graduation.

R3: Is there a relationship between community college academic advising and Latinos transfer?

Ha: There is a relationship between community college academic advising and Latino transfer.

R4: What are the perceptions of community college presidents and/or chancellors on the relationship between academic advising and selected performance outcomes of Latino students?

Research Design

For this study, a sequential mixed methods design was used. The first phase of this study was quantitative, and the second phase was qualitative. Mixed methods studies allow for a more in-depth analysis of the quantitative data by following up with the use of qualitative methods. For this study, archived data were collected for a purposeful sample of community college districts across the state of Texas. Archived data collected were:

(a) number of academic advisors per college, (b) persistence, (c) graduation, (d) and transfer. The quantitative data were analyzed using Pearson's r. For the qualitative analysis, the data obtained from community college presidents' semi-structured interviews were analyzed using a constant comparative coding process whereby relevant themes were extracted. The research design is presented in Figure 3.1.

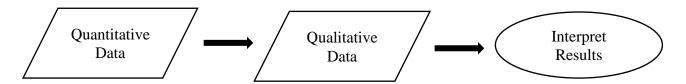


Figure 3.1 Adapted from Creswell (2002)

Population and Sample

The population of this study consisted of all higher education institutions in Texas. There are 148 higher education institutions including public and independent institutions in Texas with a fall 2019 total enrollment of 1.5 million students (THECB, 2019). Table 3.1 provides information regarding the public higher education institutions in Texas and Table 3.2 provides information regarding independent institutions in Texas. Additionally, Appendix A and B provided a detailed list of all institutions in Texas. Of the total Texas higher education population, 40.0% were Latino, 34.0% of the students were White, 12.0% were African American, 6.0% were Asian, 4.0% international, and 4.0% identified as other (THECB, 2019). In fall 2019, the total enrollment for the Texas community colleges was 748,399 (Texas Higher Education Accountability System [THEAS], 2019). Of the total 748,399 Texas higher education population, 351,752 (47.0%) were Latino, 222,937 (29.2%) were White, and 93,961 (13.0%) were African American, 35,629 (4.8%) were Asian, 29,296 (4.0%), identified as other, and international students accounted for 14,824 (2.0%) (THEAS, 2019). A purposeful sample of 72 community college districts in Texas were collected and analyzed.

Table 3.1

Overview of Higher Education Institutions in Texas

Public Institutions	Number of Institutions
Universities	37
Community Colleges	50 Districts w/Multiple Campuses
Health Related Institutions	10
Technical College System	6
State Colleges	3
Total Public Institutions	106

Table 3.2

Overview of Higher Education Institutions in Texas

Independent Institutions	Number of Institutions
Universities	38
Junior Colleges	1
Health Related Institutions	1
Chiropractic	2
Total Independent Institutions	42

Participant Selection

A purposeful sample of 10 community college presidents and/or chancellors was selected to be interviewed for the purpose of this study. Three presidents were from small community colleges, three were from medium sized colleges, three were from large colleges, and one was from a very large community college system. The enrollment sizes determine the college sizes. College systems are located in major metropolitan locations in the state of Texas and serve between 20,000 and 60,000 students. Large colleges serve between 9,000 and 20,000 students. Medium colleges serve between 6,000 and 9,000

students, and small colleges serve between 1,000 and 6,000 students (THECB, 2018). The community colleges are composed of 52% White male presidents, 25% white females, 13% Latino males, 8% Latina females, 3% Asian males, 1% Asian female. The interview participant demographics are presented in Table 3.3.

Table 3.3

Interview Participants' Demographics Data

College Size	Gender	Ethnicity	Role	Allocated #
Small	Male	White	President	P2
Small	Male	White	President	P1
Small	Male	Latino	President	P3
Medium	Male	White	President	P9
Medium	Male	White	President	P6
Medium	Male	Latino	President	P5
Large	Female	Latina	President	P7
Large	Male	White	Chancellor	P4
Large	Male	Latino	President	P10
Very Large	Male	White	Chancellor	P8

Data Collection Procedures

Quantitative

Prior to data collection, the researcher gained approval from UHCL Committee for Protection of Human Subjects (CPHS). Upon granted approval, data were collected from the THECB and community colleges' human resource administrators. Data collected included the total number of community college advisors, average advisor salaries, along with student persistence, graduation, and transfer. The data were uploaded into an IBM SPSS database for further analysis.

Oualitative

A purposeful sample of community college presidents and/or chancellors from small, medium, large and college systems were invited to participate in the qualitative portion of this study. The participants were asked to engage in a 20-30 minute semi-

structured interviews. The college presidents were contacted via email with a formal request to participate in the interview. Once consent was given, the interviews were scheduled, and the participants were informed of the study details via a consent form. The consent form included assurance that participation in the study is voluntary, that their identities would remained confidential, and that the participants would not experience undue harm while participating in the interview. Also, participants were provided with the consent forms which included information on the interview process (see Appendix D).

The interview questions asked the participants to consider how community college advising affects Latino student performance. Precisely, participants were asked about the impact of community college advising and Latinos' persitence, graduation, and transfer. Interview questions are listed in the Interview Guide that is included as Appendix E. All interview sessions were audio recorded. After the interviews were completed, the sessions were transcribed. Then, the interview transcripts were emailed back to the presidents for the opportunity to review and/or clarify the data. All data were be secured in a password-protected folder on the researcher's computer and in the researcher's office within a locked file cabinet at all times. At the culmination of the study, the data will be stored for three years, which is the time required by CPHS. The research data will be destroyed at the conclusion of the study.

Data Analysis

Quantitative

All data were collected and uploaded to IBM SPSS for analysis. Research Questions 1–3 were answered using Pearson's product-moment correlations (r) to determine if there was a relationship between academic advising and Latino student persistence, graduation, and transfer. All variables are continuous in measurement. Effect size was measured by calculating the coefficient of determination (r²) to determine

the proportion of variance in the dependent variable that could be attributed to the independent variable. A significance value of .05 was used to separate the most unlikely (or extreme) 5% of the sample means from the most likely 95% of the sample means (Gravetter & Wallnau, 2009).

Qualitative

Following the quantitative data analysis, findings were used to create community college president interview questions in order to provide a clearer and more in-depth understanding of the possible relationship between community college academic advising and Latino student Latino persistence, graduation, and transfer. The open-ended questions were aimed at providing deeper thoughts on behalf of the community college presidents regarding the topic. The interview data were analyzed using a constant comparative inductive coding process in order to create an understanding of the impact of community college academic advising and Latino student persistence, graduation, and transfer.

The data analysis included a process of data reduction, display, conclusions, and verifications (Berg, 2001). Data reduction allows for data to be more accessible and coherent and allowed for the extraction of relevant themes and patterns. This process took place via the transcription of the interview audio recordings, the organization of the data into recurring themes, and the translation of the data into written summaries. The coding process began by recognizing in-vivo codes. Once the codes were identified, emphasis was placed on search for patterns and themes from the data (Coffey & Atkinson, 1996) in order to put them into categories. Once the establishment of categories, subcategories were created, the findings were recorded. Conclusions were made based upon the findings about the data.

Validity

For the qualitative portion of the study, validity was established through triangulation, member checking, and peer review. The data collected during the interviews were subjected to member checking by having executive college leadership review the transcripts in order to ensure the validity of the responses that were provided. The questions were peer reviewed by executive college administrators in order to ensure the questions were valid. The peer reviews obtained feedback regarding the question type and structure. Member checking was incorported to ensure the voices of the participants will be properly captured, increasing the validity of the findings.

Privacy and Ethical Considerations

The researcher obtained permission from UHCL's CPHS prior to the collection of any data. The researcher will maintain the data for three yeas as required by the CPHS guidelines. After the deadline has passed, the reseracher will destroy all data files associated with the study. A consent form and interview questions will be provided to the interview participants, and the data collected was properly secured in a locked cabinet and with password protected file. In addition, the identities of the participants were kept confidential. For data reporting, pseudonyms were used to further protect participant identity. Participants were not be exposed to undue risk at any time during the process. The researcher remained neutral during the interviews and avoid offering personal beliefs about the topic to the participants. The audio recordings were precisely transcribed in order to protect the validity of the data. Additionally, during the coding process, the researcher utilized the automatic coding capabilities of the NVivo software in order to secure objective themes and patterns.

Research Design Limitations

As noted by Creswell (2002), the research design of this study consisted of several limitations. First, for the quantitative data, the state databases information could

be subject to human error, and these errors could compromise the study and the validity of its findings. Second, the researcher depended upon the honest feedback of the interview participants in order to effectively make conclusions about the themes of the interviews. Third, if the interview subjects are not honest in their answers, the qualitative data could be skewed, and therefore invalid. Fourth, political correctness as opposed to candid answers by the interviewees could threaten the validity of the findings. Fifth, since all the community colleges are located in Texas, the findings of the study cannot be generalizable to other states. Sixth, the small sample size of interview participants makes it difficult to draw any generalizations about the interview data. Seventh, this study will only consist of one year worth of data. To get a better picture of the relationship between academic advising and Latino student performance measures, a multi-year analysis should be done. Eight, this study did not include student voices, therefore, to get a comprehensive picture of the relationship of academic advising and Latino student performance measures should include students' interviews.

Conclusion

The purpose of this study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer. This chapter identified the need to further examine the relationship amongst the constructs. Additionally, the population and sample, data collection procedures, and the data analysis were included. The quantitative data was analyzed using Pearson's product moment correlation (r), and the qualitative data was in the form of interviews and it was themed coded using NVivo software. In order to better understand the Latino student persistence, graduation, and transfer, both the quantitative, and qualitative findings were essential to the study. In Chapter IV, the community college presidents' interview data and community college academic advising, Latino student persistence, graduation, and transfer data will be discussed in further detail.

CHAPTER IV:

RESULTS

The purpose of this mixed methods study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer rates. Institutional data from the Texas Higher Education Coordinating Board (THECB) and one year of Texas community college advisors' salary data were loaded into IBM SPSS database for analysis. The archived quantitative data were analyzed using Pearson's product moment correlations. The qualitative data collected from the community college president interviews were analyzed using an inductive coding process. This chapter offers a description of the community colleges studied and the findings of the research questions.

Participant Demographics

Data collected from a purposeful sample of 72 community college districts in Texas were collected and analyzed. This data included community college presidents and enrollment information such as persistence, graduate, and transfer rates for Latino students. In fall 2019, the total student enrollment for the 72 Texas community college districts was 748,399 (Texas Higher Education Accountability System [THEAS], 2019). Of the total 748,399 Texas higher education population, 351,752 (47.0%) were Latino, 222,937 (29.2%) were White, 93,9614 (13.0%) were African American, 34,685 (4.5%) were Asian, 29,296 (4.0%), identified as other, and international students accounted for 14,824 (2.0%) of the total population (THEAS, 2019). Table 4.1 provides specific demographic information for Texas Community Colleges.

Table 4.1

Descriptive Statistics for Texas Community Colleges 2019 Enrollment

	Frequency (n)	Percentage (%)
African American	93,961	13.0
Asian	35,629	4.8
Latino	351,752	47.0
White	222,937	29.2
International	14,824	2.0
Other	29,296	4.0
Total Enrollment	748,399	100.0

Table 4.2 displays descriptive statistics for advising characteristics, enrollment, and performance measures. Latino student persistence, graduation and transfer varied by college size. At small community colleges in Texas, Latino students persist at a 59.3% while at large community colleges Latino students persist at 29.3%. Latino student graduation also varies by college size, while 35.1% of Latino students graduate at small Texas community colleges, 10.9% graduate from large Texas community colleges. At small community colleges in Texas, Latino students transfer at 12.3% while at large community colleges Latino students transfer at 10.9%. At small community colleges, the advisors' average salary is \$42,004 and a very large community colleges, the advisors' average salary is \$34,553.

Table 4.2

Average for Advising Characteristics, Fall 2019 Enrollment, and Latino Performance Measures

College Size	N	Latino Persistence	Latino Graduation	Latino Transfer	Latino Enrollment	Overall Enrollment	Advisor Number	Advisor Salary
Small	24	59.3%	35.1%	12.3%	1,144	3,9,01	4.39	\$42,004
Medium	14	63.9%	31.6%	12.1%	3,186	7,411	10.21	\$43,216
Large	28	29.3%	29.3%	10.9%	5,608	12,162	12.21	\$43,032
Very Large	6	76.0%	10.9%	11.7%	17,067	33,222	26.67	\$34,553
All Colleges	72	61.2%	36.6%	17.6%	4,649	10,248	10.68	\$42,448

Research Question One

Research question one, *Is there a relationship between community college* academic advising ratio and Latino persistence?, was answered by conducting Pearson's product-moment correlations to examine the relationship between academic advising ratio and Latino persistence for all 72 community colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' persistence and student advisor ratio, r = .169, p = .169. In addition, the results of the Pearson's r suggested there was not a statistically significant relationship between Latinos' persistence and advisor salary, r = .157, p = .198. In other words, student advisor ratio nor advisor salary have anything to do with Latinos' persistence.

To determine the relationship between academic advising ratio and Latino persistence per community college size, a Pearson's r analysis was conducted separately for small, medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' persistence and student advisor ratio at small community colleges, r = -.236, p = .278. In other words, student advisor ratio at small community colleges has nothing to do with Latinos' persistence. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' persistence and student advisor ratio at medium community colleges, r = .304, p = .291. In other words, student advisor ratio at medium community colleges has nothing to do with Latinos' persistence. Results of the Pearson's r indicated there was not statistically significant relationship between Latinos' persistence and student advisor ratio at large community colleges, r = .268, p = .195. In other words, student advisor ratio at large community colleges, r = .268, p = .195. In other words, student advisor ratio at

large community colleges have nothing to do with Latinos' persistence. These results are presented in Table 4.3.

Table 4.3

Correlations between Latino Persistence Rate and Advising Ratio per College Size

College Size	N	r	p-value
Small	24	236	.278
Medium	14	.304	.291
Large	28	.268	.195
Very Large**	6		
All Colleges	72	.169	.169

^{*}Statistically significant (p < .05)

To determine the relationship between advisor salary and Latino persistence per community college size, a Pearson's r analysis was conducted separately for small, medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' persistence and advisor salary at small community colleges, r = .020, p = .928. In other words, advisor salary at small community colleges has nothing to do with Latinos' persistence. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' persistence and advisor salary at medium community colleges, r = .339, p = .236. In other words, advisor salary at medium community colleges has nothing to do with Latinos' persistence. Results of the Pearson's r indicated there was not a statistically significantly relationship between Latinos' persistence and advisor salary at large community colleges,

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

r = .117, p = .571. In other words, advisor salary at large community colleges have nothing to do with Latinos' persistence. These results are presented in Table 4.4.

Table 4.4

Correlations between Latino Persistence Rate and Advising Salary per College Size

College Size	N	r	p-value
Small	24	.020	.928
Medium	14	.339	.236
Large	28	.117	.571
Very Large**	6		
All Colleges	72	.157	.198

^{*}Statistically significant (p < .05)

Research Question Two

Research question two guided the study, *Is there are a relationship between* community college academic advising and Latino graduation?, was answered by conducting Pearson's product-moment correlations to examine the relationship between academic advising ratio and Latino graduation for all 72 community colleges. Results of the Pearson's r indicated there was not statistically significant relationship between Latinos' graduation and student advisor ratio, r = .190, p = .114. Results of the Pearson's r indicated there was not statistically significant relationship between Latinos' graduation and advisor salary, r = .046, p = .706. In other words, student advisor ratio nor advisor salary have anything to do with Latinos' graduation.

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

To determine the relationship between advising ratio and Latino graduation per community college size, a Pearson's r analysis was conducted separately for small, medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' graduation and student advisor ratio at small community colleges, r = .072, p = .737. In other words, student advisor ratio at small community colleges has nothing to do with Latinos' graduation. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' graduation and student advisor ratio at medium community colleges, r = .013, p = .964. In other words, student advisor ratio at medium community colleges has nothing to do with Latinos' graduation. Results, however, did indicate there was a statistically significantly positive relationship between Latino graduation rate and student advisor ratio at large community colleges, r = .482, $r^2 = .232$, p = .013. As the student advisor ratio increased at large community colleges, so did the graduation rate of Latinos. Approximately 23% of the Latino graduation rate can be attributed to the student advisor ratio. These results are presented in Table 4.5.

Table 4.5

Correlations between Latino Graduation Rate and Advisor Ratio per College Size

College Size	N	r	p-value	r^2
Small	24	.072	.737	
Medium	14	.013	.964	
Large	28	.482	.013*	.232
Very Large**	6			
All Colleges	72	.190	.114	

^{*}Statistically significant (p < .05)

To determine the relationship between advising salary and Latino graduation rate per community college size, a Pearson's r analysis was conducted separately for small, medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' graduation and advisor salary at small community colleges, r = -.019, p = .930. In other words, advisor salary at small community colleges has nothing to do with Latinos' graduation. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' graduation and advisor salary at medium community colleges, r = .234, p = .420. In other words, advisor salary at medium community colleges has nothing to do with Latinos' graduation. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' graduation and advisor salary at large community colleges, r = .065, p = .746. In other words, advisor salary at large community colleges have nothing to do with Latinos' graduation. These results are presented in Table 4.6.

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

Table 4.6

Correlations between Latino Graduation Rate, and Advisor Salary per College Size

College Size	N	r	p-value	
Small	24	019	.930	
Medium	14	.234	.420	
Large	28	065	.746	
Very Large**	6			
All Colleges	72	.046*	.706	

^{*}Statistically significant (p < .05)

Research Question Three

Research question three, *Is there a relationship between community college academic advising and Latinos transfer?*, was answered by conducting Pearson's product-moment correlations to examine the relationship between academic advising ratio and Latino transfer for all 72 community colleges. Results of the Pearson's r indicated that there was a statistically significant positive relationship between Latinos' transfer rate and student advisor ratio, r = .289, $r^2 = .083$, p = .028. As student advisor ratio increased, so did the transfer of Latinos. Approximately 8% of the variance in student advisor ratio contributed to the Latinos' transfer decision. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and advisor salary, r = .084, p = .528. In other words, advisor salary has nothing to do with Latinos' transfer.

To determine the relationship between advising ratio and Latino transfer per community college size, a Pearson's *r* analysis was conducted separately for small,

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and student advisor ratio at small community colleges, r = .255, p = .324. In other words, student advisor ratio at small community colleges has nothing to do with Latinos' transfer. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and student advisor ratio at medium community colleges, r = .285, p = .424. In other words, student advisor ratio at medium community colleges has nothing to do with Latinos' transfer. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and student advisor ratio at large community colleges, r = .149, p = .478. In other words, student advisor ratio at large community colleges have nothing to do with Latinos' transfer. These results are presented in Table 4.7.

Table 4.7

Correlations between Latino Transfer Rate and Advisor Ratio per College Size

College Size	N	r	p-value	r^2
Small	24	.255	.324	
Medium	14	285	.424	
Large	28	.149	.478	
Very Large**	6			
All Colleges	72	.289	.028*	.083

^{*}Statistically significant (p < .05)

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

To determine the relationship between advising salary and Latino transfer per community college size, a Pearson's r analysis was conducted separately for small, medium, and large colleges. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and advisor salary at small community colleges, r = -.046, p = .862. In other words, advisor salary at small community colleges have nothing to do with Latinos' transfer. Results of the Pearson's r indicated there was not a statistically significant relationship between Latinos' transfer and advisor salary, r = .232, p = .518. In other words, advisor salary at medium community colleges has nothing to do with Latinos' transfer. Results of the Pearson's r indicated there was not statistically significant relationship between Latinos' transfer and advisor salary at large community colleges, r = -.171, p = .404. In other words, advisor salary at large community colleges have nothing to do with Latinos' transfer. These results are presented in Table 4.8.

Table 4.8

Correlations between Latino Transfer Rate and Advisor Salary per College Size

College Size	N	r	p-value
Small	24	046	.862
Medium	14	.232	.518
Large	28	171	.404
Very Large**	6		
All Colleges	72	.084	.528

^{*}Statistically significant (p < .05)

^{**}Findings are inconclusive because the sample size was too small to run a correlational analysis.

Research Question Four

Research question four, What are the perceptions of community college presidents on the relationship between academic advising and selected performance outcomes of Latino students?, was answered using a qualitative inductive coding process. In an effort to capture a more in-depth understanding of the impact of academic advising on the Latino student performance measures, 10 Texas community college presidents and/or chancellors were interviewed (three small, three medium, three large, and one community college district). All of the interviews were conducted via the phone. Analysis from the qualitative data showed four main themes that characterize presidents' and chancellors' perceptions of the relationship between academic advising and Latino students' persistence, graduation, and transfer. The four themes that emerged concerning presidents' and chancellors' perceptions were: importance of advising, persistence, graduation, and transfer.

Importance of Advising

The college presidents and chancellors emphasized the importance of academic advising in the success of Latino students. They termed advising as a critical part of the educational journey of Latino students. The subthemes that emerged from the conversations with the presidents and chancellors include: advisors' role is important, aim of advising, ethnicity plays a role, leadership matters, rapport building is important with students, and wrong decisions waste resources.

Advisors role is important. The presidents and chancellors have focused on the importance of advising throughout the lives of the students. Of the 10 chancellors and presidents, five suggested that the advisors' role is important. They have stated that the advisor as a whole provides an opportunity for the students to look up to someone. The

following two groupings were discovered through further analysis of the advisors' role is important: course registration, and decrease in excess credit hours.

Course registration. One of the major functions of advisors is to guide students in the process of course registration. Three out of 10 participants viewed advisors' role being important when it comes to having Latino students enrolled in the right sequence of classes. Participant 1 reflected on the importance of the advisors' role by commenting: "We rely on providing students advice on course registration with specific emphasis on their career choice." Similarly, Participant 6 also suggested that advisors help students stay on track with their pathway: "We've got a good number of those students. When they apply to college we assign them a success coach and then as they move across the pathways, they'll move success coach." Also, Participant 4 agreed with the importance of the role of academic advisor when it comes to enrolling for classes: "Their main goal is to help students prepare to register for classes, plan their semesters ahead, review any academic holds, and discuss any transfer and career options they may be considering."

Decrease in excess credit hours. In addition to identifying the advisors' role in course registration, the participants discussed the goal of decreasing excess credit hours amongst students. Three out of 10 participants emphasized the importance of looking at the student metrics in order to reduce excess hours. Participant 5 expressed his efforts to review data to strategically reduce the number of excess hours students take:

We've been focused on this before we began the Pathways project. We've looked at our metrics since then and so what we're seeing is, you're obviously familiar with the almanac that produces the almanac. If you look at the almanac, when they started reviewing the number of hours as well as the time to degree, so we started at 99 hours for a 60-hour degree was the average of our students. We've dropped that down to 81 hours now. It's still too many, but we've improved it by

18 credit hours and we've gone from about four and a half years' time to degree, down to 4.1 years. We have seen significant improvement in reducing time to degree as well as the number of hours to degree.

Participant 4 voiced similar concerns as Participant 5 in regard to students allocating their time and money to courses that may not apply to their degree plan. Participant 4 expressed concern about ensuring students do not waste their time and money: "We don't want to waste time and money by taking the wrong course." Similarly, Participant 7 agreed with decreasing excess hours:

An academic advisor is crucial in the lives of our Latino/a students because they guide them to make the best decision based on their majors and provide them with program information to fulfill their degree requirements without earning excessive credit hours and wasting money.

Participants 4, 5, and 7 shared similar concerns regarding the need to improve the number of excess hours that community college students typically end up taking. Additionally, these participants recognized the importance of the advisor's role to reduce the waste of time and resources.

Aim of advising. The goal of advising is highlighted by five of the 10 presidents and chancellors when discussing the level of counseling and advising implemented at their respective community college. They highlighted a number of benefits that they seek while assigning advisors to students. The focus is not only on guiding them academically but on helping them achieve personal goals as well. The following three groupings were discovered via the aim of advising: career success, college success and retaining students.

Career success. Five of the 10 participants viewed aim of advising as a connector to career success in terms of career goals and transfer and workforce pathways. Three of the participants viewed aimed of advising as helping students with career success.

Participant 1 stated that the goal is to place Latino students into high demand fields: "we want to ensure that our students are prepared for success in college and careers with high wages and in high demand fields." Participant 7 also suggested that advising helps students with career goals: "As they see them as individuals advising them in their educational career dreams whatever that may be." Participant 2 supported participants one and seven's view that the importance of advising is related to their academic and career goals: "we employ professional advising staff whose primary task is to help students select their classes in which they can succeed and lead to the realization of their educational and career goals."

Two participants suggested that the aim of advising is to help students transfer to four-year institutions and/or prepare them to enter the workforce. Participant 8 stated that their institution's goal is to support students through their career and or educational journey: "Our goal is to support students to get an associate's degree and transfer to a four-year institution, or just take a few classes and get into the workforce." Participant 5 also suggested that advisors are essential in helping students choose a career or transfer to four-year institution: "Our advisors help students with their first-year experience, which includes choosing a career, navigating through the college process and transitioning into the workforce or a four-year institution."

College success. The next grouping discovered by analyzing aim of advising was college success. Eight out of 10 participants suggested that aim of advising prepares Latino students for success. The following three groupings were discovered after further analysis of college success: pathways, first year experience and systems and staff in place.

Pathways. Five out of ten participants discussed the importance of having a clear pathway for students. These five participants perceived that providing Latino students

with an academic pathway contributed to students' likelihood of academic success. Participant 10 stated an understanding of the short and long-term responsibilities associated with serving students: "As more Latinos are enrolling in college, it is my responsibility to provide students with clear pathways to enter our college, stay at our college with the intention of graduating and transferring to a four-year institution if applicable." Furthermore, Participant 8 agreed with the overall college success notion:

At our institution, the advising process is an integral part of the academic success and helps us to ensure that our students stay on track for their academic pathway. Our goal is to support students to get an associate's degree and transfer to a four-year institution.

Participant 3 concurred with Participant 10 and Participant 8 by sharing the following:

At our institution, our advisors assist first time and returning students in the process to achieve their educational goals. Our advisors help students with degree plans, student planning to stay on track to graduate, and transfer planning to maximize their time at our institution while taking classes that will transfer to their four-year university of their choice. We have over 10 career pathway transfer plans and guaranteed 2+2 programs.

Similarly, Participant 9 agreed with the notion of helping choose a career and the importance of having pathways available for students:

My thoughts about academic advising is like they are a GPS system for our institution. Our advisors listen to where the students see themselves in the future, and they suggest ways to get there. Academic advising is essential to the success of our students and can assist students with general questions, assist students identify their goals and help students achieve those goals. An advisor can help

students achieve their academic guided pathway which will assist students achieve their academic goals.

Participant 2 agreed with Participant 9 in the value academic advising contributes to a student's academic outcome. Participant 2 stated that if students are not on the correct pathway, they are less likely to graduate:

When students think they're going to graduate and then they don't graduate because they didn't take the right thing, yes, that's usually what it is. We make the academic advisors tell the students why they're not graduating. They still have to do that once or twice.

These five participants concurred with the concept that advisors help students stay on the correct pathway to achieve their academic and personal goals.

First year experience. Two out of ten participants discussed the juggle of supporting various students including first time in college. While college leaders are focused on the outcomes of the students, they also recognize the importance that academic advisors play on the students' first year experience at any given institution. While the participants were focused on the academic outcomes of the students, they also recognized the impact that academic advisors play in the students' first- year experience at their institution. Participant 5 captured the scope of work that advisors do at community colleges: "Our advisors help students with their first-year experience, which includes choosing a career, navigating through the college process and transitioning into the workforce or a four-year institution." Participant 4 concurred with the notion of the many competing priorities:

As we continue to prioritize persistence, degree graduates and transfer rates, I recognize we have to have systems in place to help our students. Advising is a student support that has demonstrated to have a strong correlation to those

outcomes. Additionally, Participant 1 indicated that: "we want to ensure that our students are prepared for success in college."

Both participants, 4 and 5, agreed with the notion that they are responsible for supporting students throughout the students' life cycle starting from the first year experience through graduation and transfer and/or transitioning into the workforce.

Systems and advising staff in place. One out of ten participants discussed the importance of having the right systems and advising staff in place to support students' college success. Participant 3 shared that "we employ professional advising staff whose primary task is to help students select their classes in which they can succeed and lead to the realization of their educational and career goals."

Retaining students. The next grouping discovered by analyzing aim of advising was retaining students. Retaining students are more and more associated with the relationship that they build with advisors. Four out of 10 participants suggested that aim of advising prepares Latino students for success. Participants perceived retaining students was more associated with the relationship that they built with advisors.

Participant 1 expressed intentionality when providing support to Latino students: "We want the growing number of Latin American students to be successful by supporting them and retaining them from fall to fall." Similarly, Participant 6 is committed to the retention and overall success of Latino students:

We've also seen the retention of gaps in our performance by different student groups at this stage. We're proud of that, the connection, commitment, and then finally, completion. We want students to graduate or go to university, transfer, or they go to work.

Participant 7 also expressed the desire to retain students, but recognized that there are competing priorities for Latino students: "The target employment rate is 2.8% here. It

creates a challenge for retaining students. We started talking about work and college not work for college." Similarly, Participant 5 expressed the efforts of academic advising to retain Latino students: "Academic advising is the core to the efforts to retain our Latino students. Academic advisors are the main connector for other support services on campus, which is vital to the Latino student persistence and retention."

Ethnicity plays a role. The college presidents and/or chancellors shared the importance of advising ethnic students. Six college presidents and/or chancellors of the community colleges commented on the importance of the ethnicity while designing an advising program. The presidents and chancellors insisted that when they design the program for the students, they do not only think about the ethnic students, they look forward to the improvements in all students' groups. The following six groupings were discovered via ethnicity plays a role: important for Latino students, Latino students are more compliant, Latino students are timid, matching advisor and student ethnicity is beneficial, first generation lack of guidance, and lack of role models.

Important for Latino students. The importance for Latino students when discussing ethnicity plays a role was highlighted by six out of 10 presidents and chancellors. They shared that Latino students in particular need the extra support to navigate through the complex educational system. The following two groupings were discovered through further analysis of important for Latino students: connection to Latino students and need extra support.

Connection to Latino students. Two of the participants viewed making contentious efforts to connect and encourage the Latino students as important for Latino students. Participant 8 stated that he is aware that conscientious efforts need to be made to reach the Latino student population:

We made a conscientious attempt to reach out to the Hispanic community and see what some of the challenges were and some of the obstacles and, not only to Hispanics, but we specifically targeted Hispanics and then we targeted African Americans.

Similarly, Participant 9 highlights the importance for Latino students to have an advisor be by their side so they do not feel isolated:

For our Latino students in particular, having that advisor encourage, walk alongside, introduce, connect, it seemed to be particularly relationally important in giving confidence and connection, and just helping our students in general understand that if they have the question or the concern, that means that there are thousands of other students that have the same question or concern and not making them feel as isolated or as alone.

Reaching out to Latino students is an important factor for the success of the Latino students and the level of academic advising. Furthermore, the outcome of the targeted approach towards Latinos for advising is essential to the result of the attention given to the Latino students.

Need extra support. Four of the participants agreed that Latino students need extra support and guidance both academically and personally. Participant 2 discussed how advisors go beyond providing a general campus service and actually serve in mentoring capacities:

I think it is extremely important to have academic advising in the lives of our Latino/a students...Well, I think what's doing well, especially as we focus on the Latino students, is that it gives them the information that they need, both on the academic side, but also the proverbial shoulder to lean on or the person who they

can talk to about what's happening and maybe the advisor can give some guidance and direction, motivate them, let them know that it's all worth it.

Participant 7 agreed with participant 2 regarding the importance of advising to help Latino students get through college:

I know what an advisor does. I know what they could do. They helped get through my first two years of college, they are also going to help me get through my last two years. It's very critical and much needed in the Latino community just because I think there is a lot of other different type of challenges that the Latino community unfortunately is going through currently, and I believe there needs to be more awareness of the importance of advisors to help students complete their program.

Similarly, Participant 4 acknowledged the high percentage of Latino students need to receive adequate advising:

When we talk about Latino students when I was in El Paso, about 90 to 92% of our students were Latino. As community colleges are making the movement in guided pathways, the follow up through academic advising is even more critical. It is changing so that we can do a better job because as opposed to the way that we used to offer courses, it was like a cafeteria-style.

Participant 5 also reflected on the importance of academic advising for Latino students' success: "Academic advising is changing and is critical to the success of Hispanic Latino students, especially in clear pathways."

Latino students are more compliant. Two out of 10 participants shared that although Latino students are associated as the people who try to navigate through problems themselves, they are usually compliant when given explicit instructions. They

try not to question a lot and tend to do as they are told. This idea was first mentioned by the Participant 1 as:

I call it abused but Latin Americans students especially males will take whatever an advisor tells them and go on about his business when what the advisor provided may not have been the best counsel and the best advice for that student or lead to the quickest route to completion either.

Participant 4 shows support for this idea in the following comment by giving his personal example that: "In the Latino culture, we don't really reach out for help because they teach us, just do what you can with what you know type of behavior."

Latino students are timid. Three out of 10 participants interviewed shared a similar sentiment regarding students being timid. For example, Participant 1 explained:

I think we have to understand that for many, many Latin American students, especially those whose first language was not English, that we've got to understand a degree of timidness, a degree of shyness that we might not find in some other ethnic groups.

Similarly, Participant 8 commented that the inability to seek help for the Latino students is more serious because it directly affects their college persistence and they tend to give up instead of trying to find a solution to the problems they are facing: "I also think and we noticed this, so when Hispanic students have problems in school, we don't hear anything from them. The next thing we know, they just drop out of school."

Asking for help also highlights the students and their inability to cope with the situation at hand, and the students try to avoid this by not coming to the front. Participant 9 shared his observation that led to the identification of this theme as important for the Latino students.

It seems to be particularly important for our Latino students to have someone that they feel comfortable with and have trust in. They're not going to ask questions or take risks until they have that trusting relationship with someone who can advocate for them. That's a broad statement, but in our own analysis in the interviews that I've done, that relational advocate is-- That issue has been raised by our Latino students far more than any other student demographic.

These three participants described that the shyness or timidness that Latino students experience, can be a deterrent to their academic success. Participants revealed the tendency for Latino students to not seek out assistance, was an indication for their institution to focus on developing relationships between students and campus advocates.

Matching advisor and student ethnicity is beneficial. Three out of 10 participants interviewed concurred that students should be matched to an advisor that shares their ethnicity. These participants described the positive influence an ethnic advisor has on a student of color and how this advising experience impacts students differently than being advised by a Caucasian advisor. For example, Participant 1 shared the interesting idea that ethnic representation within an advising department mostly benefits students of color:

Role model is a huge deal for successful academic advising. In other words, we're going to do a lot better with Latin American students, if they're advised by Latin American academic advisors. I don't think it's the reverse of that is true. I don't think that's nearly as big a deal for white students to be advised by Latin advisors, as it is for Latin America students to be advised by people with whom they identify of the same ethnic group as they are.

For instance, Participant 8 pointed out that although the Hispanics feel more comfortable around their own ethnic groups, Anglos do not seem to have the same problems:

47% of our students are Hispanic, it's growing every year. I don't think most community colleges though make a special effort onto Hispanic students like we do. I don't do that for any group. We're trying to do the same thing for African Americans, but we made a conscientious effort to hire more Hispanic faculty administrators and staff. I'm a big diversity person. I'm Anglo, but I have got it that people would like to-- I don't think that Anglos can't teach Hispanics or African Americans, but I do know that sometimes people like to see somebody that's been through their experiences. It can relate to what they've gone through their lives. We did other things. We set up special groups for Hispanic students and I like having their parents on campus ... That's the way I've kind of take a look at this, so let us get down and help you. Help you fill out the financial aid form, we'll help you find a job on campus. We got counselors, tutors, advisors, you name it, we got a huge infrastructure to help students be successful.

Similarly, Participant 9 points out the diversity in the employees in his community college referring to the same phenomena:

One of the things that we've been really intentional about as an institution, is making sure that our advising staff reflect our student body. It's the most diverse group by representation in our entire college. Its Director is Latino, our associate director is African American and the majority of our advisors are Latino or Latina and that was very intentional and by design, because that's who the majority of our students are. It's because our students can see themselves in our advisors.

These participants suggested that there is value in employing a diverse group of academic advisors to build trust amongst their institution's students of color. The benefit of students being advised by an advisor of their same ethnicity, was viewed as being important to these participants' institutions.

First generation lack of guidance. Two out of 10 participants shared their thoughts around the lack of guidance for first generation students. Participant 7 highlighted the issue of the lack of guidance for the first generation students of ethnic students. They are among the first in their family to attend college, and they do not have the understanding or support from other family members for the completion of their degree:

You know those are things that sometimes um you know specially with first generation where the students are not familiar with the college, they do need that guidance. But again, I think they do need to know from the beginning ...

Unfortunately, for a lot of students. I don't know but for my parents not that they were not supportive, they just didn't know how to help me. And sometimes you have family members that you know they don't understand and that makes it harder on the student. So, we need to be that constant motivator. Either that constant person that makes sure that they continue that they complete, and of course they graduate.

It is also the expectations that are associated with the second or third generation of college students that motivates them to set their goals for obtaining a college degree. Ethnic students may not have that motivation, being the first generation, so they have to motivate them themselves every time they hit a low spot in their academic journey. This concern is explained by Participant 2 in his comment:

Again, as you know, many Latinos are still first in their family to go to college, that the advising that they receive from that counselor or academic advisor is crucial. You know it and I can't stress it enough about the important role that the counselors and advisors play in guiding the student, especially a Latino student ... Again, when you come from an environment or a family where you may be the

first in your family to go to college or there's not that like mom and dad both got college degrees and they've said from the beginning, "You're going to go to college."

The two participants discussed the lack of guidance first generation have at home and thus academic advising becomes critical with helping Latino students to guide them and motivate them through the college journey.

Lack of role models. Two out of 10 participants shared their thoughts around the lack of role models for Latino students. The lack of guidance and support of the first generation students was highlighted by two college presidents and/or chancellors. Participant 1 explained this issue in the following statement: "I think it is imperative to provide adequate advising to the Latin American students because they do not have the role models at home ... Role model is a huge deal for successful academic advising." Participant 7 concurred with Participant 1 that while their students lack role models at home, the advisors themselves can act as role models for the students. Participant 1 expressed that their students can look up to the advisors that are from their own community and see themselves succeeding like their campus advocates:

A lot of the high schools around here Interviewer got Fs you know. That's to show a lot of the students already come with a lot of need, a lot of deficiencies already from the high school. So it is hard to expect a student to just come in and you know have no problems in college. It is going to be a challenge. Therefore, we need to do our part in providing the additional training and as we are picking and selecting advisors I have been very aware of them being good role models, definitely caring. Caring that right there, truly caring about the individual. Truly understanding if they know the role they play and also I believe we have a couple, two or three advisors that already are from the neighborhood, they are actually

coming from high school, who actually went to our institution, who actually went to Y University. I mean that right there is a pathway for a lot of the students for them to be successful. If we are able to showcase that and to let them know I know how it is, I am from here. You know, you have to form a relationship with the student.

Participant 2 concurs with participant 7 and 1 regarding the thought around having advisors serve as caring role models to help Latino students continue with their educational journey:

When you don't have that type of a situation, you have to rely on people at the college. Again, it could be a faculty member or it could be an advisor who can fulfill that role, but I think that in terms of being successful and especially for the Latino student who can find a role model for them. Even if it's not "a role model" but somebody who just takes interest in that individual, for some students, that's going to be enough to keep them going.

The three participants acknowledged that advisors can serve as role models to Latino students.

Leadership matters. Three of the 10 college presidents and chancellors ventured the importance of leadership in the advising program. The following two groupings were discovered via leadership matters: accountability of advisors and important in budget process.

Accountability of advisors. Three out of ten participants expressed their thoughts around having dedicated advisors, mandatory sessions, and faculty is assigned to the students, but it will not be any good unless the designated personnel is held accountable for their performance. The accountability can be evaluated based on the number of

successful students or the performance of those that are assigned to them. Participant 1 had been clear about this theme in his interview, and said:

Because we make this front and center when we seek for academic advising, we call attention to, "Look what you did to this student." ... You think twice, about not taking care of business. I think accountability is absolutely critical for good academic advising.

Similarly, Participant 7 pointed out to the criteria of the accountability of the advisors. According to her, the number of students that they help in transitioning to the university is the criteria for their performance: "They were evaluated based on the number of students they transitioned to the university."

Additionally, Participant 2 highlighted this topic in a very frugal manner with the burden of evaluation on the college:

There are good academic advisors and there are okay academic advisors, and then there are academic advisors who probably shouldn't be academic advisors. Now, that's not the student's problem. That's the college's problem. Making sure that the academic advisors are talented, care about the student, and motivated is essential.

The three participants agreed that is not sufficient to have advisors assigned to students or mandatory advising sessions. It is also necessary to hold the advisors accountable for their performance.

Important in budget process. Two out of ten participants highlighted the importance of allocating budgets to ensure the success of students. Participant 10, explicitly agreed to the importance of budget in aligning the pathways for the success of the students:

It's been about 7 years ago, this is how important it is. Case management advising model. Advisors have case load no more than 350 students. There is touch points where they have to meet with their students. Very intrusive, case managed. Because we felt that advising was critical to student success/age \$2 million dollars to hire the amount of advisors to have a feasible case load (board of trustees- student success initiative). I have 55 advisors. Graduation rates have gone up to 32% (3 year), 45% (4 year). Keeps students on their pathways. Aligning pathway. Ensuring that degree paths are intentional, so students don't take courses they don't need. Before 78-79 hours-66 credit hours to graduate. More intentional. Kein McClaine –CCSSE – students' don't do optional, you have to do it for them. We are there, we are not waiting for the students. Every student is on a pathway. Every course counts and transfers. Individualized education pathway, meet with advisor before changing major. Students were running out of financial aid, had a major problem when students had excess hours. You can't get a strong pathways moving unless you have a strong advising system. It definitely pays off. Students feel more supported, more engaged. Now we invest in better technology and professional development (Certified Advisors). Maintenance of skills and credentials. Yearlong professional development a certification through ACE. Two to three layers, entry, intermediate, expert. If don't complete successfully complete the program, \$1,500. Incentivize, a lot of skills to become a good advisor.

The same theme is concisely mentioned by Participant 9: "When I consider our five-year budget model, I keep academic advising as a priority."

Rapport building. The goal of rapport building was highlighted by many of the community college presidents and chancellors when discussing the level of advising

implemented at their respective community college. They highlighted a number of benefits that they seek while assigning advisors to students. The focus is not only on guiding them academically but on helping them achieve personal goals as well. The following two groupings were discovered via further analysis of rapport building: students do not see advisors enough and students' life outside academia matters.

Students do not see advisors enough. Six out of the 10 college presidents and chancellors interviewed, shared their concern about the unwillingness of students to visit the advisors frequently. It disrupts the advising program, as the students do not get timely advice from the college advisers. This leads to delay in the intervention and the students do not get help on time, which may eventually lead to their dropping out.

Advice seeking cause students stress. Three out of the 10 college presidents and chancellors interviewed, recognized that for some students it can be stressful to seek advising. Participant 1 disclosed the challenge his/her institution encountered with students' inability to see the importance of obtaining advice and assistance in supporting them in their scholastic pursuit:

We have to know that for you and me, it might not have been a big deal going to the academic advisor, but it's a big deal that causes stress, worry, and concern for many students, even the anticipation of going to the advisor.

This point is further elaborated by Participant 2, who believes that seeking advice can be a source of embarrassment for the students for not being able to navigate through the academic labyrinth on their own. According to him, seeking advice can always help them, but the students fail to see it so, and if this is so, it should be identified and addressed while designing advising programs:

I think some maybe because they don't feel like there's any hope or maybe they're embarrassed to tell somebody, "Hey, I'm not doing well," or something that they

just don't get the assistance that they need. If they do get the assistance, there's a pretty good chance that they're going to get back on track, but it varies greatly. Participant 8, also acknowledged this issue:

There's not going to do that. We're finding, by the way, we're taking a look at counseling- you haven't really asked about that, but some of the mental health issues what we're finding is that minority students, in particular, are reluctant to go see counselors for mental health issues, so we're trying to figure out how to deal with that.

These participants experienced the challenge of dispelling the misperception students hold in seeking assistance as being an embarrassment or causing the student stress. Their students' reluctance to seek out assistance and support, was perceived as being a concern that influenced students' college experiences.

Timid students fail to seek advice. One out of ten college presidents and chancellors discussed that timid students fail to seek advice. Participant 1 stated that it is not the failure of the students when this situation occurs, but it is the system that has failed the student:

Sometimes, Latin American students are more timid than other students and if you're timid in seeking out an advisor, persistence with that advisor and still do you feel you have the answers to the courses you need to take all the way through your degree, then the system that academic advising system has failed you.

Participant 1 is clearly concerned about the lack of advice seeking from Latino students because they tend to timid.

Students' life outside of academia matters. Two out of ten college presidents and/or chancellors indicated that community college students are usually bound to have

many responsibilities and these play a huge role in their success and failure in community college. This is explained by Participant 2:

The counselors do academic advising, but they also provide a broader array of support for students that may go beyond just the academics, whether it be college-related or just in terms of their own personal life, the challenges that they're dealing with ... Oftentimes, our counselors are able to make referrals to students to get some help, whatever that assistance may be, whether it be financial or they need any kind of counseling services that go beyond the limited scope of what we provide here. This true of all students. A lot of students, especially community college students, tend to be a little older. Many of them may have a family. Some of them are the sole provider. They may be single parent ... They've got to work full-time and they can't find a way to juggle both a pursuit of a baccalaureate degree and working full-time. I think that one of two things is going to happen that makes the difference between a student transferring or not transferring.

Participant 10 also referred to the multiple roles that the Hispanic students have to play other than studying. This adds to their difficulties in achieving their goals, due to which they need additional support:

Oftentimes, our students that are Hispanic, traditionally, are carrying multiple roles. Oftentimes, they could be working. They have a responsibility to a parent or a loved one or maybe they are a parent themselves. It's important that academic advising continues to play a role in their trajectory to that degree... People think something's wrong with you, even though a lot of the things that we're seeing really aren't mental health issues, they're stress-related. You could have two kids, you're going through a divorce or the stress of work and kids, and

sometimes you just need to talk to somebody. That's not a mental health issue. That's just life.

Both participants concur that Latino students and community college students in general have multiple roles that they have to juggle in addition to studying.

Wrong decisions waste resources. Students who do not seek advising support on time tend to be more at risk of choosing courses outside their program plan, impacting their financial aid eligibility, time, and motivation to complete a degree. One out of 10 college presidents and/or chancellors identified the problems associated with making the wrong decisions. Participant 10 expressed the need to minimize students wasting their time and money: "We don't want students also wasting their times taking unnecessary courses, courses that are not degree-applicable when they do transfer."

Persistence

Persistence among the Latino students is one of the major challenges that the college presidents and/or chancellors have been observing. They highlighted a number of benefits that they seek while assigning advisors to students. Eight of ten participants discussed the importance of Latino students persisting from one semester to the next. The following two groupings were discovered via the further analysis of persistence: advisors' role is vital and number of students is low.

Advisors role is vital. A common notion among the college presidents and/or chancellors was that advisors had a vital role with the Latino students' persistence. Six out of 10 participants viewed advisors' role being important when it comes to helping students persist from one semester to the next. The following two groupings were discovered after further analysis of advisors' role is vital: data supports the claim and retaining students.

Data supports the claim. Two out of 10 participants discussed that although the data for graduation and transfer can be easily accessible for community colleges, some of the participants are intentional in tracking persistence of students in relation to the academic advising services they receive. The following participants agreed that advising plays a critical role in the Latino students' retention and they have data to support their perception. Participant 5 shared based on his perceptions and data analysis that advising plays a critical role to Latino students' completion: "From my perspective and based on the data, I do believe that academic advising plays a crucial role with regards to Latino students' retention and completion within the community college sector." Likewise, Participant 6 alluded to the measures that have seen improvement due to the advisors' role and believes that this way the performance of the Latino students can surpass other groups of students:

I'm proud to say that over the last couple of years we've seen interesting not only a reducing gap but actually in some of our measures. I don't have them in front of me, but in some of the measures, our Latino students do better than other groups of students. Then overall, we've reduced the gaps for that.

Both participants shared that advising can play a significant factor on the persistence of Latino students. Both agree that they intentional review their college data to improve the outcomes of Latino students particularly persistence.

Retaining students. Four out of 10 participants shared that although some college presidents or chancellors may measure persistence differently, the ultimate goal is to retain as many students as possible. Retention of students was viewed by almost half of the participants as being a critical objective for their institution. Participant 1 expressed a desire to keep students within the college system, something that would impact their

overall success: "We want the growing number of Latin American students to be successful by supporting them and retaining them from fall to fall."

The presidents and chancellors have agreed to the idea and some even presented the explanations because of which the community college students would persist more if exposed to advising. Participant 10 presented one such example: "I think that's a very big role oftentimes, especially among the Latinx community. We may not have that family member or a lot of first-generation college students." Participant 7 provided further explanation for the role of advisors in a student's persistence journey:

Making sure that they register on time that they do the financial aid on time, and they are taking the right classes, and if they are struggling with a class that they let an advisor know through the contact that they have. So that we can try to prevent any drop outs, to prevent any Fs, or low grades. So, um very critical that we solidify the relationship that an advisor has.

Retaining students are more and more associated with the relationship that they build with advisors. Moreover, advisors are instrumental in connecting Latino students to other resources to help them persist from one semester to another. Participant 5 gave references from the available data of his college, citing the multiple roles that a student has to juggle through and the facilitation of the advisors:

Academic advising is the core to the efforts to retain our Latino students. Academic advisor are the main connector for other support services on campus, which is vital to the Latino student persistence and retention ... The latest data we have available is from last fall, fall of 2018. Our full-time students indicate and actually on this one, both full-time and part-time indicate 70% of them either agree or strongly agree that our advisors are helping. The counselors or advisors are helping them select the course of study in their first semester.

Although presidents and chancellors recognize the importance of academic advising with the student retention efforts, there still an opportunity to continue monitoring the efforts with the data driven outcomes.

Number of students is low. Three out of 10 participants mentioned that the number of students continuing their academic journeys is not enough. They would prefer having more qualified personnel to be able to benefit the economy and the society as a whole. The following two groupings were discovered after further analysis of number of students is low: do not enroll after high school completion and first generation lacks support at home.

Do not enroll after high school completion. One out of 10 participants Participant 2 questions the move of the students to discontinue their studies after a high school diploma for the realization of their future goals:

I'm not going to be able to give you the exact percentage, but it was amazing. The number, we served 17 school districts. Our executive director of enrollment management did a study of high school seniors that graduated from high school and went on to higher education somewhere. Not just at XXX College, but just somewhere. It was in the 50% number. I'm thinking so good for the 50% that are going, but what about the 50% that aren't going to college and what kind of careers and pathways are going to be open to them with simply a high school diploma?

Participant 2 expressed a concern for the future of half of the high school students being served in his/her community that chose not to enroll in college after they graduated. He perceived that students who only held a high school diploma, would be limited in their future career options.

First generation lacks support at home. One of the reasons because of which people discontinue their education is the lack of support at their home. If the students do not see role models who study for a better future, they may not be able to see themselves struggling similarly. Two out of 10 participants mentioned the lack of support that first generation students are faced with. Participant 3 mentioned that the lack of support from their homes is not the result of unwillingness to help the students, but the inability and lack of knowledge in the other family members that hinders their progress:

A lot of our population is still first generation and they don't have the resources at home to educate them or support them. They do support them but when their own knowledge of navigating the community college or in their college university system and issues that happen in their daily college life.

Another aspect that the first generation students have to face is the inability to connect with a family member for guidance. Therefore, they definitely need an advisor whom they can approach in the time of need. This aspect is highlighted by Participant 10 as:

Therefore, we don't have a family member at times to be able to connect with and ask them questions. I think just the fact that we have a lot of Latinx students that are first-generation college students, advising is so, so important to ensure that they stay on the pathway to completion.

The three participants agreed that advising is vital in assisting Latino students in persisting from one semester to the next.

Graduation

The ultimate goal of community college presidents and/or chancellors is to provide students with the opportunity to complete their degrees and be productive citizens in the economy. Of the 10 presidents and chancellors, eight of the participants discussed the importance of graduation. The following four groupings were discovered

via further analysis of graduation: advising is critical, degree efficiency, completion, and identification of required credits.

Advising is Critical. Four out of ten participants shared that advising is critical in the successful student graduation. Even when students transfer out before graduating, it is important that students have an advisor through their academic journey. Participant 10 shared that it was important to keep students focused on their journey to complete a degree without taking unnecessary classes:

It's important that we keep students through advising on the journey to complete with the least amount of hours possible. Ultimately understanding that, it's important, I think, that students graduate before they transfer. It's important because I think that increases the likelihood of them graduating from that senior institution. Highly important, highly related to student's ability to continue on after graduation once they transfer or enter the workforce.

Participant 8 concurred with the college presidents and chancellors' discussion, emphasizing the importance of advising to help students graduate from community colleges:

Without that, I don't know if they would have that connection or lifeline to be able to be sure that they're not making errors through their journey or through their process. Advising to completion is important. The more advising, the more intentional you are about building your classes for that semester based on your workload or based on your commitment is important because that will ensure that you complete and finish that semester, which gets you one step closer to ultimately graduating from the college or university ...That's important. I think specifically with graduation, the role of advising in graduation is important.

Because at the end of the day, we know that students who actually graduate from

a community college, the likelihood of them graduating from a university are so much higher.

According to Participant 7, Latino students benefit from the relationship they can potentially build with their advisors and are likely to stay on track to graduate:

Yeah so, umm. I truly believe that a student needs an advisor, just like we do. So the goal of course is to come to school not to just take a class and leave. They come to college to complete a program and because whatever reason, they don't. We need to do our part and that consistent person is the advisor. The faculty member may be one semester only. An advisor can follow them through the whole career and so even when we do the transition to a four year, we need to have those partnerships where we can hand off and then we can continue with an advisor that they already trust. I know what an advisor does. I know what they could do. They helped get through my first two years of college, they are also going to help me get through my last two years. It's very critical and much needed in the Latino community just because I think there is a lot of other different type of challenges that the Latino community unfortunately is going through currently, and I believe there needs to be more awareness of the importance of advisors to help students complete their program ... And, I know a lot of times it's about numbers is about how many people I saw, how many people I spoke to. I mean it takes time, it's a relationship. It's just because at the end of the day we want people to continue, we want people to complete their programs, complete their class, and again Indra your question is you want them to graduate. I believe the advisor is the constant figure in their lives to be able to motivate them, to help them continue.

Advising is important for all students, but the research shows that Latino students could benefit greatly from intentional efforts to increase their exposure to effective advising systems within community colleges. These efforts can serve the total student population, potentially impacting student performance measures. This much was expressed by several participants. Participant 2 agrees with Participant 10, 8, and 7 regarding the critical role advising plays not only with Latino students' but all the student body graduation goals. He stated that although it is possible to graduate on their own, the students' possibility of graduation increases if they benefit from advising:

Well, I think there's a direct correlation. Again, I would say this is true of all students, but it's very rare that a student can self-direct and go through an entire certificate or degree program just on their own without getting any kind of assistance.

Five of the participants agreed that advising played a critical role in their students reaching their academic goal of successfully graduating.

Degree Efficiency. Two out of ten participants shared the notion of having successful programs that lead to timely graduation. These participants perceived their efforts to ensure their students graduate in a timely manner, was perceived as being crucial to their institutions' successful outcomes. Participant 1 offered a new term associated with degree attainment, one that ups the ante for colleges who wish to show institutional effectiveness: "Degree efficiency, another term for time to degree, grows more critical all the time as efficiency has become an increasingly more important component of institutional evaluations."

Similarly, according to Participant 6 he shared that when he looked into the date of students who were taking additional classed that they did not need, 150 of those students could graduate right away without taking any further classes:

I'm in my eighth year as president and so when I came I asked the question, "How many students do we have enrolled that have already more than 60 hours of credit?" The answer to that semester was 600. Then I said, "Well, how many of those can graduate right now?" They didn't understand the question because they thought the students who are ready to graduate would apply and they would move through and do that ... We found 150 of those students could drop every class they were in that semester and graduate. They didn't need what they were enrolled in. What we've started doing is we've done this for many years now and it's been a manual process so it's a labor of love but the students, we evaluate their transcript after they get to a certain number of hours and we automatically award the degree to them when they reach the magical number ... We're in the process of trying to do that electronically. Turns out that is not as easy as you would think because of the complexity of all the classes that students bring with them. That's an example of advisors saying, "Hey, we think we can do something about this and that's the monitoring and auto awarding of the degree and tracking those students and making sure they know where they're at." That effort led us to redesign our student experience for registration for classes and also our discussion of their Pathway ... We know what they want so we put that as the primary one of the recommended class. The students other than the limited options they have for the core and maybe even some options within their academic studies, they can't be in the wrong class. They are not taking AP Humanities classes just because they like it. They can't register for that unless they go into the classroom. They can't do these out of sequence. We think that that's going to lead us to having an even lower number of hours to degree and even a faster time to degree, and students more knowledgeable about what that means.

Both Participant 1 and Participant 6 illustrated best practices to proactively identify ways to improve students' graduation without taking unnecessary classes.

Completion. Six out of ten participants shared completion can varied by student. It can be a completion of a certificate or an associate degree. The following three groupings were discovered through further analysis of completion: career success, first year experience, and college success.

Career Success. While talking about graduation, the presidents have been emphasizing on the success of the students. According to them the success of the students can be measured with the help of their career success and academic success. Two out of 10 participants discussed this notion during their interview. Participant 7 mentioned that advising also aims to help students fulfill their dreams: "As they see them as individuals advising them in their educational career dreams whatever that may be." Participant 8 also shared the same sentiment regarding students becoming part of the economy by completing a postsecondary education: "Our goal is to support students to get an associate's degree and transfer to a four-year institution, or just take a few classes and get into the workforce."

First Year Experience. While talking about graduation, two participants shared the importance of having the correct pathway selected from the beginning of the students' journey. For instance, Participant 7 shared the importance of having advising to help students choose the correct pathway from the entry point:

Advisors can be helpful through different stages, not only in course registration. This can be at the start of the program when a career path is chosen, and the rest of the steps are taken accordingly. Once the person knows what he would want to do at the end of the degree, the specialization and courses can be taken to reach that goal.

Furthermore, Participant 5 mentioned this in his experience: "Our advisors help students with their first-year experience, which includes choosing a career, navigating through the college process and transitioning into the workforce or a four-year institution."

College Success. Students' success may vary significantly. However, presidents and chancellors want to ensure the success of all their students. Three out of ten participants mentioned their institution's responsibility to ensuring their students succeed. Ensuring students' success, involves supporting students with academic advising, clear pathways, and assisting students with identifying their goals. Participant 1 shed light on the nature of the conversations advisors must have with students who get off track:

We want to ensure that our students are prepared for success in college ... When students think they're going to graduate and then they don't graduate because they didn't take the right thing, yes, that's usually what it is. We make the academic advisors tell the students why they're not graduating. They still have to do that once or twice.

Like Participant 1, Participant 10 also shared the responsibility he has to ensure that Latino students are successful at his college: "As more Latinos are enrolling in college, it is my responsibility to provide students with clear pathways to enter our college, stay at our college with the intention of graduating and transferring to a four-year institution if applicable."

The notion of college success is further validated by Participant 9: "Academic advising is essential to the success of our students and can assist students with general questions, assist students identify their goals and help students achieve those goals."

Identification of required credits. Three out of ten college presidents and/or chancellors shared that one of the major responsibilities of the advisors is to sit down with the students to help them identify credits that they need to graduate or transfer.

Participant 3 offered insight on importance of tracking student progress, down to the credit hour: "It's vital that extra help and advisement just sitting down with a student sharing with them. Okay, you've got 12 credits left, these are the 12 credits that you need." Making sure that they sign up."

Additionally, Participant 6 explained that the advising for identification of the credits would be much more effective if they have a stronger rapport with the students. It would help them identify the easiest path for the candidates:

Because of that, you might want to really explore those colleges a little bit more right now so you know what's coming matter for you later because we don't want you to take classes that you don't need. We'll find out if they will accept this other class. If one of them is flexible, to take the flexible class.

Similarly, Participant 8 shared that it is not the priority of many colleges to identify the reasons because of which many students do not complete their degrees. Such statements are not common among the presidents. Most of them have focused on their own programs, and even highlighted their weaknesses, but Participant 8 has clearly mentioned that colleges need to go further than just inducting students and offering them courses:

I don't think most colleges have really-- they don't dig in to why students are not completing and why they take more hours than they need to take in their community colleges. I don't see that, only a few progressive colleges do that.

The three participants agreed on the importance of being proactive in identifying required credits needed for students to graduate on time.

Priority registration. Two out of 10 college presidents and/or chancellors shared one of the techniques they use at their college to help students finish their degrees. They mentioned that through priority registration they ensure students enroll for the classes that

they need to graduate. Participant 3 mentioned the option of priority registration gives an opportunity to potential graduates to graduate:

We have early registration for those students after they have above 45 credits to make sure that they have every opportunity to get into the classes that they need for graduation in their course selection is very limited at that stage. We give them priority registration, which is a week earlier than it's open for everybody else to help them get the right courses that they need to graduate.

It appears that the option of priority registration can be extended to priority courses as mentioned by Participant 6:

Remember I mentioned the priority courses that we suggest for students? Those priority courses are the courses that are in the university destination that most students travel to. It's not necessarily based upon what our faculty actually wants the students to take. It's based on what's going to work for them when they transfer. The first shot at that is informed by that transfer mindset which helps advisors to build and help our students. The challenge is students very often don't know exactly where they're going to go.

Both participants are in agreement that securing best practices at their institutions to increase the number of students who graduate.

Downward expansion to certification. Participant 6 mentioned the downward expansion technique to increase the number of graduates at his institution. Even though he does not have data to confirm the merits of this program, he wanted to share it as a best practice:

Initially, we were only looking at those students that were doing an associate degree for that autographed piece that I mentioned and we've expanded that downwards to also do that practice for certification. It's hard to evaluate every

student's transcript every semester for a potential 16 hours of cred. We've had our technology team identify four students where they are seeking that associate degree. We have said, run a degree on it against the sub degrees or the cert 1s or cert 2s as well and surface that for advisors so they can have those conversations with students. I can't tell you that that's a new process, I can't tell you that's led to richer discussions, deeper connections and students doing that more or not, I wish I could tell you that but that's what I'm thinking about right now anyway.

The downward expansion certification to increase the number of graduates per semester is a technique to provide students with a certificate while pursuing an associate degree.

Transfer

The presidents and/or chancellors admitted to the importance of academic advising while facilitating the transfer of students with six of the 10 study participants focused on the critical role of advising to ensure a successful transfer of students from their institutions to a four-year postsecondary program. The subthemes that emerged from these discussions were: advising is critical for transferring, designated advisors for transfer, credit transfer can be risky, more students intend to transfer than actual number that transfer, and rate of transfer needs to increase.

Advising is critical for transferring. Two out of ten college presidents and/or chancellors discussed the importance of academic advising in the transferring process. For students to successfully transfer from a community college to a four-year institution with accurate course selections, two of the participants recognized the importance advising plays in this experience. Participant 1 offered insight into what makes for a success transfer for Latino students: "Academic advising is totally critical to a successful transfer. It used to be equity, but now its completion and advising that leads to completion and completion leads to much smoother transfer for Latin American

students." Participant 5 agreed with Participant 1 that students successfully transferring is less likely to occur without the guidance of a skilled advisor: "I've shown and implemented programs that show that counseling and advising plays a crucial role in each of these areas from retention to successful transfer, and graduation."

Designated Advisors for Transfer. Two out of ten participants shared the different advising transfer models and resources provided to students at their respective community college. Some places have faculty members that are in charge of the overall advising, whereas others have dedicated personnel that oversea the process of advising. Some colleges even go to the extent of providing specialized advisors for transfer that facilitate students to transfer to the university of their choice. Participant 10 detailed program of study transfer guides that help students to stay on clear transfer pathways:

What we have developed at XXX College, we call it transfer advising guides. These transfer advising guides are mapped to the specific program of study at our transferring university. We're not just ensuring that they transfer because cash transfer alone is not enough. Yes, we're building more. We're not done because we still are building more. Remember, we're mapping to their programs. From XXX College to the programs at University XXX, from XXX College to Texas YYY, XXX College to University of YYY, all those, so it begins to build. The moment the student declares, I'm going to go to ABC University, and I'm going to major in biology, then we know exactly what transfer advising guide to pull because it's the most accurate and the most transferable and degree-applicable pathway for that student.

On the contrary, although Participant 7 does not have a dedicated team of advisors at her college, she accepts the importance of such initiatives and regrets her inability to provide her students with such set up:

Community Colleges and their advisors. We are working with our students that we have to make that connection. I think we do need dedicated people Indra. It has to be a transfer coordinator or something like that. We need to have a person like that. We need a person on board to facilitate this type of interactions. Transfer advisor something like that. Again, at XYZ College, they had dedicated transfer advisors. That's what they were, specifically advisors where they would be handed off. Okay, you are getting ready to graduate, here is your transfer advisor. They tried to help them. That would be the whole responsibility. They were evaluated based on the number of students they transitioned to the university. So they had to make sure they maintained those relationships ... So it's all good, but I think we need to have a concerted effort and a process in place where not everyone is at one place, but having a process. We don't have that. We are working hard to making sure that the ultimate student experience is happening in both of our colleges whether it is here or at the four-year university. But I believe we need to do better because that is another key to success for the student. We need more resources to do that.

These two participants perceived the importance of providing their students with qualified transfer advisors and accurate transfer guides to ensure a smooth transition for students enrolling at their chosen four-year institution.

Credit transfer can be risky. Two out of ten college presidents and/or chancellors expressed their support in having dedicated personnel to guide students in the process of transferring which could be risky. It may be that the credits that students completed at the community college may not be accepted at the university. Participant 10 shared the intentionality built into effective transfer pathways that eliminate the potential for wasted credit hours:

One thing I want to emphasize is the fact that the transfer pieces also, it's beyond just the community college. Advising is critical to not just map the courses to the transfer institution, but map it to that specific program within that transfer institution. That's being very, very calculated, very targeted so that every course that you are building within that schedule for the student is degree-applicable and is intentional ... That counts when they do transfer because the courses are going to transfer. At the end of the day, students get in trouble when those courses don't apply to those specific degrees that they're pursuing at the university. We have to be highly prescriptive in the advising to ensure that students aren't taking excess hours or just taking classes that don't count towards their degree program at the university.

Like participant 10, participant 1 felt that transfer would be more attractive to the students if they had a roadmap from the beginning of their academic journey at the community college. According to him, the safest path for the students would be to transfer with a degree. That way, their courses are more likely to be accepted without much sifting to suit the university of transfer:

You're not going to have a need for transfer if you don't have to a transfer is not going to be a very attractive opportunity if you haven't had good advising, preparing for transfer. What we have found more and more is, and we try and make sure that all the students know this, that if you transfer with a degree or a certificate, but more importantly a degree, the school is much more likely the transfer institution is much more likely to take all the coursework you transfer and award the appropriate credit at the transfer institution. If you transfer 50 hours or 54 hours but there's no degree or certificate with it then the receiving institution is going to pick and choose which courses transfer to meet their major requirements

and which ones don't and which ones transferred as elective instead of subjectspecific.

Both participants concurred with the notion of having dedicated support for students to ensure that students take the correct classes that will transfer to the four-year institution.

More students intend to transfer that actual number of transfers. Five out of 10 college presidents and/or chancellors commented that more students show an intent to transfer, but when the time for action arrives, far less students actually transfer. The following two groupings were discovered after further analysis of more students' intent to transfer that actual number of transfers: the process can be very confusing and skepticism related to university transfer.

The process can be very confusing. The process of transferring from a community college to a university can be very confusing. Two out of 10 college presidents and chancellors shared their thoughts regarding this concept. Both participants recognize that transfer can be confusing, and thus having advising and adequate support systems in place is necessary for the successful transfer of students. Participant 4 captured the importance of effective transfer advising for students who can be confused by the program requirements they will find at different universities:

It gets very confusing to students as to which classes will transfer and apply towards their degree, and because depending on your major, unfortunately every institution is different ... Advising is critical to ensure that students understand that spiderweb of multiple institutions and majors and what courses are going to apply, transfer and apply and which ones won't.

Furthermore, Participant 10 shared about the facilitation that is provided to the students at his college for completion of their transfer process. They have prepared transfer guides that can be handy when handling complex cases:

Every advisor is responsible for their caseload. However, we do have a transfer center where this really comes in handy when students are not really sure, right? This is a point where they can really explore their transfer options and what schools have to offer to help them hone in on that specific school and program they want to transfer to. The transfer guide, I think, gives them all the options and really helps them zero in on a specific institution or program of study ... They're very tailored. They're very individualized. We have over a thousand transfer advising guides specific to those universities so that students and advisors can work together to ensure that every course that they're taking counts. There is no excess course. They all transfer, but they all are degree-applicable. It's a lot of work. At the same time, it assures that students are not taking more courses than they need to. The courses they are taking are degree-applicable to that institution if they wish to attend.

Although both participants recognized that transfer is complex, resources, and staff should be allocated to minimize the confusion through the transferring process.

Skepticism related to university transfer. Participant 6 mentioned that there is some degree of skepticism among the community college personnel and students regarding university transfer:

I would describe our institution as evolving in our appreciation of the transfer function. I did not describe where we've been and where we're going and how we seek advisors in that space. When I came in and we had a transfer institution on campus, prior people on my cabinet actually would invite that university to leave because they thought there were stealing our students ... My point of telling you this isn't to criticize the mindsets of people that happen to be here because I don't believe they're bad people, that was just a common insult. My view is when you

are involved in an organization as a student, or a customer, or a member of a church, or a political party, any group you're part of, I don't know, that it didn't seem like we've had the best interests of students at large. Students expressed to me that they felt that because they didn't understand why we didn't have more resonance and more dialogue around that. To be honest, our data suggested that we could do a better job with transfer and we've been working on it it's been hard to move that needle, to be honest. To lay the framework they're just trying to give you a backdrop... Because of this backdrop of people not trusting basically the universities, even when we had the first one on campus, there was some suspicion that that person—it might have been true, might have been well earned. That person was stealing the students before they got through all of our education classes, for example. Personnel has changed, times have changed and I believe now in the past the advisor that was on our campus was paid for by the university.

As participant 6 suggested, the level of skepticism related to university transfer needs to be addressed from a multi-disciplinary prospective.

Rate of transfer needs to increase. Presidents and chancellors recognize that the rate of transfer needs to increase in their colleges. They are puzzled with the reasons behind the low level of transfer. Four study participants out of the 10 recognized the need of increasing the rate of transfer. The following three groupings were discovered via further analysis of rate of transfer needs to increase: comfort of the student in the university and university costs are daunting.

Comfort of the student in the university. Two out of 10 college presidents and/or chancellors shared that students may not feel comfortable to move from the community college to the university. It may be that the environment in the college is designed to accommodate different ethnicities. Moreover, the sheer number of Latinos in community

college may make them feel comfortable. Participant 8 mentioned that the comfort of the students is what steers their actions for transferring from a community college to a university:

I know the universities most of them are not-- it depends. We have a great relationship with the University of YX. If I were advising our students, that's normally where I would-- if you're a Hispanic student if you want to be comfortable...but generally speaking, I don't see the university is making a special effort. I just don't.

Participant 8 saw an opportunity for the universities to make an extra effort to make the transfer students welcomed at their institution. Furthermore, Participant 4 recognized that students are slowing transferring because they have many competing priorities:

I've had definitely students end up transferring. Overall speaking, an 80% of our students are part-time, and they never enter as full-time. They get into a different percentage as to who transfers. It's probably hailed around I would say probably 20% to 30% of total students who end up transferring.

Although both participants shared their perceptions as to why students are not transferring at the rate that they would like, they recognize they have opportunities for improvement.

University costs are daunting. Two out of 10 college presidents and/or chancellors shared the cost factor that students consider while contemplating about the possibility of transferring. Participant 6 shared: "Of all the universities in our area, Southeastern is the lowest cost university by some 20% for students. It's still very affordable for them but again, we want to get to that other place." Participant 2 also alluded to the difficulty of sponsoring a university degree for the community college students as they have multiple roles to play and several responsibilities to take care of,

and thus their decision not to continue and transfer to a university makes more sense if seen from this perspective:

It always amazed me that a student would put in so much effort to get the twoyear transfer degree and then not go on to the university. There's probably a lot of
reasons. Maybe their goals change or I think, clearly, the cost of a university ...
Even a public university is so much more than, say, a public community college,
but they probably struggle with ways about how to finance it, raising a family.

Although both participants acknowledged the efforts students put forward to obtain a
two-year degree, sometimes it is not feasible to transfer because the universities are much
more expensive.

Summary of Findings

The results of the quantitative research showed that there was not a statistically significant relationship between Latinos' persistence and student advisor ratio across small, medium, and large community colleges. In addition, a relationship was not found between Latinos' persistence and advisor salary at small, medium, and large community colleges. Furthermore, the findings indicated that there was not a relationship between Latinos' graduation and student advisor ratio for small and medium colleges. However, findings indicated that a statistically significant positive relationship existed between graduation and advising ratio at large community colleges. Moreover, a relationship was not found between Latinos' graduation and advisor salary at small, medium, and large community colleges. Also, a relationship between Latinos' transfer and student advisor ratio across small, medium, and large colleges was not found. Lastly, a relationship between Latinos' transfer and advisor salary at small, medium, and large community colleges did not exist.

On the contrary, the results of the qualitative research showed that all of the presidents and chancellors interviewed accepted the role of advising as important in the journey of the Latino students through community colleges. It was interesting to learn that all the participants accepted the role of advising as important in the journey of the Latino students through community colleges. However, some of these colleges boasted an elaborate set up of advising the students, whereas, others had a shortage of staff, budget, and the tools required for successful advising. Participants mentioned that the best form of advising can be provided by the dedicated personnel that are trained in advising the students and are regularly evaluated for their performance. It yields best results when a rapport is built between the advisors and students so that the multiple issues of the students can be discussed, their goals identified, and the pathway charted for success.

Some of the participants' colleges focused more graduation, others on transfer, but most of them faced trouble with the persistence of the students from semester to semester. These results were obtained from the presidents and chancellors and their perception was the focus of this section of the study. They hope to be able to achieve better results with the Latino students by improving their frequency of meeting with the advisors and helping them achieve their academic and career goals. Through this study the factors that need improvement are highlighted, some of the best practices are mentioned that can help other community colleges, and direction for future research is identified. The findings can help provide suggestions to improve and encourage the use of academic advising in community colleges for Latino students.

To conclude the discussion on the relationship between academic advising and the selected Latino student performance measures, Chapter V provided a discussion of the findings detailed in this chapter in comparison to the findings listed in Chapter II, along

with the implication of the findings concluded for this study and recommendations for future research studies.

CHAPTER V:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the relationship between community college academic advising and Latino students' persistence, graduation, and transfer. The Latino population has played a significant role in driving the growth of the number of United States (U.S.) inhabitants over the past decade (Krogstad, 2020; National Center for Education Statistics [NCES], 2018). While the number of Latinos continues to increase in the U.S., enrollment in and completion of college credentials amongst Latinos continues to lag among their white counterparts (Georgetown University Center on Education and the Workforce, 2018; Krogstad, 2020; NCES, 2018). Although some studies have been conducted to gain an understanding of Latino student persistence, graduation, and transfer at four-year institutions, there is much less research on the specific relationship between academic advising and Latino students' persistence, graduation, and transfer at community colleges (Martinez, 2020; Schudde, Bradley, & Absher, 2019). As persistence, graduation, and transfer are the most common national performance metrics for community colleges, Texas community college leaders have an opportunity to contribute to the overall success of Latino students (Excelencia in Education and Greater Texas Foundation, 2018; Horn, Horner, & Lee, 2017; Texas Higher Education Coordinating Board [THECB], 2018). To investigate the influence of academic advising on Latino student persistence, graduation, and transfer, this study utilized archival data from the THECB on 50 Texas community colleges with 72 Texas community college districts and interview transcripts for 10 college presidents and/or chancellors across the state of Texas. This chapter presents a detailed discussion of the findings and the implications of these findings as well as future research recommendations.

Summary

This was a mixed methods study that consisted of two phases of data collection and analysis. The first phase was quantitative data collection and analysis. Archived data (a) number of academic advisors per college, (b) persistence, (c) graduation, (d) and transfer were collected from the Texas Higher Education Coordinating Board (THECB) and analyzed using Pearson's product moment correlation (r). The data was inputted into SPSS and an analysis of Pearson's r was run. The following research questions guided the first phase of this study:

- 1. Is there a relationship between community college academic advising and Latino persistence?
- 2. Is there are a relationship between community college academic advising and Latino graduation?
- 3. Is there a relationship between community college academic advising and Latinos' transfer?

In the second phase of the study, qualitative measures were used in the form of phone interviews with ten presidents and/or chancellors from Texas community colleges to gain insight into their perception and experiences as it pertains to academic advising and Latino students' persistence, graduation, and transfer. The following research question guided the second phase of this study:

4. What are the perceptions of community college presidents and/or chancellors on the relationship between academic advising and selected performance outcomes of Latino students?

Throughout this investigation, the qualitative findings predominantly indicated that academic advising influences Latino students' persistence, graduation, and transfer decisions. These findings concurred with the theoretical framework for this study,

education production function theory, which indicates that educational inputs influence student outputs (Baker, 2012). Beyond studying the impact of academic advising, this research addressed the areas of Latino student persistence, graduation, and transfer at small, medium, and large colleges in Texas. In support of these findings, all the college president and chancellor participants in this study agreed that academic advising played a significant role in the persistence, graduation, and transfer of Latino students. Presidents and chancellors spoke to the idea that investing in academic advising and reducing the advisor to student ratio influenced Latino students' decisions to persist, graduate, and eventually transfer to a four-year institution. To the contrary, the overall quantitative results did not find many statistically significant relationships between academic advising and Latino student persistence, graduation, and transfer. The sections below present a summary of findings as they relate to each of the research questions.

Research Question One

Is there a relationship between community college academic advising and Latino persistence? The quantitative data in this research conflicted with the existing literature. The overall findings from this study indicate that there was not a statistically significant relationship between Latino student persistence and student advisor ratio. Additionally, disaggregated results for small, medium, and large community colleges in Texas did not find a statistically significant relationship between Latinos' persistence and student advisor ratio. Furthermore, the overall findings of this study indicate that there was not a statistically significant relationship between Latino's persistence and advisor salary at small, medium, and large community colleges in Texas. Overall, the data in this research showed that there is no relationship between academic advising and Latino student persistence.

There is a lack of literature regarding persistence models at community colleges. Most of the research is based on four-year models (Saenz & Ponjuan, 2008). Student persistence is challenging to study at the community college level because the data sets are minimum, and students' goals vary (Hatch & Garcia, 2017). Furthermore, findings and conclusions from Martinez (2017), Alvarado (2017), Hatch & Garcia (2017), Tovar (2014), and Spencer (2017) concluded that multiple internal and external factors influence student persistence. Latino students tend to have difficulty asking for help and therefore, they may not even see an advisor during their educational journey (Peña, 2017). One surprising factor through the quantitative data analysis was the lack of relationship between advising and Latino student persistence. This may be since community college students tend to be part-time students and do not see an advisor at all or the student advisor's ratio is too big to proactively reach out to their caseload.

Research Question Two

Is there a relationship between community college academic advising and Latino graduation? The quantitative data in this research conflicted with the existing literature. The overall findings from this study indicate that there was not a statistically significant relationship between academic advising ratio and Latino graduation. Additionally, disaggregated results for small and medium community colleges in Texas did not find a statistically significant relationship between Latinos' graduation and student advisor ratio. Results, however, did indicate there was a statistically significantly positive relationship between Latino graduation rate and advisor ratio at large community colleges. Furthermore, the overall findings of this study indicate that there was not a statistically significant relationship between Latino's graduation and advisor salary at small, medium, and large community colleges in Texas.

The findings are congruent with the existing research. Community colleges have been traditionally open-access institutions and have been measured differently throughout the years (Wilcox, Linguori, & Postle, 2018). However, large institutions tend to have systems and programs in place to track student progress, including graduation, such as the City New York University (CUNY), which followed a cohort of students that showed an increased graduation rate from 24.1% to 54.9 5% (Levin & Garcia, 2017). One surprising factor through the quantitative data analysis was the lack of relationship between advising and Latino student graduation at small and medium colleges. This may be because community college students tend to have different goals when they enroll at their community college or not have clarity what pathway is the best one to choose from. Meanwhile, large colleges may have larger budgets allocated for advising which allows a more robust student support approach for all their students.

Research Question Three

Is there a relationship between community college academic advising and Latino transfer? The quantitative data in this research conflicted with the existing literature. The overall findings from this study indicate that there was a statistically significant relationship between Latino student transfer and student advisor ratio. However, disaggregated results for small, medium, and large community colleges in Texas did not find a statistically significant relationship between Latinos' transfer and student advisor ratio. Furthermore, the overall findings of this study indicate that there was not a statistically significant relationship between Latino student transfer and advisor salary at small, medium, and large community colleges in Texas. Overall, the data in this research showed that there is no relationship between academic advising and Latino student transfer.

In congruence with the findings and conclusions (Andrade, 2019; Horn, Horner, & Lee 2017; Miller, Fishman, & McCarthy, 2015) community colleges are beginning to realize the importance of working with four-year institutions to build a robust, seamless transfer pipeline. Large community colleges may have difficulty adhering to a seamless transition plan because there are many variables that students may take into consideration when deciding to transfer, or the students may not access valuable services such as academic advising (Andrade, 2019; Nuñez & Yoshimi, 2016; Sponsler, Pingel, & Anderson, 2015;). One surprising factor through the quantitative data analysis was the lack of relationship between advising and Latino student graduation. This may be due to the fact that community college students tend to have multiple family obligations that prevents them from looking for a long-term education opportunity.

Research Question Four

What are the perceptions of community colleges presidents and/or chancellors on the relationship between academic advising and selected performance outcomes of Latino students? Triangulation of the semi-structured interviews provided insights into the overarching themes on the relationship of academic advising and Latino student persistence, graduation, and transfer. There were four themes that emerged regarding presidents' and chancellors' perceptions: importance of advising, persistence, graduation, and transfer. A summary of each theme is necessary to understand the presidents and chancellors' perceptions.

Importance of Advising. The importance of advising is a critical resource to help Latino students navigate through their educational journey at the community college. Traditionally, Latino students experience personal obligations such as a parenting, full-time employment, family care giving, and paying bills which impacts their ability to complete their postsecondary education (Illoh, 2017). In alignment with the literature,

presidents and chancellors in this study perceived academic advising as one of the most effective tools to retain students (Martinez & Elue, 2020). Texas community college presidents and chancellors in this study had positive perceptions of the importance of advising to not only help Latino students enroll for the right courses, but to decrease the excess number of credits that community college students traditionally accumulate before transferring to a four-year institution or going to the workforce. Presidents and chancellors involved in this study have started to more intentionally disaggregate their data to reduce the excess hours. An example was given from a participant who was able to reduce the excess hours from 99 to 81 credit hours. Furthermore, presidents and chancellors in the study implemented a variety of academic advising styles they perceived to be beneficial to their students' population. This is congruent to He & Hutson (2016) who discussed the various advising styles such as: holistic, intrusive, and appreciative. Holistic advising implies that the advisor sees the student as a whole and communicates with the students regarding personal and academic goals. Intrusive advising operates under the proactive notion where the advisor proactively reaches out to the students. Appreciative advising refers to a more collaborative relationship between the advisor and the student (He & Hutson, 2016; Varney, 2007).

In addition to having different advising styles available, presidents and chancellors in this study also implemented various staffing techniques. Some of the advising staffing techniques that presidents could implement include centralized, decentralized, and shared (He & Hutson, 2016). Centralized staffing models are where there is a dedicated advising office. Decentralized advising is where some presidents include faculty as advisors, for example. Shared models are where students have an opportunity to see a dedicated academic advisor or a faulty member. Presidents and chancellors shared the importance of having faculty advisors to help students with career

and college success while others had dedicated advising personnel. Dedicated advising means having full-time advisors who help students throughout their academic journey. Presidents and/or chancellors made an effort to have advisors who looked like the students they served. The Texas community college presidents and/or chancellors believed in having advising staff who reflected the student population. This is in line with Saenz et al. (2017) and Longwell-Grice et al. (2016) who stated that faculty and staff should reflect the student population that is being served. Presidents and chancellors in this study stated that Latino students can have personality traits such as timidness that may make them hesitant to ask for help; therefore, having dedicated advisors who look like them can help students to feel more comfortable during the advising process. As the Latino population continues to grow and Latino students continue to choose community colleges as their higher education entry point (Arbona & Nora, 2017), presidents and chancellors are cognizant of this demographic shift and shared their attempts to employ advisors and personnel who represent Latino students so these advisors can serve as role models to the students they serve.

Presidents and chancellors in this study also discussed the importance of incorporating advising into the budgeting process. One best practice that was shared was the purposeful case management advising model where one advisor has a case load of no more than 350 students. Having a small case load has significantly impacted the graduation and transfer rate for all students at one of the participating institutions. This is an example of robust, dependable, and effective advising models at community colleges, but these efforts usually exist on a small scale and are not present at many community colleges (Martinez & Elue, 2020). The common end goal amongst the college presidents and chancellors was to increase the educational trajectory of Latino students. Advisors are critical in providing a connection to Latino students to improve the already nationally

lowest completion rates (Alvarado, 2017; Hatch & Garcia, 2017). In Texas, only 18.0% of Latinos have earned an associate degree (Excelencia in Education, 2018a).

Finally, presidents and chancellors in this study were interested in the academic and career success of Latino students. The future workforce of Texas depends on how community colleges will respond to the changing demographics by supporting the heterogeneous Latino population (Hernandez, Slate, & Joyner, 2015). Disaggregating Latino educational attainments by gender and ethnic group will be critical to improving the persistence, graduation, and transfer outcomes of Latinos at Texas community colleges, meaning students can successfully enter the workforce and earn family sustaining wages.

The findings of this study confirm previously cited research (Alvarado, 2017; Martinez, 2017; Woods et al., 2016) who stated advising is a critical piece to help Latino students navigate their college experience and to contribute to their student success. This study contributes to a growing body of research that highlights implications for future college presidents and chancellors, one of which is a growing Latino population whose unique advising needs must be met if Texas intends to meet education initiatives like 60X30TX. While all participants agreed that advising was important, only one participant's board of trustees committed financial resources to advising. The participant secured a \$2 million dollar funding package from the board of trustees to hire additional advisors and ramp up professional development opportunities for advisors. This campus leader relied on research and enacted a plan that stands a good chance of helping Latino students navigate their higher education careers.

Persistence. Persistence was discussed as one of the major challenges that community college presidents and/or chancellors must cope with. For the most part, presidents and chancellors agreed that advisors played a vital role in retaining students.

College presidents and/or chancellors not only look at Latino student persistence data as one of the metrics, but they also review the data to track the progress of Latino students through graduation and transfer and workforce participation. Elliot and Parks (2018) argue that that if Latinos do not have some form of postsecondary education, they are less likely to join the workforce or enter high demand careers. The lack of completion and/or persistence for Latinos presents a major barrier for the advancement of the Latino population especially in the face of the Texas higher education initiative, 60X30TX, where, to remain competitive in a global economy, 60.0% of Texans ages 25-34 will need a certificate or degree by the year 2030 (THECB, 2018). If Latinos do not get educated at the same rate as their peers, they will continue to be affected by high poverty rates and inequity (Fletcher, Hernandez, Klepfer, & Wartel, 2018). It is important to note that poverty rate among Latinos is the highest in comparison to all ethnic groups (Hernandez et al. 2015; Iceland & Hernandez, 2017; Plucker & Peters, 2017). If the goal is to increase the number of Latino students persisting from one semester to the next, then presidents and/or chancellors need to carefully review their yearly budget allocations and provide advisors with the training and resources to adequately advise Latino students so that these students may stay on track from one semester to the next (Cook, 2009; Gillispie, 2003; Gordon, 2004).

Furthermore, presidents and/or chancellors recognized that the high school to college pipeline is shrinking, and many Latino students tend to lack role models at home who can help them navigate the college experience. Rodriguez and Arellano (2016) confirmed a devastating statistic for Latino students which indicates that 50% of Latino students will not graduate from high school. Latino students tend to be more compliant as discussed by the presidents and chancellors involved in this study which means that advisors must be proactive, have a personal connection, and reach out to Latino students

to help them achieve their goals. It is important to recognize that advising models adopted by college vary by the organizational capacity and infrastructure of the institution (Martinez & Ellue, 2020). Some institutions have the budget to have the intrusive advising model which is an action-oriented way to approach students. Others may have the resources to have individualized appreciative advising models to helps students find their pathways. Yet other institutions may have a learner center advising model that provides clear and continuous guidance both during the advising session and outside the advising session (He & Hutson, 2016). There is no one advising model that fits all institutions, but it is important to understand and track Latino student persistence data to support them in their academic journey. This means that the presidents and/or chancellors make conscientious annual budgetary allocations to support the efforts of academic advising and Latino student persistence.

The findings of this study are supported by previous research (Bingham & Solverson, 2016; Hatch & Garcia, 2017; Tovar, 2014) who stated persistence is a critical piece that needs improvement at the community college level. This study contributes to the limited literature that exists for community colleges and persistence (Saenz & Ponjuan, 2008). This study highlights implications for future college presidents and chancellors and is helping to call attention to the growing Latino population as a challenging issue for incoming presidents, chancellors, and community college leaders – one they need to be prepared to tackle.

One unexpected finding from the interviews that were conducted was the level of data tracking that has been put in place at several participating institutions where Latino students are outperforming other students, showing that some college presidents and/or chancellors have been able to reduce the achievement gaps for the institution. For instance, one college president mentioned that Latinos were persisting at a higher rate

than other students at his institution. Clearly, college presidents and/or chancellors are listening and recognizing the importance of academic advising and how it impacts student persistence.

Graduation. Graduation was discussed amongst the college presidents and/or chancellors as the ultimate metric for measuring the success of students. This is in alignment with the idea that today's community colleges are held to different standards when it comes to graduation and job placement (Wilcox, Liguori, & Postle, 2018). College presidents and/or chancellors in this study perceived academic advising as a critical support for students seeking to achieve academic goals. Some of best practices shared included looking at data and creating degree efficient programs that lead to timely graduation. College presidents and/or chancellors in this study agreed that they are always trying to find ways for students to complete a certificate or associate degree. They also try to prepare students for future career success. Another technique mentioned was allowing students who are close to graduation to take advantage of priority registration. Not all presidents and/or chancellors revealed their graduation rate by demographic for their institution, but they are approaching graduation with creative tactics to increase the number of graduates. The presidents and/or chancellors concurred with the notion that it is extremely important to Latinos to graduate before they transfer or enter the workforce. Additionally, they agreed that intentional advising was necessary to keep students on track throughout their academic journey.

The findings of this study were consistent with previous research (Postle, 2018; Tyndorf & Martin (2018); Wilcox, Longuori, Wood, & Harris, 2015) who stated advising is a critical piece to student graduation. This study contributes to a growing body of research that highlights implications for future college presidents and chancellors. This

study supports efforts to highlight the growing Latino population as big issue that college presidents and/or chancellors need to be prepared to tackle.

Three surprising findings emerged through the interviews. The first one was a new term: "degree efficiency" which is a phrase that a study participant utilized to refer to timely degree completion. Efficiency is a powerful message because presidents and chancellors do not want to waste students' time or money. The second unique finding was shared by another participant of this study regarding the importance of looking at students who have over 60 credits hours or more and reviewing their program plans to determine if they can graduate during the review of their credits. This participant found over 150 students who were eligible to graduate without taking any excess hours for the semester they were currently enrolled in. The third surprising finding was the concept of "downward expansion to certification." One participant had technology in place to review courses from an associate degree level down to a certificate level. This gives students an opportunity to earn a certificate while pursuing an associate degree. College presidents and chancellors exhibited serious focus around the topic of graduation and largely communicated a commitment to improving graduation rates and closing achievement gaps.

Transfer. All Texas community college presidents and chancellors believed that having stronger policies, partnerships, and clearly outlined articulation agreements with four-year institutions was an area of improvement for their respective institutions. Stronger policies include reverse transfer opportunities where community college students who began their career at the community college and transfer without a degree can receive credit for their associate degree while taking classes at the four-year institution (Miller, Fishman, & McCarthy, 2015). In alignment with the findings from the literature review, community colleges are beginning to realize the importance of

working with local school districts, and four-year institutions to build stronger policies and curriculum together (Miller, Fishman, & McCarthy, 2015). For instance, common core numbering, guaranteed admissions, and full transferability of a degree are examples of stronger policies and curriculum that can facilitate the transfer experience for Latino students. As bachelor's degrees continue to be increasingly required to obtain a job of economic value, the number of Latino students with a bachelor's degree in the state of Texas continues to below 20.0% in comparison to 61.0% Asians who have entered the workforce with a bachelor's degree (Bureaus Labor Statistics [BLS], 2017). Community college presidents and chancellors have an obligation to create promising mechanisms and pathways to address the education inequities (Fink, 2021).

Additionally, college presidents and/or chancellors agreed that advising was critical in the transferring process to help the rate of transfers. Not only is advising critical, but the frequency of academic advising, workshops, and meetings improves the transfer outcomes for students (Andrade 2019; Nuñez, 2016). If students do not take the right sequence of classes under the guidance of an advisor, then they are likely to have excess hours and courses that won't transfer to the four-year institution which could impact the cost of their attendance at the four-year institution. The presidents and/or chancellors recognized that the cost of attending a university can deter students from transferring. Jabbar, McKinnon-Crowley, and Serrata (2019) support the common challenges that transfer students face including lack of monetary support, lack of family support and inability to understand the transfer process and the inability to relate to the four-year institution demographics. As a result, community colleges tend to have less than favorable transfer outcomes and completion rates (Martinez & Elue, 2020). The findings of this study support previously cited research (Andrade, 2019; Horn, Horner, & Lee, 2017; Nuñez & Yoshimi, 2016) who indicated advising is a critical piece to a

successful transfer experience of Latino students. There is a relationship between academic advising and Latino student success, and brings to light the idea that community college presidents and chancellors need to be prepared to address this pressing demographic change.

Although college presidents and/or chancellors discussed the importance of academic advising in the transfer process, only two participants shared the systems in place they had at their colleges. For instance, one participant shared that at his institution, there were two dedicated advisors to the work of transfer to ensure students took the correct sequence of classes. Another participant had created transfer maps for all their partner universities, creating a clear roadmap for students who are interested in transferring. Lastly, another finding that emerged from the interviews was the level of skepticism within the university staff. The skepticism was as result of mindsets that are based on previous outdated practices where colleges and universities were not readily available to send students out to another institution. It was fascinating to learn that a participant acknowledged there still much more work to educate college and university personnel to create seamless transfer opportunities. Clearly, college presidents and/or chancellors are listening to the research around advising and Latino student achievement, and this means that Texas stands a promising chance of making student success gains as long as leaders continue to amplify their voices.

Implications

As the demographics of the U.S. are projected to be majority-minority by 2045, community colleges have a responsibility to create opportunities and policies for this new shifting demographic population (Latino) to persist and complete a credential of economic value (O'Banion, 2019). Furthermore, the U.S. Census projects that in 2060, whites will only account for 32% of the underage 18 population, while Latinos will

comprise 36% (2019). Latinos are the fastest-growing minority group in the United States (Longwell-Grice, Adsitt, Mullins, & Serrata, 2016). The education of Latinos is critical to the economic and social future of the U.S. (U.S. Bureau of Labor Statistics, 2018; U.S. Census Bureau, 2017). The first implication for higher education administrators suggests that it is necessary to assess academic advising models to ensure that Latino students have access to them. Not only is it crucial for community college Latino students' persistence, graduation and transfer metrics, it is also vital to ensure that Latino students are obtaining an education at the same rate that the population is growing, otherwise the Latino population will continue to be undereducated.

The second implication for higher education practice based upon the study's findings, is that efforts must be made by community college leaders to allocate adequate budget to ensure that advisors have smaller caseloads to be intentional with their caseloads. This allows advisors to ensure that students do not take excess hours and that they are registering for the correct classes based on their program plan of study. As alluded to by the participants of this study, Latino students tend to be timid and do not seek advising because it may cause them a level of stress or embarrassment.

Latinos with a college education are valued more highly in the workplace because they tend to be more proficient at jobs, benefit more from additional training, and make better and more effective decisions regarding resources and their own time (Levin & Garcia, 2018). To help Latinos achieve a college education, higher education leaders recognize the importance of and the value that academic advising brings to their institution. Advisors help Latino students make choices in a complex environment and guide them to seek additional resources to be successful, which helps Latinos to succeed and persist in college (Community College Survey of Student Engagement [CCSSE], 2018). Institutions are starting to recognize that some strategies to improve the transfer

experience for all students include having transfer maps with course sequence and specific critical information that details the pre-requisites needed to transfer to a four-year institution (Fink & Jenkins, 2017; Schudde, Bradley, & Absher, 2019). The third implication for higher education practice based upon the study's findings is that it is necessary for college leaders to be data-driven and disaggregate their students' data to increase the number of Latinos persisting from one semester to the next.

The fourth implication for higher education practice based upon the study's findings, showed the need for community college leaders to look at ways to improve graduation rate through innovative practices. The participants of this study shared best practices that other college administrators should consider implementing. First, it is important to look at the data to create degree-efficient programs that would lead to timely completions. Another technique that can be implemented is reviewing the program plans of students who have over 60 credits to determine if they can graduate without taking any additional courses. The other practice mentioned was downward expansion certification which, with the proper technology, students have an opportunity to earn a certificate while pursuing an associate degree.

The present study was motivated by an interest in contributing to the limited research on the impact of academic advising and Latino students' decision to persist and graduate from a Texas community college with the intention of transferring to a four-year institution. As the goal of all Texas community colleges is to educate 60% of the students' ages 25-35, particularly underserved individuals, to at least a certificate of higher education degree by the year 2030 to mobilize the Texas economy into a skilled workforce (THECB, 2018), leaders should consider establishing mechanisms to support the growing Latino population (Schak & Nichols, 2019). Texas community colleges' academic advising will be essential in assisting Latino students with achieving their

educational goals in order to meet the goal set by the Texas Higher Education

Coordinating Board. The fifth implication for higher education practice based upon the
study's findings showed the need to improve the transfer process for students. Better
articulation agreements, data-sharing agreements, and dedicated advising staff to support

Latino students with the transfer process will be necessary to improve the number of

Latino students who eventually transfer to a four-year institution.

In conclusion, despite having approximately 43% of Latinos enrolling in higher education institutions, these students are not graduating at the same rate as their white peers (Longwell-Grice, et al., 2016). National data indicate that the attainment gaps vary by state (Schak & Nichols, 2019). Particularly, college leaders must enact mechanisms to help adult Latinos complete a college degree in places where the highest attainment gap currently exists among Latinos and whites (Schak & Nichols, 2019). Leaders are responsible for creating incentives that will help more adult Latinos who may have dropped out of college, never enrolled, or were raised outside of the United States to complete a college degree (Schak & Nichols, 2019). As the postsecondary academic advisor's role continues to evolve, research suggests that it provides students with adequate support, structure, and a roadmap to success (CCSSE, 2018).

Recommendations for Future Research

There was a gap in the literature regarding academic advising and Latino student persistence, graduation and transfer at community colleges. This study provided evidence about the benefits of offering advising services to promote Latino student persistence, graduation and transfer. This study's findings resulted from obtaining perceptions of college presidents and chancellors and collecting archived data from the Texas Higher Education Coordinating Board (THECB). Future research should include a mixed-methods study that compares Texas community colleges' Latino outcomes with

another highly Latino populated state. Additionally, future studies should consider analyzing the various advising styles and how they affect Latino students' overall success. Conducting a longitudinal study exploring the factors that influence Latinos to persist at community colleges who then successfully transfer to four-year institutions and complete a bachelor's degree should be considered.

Community college advisors need to have meaningful, ongoing conversations with Latino students to understand the most straightforward pathway to the students' educational goals. Advising should be focused on increasing student awareness of how individual academic and enrollment decisions may impact students' short-term and long-term decisions. These advising approaches will improve Latino student outcomes and institutional effectiveness (Carales, 2020). Future research should include exploring the perceptions of advisors and students at community colleges and the impact of their personal educational experiences within the higher education system.

At the national level, as the Latino population continues to grow in the U.S., Latinos must pursue a post-secondary education to obtain higher-paying jobs that therefore increase their opportunities for social mobility. Latinos will need to enter the workforce and contribute their talents to the future national economy in larger numbers (Martinez, 2019). Future research needs to include promoting high school completion, college preparation, and the importance of having post-secondary education pathways that include community colleges and four-year institution articulation agreements for Latinos across the nation.

Conclusion

The purpose of this mixed methods study was to determine the relationship between academic advising and Latino students' persistence, graduation and transfer.

This mixed methods study was study was conducted using one year archival data from

the THECB on 50 Texas community colleges with 72 Texas community college districts. Archival data from fall 2019 revealed that there was no statistically significant relationship between academic advising and Latino student persistence at small, medium, and large community colleges. Additionally, it revealed that there was no statistically significant relationship between academic advising and Latino student graduation at small, and medium colleges. However, the data revealed that there was a positive relationship between academic advising and Latino students' graduation at large colleges. Moreover, archival data revealed that there was no statistically significant relationship between academic advising and Latino transfer at small, medium, and large colleges. Interviews of 10 Texas college presidents and chancellors revealed that all participants had positive experiences and perceptions in regards to academic advising and Latino students' persistence, graduation, and transfer.

The present mixed methods study showed the need to study the impact of academic advising and Latino students' performance measures (persistence, graduation, and transfer) at Texas community colleges. Latino students are a heterogeneous group; therefore, community college leaders must be prepared to serve their needs accordingly (Levin, & García, 2018). Given that Latinos are a growing heterogeneous group in the United States, comprising a total population of 60.6 million (Krogstad, 2020), it is imperative to increase the knowledge and understanding of the relationship between academic advising and Latino student persistence, graduation and transfer. As a nation, it is imperative to serve Latino students to improve the educational outcomes so they can integrate into professional careers that have not been traditionally selected by Latinos. Higher education brings higher earning potential that can give Latinos an opportunity for social mobility. As such, state and federal policymakers should invest in interventions to

promote the success of Latinos (Georgetown University Center on Education and the Workforce (2018).

Given that there are multiple advising models, structures vary amongst the colleges. The college presidents and/or chancellors who were interviewed for this study agreed that budgeting adequately for advising was among their strategic priorities. Advising is a wise investment that higher education institutions can implement because it can increase the institution's retention rate, which means more revenue for the school (CCSSE, 2018). Professional development for advising at the campus, state, regional, and national level lends itself to the growth of the academic advisors, which in turn can provide a better experience to those students at the community college as well as those who transfer from one institution to another (Carlsen & Gangeness, 2020).

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APPENDIX A:

PUBLIC INSTITUIONS

Universities	Community Colleges	Health-Related Institutions	Technical College System	State Colleges
Angelo State University	Alamo Community College District Northeast Lakeview College Northwest Vista College Palo Alto College San Antonio College St. Phillip's College	Sam Houston State University College of Osteopathic Medicine	Texas State Technical College	Lamar Institute of Technology
Lamar University	Alvin Community College	Texas A&M Health Science Center	Texas State Technical College – Fort Bend	Lamar State College - Orange
Midwestern State University	Amarillo College	Texas Tech University Health Sciences Center	Texas State Technical College - Harlingen	Lamar State College – Port Arthur
Prairie View A&M University	Angelina College	Texas Tech University Health Sciences Center –El Paso	Texas State Technical College – Marshall	
Sam Houston State University	Austin Community College	The University of Texas at Austin Dell Medical School	Texas State Technical College – North Texas	
Stephen F. Austin State University	Blinn College District	The University of Texas Health Science Center at Houston	Texas State Technical College - Waco	

Sul Ross State University	Brazosport College	The University of Texas Health Science Center at San Antonio	Texas State Technical College – West Texas
Sul Ross State University Rio Grande	Central Texas College	The University of Texas Health Science Center at Tyler	Texas State Technical College
Tarleton State University	Cisco College	The University of Texas M.D. Anderson Cancer Center	Texas State Technical College – Fort Bend
Texas A&M International University	Clarendon College	The University of Texas Medical Branch at Galveston	Texas State Technical College – Harlingen
Texas A&M University	Coastal Bend College	The University of Texas Rio Grande Valley – Medical School	Texas State Technical College – Marshall
Texas A&M University – Central Texas	College of the Mainland Community College District	The University of Texas Southwestern Medical Center	Texas State Technical College – North Texas
Texas A&M University – Commerce	Collin County Community College District	University of Houston College of Medicine	
Texas A&M – Corpus Christy	Dallas County Community College District	University of North Texas Health Science Center	

- El Centro College
- Mountain View College
- North Lake College
- Richland College

Texas A&M Del Mar College

University at Galveston

Texas A&M El Paso Community University – College District

Kingsville

Texas A&M Frank Phillips

University - College

San Antonio

Texas A&M - Galveston College

Texarkana

Texas Grayson College

Southern University

Texas Tech Hill College

University

Texas Houston Community

Woman's College

University

The Howard County
University of Junior College
Texas at District

Arlington

The Kilgore College

University of Texas at Austin

The Laredo Community

University of College

Texas at Dallas

The Lee College

University of Texas at El Paso The Lone Star College University of System **Texas** CyFair Permian Kingwood Basin Montgomery North Harris Tomball University Park The McLennan University of Community College Texas Rio Grande Valley The Midland College university of Texas at San Antonio The Navarro College University of Texas at Tyler North Central Texas University of Houston College University of Northeast Texas Houston – Community College Clear Lake University of Odessa College Houston -Downtown University of Panola College Houston -

Victoria University of

North Texas University of

North Texas at Dallas West Texas

A&M

University

Paris Junior College

Ranger College

South Plains College

South Texas College

Southwest Texas Junior College

Tarrant County College District

- Connect
- Northeast
- Northwest
- Southeast
- Trinity River

Temple College

Texarkana College

Texas Southmost College

Trinity Valley Community College

Tyler Junior College

Vemon College

Victoria College

Weatherford College

Wharton County Junior College

APPENDIX B:

INDEPENDENT INSTITUIONS

Universities	Junior Colleges	Health-Related Institutions	Chiropractic
Albine Christian	Jacksonville College	Baylor College of	Parker University
Universities	vackson vine conege	Medicine	Turker Chrycisty
Amberton University			Texas Chiropractic College
Austin College			
Baylor University			
Concordia University			
Texas			
Dallas Baptist			
University			
East Texas Baptist			
University			
Hardin-Simmons			
University			
Houston Baptist			
University			
Howard Payne			
University			
Houston-Tillotson			

LeTourneau University

Jarvis Christian College

University

Lubbock Christian
University
McMurry University
Our Lady of the Lake
University of San
Antonio
Paul Quinn College
Rice University
Schreiner University
South Texas College of
Law Houston
Southern Methodist
University

Southwestern Adventist

University

Southwestern

Assemblies of God

University

Southwestern Christian

College

Southwestern

University

St. Edward's University

St. Mary's University

Texas Christian

University

Texas College

Texas Lutheran

University

Trinity University

University of Dallas

University of Mary

Hardin-Baylor

University of St.

Thomas

University of the

Incarnate Word

Wayland Baptist

University

Wiley College

APPENDIX C:

COVER LETTER



October 1, 2020

Dear Texas' Community College Presidents:

Greetings! You are being solicited to participate in a 30-40 minute semi-structured interview. The purpose of the semi-structure interview is to examine the relationship of academic advising and selected Latino performance measures (persistence, graduation, and transfer). Throughout the interview you will respond to open-ended questions. The information obtained from this study will be supplement the quantitative data I obtain from an analysis of academic advising and Latino performance measures of the fifty community colleges in Texas.

If you agree to participate, your interviews will be audio recorded. You may review these recordings, and request the destruction of partial or all of the recordings. No obvious undue risks will be endured and you may stop your participation at any time. In addition, you will also not benefit directly from your participation in the study. Your responses will only be reviewed by me, and your confidentiality will be maintained at all times.

Your cooperation is greatly appreciated. If you agree to participate in this interview, please affix your digital signature to this document. If you have any further questions, please feel free to contact Dr. Michelle Peters (petersm@uhcl.edu) or myself (pelaezI7237@uhcl.edu). Thank you!

Sincerely,

Indra Paola Peláez, M.Ed. UHCL Doctoral Student

PelaezI7237@uhcl.edu

APPENDIX D:

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to participate in the research project described below. Your participation in this study is entirely voluntary and you may refuse to participate, or you may decide to stop your participation at any time. Should you refuse to participate in the study or should you withdraw your consent and stop participation in the study, your decision will involve no penalty or loss of benefits to which you may be otherwise entitled. You are being asked to read the information below carefully, and ask questions about anything you don't understand before deciding whether or not to participate.

Title: The Relationship Between Community College Academic Advising, and Latino Persistence, Graduation, and Transfer.

Student Investigator(s): Indra Paola Peláez **Faculty Sponsor:** Michelle Peters, Ed.D

PURPOSE OF THE STUDY

The purpose of this research is to determine if Texas community college presidents believe there is a relationship between academic advising and the selected performance measures (persistence, graduation, and transfer) for Latino students.

PROCEDURES

Your interview will take place via telephone or in a face-to-face session depending upon your preference. There will be no more than ten open-ended questions and some time at the end for open dialogue about perceptions that might not have been covered in the posed questions.

EXPECTED DURATION

The total anticipated time commitment will be approximately 30-40 minutes.

RISKS OF PARTICIPATION

There are no anticipated risks associated with participation in this project.

BENEFITS TO THE SUBJECT

There is no direct benefit received from your participation in this study, but your participation will help the investigator(s) better understand how community college presidents feel about the relationship between academic advising and selected performance measures for Latinos.

CONFIDENTIALITY OF RECORDS

Every effort will be made to maintain the confidentiality of your study records. The data collected from the study will be used for educational and publication purposes, however,

you will not be identified by name. For federal audit purposes, the participant's documentation for this research project will be maintained and safeguarded by the Student Investigator for a minimum of three years after completion of the study. After that time, the participant's documentation may be destroyed.

FINANCIAL COMPENSATION

There is no financial compensation to be offered for participation in the study.

INVESTIGATOR'S RIGHT TO WITHDRAW PARTICIPANT

The investigator has the right to withdraw you from this study at any time.

CONTACT INFORMATION FOR QUESTIONS OR PROBLEMS

The investigator has offered to answer all your questions. If you have additional questions during the course of this study about the research or any related problem, you may contact the Student Researcher, Indra Paola Peláez, at 773-719-8210 or by email at PelaezI7237@uhcl.edu. The Faculty Sponsor Michelle Peters, Ed.D., may be contacted at phone number 202-321-3751 or by email at petersm@uhcl.edu.

SIGNATURES:

Your signature below acknowledges your voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to you. By signing the form, you are not waiving any of your legal rights.

The purpose of this study, procedures to be followed, and explanation of risks or benefits have		
been explained to you. You have been allowed to ask questions and your questions have been		
answered to your satisfaction. You have been told who to contact if you have additional		
questions. You have read this consent form and voluntarily agree to participate as a subject in		
this study. You are free to withdraw your consent at any time by contacting the Principal		
Investigator or Student Researcher/Faculty Sponsor. You will be given a copy of the consent		
orm you have signed.		
Subject's printed name:		
Signature of Subject:		
Date:		
	_	

Using language that is understandable and appropriate, I have discussed this project and the items listed above with the subject.		
Printed name and title		
Signature of Person Obtaining Consent:		
Date:		

THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281-283-3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT. (FEDERALWIDE ASSURANCE # FWA00004068)

APPENDIX E:

INTERVIEW QUESTIONS

- 1. Tell me your thoughts about academic advising at your community college.
- 2. Tell me your thoughts about the importance of Latino/a academic advising at your community college.
- 3. Do you feel that academic advising is important for Latino/a students at your community college? If so, why? If not, why not? (Optional if # 2 is not answered)
- 4. What role do you feel the advising of Latino/a students has on their persistence at your community college?
- 5. What role do you feel the academic advising of Latino/a students has on their community college associates degree graduation at your community college?
- 6. What is your perception of the relationship between community college academic advising at your institution and Latino/a student's decision to transfer to a four year university?
- 7. What do you feel are the best practices for advising of Latino/a students at your community college?
- 8. What are some changes you would like to see to the academic advising of Latino/a students to ensure that they graduate at your community college?
- 9. When considering your budget, how important is academic advising to you?
- 10. Is there anything else you want to tell me about academic advising of Latino/a students at your community college?