The Impact of Peer Mentoring on Persistence and Retention at a Technical College

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# ABSTRACT

Student retention has been an ongoing challenge for colleges and universities for decades (Morrow & Akermann, 2011). Researchers have created several models that identify retention and persistence issues in 4-year colleges (Berger & Milem, 1997; Spady, 1979; Tinto, 1975; Voorhees, 1987), but models targeting the unique persistence and retention issues at technical colleges are limited. Technical college students are generally considered non-traditional (over 25 years of age) and many are also first-generation college students (Bean & Metzner, 1985). Most of these students have been out of high school for several years before they enroll at the technical college (Fike & Fike, 2008). Given the gaps in the educational journey for many technical college students, there is a need for technical colleges to provide programs that will assist these students in persisting and graduating.

A peer mentoring program was implemented at one technical college to provide students with resources to increase their persistence and graduation. This qualitative study was designed to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment. Semi-structured interviews were conducted with participants who were mentors, persistent mentees, and non-persistent mentees at one technical college. The results of this study suggest that peer mentoring programs can be effective in supporting the retention and persistence efforts of technical colleges.

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#### Chapter I

#### INTRODUCTION

Currently there is a movement to increase the number of college graduates to 60% across America by the year 2025 (Complete College America, 2009). This will be a significant challenge for most post-secondary institutions. Data indicates approximately 22% of first-year college students do not return for their sophomore year, even though college enrollment rates are increasing at an extraordinary rate (Morrow & Ackerman, 2011). Colleges and universities are intensifying their efforts to discourage student departure, due in part to economic pressures making student retention and graduation a critical component for institutional success (Webster & Showers, 2011).

When students drop out of class or college, the community suffers as much as the institution itself. An educated individual renews the local workforce, thus improving surrounding communities on a long-term basis (Fike & Fike, 2008). A person who receives a bachelor's degree will typically earn approximately \$1 million more during their lifetime when compared to an individual with a high school diploma (U.S. Census Bureau, 2012). While the economic value of earning a college degree is considered a key reason for this achievement, other assets such as identity and social capital can be realized (Schuller, Brassett-Grundy, Green, Hammond & Preston, 2002). The value of higher education however goes deeper than the degree and many valuable lessons can be learned outside the classroom (Hoover, 2011). According to Hoover (2011), students participating in higher education have the ability to find their own identities and develop

self-esteem that will add value to society when they enter the workforce. Technical colleges are 2-year, post-secondary institutions with workforce development at the core of their mission. The issue of persistence and retention at technical colleges is complicated by the demographic of the student population. The average age of a technical college student is 27 years, and many of these students are adults who work and support their families and thus, predominantly attend on a part-time basis (Ayers, 2010). With these factors in the equation, it is understandable that interruptions to these students' enrollment are more likely to occur when compared to the typical student who is attending a traditional college or university (Bailey & Alfonso, 2005). Given the national focus on workforce development, retention, and graduation of students at the post-secondary level, it is essential that institutions identify strategies for increasing student persistence and retention. The purpose of this study was to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment.

### Statement of the Problem

There are a variety of reasons that students may not advance to their second year of college. Lack of persistence may be related to poor academic achievement, extreme financial issues, and the lack of student engagement (Morrow & Ackerman, 2012). The negative financial impact on colleges increases as retention issues occur from one academic term to the next. Individual institutions have a responsibility to identify factors that influence persistence and retention. Numerous researchers have developed models and programs to address the issue of retention and persistence as related to traditional colleges and universities (Berger & Milem, 1997; Spady, 1979; Tinto, 1975; Voorhees,

1987). This study is important because it can provide insights into retention and persistence issues and strategies that may be unique to the technical college environment.

# Significance of the Problem

This study is significant because it explores the gap in existing research on retention and persistence issues in technical college environments. Bean and Metzner (1985) reported significant differences between persistence issues of non-traditional community college students and traditional students attending 4-year baccalaureate institutions. Although models of persistence at community colleges (Bean & Metzner, 1985: Voorhees, 1987) are more closely aligned with the issues faced in technical colleges, there is still a critical difference in the mission of a community college versus a technical college whose primary focus is on workforce development.

Increasing student engagement is a strategy recommended by most researchers in the field of student retention and persistence in post-secondary institutions (Spady, 1970; Tinto, 1975). The challenge of increasing student engagement takes on new meaning when applied to the typical technical college student who is older, working, and does not live on campus. The topic of peer mentoring at the technical college level is essentially not covered; only a few studies (Colwell, 1988; Langeni, 1990; Schwartz, 1989) were found that focused on persistence at technical colleges, but none of the studies involved peer mentoring, and all three used quantitative methodologies. These studies on persistence at technical colleges, beginning with the Colwell study, explored the relationship of high school rank to grade point average at the end of the first term. The Langeni study focused on outreach and orientation programs, and the Schwartz study explored student backgrounds in relation to persistence (Colwell, 1988; Langeni, 1990;

Schwartz, 1989). My study addressed the gap in research regarding persistence as it relates to technical college environments by focusing on aspects of a peer mentoring program that may influence students' persistence in a technical college setting.

### Research Design

I used a basic qualitative interpretive methods approach for my study. Semistructured interviews were used to explore the perceptions and experiences of the students who were involved in a peer mentoring program in a technical college environment. The institution chosen for this study was a technical college located in the southeastern United States. Participants selected for the interviews were 10 mentees who have persisted to the next semester, 5 mentees who did not persist, and 10 mentors. The purpose of this study was to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment.

The research questions explored in this study included:

RQ1: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

RQ2: In what ways, if any, does the gender or race of the mentor contribute to participants' decisions to persist and remain enrolled in a technical college?

# Conceptual Framework

The persistence and retention model created by Bean and Metzner (1985) focused on non-traditional undergraduate students in a community college setting. The similarity in demographics between community college students and students in the technical college used for this study make this model a good choice to guide the current study.

Bean and Metzner (1985) identified factors related to the persistence of dislocated workers in the community college setting (Simmons, 1995). This model is especially relevant to the technical college arena in that workforce development is at the core of its mission. In the Bean and Metzner model (1985), four variables were used to gauge how students interact with the institution in relation to the attrition process: educational goals, high school performance, ethnicity, and gender. The results of the Bean and Metzner model suggested that non-traditional students are more affected by the external environment whereas their traditional counterparts are influenced by social integration at the institution. The Bean and Metzner model (1985) depicted in Figure 1, takes into account the background variables a person brings to the institution, including age, gender, ethnicity, hours enrolled, high school performance, and educational goals. Once enrolled, academic and environmental variables and social integration variables impact their success and persistence at the institution. This model was used as a foundation for understanding the success and persistence of students who participate in a peer mentoring program at a technical college.

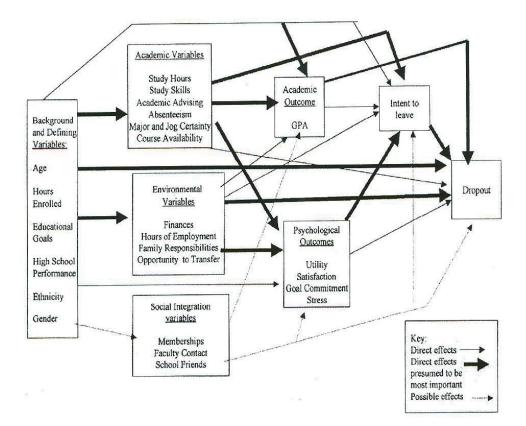


Figure 1. Bean and Metzner Model (Bean & Metzner, 1985)

### Limitations

This study was limited in that it focused on only one technical college in the southeastern United States. The findings of this study will not be generalizable to other technical colleges or 4-year colleges. The sample size was limited to 25 participants due to difficulty in locating and attaining agreement to participate from 5 previous students, who did not return to the college. Another limitation was a lack of prior research on studies that related to persistence and retention in a technical college setting. Lastly, the data in this study were self-reported through semi-structured interviews, and may have been influenced by selective memory, exaggeration, or attribution.

# **Definition of Terms**

*Ethnicity*. State of belonging to a social group that has common national or cultural traditions (Barbatis, 2010).

*Gender*. The cultural construction of a person that is learned versus the sex of a person that is biological or natural (Gross, 2010).

*Learning Support.* Programs designed to prepare or assist students for collegiate work and whose academic credentials are below placement standards (McCabe, 2003).

*Learning Support Student*. Student whose academic credentials are below placement standards (McCabe, 2003).

*Mentoring.* Process whereby a senior, more experienced person guides a junior, less experienced one (Harnish & Wild, 1994).

*Peer Mentoring*. Process involves relationships that are equal and mutually beneficial (Harnish & Wild, 1994).

*Persistence*. Students' desire to continue their academic studies at a single institution (Hagedorn, 2005).

*Retention.* Student retention is defined as a measure of the percentage of students who gain course credit or an award based on the number who registered for classes, and has been an ongoing challenge for colleges and universities, retaining students, particularly after the first year (Webster & Showers, 2011).

*Sense of Belonging*. The sense that members of a community feelo that they belong and that they matter to one another (Morrow & Ackermann, 2011).

# Organization of the Study

In Chapter 1, I presented a rationale for the study in addition to the significance and research questions. Chapter 2 will include a review of literature relevant to key topics associated with persistence, retention, and pertinent intervention strategies. The methods for data collection and analysis can be found in Chapter 3. The results of this study are presented in Chapter 4. Chapter 5 includes a discussion of results and recommendations for administrators in technical college environments.

# Chapter II

# LITERATURE REVIEW

Literature relevant to the characteristics of a student peer mentoring program and persistence in a technical college setting is presented in this chapter. The purpose of this study is to identify characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment. Currently, there is a national movement to increase the number of college graduates by 60% by the year 2025 (Lumina Foundation for Education, 2005). This initiative has been adopted on the state level through Complete College Georgia (Complete College Georgia, 2011). Data from the Lumina Foundation revealed that one of every three students who declared a major did not persist to their next year of college (Brown, 2012). While there is extensive research on persistence and retention involving students enrolled in 4-year and community colleges, little research exists on this subject in regard to technical colleges.

#### Benefits of Higher Education

The benefits of earning a degree in higher education have been substantiated. A person who receives a bachelor's degree will typically earn approximately \$1 million more during their lifetime when compared to an individual with a high school diploma (U.S. Census Bureau, 2012). While the economic value of earning a college degree is

considered a key reason for this achievement, other assets such as identity and social capital can be realized (Schuller et al., 2002). The value of higher education however goes deeper than the degree and many valuable lessons can be learned outside the classroom (Hoover, 2011).

#### Community and Technical College Students

For many students, the 2-year community college provides a less costly option (Schneider & Yin, 2011). Enrollment has increased by 25% during the past decade at community colleges with approximately 6 million students enrolled nationwide in 2010. This pathway is becoming a viable option for many students who are pursuing 4-year bachelor degrees while others are choosing to improve their existing skills to enter the workforce (Schneider & Yin, 2011).

The characteristics of community college students are similar to their technical college counterparts. Most students enrolled in community colleges are first-generation college students, come from high-risk populations, and need significant support and direction to navigate through postsecondary education successfully (Williamson, Goosen, & Gonzalez, 2014). This supports the data from the National Center for Education Statistics (NCES) indicating that most students attending community colleges across the United States (U.S.) are from lower socio-economic backgrounds and are first-generation college students (NCES, 2012). Many of these students are adults who work and support their families and thus predominantly attend on a part-time basis (Ayers, 2010). With these factors in the equation, it is understandable that interruptions to these students' enrollment are more likely to occur when compared to the typical student who is attending a traditional college or university (Bailey & Alfonso, 2005). In addition,

students from ethnic minority communities including African American, Asian and Pacific Islander, American Indian, and Hispanic were more likely to attend a community college (NCES, 2012).

# The Technical College System of Georgia

The Technical College System of Georgia (TCSG), the educational system to be used in this research study, is comprised of 24 technical colleges located throughout Georgia offering degree, diploma, and certificate programs. Programs of study are organized in the following divisions: allied health, business technology, industrial maintenance, informational technology, and personal services. The primary mission of TCSC is to focus on building a well-educated, globally competitive workforce for Georgia by providing technical, academic, and adult education to its students (TCSG, 2013a).

The technical college for this study has approximately 5,000 students of which 51.7% are full time and 48.3% are part time with an average age of 27 years (TCSG, 2013b). The demographic breakdown of students by gender is 66.8% female and 33.2% male, while in relation to race, minority students make up 48.3% of the total student population (TCSG, 2013b). The reported graduation and retention rates as provided by TCSG are 50.9% and 64.5% respectively for 2014 (TCSG, 2013b). Given the directive set by the Complete College Georgia initiative, graduation and retention rates will have to improve by 2020, as 60% of the jobs in the state will require some form of college education completion including certificates, associate's degrees, and bachelor's degrees or higher.

#### Persistence and Retention

Persistence, as related to higher education, can be defined as a measure of degree completion or the continuation of coursework in the subsequent semester (Hagedorn, 2005). The persistence of students in higher education has been an ongoing challenge for decades, especially as it relates to first-year students. Only 58% of the entering freshman of U.S. colleges, graduate within 6 years and many of those students do not persist to sophomore status (Astin & Oseguera, 2005). This topic has been researched from numerous perspectives given the fact that it is a complex subject that is driven by multiple factors. Woosley (2003) concluded that both social and academic adjustment is related to persisting in college (Woosley, 2003).

It has been recognized that institutional involvement coupled with student integration at the institution are key components in relation to persistence in college students (Berger & Milem, 1999). Goodman and Pascarella (2006) conducted a longitudinal study at the University of South Carolina between the years of 1973 and 1996. They found that students who participated in their first-year seminar course were more likely to persist to their sophomore year than students who did not participate. This study encompassed 23 years and the differences were statistically significant for 15 years of the total collection of data in relation to student persistence.

Student retention is defined as a measure of the percentage of students who gain course credit or an award based on the number of students who registered for classes (Webster & Showers). Retention has been an ongoing challenge for colleges and universities, retaining students, particularly after the first year (Webster & Showers, 2012). Retention is driven by multiple factors, meaning the context of the college

environment influences retention data. Therefore, each institution must study its own retention pattern to discover what factors are influencing retention. Once these factors are identified for a particular college, retention can be addressed as a spectrum of strategies that may be hypothesized as possible solutions.

Approximately 22% of first-year college students do not return for their sophomore year even though college enrollment rates are increasing at an extraordinary rate (Morrow & Ackerman, 2011). Additionally, a study by the U.S. Department of Education in 2002 reported that approximately 32% of students left postsecondary institutions within three academic years without earning a degree (Sanchez, Bauer, & Paronto, 2006). There are a variety of reasons why students may not advance to their second year of college. These factors include, but are not limited to poor academic achievement, extreme financial issues, and the lack of student engagement. These factors are damaging to both the colleges and their surrounding communities as they affect their respective economic conditions and overall quality of life (Sanchez, Bauer, & Paronto, 2006). As retention issues occur from one academic term to the next, the operations of these colleges become an issue as colleges, in many cases, are funded based on enrollment. Leadership at colleges and universities are intensifying their efforts to discourage student departure due in part to economic pressures that are applied to the academic administration that is critical for the success of the institution (Webster & Showers, 2011).

#### Ethnicity

First-year attrition rates of ethnic minorities that include African American and Native American students attending colleges and universities have been shown to be higher on a national level as compared with European Americans (NCES, 2012). Barbatis (2010) reported ethnically diverse community college students were underprepared at the high school level. Research conducted by the U.S. Department of Education has found that the most significant predictor of persistence through the baccalaureate degree for all students, that include those starting in community colleges, is the degree of academic rigor of their high school curriculum (Adelman, 1999). Tinto (1993) addressed the departure rates involving ethnically diverse college students with self-esteem and self-efficacy being predictors of persistence. Additionally, the perception that ethnic minorities have pertaining to the college environment are also linked to academic persistence as many of these students are first-generation college students (Gloria & Robinson Kurpius, 1996).

Differences in race, culture, and ethnicity are associated with differences in the structure and operation of social networks to include peer mentoring. The meaning of race and ethnicity is deeply embedded within U.S. culture that has a legacy of discrimination toward persons of color (Darling et al., 2006). Claude Steele identified stereotype threat and cultural mistrust in the context of mentoring relationships between blacks and whites, however these perceptions disappeared when students were informed by the mentor that the standards, while high, could be met (Cohen, Steele, & Ross, 1999). In a more recent study, research revealed that mentors with similar backgrounds,

particularly in relation to students of color, enabled the mentees to gain a sense of academic self-efficacy (Syed, Azmitia, & Cooper, 2011).

One of the challenges that students face in higher education are gaps in personal identity which can be described as "inconsistencies between and individuals' self-view and his or her perception of how others view him or her" (Schwartzman & Sanchez, 2016, p. 36). Underrepresented students develop a sense of belonging or of exclusion as campus stakeholders experience each other in the classroom and through extracurricular activities. Students do not always have equal access to mentoring which can be associated with students' backgrounds to include race, class, and gender (Brown-Nagin, 2016). Claude Steele coined the term "stereotype threat" which is the risk of negative stereotypes becoming reinforcing (Steele & Aronson, 1995). In certain academic situations, race and gender identity can trigger the threat; studies have shown that when the race or ethnicity of a black or Hispanic student is noted prior to the administration of a standardized test, the student performs worse (Aronson et al., 1998). Similarly, when a woman's gender is put at issue in high-level math courses, her performance suffers (Aronson, 1998).

Voorhees (1987) suggested that there was no significant difference in attrition rates between minority students and whites when other factors, such as academic ability and socioeconomic status, were controlled. A later study conducted by Berger and Milem (1999) found that while African American students enter the institution with strong levels of institutional commitment, they are less likely to perceive the institution as being supportive and less likely to persist. These findings point out the importance of a supportive campus climate.

The understanding of cultural differences in the mentor-mentee relationship is an important component related to successful outcomes with ethnic minority students. These students may be challenged with negotiating an academic culture that has different social expectations than they experienced in their former culture such as remaining silent in the classroom, which may be misinterpreted by the professor as not being engaged (McGregor, 2011). Other cultural differences including time management and priority setting are challenges for some ethnic minority students and should be noted by their mentors (Alvarez, Blume, Cervantes, & Thomas, 2009). Mentors will need to be aware of these cultural differences and exhibit sensitivity when working with ethnic minority mentees. This self-awareness is important for mentors with regard to issues of race and culture in shaping the relationship with their respective mentees (Alvarez, Blume, Cervantes, & Thomas, 2009). The ability of the mentor in sharing their own educational experiences with the ethnic minority mentee as related to cultural differences, will bolster support for persistence and retention (Helms, 1995).

In 1995 a research study was conducted that focused on mentoring at the community college level, that would provide support to minority students both formally and informally through recurrent contact and exchanges with mentors (Cohen, 1995). Six dimensions were theorized that included students' perceptions, of the mentoring concept, information and confrontive perspectives, the mentor as facilitator, and student vision dimension. The results of the study provided evidence that mentoring might be experienced differently for different groups finding white, African American, and Hispanic students each conceptualized mentoring differently (Cohen, 1995).

#### Gender

While sex and gender are often considered interchangeably, sex is a matter of biological construction and gender is a matter of cultural construction. Gender is the learned or cultural while sex pertains to the biological or natural (Gross, 2010). Cultural differences can influence perceptons (Franzoi, 1996). For example, behaviors considered masculine in one culture may be defined as feminine in others (Franzoi, 1996).

Relationships, pursuits, and choices are influenced by gender. Since peer mentoring is based on developing a relationship, it may be influenced by the gender differences or preferences between mentor and mentee. Rhodes (2002) noted that females wanted a psychosocial relationship whereby their mentor talks with them, whereas males want an instrumental approach that involves the mentor engaging in activities with them (Darling et al., 2006). Female mentors tended to be more comfortable in conforming to gender expectations by providing support and sensing the need for their mentees emotional support (Allen & Eby, 2004). Empathy, authenticity, and other relationship qualities in mentoring relationships between faculty and female college students predicted both higher self-esteem and less loneliness of the students (Liang, Tracy, Taylor, & Williams, 2002). Campbell and Skoog (2004) reported that undergraduate women who had access to mentoring were positively affected in terms of their career decisions, received critical support, were stimulated to consider particular areas of research, and were assisted in applying to graduate school.

Results from studies on gender-matching related to mentoring are mixed. Lockwood (2006) found that female students, but not male students, are more inspired by a role model of their own gender than of the opposite gender. Another study conducted

by Campbell and Campbell (2007) found that matching mentors and mentees of the same gender did not yield any advantages as compared with students whose gender was not matched. Other studies have shown that there are no reliable differences in positive mentoring outcomes based solely on the sex of the mentee (Johnson, 2007).

Liang, Tracy, Taylor, and Williams (2002) found that mentoring relationships, empathy, authenticity, and other relationship qualities between faculty and female college students predicted higher self-esteem and less loneliness among the students (Darling et al., 2006). Good relationships between girls and their female mentors can be characterized by intimacy and closeness (Sullivan, Marshall, & Schonert-Reichl, 2002), while males prefer mentors who engage in activities with them while females want mentors who will talk with them (Rhodes, Reddy, Grossman, & Lee, 2002).

Researchers at Cornell University conducted a study that focused on the effect of instructor race and gender on student persistence in the fields of science, technology, engineering, and math (STEM) (Price, 2010). In the study, black and female instructors were assigned to teach introductory STEM courses to students with similar racial or gender characteristics. The results of the study indicate that black students are more likely to persist in a STEM major if their instructor is black. Likewise, female students are also more likely to persist when they are taught by female instructors. Another study was conducted at the Air Force Academy in 2009, revealed that pairing female students with instructors who were also female yielded increased performance in STEM courses, but had no significant effect on performance in subsequent courses (Carrel, Page, & West 2009).

#### **Financial Impact**

Student departure generates critical outcomes as related to cost for both students and institutions of higher learning (Tinto, 1993). The financial impact of student retention on an institution is significant to vitality and sustainability (Fike & Fike, 2008). Even though it costs more to recruit than to retain students, institutions generally expend more financial resources on recruiting functions than on retention programs (Fike & Fike, 2008). More recently in the state of Georgia, benchmarks have been established to tailor the funding formula with more emphasis on the number of students who are graduating (Complete College Georgia, 2011). This initiative was established in an effort to be more competitive nationally and globally.

Schneider and Yin (2011) conducted a national longitudinal study from 2004 through 2009 in the U.S. and found there are hidden costs of low retention rates within the community college ranks. State and local governments allocated approximate \$3 billion to community colleges for the education of students who did not return for a second year (Schneider & Yin, 2011). In tracking the costs for the state of Georgia during the 2008-2009 academic year, \$17 million was expended on first-year community college students who did not return for their second year (Schneider & Yin, 2011).

#### Models of Student Persistence

There are numerous theories developed during the past 40 years in an effort to better understand the experiences of the student who does not persist for a college degree (Berger & Milem, 1997; Spady, 1970; Tinto, 1975; Voorhees, 1987). Early literature suggested that the lack of persistence of a student was due to a lack of motivation, skills needed, and ability to adjust to the rigors of college coursework. Therefore, many

institutions took the stance that high dropout rates were due to student issues rather than institutional responsibility (Tinto, 1987). Existing theories related to this study include those of William Spady and Vincent Tinto, who stressed the development of social and academic integration as key influences on student persistence (Pascarella & Terenzini, 1979).

While early research is still relevant, more recent research by Berger and Milem (1999) suggested that social and academic integration are important coupled with institutional intervention programs such as mentoring programs especially in relation to first-year college students. Research on student attrition has largely been focused on the freshman year. Spady suggested that the effects of that first year tend to influence students transferring to another institution during the ensuing year (Abdul-Mannan, 2007). Vincent Tinto's principles of effective retention include the need to foster a sense of belonging for the students in relation to personal connections to the institution. (Tinto, 1987). This relationship is a key component to his theory. Tinto's stance is that the background of a student will partially determine how they will relate to the social and academic systems of the institution (Tinto, 1989).

More recent research concurred with the earlier theorists in that intervention on the part of the institution, such as programs where freshmen complete a first-year seminar courses, were likely to result in increased persistence (Goodman & Pascarella, 2006). While numerous approaches to student retention have been explored for this literature review, Vincent Tinto's Theory of Student Departure is relevant for this study involving peer mentoring, because he focused on the institution's role in persistence (Berger & Braxton, 1998).

Since much of the literature has direct application for traditional 4-year colleges and universities, researchers have gleaned knowledge about student persistence from the models of Bean and Metzner, 1985; Milem and Berger 1997; Spady, 1970; Tinto, 1975; and Voorhees, 1987. Given that the focus of this study is on a 2-year technical college, the community college persistence models created by Bean and Metzner, (1985) and by Voorhees, (1987) are significant. These two models add value to this study as they incorporate characteristics of the nontraditional student.

#### Spady Model

As an early pioneer studying student persistence, William Spady designed a conceptual model in 1970 using Durkheim's Model of Suicide as a framework (Pascarella & Terenzini, 1979). Durkheim's model suggested that a person is more likely to commit suicide if they fail to integrate into society. Spady used this theory to understand student retention by including integration into the social system as a factor that impacts a student's decision to drop out.

Spady's model (1971) suggested that the institution plays a key role in the integration of a student into the social environment in relation to student retention. Spady theorized that students who maintain satisfactory academic achievement and are able to establish friendships among peers persist at a higher rate than their counterparts who have lower academic performance and fewer friendships (Spady, 1971). This research was significant because it brought the institution into the equation of shared responsibility rather than only focusing on the failure of the student to make the right decisions as related to their effort to persist.

Spady theorized that the ability of a student to persist in college is influenced by three factors: high school achievement, socio-economic and motivational resources provided by the family, and the IQ of the student. He emphasized that the aspirations of a parent play a key role for their child in stimulating them to reach their educational goals (Spady, 1971). Additionally, participation in an institution's extracurricular activities could provide a sense of belonging and increase student persistence (Spady, 1971).

Spady's model starts with family background that is connected to academic potential and normative congruence. In this model, the academic level, grade performance, intellectual development, social integration, and satisfaction are connected to the drop-out decision and institutional support.

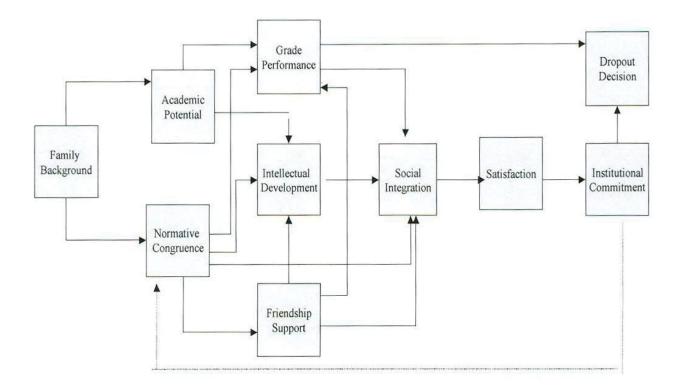
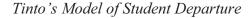


Figure 2. Spady's Model (Spady, 1971)



In 1975, Vincent Tinto expanded on the work of student persistence that Spady had started and also focused on Durkeim's Theory of Suicide in the creation of his own model. Tinto theorized that a student's social and academic experiences would determine the extent of integration into the institution that ultimately would determine their persistence. The consequences for colleges were to create an environment that would foster greater academic achievement and social engagement among its students. The theory was persistence would prevail if these factors were put into place by the institution.

Tinto believed that developing a "sense of belonging" was crucial to the success of a college student as related to persistence. "Sense of belonging" was defined as the feeling that an individual belongs and that individuals in the community matter to one another (Morrow & Ackermann, 2011). The connection that college students feel towards their college or university can play a key role in their quest to persist, while the disconnection for the technical college in my study is because typically none of its students live on campus and are non-traditional and part-time. This is, however, why a mentoring program can bring students together to foster relationships that improve their academic success while ultimately leading to retention for the institution.

In the Tinto model, pre-entry student attributes were identified as family background, skills and abilities, and prior schooling experiences as good predictors of their commitment to the institution and persistence to graduate (Tinto, 1987). In addition, Tinto hypothesized that if students displayed high levels of institutional commitment and had high personal goals, higher persistence would prevail.

To have an enhanced perception of academic and social integration, Tinto provided examples of activities that would promote integration. The student's relationship and contact with faculty in addition to their engagement in the classroom was directly proportional to their academic integration at the institution. Social integration outside of the classroom with faculty and peer relationships were deemed important in Tinto's research.

The variables studied in Tinto's model included pre-college characteristics, social and academic integration, and student commitment in an effort to predict the persistence of a student (Haussmann, Schofield & Woods, 2007). Involvement from the institution to foster engagement can begin with an orientation program that is not only informative, but also leaves the new student with a "sense of belonging" (Hurtado & Carter, 1997).

Tinto's model included components of formal academic performance and informal faculty/staff interactions (Morrow & Ackermann, 2011). Tinto stated "the nature and quality of these associations lead to varying levels of normative and structural integration in those collegiate systems" (Tinto, 1975) The Tinto model also included goal and environmental commitment factors including place of residence while attending college and highest degree sought that could impact whether students persist at the institution until graduation (Tinto, 1975).

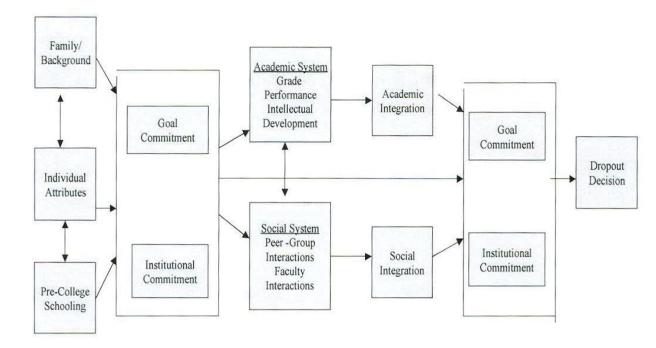


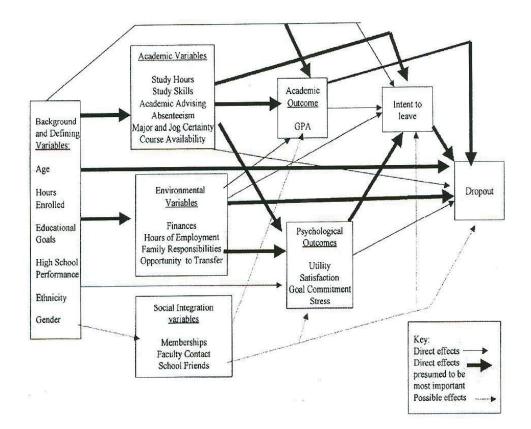
Figure 3. Tinto Model (Tinto, 1975)

# Bean and Metzner Model of Nontraditional Undergraduate Student Attrition

Bean and Metzner created a student retention model for nontraditional undergraduate student attrition that focused on identifying factors for persistence in retraining dislocated workers in the community college setting (Simmons, 1995). This model is especially relevant to the technical college arena in that workforce development is at the core of its mission.

Community colleges rely almost exclusively on older, part-time, and commuter students (Riesman, 1981). The nontraditional student typically does not live on campus and therefore must commute to campus, which has a profound effect on the socialization aspect of attrition (Bean & Metzner, 1985). Another characteristic is age; older students have already developed self-control and values that are identified with maturity and are less susceptible to socialization than their traditional counterparts (Bean & Metzner, 1985). The third characteristic associated with nontraditional students is part-time attendance which reduces the amount of time for student-to-student and student-tofaculty contact and therefore the socialization influence of attending college (Bean & Metzner, 1985). Additionally, there is less interaction through extracurricular activities and the use of campus services (Pascarella, 1980). These students for the most part work full time, have families, and are enrolled in school to develop new skills that will ultimately enhance their standard of living. It should also be pointed out that while traditional students attend college for both social and academic reasons, for nontraditional students, academic reasons are paramount (Tinto, 1975).

In the Bean and Metzner model four variables were used to gauge how students interact with the institution in relation to the attrition process: educational goals, high school performance, ethnicity, and gender (Bean & Metzner, 1985). The results of the Bean and Metzner model (1985) defined the chief difference in the attrition process of traditional versus nontraditional students as nontraditional students are more affected by the external environment than by social integration of the institution. The next model indicates that when academic and environmental variables are both positive, students should remain in school and when these same two variables are negative, the nontraditional student tends to leave school.



*Figure 4*. Bean and Metzner Model (Bean & Metzner, 1985) *Voorhees Community College Persistence Model* 

In the community college persistence model created by Voorhees in 1987, academic integration using informal faculty contact, student grade point averages, and the number of hours weekly logged to studying outside the classroom were examined using the Tinto model as the framework (Halpin, 1990). The Voorhees' study concluded that community college students have different needs when compared to traditional 4-year college students. Social interaction is less important than convenience given the fact that a large number of community college students are non-traditional in relation to age and in many cases have full time employment.

Given the fact that the focus of my study is on a 2-year technical college, the community college structure is a more realistic match than the traditional 4-year

institutions. Therefore, the community college persistence model created by Voorhees in is significant (Halpin, 1990). Academic integration using informal faculty contact, student grade point averages, and the number of hours weekly logged to studying outside the classroom was studied by Voorhees using Tinto's model as the framework. Additionally, the Voorhees study concluded that women were more likely to persist than men. The study included both new and continuing, as well as, full and part-time students in the sample. He concluded that these factors were predictors of student persistence.

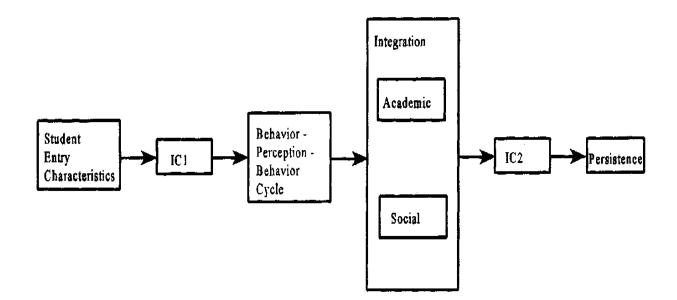
Voorhees concluded that community college students have different needs when compared to traditional 4-year college students. He noted that social interaction is less important than convenience given the fact that a large number of community college students are non-traditional in relation to age and who also in many cases have full time employment (Halpin, 1990).

Consequently, other priorities including course offerings, daycare services, flexible scheduling, and transportation assistance are of significance to this sector of students. These findings by Voorhees appear to be validated by later research that illustrate that community college students typically began college with a different set of challenges when compared to a traditional 4-year college student (Tinto, 2006). *Milem and Berger's Causal Model of Student Persistence* 

Milem and Berger in 1997 expanded on previous research using the framework of Tinto's student departure theory in an effort to provide a better explanation of how students interact in relation to the behaviors and perceptions within a college environment as a prerequisite to academic and social integration (Berger & Milem, 1999). In doing so, Milem and Berger selected student entry characteristics for their study to measure

behavioral and perception responses from the students to determine measurements for persistence. These variables included individual backgrounds, commitment at the beginning of their education, involvement through their first fall semester, mid-fall perceptions of their education, involvement mid-spring, academic and social integration, and overall commitment at the conclusion of the study.

The results from the study revealed a positive correlation of combining behavioral and perceptual components to describe the process of persistence during the first year of college. Peer relationships were deemed as an important factor especially relating to the female gender. High school grade point was brought out in the study as having statistically significant effects on early involvement and institutional commitment. The study also pointed out that while African-American students enter the institution with high levels of institutional commitment, they are less likely to perceive the institution as supportive, therefore less likely to persist. Additionally, students who did not become involved early in the process were less likely to persist (Berger & Milem, 1999).



*Figure 5*. Milem and Berger Casual Model of Student Persistence (Berger & Milem, 1999)

### Mentoring

The practice of mentoring originated centuries ago as Homer created Mentor, the wise guardian in *The Odyssey*, and is of much interest today in a variety of settings including higher education. (Kartje, 2014). Mentoring is commonly defined as a process whereby a senior, more experienced person, guides a junior, less experienced one (Harnish & Wild, 1994). Additionally, a mentor advises and supports a mentee with the intention of fostering the latter's career growth (Adams, 1997; Cronnan-Hillix, Gensheimer, Cronnan-Hillix, & Davidson, 1986). The mentor receives from his service, a sense of accomplishment and confidence in helping his fellow man (Kartje, 2014). Likewise, outcomes including personal growth, increased confidence, and self-esteem are achieved by the mentee (Ehrich, Hansford, & Tennent, 2004).

In higher education, mentoring was first studied in 1911 by engineering faculty at the University of Michigan; however, the roles and functions involved in the mentoring

experience and the perceptions by students did not advance until the late 1980s (Johnson, 1989). One of these developed mentoring programs during this period focused on K-12 teachers (Anderson & Shannon, 1988). From the next decade to the present, mentoring programs in higher education have become more prevalent. Mentoring in higher education involves three broad components provided to mentees by their mentor: emotional and psychological support, direct assistance and career development, and role modeling (Jacobi, 1991).

Mentoring programs to a large extent were established to address a vast array of difficulties that undergraduate students experience. The impact of mentoring with college students has shown numerous positive outcome variables ranging from retention and graduation rates to the adjustment to the educational environment (Crisp & Cruz, 2009). As students transition to higher education from high school, factors have been identified that can have an adverse impact on retention such as independence, time management, finances, and different teaching styles (Salinitri, 2005). Mentoring programs that offer reassurance to students with academic shortcomings and struggles adapting during their freshman year have seen improvements in their retention rates (Mee-lee & Bush, 2003). *Peer Mentoring* 

With the growth of non-traditional students on college campuses, institutions are faced with providing additional assistance to help these students cope with college life (Fox & Stevenson, 2006). Peer mentoring involves relationships that are equal and mutually beneficial (Harnsih & Wild, 1994). Peer mentoring programs have been implemented whereby freshmen are paired with an upperclassman, which helps to facilitate career development and personal growth (Faucette & Nugent, 2010; Sanchez, Bauer & Paronto, 2006). This idea is taken to an additional level at Stephen F. Austin

State University where peer advising goes beyond academics by offering short-term opportunities, such as weekend excursions, to long-term activities that include student organizations and the fraternity and sorority system (Peck, 2011). Peer mentoring can also be embedded within higher education courses that support academics and extracurricular activities through networking and collaboration (Smith, 2008). This concept allows for peer-assisted learning that can facilitate individual tutoring, small group discussions, and extracurricular study groups.

Traditionally, faculty and staff have provided mentoring to their respective students, but this trend is evolving with more students volunteering as peer mentors (Jacobi, 1991). This is especially true for students who have entered college for the first time regardless of their age. Mentoring intervention can be conducted in many different formats including assigning peers such as upperclassmen. On the community college level, there has been more focus on work-based learning whereby there is a connection between the learning process and the eventual workplace that leads to a more productive life (Stromei, 2000).

The advantages to an institution of higher education to promote peer mentoring are numerous for their students. Peer mentoring provides a means for its participants to develop inter-personal skills to get involved in helping others to achieve their academic goals. In this process, the mentor is demonstrating servant leadership as a volunteer in helping fellow students who are depending on them for academic assistance. Likewise, the mentee is learning the value of involvement and commitment to a purpose, namely persisting in college. The outcome that is produced that goes beyond persistence in this process however is leadership (Haber, 2011).

Peer mentoring is reciprocal in nature and can involve students helping students

from both perspectives of the mentee and mentor. It can be argued that the chief advantage of learning from peer learning is the opportunity for students to learn from each other in a manner that is qualitatively different from formal lecturing (Anderson & Boud, 1996). While student success is a tangible benefit of peer mentoring, students also learn to deal with transition. In terms of feelings of isolation upon entering the first year of college, students can more readily adapt to the college setting (Cropper, 2000).

While many benefits of peer mentoring have been stated, there can also be challenges in the process that can affect both the mentor and mentee. Some of the issues found in the literature that relate to mentors and mentees include: a lack of time; a lack of training; unsuitable pairings; and a lack of commitment and unrealistic expectations (Ehrich, Hansford, & Tennent, 2004). Additionally, mentoring relationships that are not compatible to include issues of race and gender were noted (Ehrich, Hansford, & Tennent, 2004).

In an attempt to outline mentoring and the effects on education, Kartje (1996) identified three major actions that encompass a mentoring relationship. The first action involves a mentor providing academic training to the mentee conveying knowledge or skills. Next, the mentor teaches ethics, values, and protocols specific to their field of study by serving as a role model. Lastly, mentors provide psychological support and build self-esteem and confidence for the mentee. Kartje (1996) also discussed in the literature that both the mentor and mentee benefit in the process and that the mentoring relationship is personal and involves sharing information that is not public knowledge.

Salinitri (2005) conducted a study to examine the effects mentoring exhibited on first year low-achieving students and program satisfaction. The study revealed considerable contrasts in grade point averages for the students who were mentored as

compared with those who were not. Students who were mentored proved to have a lower failure rate and an increase in student retention as compared to the control group in the study.

Budge (2006) investigated the particulars of diverse forms of mentoring programs in the business arena, K-12 education, and higher education (Budge, 2006). The study also examined the underrepresentation of females and minority students involved in peer mentoring relationships. The study revealed that mentoring was beneficial for students and employees to be successful in their respective environments.

Campbell and Campbell (2007) conducted a research study that hypothesized academic performance and retention would improve when mentees with mentors were matched based on gender and ethnicity. The results of the study however did not find any advantages to matching students of the same gender and ethnicity. Previous work by these researchers revealed the same results, that there was no benefit in mentor-mentee pairing based on gender and ethnicity (Campbell & Campbell, 1997).

Nora and Crisp's (2008) study, *Mentoring Students: Conceptualizing and Validating the Multi-dimensions of a Support System*, was piloted to structure guidelines and elements that are a part of a mentoring experience. The researchers used viewpoints from educational, psychological, and business models to create four domains (Nora & Crisp, 2008). These domains included: providing psychological support, creating goals and paths to achieve goals, support academically, and serving as a role model. The study was conducted with 200 participants at a 2-year community college. The results of the study suggested that students considered emotional and psychological support, assistance with goals and paths to achieve goals, and academic support as their primary mentoring experiences. In addition, students suggested that adjusting to college socially and

academically were enhanced by their mentoring experiences (Nora & Crisp, 2008).

In one study, researchers examined mentoring as a tool to increase completion rates for women and minority students in STEM (science, technology, engineering, and mathematics) majors (Holland, Major, & Orvis, 2012). The study involved participants from one predominantly African American university and one university with a predominant white student body. The variables involved in the study included affective commitment to their major, involvement with their major, and willingness to mentor others. The results of the study revealed that race significantly predicted satisfaction with one's major and that minority students reported lower satisfaction levels than did white students. Race also significantly predicted affective commitment to major with minority students again reporting lower levels of commitment than white students.

### Learning Support

Learning support is a term for programs designed to prepare or assist students for collegiate work whose academic credentials are below placement standards. Statistically, one in four students who enter higher education is underprepared (McCabe, 2003). Generally, learning support programs are intended to serve students who need additional assistance in English, math and reading. In general, 2-year institutions of higher learning have open admission policies which cater to a significant number of students with basic skills deficiencies and who require learning support. While many of these learning support students have already had a deficient twelve-year educational record prior to college, it is obvious that some type of institutional intervention will be necessary.

A community college in the southwestern United States implemented a 3-year study whereby student services of the institution customized orientation and advisement programs. The students took learning support courses in an effort to improve study skills

and time management, which yielded positive results in relation to persistence by 19% (Escobedo, 2007). The institution selected six student retention specialists that were a part of student services and worked with learning-support student cohorts enrolled at the institution from 2001 through 2003. Data indicated that college-level course enrollments rose steadily from 49% in 2001 to 85% at the end of the study in 2003. Evaluation results implied that stronger integration of retention specialists with other student services and faculty was needed.

Initiatives involving learning support that add value to students with academic inadequacies can extend well beyond the classroom. Tinto asserted that students learn best when courses are integrated into a community of learners (Tinto, 1997). Programs designed to help these students often integrate faculty, staff, and classmates in learningcommunities to help build skills and self-confidence in those students who are most at risk. As a case in point, Metropolitan Community College, located in eastern Nebraska and has a student body of approximately twenty-five thousand students, launched a mentoring program targeting learning support students that yielded positive results including higher completion, retention, and graduation rates (Raftery, 2005). These outcomes additionally add value to the learning support students' economic, family, and social well-being in the future. A program that is coordinated by faculty and student services staff fosters a supportive environment through regular interaction in the learning community to build skills and raise self-confidence in their students who are at most at risk. Likewise, faculty and staff team members receive a sense of pride and accomplishment when their students overcome barriers and succeed.

#### Summary

The literature reviewed in this chapter provides a foundation for understanding student engagement and persistence. There are no persistence or retention models designed specifically for technical college environments and there is limited research regarding community college students.

In relation to mentoring programs, the literature contained many studies that evaluated the effectiveness of mentoring on student persistence, and, social and academic integration at the institution. However, these studies did not focus on non-traditional students or technical college students.

The institution's role in fostering student persistence and social integration were common themes in models of persistence. Both of these elements can be traced to Spady's (1970) research and continue to be included in Tinto's (1975) model. Milem and Berger (1997) expanded on prior research using Tinto's student departure theory in an effort to better understand the adaptation of students to the college environment in conjunction with their ability to persist.

Although the literature contains a body of research in relation to student engagement and persistence, there is limited research regarding community college students, with the exception of the Voorhees (1987) model and to some extent, the Bean and Metzner (1985) model that focus on nontraditional undergraduate students. There is even less research that applies directly to the technical college student. The research does not, however, provide a framework from which to address the subject of student engagement as it relates to persistence and retention among technical college students.

In Chapter 3 methods and data analysis procedures will be discussed, followed by Chapter 4 that includes the results of the research. Chapter 5 provides a discussion of the findings, implications for further research, and recommendations.

# Chapter III

# METHODOLOGY

### Introduction

The changing jobs' marketplace is driving transformation in the technical college mission. By 2020, over half of the jobs in America will require a higher education credential; therefore, the need for students to persist and complete college is of greater importance (Complete College America, 2009). The purpose of this study was to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment. While a few studies do exist on persistence at technical colleges (Colwell, 1988; Langeni, 1990; Schwartz, 1989), none have looked specifically at the influence of peer mentoring. More recent studies at the community college level (Crisp, 2009; Miranda, 2013) were found that relate to peer mentoring; however, the program to be studied involves student-to-student mentoring in the technical college arena. The former studies involved the faculty serving as mentors to students in their area of expertise. Given the opportunity to reflect on and speak freely about their mentoring experiences, students may be more likely to shed light on the various ways in which these experiences have influenced their decision-making, their academic performance, and their personal lives.

#### Research Design

I used a basic qualitative interpretive methods approach using semi-structured interviews involving students in multiple programs of study at the designated on-campus site. This approach was selected to focus on the experience of the participants and the meaning of those experiences from their perspective. I wanted to understand the elements of a peer mentoring program that participants identify as critical to their persistence and success in a technical college. The research questions are:

RQ1: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

RQ2: In what ways, if any, does the gender or race of the mentor contribute to participants' decisions to persist and remain enrolled in a technical college?

Qualitative research methods were chosen for this study because the use of this particular type of basic interpretive approach, which is descriptive in nature, enabled me to obtain rich, detailed data entrenched in the context of the lived experience of the participants in the study (Van Manen, 2014). This method also allowed me to reduce the individual experiences of these participants in an effort to understand what influences their persistence at a technical college.

#### Setting

The main campus of the technical college where the study was conducted is located in the southeastern United States. This site was selected because of the availability of resources and the early phase of the peer mentoring program at this college. The designated college, is in an early stage of implementation of a student peer mentoring program intended to strengthen retention at the college. The college is

accredited by the Southern Association of Colleges and Schools. More specifically, the learning center at the college that is housed in the Allied Health Building on the first floor was the location of the study. This is the location where peer mentoring takes place during the operating hours of the college Monday through Thursday and serves all academic programs.

The physical surroundings of the learning center is a space that included a section of comfortable chairs and sofas for students to meet, work, and socialize. The area is equipped with Wi-Fi for students who bring technology devices with them, and there are computer stations available to conduct research or on-line coursework. The staff, which is comprised of a director and an administrative assistant, is housed within glass partitioned walls to give privacy when counseling students, while maintaining the ability to monitor the activity of students. The space is well lit, open, and provides an inviting atmosphere for students to collaborate and study. Adjacent to these areas is a designated conference room that seats twelve for meetings or group counseling.

Although the learning center features other mentoring programs for faculty and staff, this study only focused on the student-to-student peer mentoring program. Although the learning center's operation is relatively new, it has proven to be a conspicuous place for students to congregate. The mentoring program has between 17 and 25 volunteer student mentors who, depending on their own academic schedules, are regularly mentoring fellow students. Prospective mentors complete an application that asks for their contact information, availability, subject interests, and any special skills that they may possess. Mentors are screened by the learning center staff and participate in an orientation session and are trained prior to becoming active in the program. Service

provided by the mentors is performed on a voluntary basis; however, they do receive recognition in the form of a certificate and letters of recommendation upon request.

#### Participants

The learning center served approximately 200 unduplicated mentees from the fall of 2014 through the spring of 2016. These mentees were mentored by 25 volunteer students who represented a variety of program disciplines. Programs that are supported by the learning center include courses from all academic divisions of the college.

# Purposeful Stratified Sampling

Purposeful stratified sampling was employed in this study which is a technique that allowed me to select the participants that are needed for the study to compare subgroups within the participant population (Seidman, 2013). Sampling with this method ensured that a proportional representation from each strata is included in the study. They included: mentees who have persisted through the fall of 2014 through spring of 2016, mentees who did not persist during the same period, and the mentors who were involved with the learning center during the same time period. Participants were selected from these three groups based on ethnicity and gender. The selection of participants by ethnicity and gender ensured a representation that mirrors the composite group involved in the peer mentoring program.

### Mentee Selection for Persistent Participants

The mentee population that persisted consisted of 66 students who were involved in the peer mentoring program at the learning center from fall semester 2014 to spring semester of 2016. During the 2015 spring semester, 60% of the mentees were female and

40% were male, and the distribution by ethnicity was 70% African American and 30% white. The selection of this subgroup was further stratified based on the number of visits at the learning center. The procedure below was followed to select mentees who persisted:

- I obtained a listing of the mentees who were involved in the peer mentoring program for the school year 2015 from the Director of the Learning Center.
   The listing contained student identification, ethnicity, and gender information.
- 2. I identified the mentees who persisted.
- 3. I stratified this group by ethnicity and gender.
- 4. I purposely selected from each subgroup based on the number of visits with a mentor selecting participants with the most visits.
- 5. I asked the prospective participant to participate and sign a consent form if they agree to participate.

The table below was populated with the ten mentees selected who persisted during the 2015 school year selected based on a representative sampling of ethnicity and gender, their student identification, and frequency of visits at the learning center:

# Table 1

### Mentees that Persisted

10 Mentees	Ethnicity	Gender	
Student ID	70%AA/30%W	40%M/60%F	
XXXX	African American	Female	
XXXX	African American	Female	
XXXX	African American	Female	
XXXX	White	Female	
XXXX	White	Male	
XXXX	White	Male	
XXXX	White	Female	
XXXX	African American	Female	
XXXX	African American	Male	
XXXX	African American	Female	

#### Mentee Selection for Non-Persistent Participants

Non-persistent participants were selected from students who participated in the peer mentoring program at the learning center during any semester starting in fall 2014 through fall 2015 but at some point exited the college. During the fall semester of the 2015 school year, 60% of these mentees were female and 40% were male, and the distribution by ethnicity was 70% white, 20% African American, and 10% Asian. The strata of ethnicity and gender was used in the selection process to ensure representation from each participant group so that contrasting experiences are a part of the findings. I followed the procedure below to select mentees who did not persist:

- I obtained a listing of the mentees who were involved in the peer mentoring program for the school year 2015 from the Director of the Learning Center The listing contained student identification, ethnicity, and gender information.
- 2. I stratified the listing by mentees who did not persist.
- 3. I further stratified the listing by ethnicity and gender.

- 4. I purposely selected from each subgroup based on the number of visits with a mentor with the most visits.
- 5. I asked prospective participants to participate and sign a consent form if they agree to participate.

The table below was populated with ten mentees who did not persist during the

2015 school year selected based on a representative sampling of ethnicity and gender that

represents the learning center:

Table 2

Mentees That Did Not Persist

10 Mentees	Ethnicity	Gender
Student ID	70%W/20%AA/10%A	40 <mark>%M/60</mark> %F
XXXX	African American	Female
XXXX	African American	Female
XXXX	Asian	Female
XXXX	White	Male
XXXX	White	Female
XXXX	White	Female
XXXX	White	Female

Mentor Selection

Mentors selected for the study were from the group that works with mentees at the learning center. The mentor group studied was a sub-set of the overall population at the learning center and has approximately 25 students serving as volunteer mentors. Ethnicity for the mentor group was 70% white and 30% African American. In terms of gender for mentors, the breakdown of volunteers was 50% female and 50% male during the spring semester of 2015 as compared to the student body at the technical college which is 60% female and 40% male (TCSG, 2013b). This contrast was important for the

study to possibly determine why there are not more female volunteer mentors at the learning center. I followed the procedure below in the selection of mentors:

- 1.I obtained a listing of the mentors who were involved in the peer mentoring program for the school year 2015 from the Director of the Learning Center.The listing contained student identification, ethnicity, and gender information.
- 2. The listing was then be stratified by ethnicity and gender.
- 3. I selected ten mentors from this subgroup with priority based on the maximum time devoted at the learning center.
- 4. I contacted the mentors at the learning center to ask them to participate in the study.
- 5. I asked prospective participants to participate and sign a consent form if they agree to participate.

The table below was populated with ten mentors who served at the learning center during the 2015 school year selected based on a representative sampling of ethnicity and gender that represents the learning center:

Table 3

Mentors

10 Mentors	<u>Ethnicity</u>	Gender
Student ID	70%W/30%AA	50%M/50%F
XXXX	White	Female
XXXX	African American	Female
XXXX	White	Female
XXXX	White	Male
XXXX	White	Male
XXXX	African American	Male
XXXX	White	Female
XXXX	White	Female
XXXX	White	Male
XXXX	African American	Female

#### Data Collection

Prior to initiating this study, approval was granted from the Institutional Review Board at Valdosta State University: First, an application for use of human participants in research was completed (Appendix A). Next, a letter of cooperation was sent to the director of quality enhancement at the college, who is in charge of the learning center (Appendix B). Upon approval, I notified the director of the learning center to convey the proposed time frame of the study.

# Interview Process

The data collection method used in this qualitative study was semi-structured interviews. This interviewing technique allowed for some flexibility, while having a disciplined framework of questions and protocol from which to operate (Vagle, 2014). Interviews were conducted individually with ten mentees who persisted, ten mentees who did not persist, and ten mentors who were involved in helping other students at the learning center.

This process involved a series of two semi-structured interviews for the mentees who have persisted and one semi-structured interview for the mentees selected who did not persist. The reason for the different approach is to generate another set of questions for the persistent mentees because of easier access to this group in comparison with mentees who did not persist. Ten mentees who have persisted were asked to participate in a series of two interview sessions to get more in depth of the element of peer mentoring. The sub-group of ten mentees who did not persist were asked to participate in only one interview session because it was more difficult to contact and schedule interviews due them not being available on campus. Interviews for mentors were conducted in a single session for each participant. Thirty participants was a sufficient number to reflect the population involved in the mentoring program at the technical college.

The interview process for ten mentors followed a single semi-structured interview procedure. Interviews were designed to be one hour in duration with a goal of 10 hours of total interview time. With the two-tiered interview approach with the persistent mentees and the one interview with the non-persistent mentees and mentors, this process allowed for sufficient data to answer the research questions.

Data collected from the first interviews allowed for more in-depth questions that were developed in the second interview series. Interviews were conducted in an Allied Health Building Conference Room, located in Building 900, upstairs from learning center, which provided privacy from the general population of the mentoring program. Each interview began with an introduction, welcome, and thank you to participants as they entered the room. The goals of the study were described in relation to the peer mentoring program and retention. Additionally, the participants were told why they have been selected to take part in the study. At the beginning of each interview, participants were read a consent form that will outline confidentiality and privacy issues (Appendix C). Each interview was recorded digitally, with notes transcribed immediately after each session, and maintained in a locked cabinet until the study has concluded. Interviews

were designed to be approximately 1 hour in duration which should have been sufficient for the participants to answer eight to ten questions.

The purpose of the interviews was to answer the two research questions that have been established. To answer the first research question, I wanted to explore how mentoring impacts student persistence and retention in a technical college setting. In answering the second research question, I wanted to find out if gender or race contributes to a participant's persistence and retention in a technical college. Lastly, I was able to find out about the motivations of mentees seeking help and the reasons why mentors desire to help others. To accomplish this goal, I developed a set of questions that are grounded in relevant literature (Appendix D). I tested the accuracy and reliability of the interview questions by interviewing mentees and mentors who were not included in the study. The questions proved to be clear based on the feedback that was received, so the questions did not have to be revised prior to participants being scheduled. Questions for the second interviews were developed from themes that were constructed during the analysis of the first series of interviews with the persistent mentees. The second interview was scheduled approximately 1 week after the first. This time period between interviews allowed for the participant to think about the preceding interview but not enough time to lose the connection between the two.

Interview questions were constructed separately for mentees and mentors to provide data to answer each research question. Research Question 1 was designed to help understand the peer mentoring program as related to persistence and retention. Additionally, Research Question 2 was crafted to assist in determining if ethnicity and gender contributes to a participant's decision to persist and remain enrolled in a technical

college. The research questions for this study were developed to demonstrate the relationship with a sampling of interview questions that will be posed to mentees and mentors in the proposed study (see Appendix E for complete interview protocol).

RQ1: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

# Mentee Perspectives

- A. What do you hope to achieve through the mentoring program at the college?
- B. Do you feel that the mentoring program has given you a "sense of belonging" to the college? Why or why not?
- C. Do you think that the mentoring program has given you additional incentive from a social integration perspective toward the completion of college? Why or why not?
- D. What types of things does your mentor do to support you in relation to being more engaged at the college?
- E. While participating in the program, what types of challenges regarding work life balance do you encounter in relation to persisting to the next semester?
- F. Do you think that the mentoring program helps you in your quest to graduate? Why or why not?

### Mentor Perspectives

A. Did you have a mentor? If so how has he or she influenced you in your educational journey?

- B. Do you feel that mentees who are socially involved at the college are more likely to persist? Why or why not?
- C. What motivates you to mentor other students to persist and complete college?
- D. What is the most challenging part of mentoring mentees to persist?
- E. Do you feel that your commitment has helped your mentee's persistence? If so, how?

RQ2: In what ways, if any, does the gender or ethnicity of the mentor contribute to a participant's decision to persist and remain enrolled in a technical college?

Mentee Perspectives

- A. Describe your educational background in relation to preparation for college.
- B. Do you feel that there are barriers to ethnic minority students at this college that the mentoring program is addressing? If so, please describe.
- C. Does the mentoring program provide for a social network for you at the college? If so, how?
- D. Do you believe that you relate to your mentor differently based on your ethnicity and/or gender? Why or why not?
- E. Do you think that the mentoring program has given you additional incentive toward the completion of college? If so, why?
- F. What mentoring experiences that you have had would cause you to recommend the mentoring program to other students?

### Mentor Perspectives.

- A. Would you recommend the mentoring experience to other students? If so, why?
- B. Do you feel that you relate to your mentee differently based on your ethnicity and/or gender? Why or why not?
- C. Give examples of things you have done as a mentor that enabled your student to continue working toward his or her degree.
- D. In what ways could a mentoring program like the learning center assist ethnic minority students to complete college?

# Data Analysis and Interpretation

Data gathered from the interviews were recorded and transcribed in a journal. The whole-parts-whole approach was utilized to analyze the data from the interviews. This involved holistic reading of the entire text, a series of line-by-line readings, and subsequent readings across the individual participant data (Vagle, 2014). Journaling was utilized after each line-by-line reading to help remember details and to prepare additional questions for the interviews that follow. Data from the interviews were coded with the intention of constructing themes that were connected from the responses of the participants to the interview questions. A coding matrix was created to categorize the results of the interview data (Maxwell, 2013). The matrix consisted of categories that related to answering the research questions that were been established and a section for each participant's responses.

## Mentee Analysis for Persistent Participants

There was a series of two interview sessions conducted with each of the ten participants selected from this sub-group. I followed the steps below in analyzing data that was collected from these interviews:

- 1. I listened to the digital recordings of each interview.
- 2. I transcribed the data into memos immediately following each interview.
- 3. I read each transcript line-by-line.
- 4. I developed profiles of the individual participants and grouped them into categories.
- 5. I constructed a matrix organized by categories that were identified.
- 6. I studied the categories for themes within and among them.
- 7. I identified the connection of themes to the literature.
- I used the themes to develop questions for the second interview for mentees who persisted and possible additional questions for those participants who did not persist.

The process listed above was repeated during the second interview phase with the persistent mentee participants with the exception of the last step.

### Mentee Analysis for Non-Persistent Participants

There was one session of interviews for ten mentees selected who did not persist to be analyzed. I followed the steps below in analyzing the data that is collected from these interviews:

- 1. I listened to the digital recordings of each interview.
- 2. I transcribed the data into memos immediately following each interview.

- 3. I read each transcript line-by-line.
- 4. I developed profiles of the individual participants and group them into categories.
- 5. I constructed a matrix organized by categories that are identified.
- 6. I studied the categories for themes within and among them.
- 7. I identified the connection of themes to the literature.

### Mentor Analysis

There was one session of interviews for each of the ten mentors selected to be analyzed. I followed the steps below in analyzing the data that is collected from these interviews:

- 1. I listened to the digital recordings of each interview.
- 2. I transcribed the data into memos immediately following each interview.
- 3. I read each transcript line-by-line.
- 4. I developed profiles of the individual participants and group them into categories.
- 5. I constructed a matrix organized by categories identified.
- 6. I studied the categories for themes within and among them.
- 7. I identified the connection of themes to the literature.

### Validity and Trustworthiness

In an effort to deter biases, it was paramount that credibility be achieved in conducting this study with all participants. (Seidman, 2013). To accomplish this goal, I had no personal connection with any of the participants who are selected for the study.

While I tried to establish rapport with the participants, objectivity was paramount as to not adversely affect what each participant has to say during the interview process.

The identity of the participants was protected because names were removed, and I coded them with numbers. Also, the list of interviewees were not made available to the learning center staff so that they did not know who from the group was selected for the study. This process was accomplished in an effort to deter biases that could threaten any conclusions from the study. The qualitative nature of this study provided rich data, and the transcripts were secure after the interviews were conducted (Maxwell, 2013). Additionally, every effort was made to avoid leading questions so that my influence on the study was minimized. Furthermore, as an administrator at this institution, I did not identify myself as being an employee of the institution.

#### Member Checks

To further strengthen the validity of the study, I conducted member checks after each interview by soliciting feedback from the participants about the data and conclusions (Maxwell, 2013). The process of sharing the data with each participant was important to ensure that my interpretation of the data was accurate and representative of the participant's intentions. Raw data were shared with the individual participant, once the interview data had been transcribed, and participants were sent a copy of my analysis of the interview transcription if requested, in both instances, they were asked for the confirmation of accuracy. This process contributed to the credibility and trustworthiness of the transcription.

### *Researcher – Interviewer*

As a member of the senior leadership team at the college being studied, I wanted to be a part of improving retention rates which is so important to the vitality of the institution and the communities in our service delivery area. With retention rates at technical colleges hovering around 50% and funding model changes placing more reward on the number of graduates versus the number of students enrolled, the emphasis on retention goals have taken on a new perspective (TCSG, 2013b).

The topic of peer mentoring is of interest to me because a large segment of our population is composed of first-generation college students, and I would like to better understand the challenges that they face. Contrary to this profile, I was brought up with parents who were college educated, and it was expected at an early age that I would enroll and earn a college degree. There were no financial barriers in my college experience as an undergraduate. Additionally, I attended a traditional four-year university and, until a few years ago, had limited exposure to the technical college environment.

While I have not been a part of a peer mentoring program on a personal level, I have relied on peers to share ideas and to ensure that I am on the right path of a given project or assignment. Peer mentoring was especially helpful for me while training for running marathons, and I cannot imagine having the inner drive to complete the journey without fellow runners to encourage and motivate me through the process.

Moreover, the basic mission of technical education in the state of Georgia is workforce development. In my current role at the college, I work with the business sector to match graduates with positions within their respective organizations that require

technical skills. It is apparent from many meetings with area companies seeking graduates that there is an abundance of available jobs that cannot be filled due to the skills that are needed.

Additionally, the peer mentoring program at the college was conceived in 2013 just prior to an accreditation re-affirmation visit by the Southern Association of Colleges and Schools: Commission on Colleges. With this program completing its first full year of operation, I am interested in understanding the perspective of students about the potential impact of the peer mentoring program on persistence.

#### Summary

In this study, a basic interpretive qualitative approach was used. The purpose of this study was to determine aspects of a peer mentoring program that impact persistence and retention among participating students in a technical college environment. Furthermore, I wanted to see if ethnicity and gender contribute to the decision of a peer mentoring student to persist and remain enrolled in a technical college.

The study was conducted at a technical college in the southeastern United States with peer mentoring students who are involved at the learning center, a new program which has completed its first year in operation. The participants were comprised of mentors and mentees selected from learning support and regular admission students. All of these students were volunteers including the mentors who were not compensated for their efforts. The timeline in collecting and analyzing the data was 4-6 weeks.

# Chapter IV

### RESULTS

The purpose of this study was to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college setting. The first three chapters of this dissertation offered an introduction to the problem of persistence and retention in higher education, a review of the literature surrounding models of persistence and retention, and the methodological design that was utilized for this study. The findings that emerged during the analysis of data collected through semi-structured interviews will be presented.

Ten persistent mentees, five non-persistent mentees, and ten mentors were interviewed. The data analysis process included listening to the digital recordings at the end of each interview, transcribing the interviews, and doing a line-by-line analysis. Categories were identified and placed in a matrix. Themes were identified from studying the categories. Based on information from the interviews, profiles were developed for each of the participants.

# Results of Interviews of Persistent Mentees

Ten persistent mentees were interviewed in two sessions each for a total of 20 interviews (See Appendix E). Participants were technical college students who participated in the peer mentoring program (NET) and persisted from fall 2014 to fall 2015 at the technical college. Seven of the participants were female, three were male. In

relation to ethnicity, six of the participants were African American and four were Caucasian. Nine of the ten participants in this group were considered non-traditional students because they were 25 years or older. The criteria used to develop the profiles included demographic information regarding their prior educational background, program of study, and current situation. Pseudonyms were used for each participant to maintain anonymity. Table 4 provides information about the age, gender, race, program of study, Grade Point Average (GPA), and number of visits to the NET for each of the persistent mentees.

Table 4

Mentee	Age	Gender	Race	Program	GPA	Visits
1	56	М	W	Crim. Just.	2.00	18
2	20	М	W	Rad. Tech	2.50	15
3	52	F	AA	Accounting	3.74	8
4	41	F	AA	EMT	2.26	20
5	58	F	AA	Bus. Mgt.	3.00	14
6	45	F	AA	Rad. Tech	3.00	65
7	59	М	AA	Comp. Prog.	2.12	23
8	36	F	W	EMT	3.00	101
9	49	F	W	Rad. Tech	3.84	30
10	44	F	AA	Pharm. Tech	3.76	8

Participant Profile Table- Persistent Mentees

### Brief Profiles of Persistent Mentees

*Mentee #1.* This participant stated that he was about 21 years old when he was released from a rehabilitation center and was able to attend college. While he was at the rehabilitation facility, he thought about going back to school. He enrolled in the technical college after completing his rehabilitation and went to the NET to get help with his reading and math skills. He described his mentor, as being nice, thoughtful, and just a good person. During the second interview, he said "if it were not for him, I don't know if I would still be here." His math and reading skills have improved, resulting in an improvement in his grades. He has noticed that he reads more and has a better vocabulary. Furthermore, he mentioned that his interaction with other people at the NET enabled him to make new friends and to feel more a part of the college. He stated that his confidence level really improved after spending time at the NET.

*Mentee #2.* This mentee took a year off after high school before he enrolled at the technical college. After having some challenges with his math class, he decided to go to the NET for help. He talked about the "welcoming" atmosphere at the NET, and he believes that the peer mentoring program has given him a "sense of belonging" at the college. He works at a grocery store and mentioned that his mentor was flexible making it possible for him to work and schedule mentoring sessions at the NET. Mentee #2 expressed his appreciation to the mentors at the NET who volunteer their time to help other students. He feels more confident that he will get passed the prerequisite courses required for the Radiologic Technology program. He recommended the NET to one of his co-workers.

*Mentee* #3. After working a job for 20 years at Target and raising three children, this participant made the decision to go back to school. Even though she could not go to college when she was younger, she was determined that her children would have an opportunity to go to college. She pushed her children to have a better life, and all three of them have gone to college. Her daughter is studying law, her oldest son has graduated from college, and her youngest son is currently attending college. When she first went to the NET for support, her mentor said a lot of things that made her feel good and gave her confidence to believe in herself. While at the NET, she has noticed that her selfexpression skills improved, and she learned how to put her ideas on paper. She described the receptionist at the NET as someone who is always there to listen. She said, "I feel better about coming to the technical college now. I feel accepted. It's like family. I feel at home."

*Mentee* #4. There was a 10-year gap before this mentee enrolled in the technical college. She said her grammar needed a lot of work and that she was having challenges in math. Throughout the interviews, she talked about having low wage jobs and acknowledged that education was the way to achieve more opportunity and success. She knows that it will take hard work to get through college but believes the payoff at the end is worth the effort. When she first started going to the NET, she was a very shy and reserved. She mentioned that her confidence level has improved tremendously because she now believes in herself. She stated, "The NET motivated me. That is why I am still here. If the NET were not here, I would not be here." Mentee #4 used the analogy that the students at the NET are "diamonds in the rough" that are not completely polished before they are mentored. She explained that she has learned to be more disciplined and

has learned a lot about time management in relation to getting organized for studying. Consequently, her test results have changed dramatically from failing grades to A's and B's. She stated, "When I go back to my old habits, my grades go down."

*Mentee* #5. This participant graduated from high school 30 years ago. She stated that it was time for her to go back to school. She explained she did not have the time or money to go to college until now because she put both of her children through college. She wanted to give them a better life than she had experienced. With the help of her mentor, this participant was able to pass the required algebra class that is necessary for graduation from the Business Management Program. Mentee #5 is older than her mentor but has not found this to be a problem. She said she does not want to let her mentor down because she has invested so much time and effort in the process. When asked about the NET providing a "sense of belonging" to the college, she stated, "Yes, I do feel more connected to the college now. They do not make me feel stupid when I ask a question."

*Mentee #6.* After earning her General Education Diploma, this participant worked for 18 years before enrolling in the Radiological Technician program at the technical college. She conveyed that she worked as a nurse assistant for several years but wanted to provide a better future for her children, so she enrolled in the Radiological Technician program at the technical college. Now the time was perfect for her to go back to school. Going to the NET and interacting with other students who have been down the same road has given her confidence and motivation to persevere. She felt that her experience at the NET has helped her participate more in the classroom and has provided her with a more positive outlook on the future. She stated, "it is helping me to be strong,

to stay focused, and to be courageous. Overall, the NET is molding me into the successful person that I am striving to be." She talked about the atmosphere that she experienced at the NET and described the people there as "family." She stated her involvement at the NET has motivated and pushed her forward and she is focused to achieve her goal of graduation. She felt that if she did not feel at home at the NET, she probably would have been discouraged and possibly would have withdrawn from school.

*Mentee* #7. Seventeen years after finishing high school, this participant enrolled in college. He was faced with challenges that ranged from financial issues to raising a family. He acknowledged that you have to sacrifice something in life in order to go back to school and be successful. One barrier was his lack of computer skills prior to enrolling in college. His mentor at the NET helped him navigate through the Comp 1000 course that covers Microsoft Office. He expressed that his instructors were not very helpful, so he decided to seek help at the NET. His confidence level improved as a result of his mentors and he is now majoring in Computer Information Systems. He stated, "Without the programs inside the NET, I don't know where I would be." He mentioned that "My confidence level was built because the NET enabled me to have a different outlook."

*Mentee #8.* This participant dropped out of high school when she was 17 years old. She earned her GED 3 years later. Her biggest challenge was enrolling in college at the age of 36. She stated, "Your brain kind of turns to mush." "It is better to go straight from high school to college and retain more." She described the people at the NET being helpful and empathic because many of the mentors had been through some of the same programs. She described a person at the NET who helped her a lot with some of the courses in her program, Emergency Medical Technician (EMT). Mentee #8 also

said her confidence level had improved because she learned how to study there. More specifically, she was taught by her mentor to use flash cards. This not only helped her, but she now uses them with her children's homework. Since studying at the NET, her grades have gone from failing to passing. She only has a couple of tests remaining to be nationally certified for EMT.

*Mentee #9.* After retiring from Delta Airlines in 2010 with 20 years of service in information technology, this participant enrolled at the technical college. Prior to working at Delta, she attended Clayton Junior College but did not do well in algebra and public speaking. She realized during her career at Delta that employers are looking for people with a credential, people who have proven that they are dedicated to bettering themselves. Mentee #9 explained that math has always been her stumbling block and that is why she sought help at the NET. Her mentoring experience at the NET gave her confidence to move forward in math and consequently her program, Radiological Technology. In particular she discovered she was a visual learner and more specifically, a "two-day" visual learner. She uses a whiteboard to write down what she needs to remember. This has allowed her to go step-by-step in learning and retaining information. Her grades are better now, and she is a better student as a result of the help that she has received at the NET.

*Mentee #10.* This mentee attended high school in New York and dropped out when she became pregnant at the age of 19. At the age of 35 she received her GED after attending a learning center in New York City. When she first attended college, she stated, "My brain and mind were not together because I had been out of school for so long." Mentee #10 uses the NET three times per week and her grades have gone from

good to great while majoring in Pharmacy Technology. The atmosphere at the NET is inviting to her especially because there is food, coffee, and water available for students. When asked about her mentor, she stated, "She is never frustrated at me even though I am sometimes frustrated at myself." She also expressed that she now has confidence that her mentor instilled in her.

Themes from Interviews with Persistent Mentees

Research Question 1: In what ways if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

The first research question was designed to understand participants' perceptions of the peer mentoring experiences that had an impact on student persistence and retention at a technical college. Transcripts of two interviews for each of the ten persistent mentees were analyzed by identifying key ideas, phrases, or quotes that represented the essence of their responses to the interview questions (see Appendix D). These themes were then compared across ten persistent mentees. Themes that were found in the majority of the participant responses are presented below with representative quotes from participant interviews.

#### College Preparedness

The ten persistent mentees were asked to describe their educational background in relation to preparation for college. The educational backgrounds of the persistent mentees in this study fell into groups: high school graduates and students with General Education Diplomas (GED). However, all of the participants had gaps in their education from the time they either finished high school or dropped out and the time they entered or

re-enrolled in college. Some of the participants had been out of school for as long as 30 years.

Two themes emerged from persistent mentees as they described their educational journey in relation to college preparedness. First, all ten of the participants spoke about gaps in their educational preparation and how this was a hurdle they had to overcome because it made enrolling in college very challenging. For some of the participants, there was a 20-30 year space between their graduation from high school and their decision to go to college.

The second theme that emerged came from participants' recognition that they lacked basic skills necessary for a successful college experience (10/10 participants). Table 5 includes quotes that represent examples of participants' responses that were linked to the themes that emerged.

Table 5

Theme	Quotes	
Gaps in post-high school enrollment	"I worked for 25-30 years without thinking	
	about going to college. I started thinking	
	about school when I was injured on the job	
	with a broken leg" (Mentee #7)	
	"I attended community college 30 years ago.	
	I am back in school now." (Mentee #3)	

Perceptions of Persistent Mentees Regarding the Relationship between their Educational Background and their Preparation for College

Gaps in basic skills"Math has always been a stumbling block<br/>for me. I dropped math in 1987 at Clayton<br/>Junior College and again at Griffin Tech in<br/>1993." (Mentee #9)<br/>"I am hoping to get help with my math<br/>classes and take algebra next semester."<br/>Mentee #5)<br/>"My reading skills are a lot better. I read a<br/>lot more. My vocabulary is better."<br/>(Mentee #1)

According to all of the persistent mentees, the length of time between high school and enrollment in the technical college, and the gaps in their skills presented a barrier regarding enrolling or re-enrolling in college. One participant stated, "I was out of school for 30 years. It was scary. I don't think that I was prepared to go to college the first time." Another persistent mentee said, "Well my only challenge was that I waited so long. I am 36, and I was 17 when I finished high school. Your brain kind of turns to mush."

#### Achievement Goals

It is not surprising that the participants' achievement goals relate to the desire to complete a degree or earn a certificate. Many of the mentees expressed the desire to improve their employment opportunities by increasing their educational credentials. When asked to identify what they hoped to achieve through the mentoring program two themes emerged: completion of a certificate or program, and improvement of basic reading, writing, and mathematical skills. These themes are presented in Table 6.

Table 6

Achievement Goals of Persistent Mentees Related to the Mentoring Program	

Theme	Quotes			
Award of a certificate/degree	"I will finish Emergency Medical			
	Technician (EMT) this semester." (Mentee			
	#4)			
	"I hope to receive my associate's degree.			
	They have encouraged me, even though I			
	have been out of school for a long time."			
	(Mentee #3)			
Improvement of basic skills	"I had a hard time with English and math.			
	I would have been turning in bad grades."			
	(Mentee #9)			
	"I have learned to use Blackboard a lot			
	better. This semester would have been a			
	disaster without the NET." (Mentee #7)			

# My Turn

All of the persistent mentees delayed their college enrollment or college completion. As has been stated, many of the participants have had large gaps in their

educational journey. Some of these mentees have also sacrificed for their children to have a better opportunity for success than they did. When asked whether their life experiences provided motivation and/or skills to go back to school and be successful, two themes emerged: family first and opportunities. While these participants had gaps in their education, some of them were making "family first" a priority by ensuring that their children went to college. Similarly, many participants expressed that they were tired of working in low paying jobs to support their families and that they realized additional education was the key to improving their quality of life. These themes are included in Table 7.

Reasons why Persistent Mentees Chose to Start or Finish College

Theme	Quotes
Family first	"After working 20 years at Target, I decided
	to go to college. My daughter is in college,
	my older son graduated and my younger son
	is a junior in college. I feel blessed. And
	that is why I pushed them to do more than I
	did. (Mentee #3)
	"Both of my children are college graduated.
	So now it is time for me to go back to
	school. Before, I did not have the time or
	money to go." (Mentee #5)

### Sense of Belonging

All of the participants responded that they felt a "sense of belonging" to the mentoring program but not necessarily the college. Some participants felt a connection to their program. As they described their experience of belonging, friends, and home were themes that emerged. These themes are presented in Table 8.

Table 8

Theme	Quotes		
Friends	"I have been able to meet a lot of people at the		
	NET. Everyone has been considerate. You are not		
	just a number." (Mentee #1)		
	"Yes, I have made friends at the NET and brought		
	fellow students there." (Mentee #3)		
Home	Oh, it just keeps me engaged because it gives me		
	somewhere to go." (Mentee #7)		
	"They will always talk to you. I feel better coming		
	to the college now. I feel accepted. It's like family.		
	I feel at home." (Mentee #3)		

Role of a Welcoming Environment on Persistence of Mentees

## Guardian Angels

In addition to the tutoring support provided by the mentors at the NET, all participants commented on the nature of their relationship with the mentors. One participant described this relationship as being like a guardian angel, someone who cares about you and is invested in your success. The two themes that emerged regarding the role of mentors in supporting persistence were relationship with mentor and encouragement. Table 9 includes these themes.

Role of Mentors in Supporting Persistence

Theme	Quotes	
Relationship with mentor	"My mentor made me feel special because of the time that	
	she took with me and she gave me her personal phone	
	number." (Mentee #3)	
	"My mentor worked with me and did not make me feel	
	foolish." (Mentee #5)	
	"They are your guardian angels and they have your back.	
	"They will guide you, point you, and sometimes even speak	
	for you." (Mentee #4)	
Encouragement	"I was encouraged because they are positive." "When you	
	see mentors coming in, you feel the motivation that you	
	will make it and they are there for you." (Mentee #4)	
	"They are always trying to build you up. "If you do your	
	due diligence, you will be successful." "Even if you	
	stumble, they will help you to get there and keep going."	
	(Mentee #6)	

### Tools for Academic Success

All of the participants identified at least one skill that was developed as a result of participating at the NET, but they also unanimously referred to the importance of increased confidence as helping them persist. The increase in confidence not only was related to the encouragement provided by staff at the NET but also the fact that their improved skills led to a clear increase in their academic success relative to grades. Table 10 includes three critical themes that relate to persistent mentees perceptions about the outcomes they achieved at the NET.

Table 10

#### Outcomes Attributed to the Peer Mentoring Program

Theme	Quotes	
Theme	Quotes	
Confidence	"It changed my confidence 90% because it made me	
	believe in myself." (Mentee #4)	
	"The NET increased my confidence level by making it so	
	easy because they had a step by step process. "My	
	confidence level was built because the NET enabled me to	
	have a different outlook." (Mentee #7)	
	"I have come out of my shell and no need for me to stay in	
	there. "The NET helped me to be more open in the	
	classroom and I feel more comfortable with my peers."	
High grades	"My test results changed dramatically from 40's to 80's	
	and 90's." (Mentee #4)	

	"My grades are better now and I was able to get into the
	radiological technician program." (Mentee #9)
	"It helped in my grade point average. I went from good to
	great." (Mentee #10)
Skills	"I have learned to use Blackboard a lot better. I don't like
	online courses, but they have made it a lot better for me."
	(Mentee #7)
	"Organizational skills have improved. I have been taught
	to break down then whole picture into sections and take one
	section at a time." (Mentee #3)
	"It has helped me figure out that I am a visual learner. I do
	better when I can see it." (Mentee #9)

Research Question 2: Themes from Interviews with Persistent Mentees

The second research question for this study explored participants' perceptions of the impact of the gender or ethnicity of a mentor on a student's decision to persist and remain enrolled in a technical college. There was some variation relative to persistent mentees' perception of the role of gender or ethnicity in the effectiveness of a mentor/mentee pair. When asked, "Do you believe that you relate to your mentor differently based on your ethnicity and/or gender? Why or why not?" Nine of the ten participants answered "no" to this question. One male mentee stated that gender could be a factor, and he felt that females tend to have a "softer" approach and that might influence her ability to have an impact on a male student.

Two mentees mentioned students in their class who have a language barrier. They felt the language barrier made it less likely those students would benefit from having a mentor who was not bi-lingual. One participant expressed that she was not concerned about the race or sex of mentors', however, she did prefer someone closer to her age. However, all of the participants expressed the importance of the academic competence of the mentor as being a key characteristic when choosing mentor/mentee pairings. Table 11 includes themes related to characteristics of mentor/mentee pairings that influence the persistence of the mentee.

Table 11

Theme	Quotes		
Competence	"It is about learning and getting more knowledge and		
	wisdom from those who have it." (Mentee #6)		
	"You (the mentor) know what I don't know and willing to		
	share knowledge to improve my skills." (Mentee #6)		
Language barrier	"There was a girl in my class who had a language barrier. If		
	they had someone who is bilingual, that would be a good		
	thing to help." (Mentee #8)		
Everyone gets help	"The mentors that assisted me, their color or sex does not		
	matter. They do not look at your age, color, or sex. They		
	address your needs." (Mentee #3)		

Characteristics of Mentor/Mentee Pairings that Influence the Persistence of the Mentee

"The NET bridges the gap and brings people together."
(Mentee #7)
"No, I do not feel that ethnic minority students are at a disadvantage. They go to the NET for help and they get it."
(Mentee #1)
"It is about everyone going in the same direction for one purpose." (Mentee #6)

#### Non-Persistent Mentees

Ten non-persistent mentees were selected for the study. The fact that they had discontinued enrollment at the college made it difficult to locate them and get them to come for an interview, thus five non-persistent mentees were interviewed of the ten who were selected for the study (see Appendix E). Participants were students who had withdrawn from the college during the period of fall 2014 to fall 2015. Four of the participants were female, one was male. In relation to ethnicity, three were African American and two were white. One additional participant was interviewed, however, learned during the interview, they he actually persisted and graduated from his chosen field of study. The participants' ages in this group ranged from 22 to 63.

Following the reading of interview transcriptions for each participant, brief profiles were developed. The criteria used to develop the profiles in Table 12, included demographic information regarding their prior educational background, program of study, and current situation. Pseudonyms were used for each participant to maintain anonymity.

#### Table 12

Non- Persistent Mentee	Age	Gender	Race	Program	GPA	Visits
1	22	М	W	CIS	1.59	2
2	30	F	W	Bus. Mgt.	1.40	2
3	63	F	AA	Horticulture	1.20	7
4	50	F	AA	Res. Therp.	3.79	7
5	52	F	AA	Rad. Tech	1.70	8

#### Brief Profiles of Non-Persistent Mentees

*Non-Persistent Mentee* #1. This participant was a 22-year-old male and was majoring in Computer Information Systems (CIS) prior to dropping out of school due to academic suspension. He expressed that going to the NET gave him a sense of belonging to the college but not to the extent of a social network. His only issue with the NET was that there were not any mentors with CIS expertise. Non-Persistent Mentee #1 was however complimentary of his mentor because he worked well with his autism and obsessive compulsive disorder. He added that in general, the mentors at the NET seemed to help many students in different programs and provided a back-up or safety net for students to get answers to their questions. When asked about his current status, he responded that he is working and plans to enroll in another college.

*Non-Persistent Mentee* #2. This participant was a 30-year-old female and was majoring in Business Management prior to withdrawing from the college. Non-Persistent

Mentee #2 dropped out of high school in the 10<sup>th</sup> grade and received her GED about two years later. She went to the NET to get help because she had been out of school for a long time and felt overwhelmed. While at the NET, she learned how to take notes, to identify key points when reading chapters, and she felt welcomed there. She acknowledged that she did not use the NET that much but stated that the mentors helped her a lot. At the time of her leaving college, she was experiencing health and financial issues. She is currently on academic probation but intends on enrolling at the college again.

*Non-Persistent Mentee #3.* This participant was a 63-year-old female who was majoring in Horticulture. She dropped out of high school during her senior year, just two weeks before graduation and received her GED about two years later. Because of health and family issues, there were many gaps in her educational background. Non-Persistent Mentee #3 described the people at the NET as being really nice and patient. She stated, "I would go in there when I became aggravated because I knew that they would calm me down." The staff at the NET encouraged her and this is exemplified in her statement, "Even when I did not feel like doing anything, they encouraged me and I felt like I belonged there." While she had to quit attending due to academic suspension, she plans to visit the NET when she is able to re-enroll.

*Non-Persistent Mentee* #4. This participant was a 50-year-old female who was majoring in Respiratory Therapy. She graduated from high school in Brooklyn, NY and then lived in several cities including Boston and Miami during a 30 year span. During this time, she attended community and technical colleges enrolled in various allied health programs. She came to the NET to gain a deeper understanding of the math required for

the Respiratory Therapy program. Non-Persistent Mentee #4 talked about her mentor being very good with math and she stated that she received some much needed help through her efforts. She liked going to the NET because there was always someone there to help and also something to eat. Non-Persistent Mentee stated in describing the NET, "I feel like the NET is like a little family on the corner. I felt more at home at the college because of the NET." However, due to multiple personal issues, she was forced to drop out of the college.

*Non-Persistent Mentee* #5. This participant was a 52-year-old female who was majoring in Radiological Technology. Non-Persistent Mentee #5 talked about the staff at the NET making her feel at home and were always nice to her. She liked going to the NET because she could get help, and her mentors were knowledgeable about their subject matter. Being a school bus driver, her schedule did not always work for her mentor, but she did not want to bother them. She was forced to withdraw from the college due to losing her father and brother in a short period of time but plans to re-enroll soon. Her situation is exemplified by her statement, "It was really a tough year with deaths in the family in February and November, but I am not giving up."

Research Question 1: Themes from Interviews with Non-Persistent Mentees

The first research question was designed to understand participants' perceptions of the peer mentoring experiences that had an impact on student persistence and retention at a technical college. Transcripts of the interviews for each of the five non-persistent mentees were analyzed by identifying key ideas, phrases, or quotes that represented the essence of their responses to the interview questions (See Appendix D). These themes were then compared across five non-persistent mentees. Themes that were found in the

majority of the participant responses are presented below with representative quotes from participant interviews.

### College Preparedness

The two themes that emerged from non-persistent mentees as they described their educational journey in relation to college preparedness were the same as the themes from the persistent mentee interviews. All of the non-persistent mentees identified gaps in their educational preparation and discussed the fact that they lacked the skills to be successful in college. Table 13 provides quotes that represent examples of participants' responses that were linked to the themes that emerged.

Perceptions of Persistent Mentees Regarding the Relationship between Their Educational Background and their Preparation for College.

Theme	Quotes	
Theme	Quotos	
Gaps in post-high	"I went from kindergarten through the ninth grade and quit	
school enrollment	half way through the tenth." (Non-Persistent Mentee #2)	
	"I dropped out of high school my senior year, two weeks	
	before graduation." (Non-Persistent Mentee #3)	
Gaps in skills	"They showed me how to take notes, the key points at the	
	first of a chapter, and they taught me what I needed to	
	remember." (Non-Persistent Mentee #2)	
	"Well I went to the NET to get better at math and computer	
	skills and to improve everything that I was slow on."	
	(Non-Persistent Mentee #3)	

### Achievement Goals

The non-persistent mentees also identified improving skills and earning a certificate or degree as the goals they hoped to achieve with help from the NET. It is not surprising that the achievement goals of the non-persistent mentees were the same as those of the persistent mentees since their educational backgrounds and ages were similar. Table 14 includes representative quotes from non-persistent mentees regarding what they hoped to achieve by participating in the peer mentoring program.

Theme	Quotes
Award of a certificate/degree	"If you plan to finish, there are people there
	to help you." (Non-Persistent Mentee #4)
	"I wanted to get it done." (Non-Persistent
	Mentee #1)
Improvement of basic skills	"Well, I went to the NET to get better at
	math and computer skills and to improve on
	everything that I was slow on." (Non-
	Persistent Mentee #3)
	"When I left high school, I was just getting
	into pre-algebra." (Non-Persistent Mentee
	#5)

Achievement Goals of Non-Persistent Mentees Related to the Mentoring Program

Four of the five non-persistent mentees delayed their college enrollment or college completion. One of the participants enrolled in the technical college immediately after high school but dropped out about half way through his program. Reasons for the gaps varied, but it seems that for all of the non-persistent mentees there were life events involving family illnesses and deaths. Even though these mentees did not persist, they expressed the determination to go back to the technical college and finish their respective programs.

Table 15

Reasons Why Non-Persistent Mentees Chose to Start or Finish College

Theme	Quotes
Family first	"My dad got sick, so I stopped LPN schooling to take care
	of him." (Non-Persistent Mentee #3)
	"It was really a rough year. Deaths in the family in
	February and November." (Non-Persistent Mentee #5)
My turn	"I am not giving up and I plan to come back this summer."
	(Non-Persistent Mentee #3)
	"I intend on going back." (Non-Persistent Mentee #2)

Sense of Belonging

The five non-persistent mentees reported that they felt a sense of belonging at the NET, but their interviews did not reveal the home atmosphere that was described by the persistent mentees, rather they described the NET as a safe haven (Morrow & Ackermann, 2011). Although home and safe haven have similarities, the notion of a safe

haven implies that the non-persistent mentees brought a fear and anxiety to the NET that was subtlety different than the persistent mentees. One of the participants expressed that she went to the mentoring center strictly for the learning aspects. The other nonpersistent mentee stated that the mentoring center seemed clinical. All of the nonpersistent mentees expressed that they felt a sense of belonging at the NET. However, as was the case with the persistent mentee group, the "sense of belonging" is primarily attributed to the mentoring program.

Table 16

Theme	Quotes
Safe haven	"I was on my last nerve, in tears, and throwing my hands
	up. I went over there and one of the staff members went in
	the back room and she talked to me for about an hour and a
	half. She listened and she understood." (Non-Persistent
	Mentee #3)
	"I would go to campus and I would get in the parking lot
	and not even go to class. But when I started going to the
	NET, I would go to class. The NET helped me a lot and I
	will always be grateful to them." (Non-Persistent Mentee
	#5)
	"Even when I did not feel like doing anything, they
	encouraged me and I felt like I belonged there." Non-
	Persistent Mentee #3)

The non-persistent mentees felt like the NET was welcoming, and, although some of them will not be returning to the college, four of the five expressed that if they came back, they would use the NET as a resource. Because these students were struggling with personal issues, the nature of their relationship with the mentors was different in subtle ways. They talked about what the mentor did to assist them, for example one student said, "She helped me and gave pointers on things that I wasn't there for that helped me in my other classes." However, the personal crises in their lives appeared to create a personal distance in their relationship with their mentors. Some of them shared the challenges they were facing with their mentors, but others did not.

Rol	'e of	Mentors	in S	lupport	ting.	Persistence
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Theme	Quotes	
Relationship with mentor	"Truthfully, I don't remember what my mentor said, but	
	she tried to talk me through it and cheer me up." (Non-	
	Persistent Mentee #1)	
	"She tried to cheer me up. I used to chat with her through	
	e-mail but not so much anymore." (Non-Persistent Mentee	
	#2)	
Encouragement	"They encouraged me to open my mind and to do things in	
	a different way in math." (Non-Persistent Mentee #3)	

The non-persistent mentees indicated that even though they did not achieve their goal to complete their program of study, the NET provided them the confidence to return to the college. When these participants return to college, they will be better prepared as a result of the support that is received the NET.

Table 18

Quotes
"They give me a sense of calmness and direction that I can
do this." (Non-Persistent Mentee #2)
"Well, they lived up to my expectations because they were
patient and they listened. (Non-Persistent Mentee #3)
"You have a back-up, a safety net." (Non-Persistent
Mentee #1)
"If you plan to finish, there are people there to help."
(Non-Persistent Mentee #4)

Outcomes Attributed to the Peer Mentoring Program

Themes from Interviews with Non-Persistent Mentees

Research Question 2: In what ways, if any, does the gender or race of the mentor contribute to participants' decisions to persist and remain enrolled in a technical college?

The second research question for my study was designed to explore participants' perceptions of the impact of the gender or ethnicity of a mentor on their decision to persist and remain enrolled in a technical college. There was some variation relative to persistent mentees' perception of the role of gender or ethnicity in the effectiveness of a mentor/mentee pair. The interview question, "Do you believe that you relate to your mentor differently based on your ethnicity and/or gender? Why or why not?" Three of participants answered "no," and one elected not to answer. It is not clear why this African American female did not want to answer. The mentee who answered "yes" explained that an ethnic minority person may feel intimidated in that most of the mentors are white. One of the participants stated that she had an issue with a mentor being of the opposite gender. Another participant stated that age compatibility was important for the mentee-mentor relationship.

Theme	Quotes
Perspective	"I did not encounter that. Everybody seemed to get help
	when they needed it." (Non-Persistent Mentee #1)
	"I am much older and I know that there will be barriers in
	life. I know how to move barriers. If you don't get along
	well with one person, you go to the next one. I don't feel
	that there are barriers at the NET." (Non-Persistent Mentee
	#4)
	"Most of the mentors are white. An ethnic minority person
	may feel intimidated. I can see how easy it can be for
	someone of their own ethnicity understanding each other
	better." (Non-Persistent Mentee #5)

Characteristics of Mentor/Mentee Pairings that Influence the Persistence of the Mentee

#### Peer Mentors

Ten mentors were interviewed for my study (see Appendix E for interview schedule). Participants were students who were currently enrolled during 2015-16 academic year at the technical college. Six of the participants were female, four were male. In relation to ethnicity, seven were white and three were African American. The age span of these students ranged from 20 to 57. Following the reading of interview transcriptions for each participant, brief profiles were developed. The criteria used to develop the profiles included demographic information regarding their prior educational background, program of study, and current situation. Pseudonyms were used for each participant to maintain anonymity.

Mentor	Age	Gender	Race	Program	GPA
1	20	F	AA	Bus. Mgt.	4.00
2	57	М	W	Rad. Tech	4.00
3	21	М	AA	Health Sci.	3.17
4	33	F	W	Bus. Tech	3.88
5	20	F	AA	Comp. Prog.	2.85
6	31	М	W	Film Tech	3.94
7	32	F	W	LPN	2.99
8	36	М	W	Networking	3.44
9	47	F	W	Crim. Jus.	3.84
10	27	F	W	Health Sci.	3.55

Participant Profile Table - Mentors

#### Brief Profiles of Mentors

*Mentor #1.* This participant is a 20-year-old female majoring in Business Management. She became interested in becoming a mentor because it burdened her to see other people suffer in school, and it motivated her to see students obtain a better lifestyle as a result of furthering their education. She had a mentor who was her pastor, and he encouraged her to stay in school, be obedient, and live by basic morals such as treating people well. She was more interested in seeing her mentees pass their course when she first started as a mentor. As she took on more projects at the NET, her mission to help students involved more than just academics, it was about helping students gain new skills to get a career that would positively impact their lifestyle. Mentor #1 felt rewarded as a result of convincing one of her mentees to not drop all of her classes. Because of this experience, the mentee persisted and remained in school.

*Mentor #2.* The personal satisfaction that he received from helping someone else and the fact that so much had been given to him over the years were reasons this participant became a mentor. He stated, "I am an older student, 57 years old and a lot has been given to me from my God, and so I feel obligated to give back what I have been freely given." Mentor #2 revealed that he has a mentor who is a pastor that he has known since childhood, and this mentor has seen his entire journey through life. He acknowledged he has been given a lot in life, and he is motivated to help others succeed. He has learned that finding the right technique that fits the personality and learning style of the mentee is important so that they have the opportunity to persist in their program of study and be successful. He expressed the NET provides an opportunity for students to

experience group empowerment, and if students take the initiative to get help there, they will be moving in the right direction toward taking ownership in their journey to persist and graduate in their chosen field of study.

*Mentor #3.* This 21-year-old male was influenced to become a mentor when he heard the director of the NET say, "If you get involved in school, you are more likely to finish." He feels that if you can encourage someone to do better, it is worth the time and energy. Mentor #3 was motivated by a mentor that he had at the college who stated, "a good example is better than a good sermon." He is motivated to help students persist when he sees the "light bulb turn on" in a mentee and knowing they are on their way to graduate. Mentor #3 stated, "If I can encourage someone to do better, this is all worth it. A life is an investment."

Mentor #4. While first coming for help at the NET, this 33-year-old female really enjoyed the personal exchanges with students. She was influenced by one of her mentors to further her education at a 4-year institution to study organizational leadership. Her motivation to mentor is a result of the inspiration that she has received from her mentees. Mentor #4 stressed the importance of the "sense of community" that the NET provides for students to keep going and finish their respective programs of study.

*Mentor #5.* Helping other people is something that she has always enjoyed doing. One of her mentors was the middle school swim coach who pushed the team very hard and was successful. Before enrolling at the technical college, Mentor #5 was a student at a 4-year institution and was always at the tutoring center for help, so she knows how it feels to need support. To Mentor #5, giving back is the right thing to do. She stated, "The journey was more difficult for me, so I would like to help other people not have to

struggle so much." One of her mentees, who is majoring in computer programming is getting help from her on basic literature. She viewed peer mentoring as a win-win situation at the NET because you get to meet a lot of people while helping others.

*Mentor #6.* This 31-year-old male majoring in Film Technology decided to become a mentor because it makes him feel good to pass on knowledge to someone in need. The mentoring experience also makes him feel more confident that he has the knowledge to help someone else. While he talked about a couple of different mentors he had prior to college, his karate instructor seemed to be the person who instilled discipline and the will to persist. These qualities have served him well in his role as a mentor. Mentor #6 stated, "By helping someone complete college, I am leaving footprints in the sand, and it just makes me feel good to know that I have helped them along the way."

*Mentor* #7. The 32-year-old Licensed Practical Nursing (LPN) student became interested in becoming a mentor when she did not pass one of her nursing finals. She went to the NET to study for the re-take. In the process, she was able to mentor other nursing students who had just started in the program. Mentor #7 expressed that it would have been advantageous if she had a mentor during her first year of college when a lot of people give up and drop out. She talked about the NET being a good place for students to interact socially and how much they feel at home. She mentioned that many students did not come to the NET when it first opened because they were intimidated. But through "word of mouth" students began talking with their friends and more students started coming. Her biggest challenge as a mentor has been working with older students who have never been on a computer and getting them past their fears.

*Mentor #8.* This 36-year-old mentor saw the need for peer mentoring in the classes that he was taking, and was asked by the staff at the NET to become a mentor. He was influenced by his dad who possessed the qualities of intelligence, patience, and guidance in helping others. Mentor #8 expressed that his ultimate goal is to help students pass a test, graduate, or achieve a certification. Once he knows the mentees goal, he can devise a plan and encourage the mentee to stick with it until the goal is met. Mentee #8 felt that the social interaction at the NET is an important factor in the equation of a student's decision to persist and graduate. He also thought that the visibility of the NET will help lure more students in to get help and provides for a more inclusive campus. He stated, "Someone who is a social butterfly will attract other students and bring them in."

*Mentor #9.* This participant saw the need for mentors in her classes and once she learned that there was a mentoring center on campus. She believed that being a mentor will add to her resume and demonstrate leadership ability, enabling her to get accepted at a four-year institution. She explained to her mentees that they need to use what they learned in the "real world" and apply it to their field of study. She expressed that she cannot imagine not having the NET, "I would say that students at the NET are more likely to persist when compared to other students."

*Mentor #10.* This Licensed Practical Nursing (LPN) student was first introduced to the NET as a mentee after failing one of her nursing exams. She began studying at the NET with three other LPN students and later became a mentor there. Mentor #10 discussed her passion to mentor other students because of the importance of education and starting a career. She feels that encouragement helps a student get more involved in the college, and they are more likely to persist and graduate. She has recommended the

NET to other students because the experience helped her. Mentor #10 stated, "A lot of students are on a budget and cannot afford to pay a tutor, but there is no charge for services at the NET."

Research Question 1: Themes from Interviews with Mentors

The first research question was designed to understand participants' perceptions of the peer mentoring experiences that had an impact on student persistence and retention at a technical college. Transcripts of interviews for each of the ten mentors were analyzed by identifying key ideas, phrases, or quotes that represented the essence of their responses to the interview questions (see Appendix D). These themes were then compared across ten mentors. Themes that were found in the majority of the participant responses are presented below with representative quotes from participant interviews.

### Footprints in the Sand

The ten mentors conveyed different experiences in relation to becoming a mentor. Four of the mentors first came to the mentoring center as mentees because they needed help and later were able to give back to others. All of the participants expressed that they became mentors because of the personal satisfaction they received from helping somebody else. All of the mentors had the experience of being mentored by someone, often a pastor or spiritual leader. One mentor referenced the poem by Mary Stevenson, "Footprints in the Sand." The meaning of this poem in relation to the mentors is that they can walk beside their mentees, helping them to succeed, but sometimes they have to pick the mentee up, and carry them for a while, leaving only one set of footprints in the sand. Two themes emerged and are presented in Table 21: giving back and a mission to serve.

### Table 21

## Reasons for Becoming Mentors

Themes	Quotes
Giving back	"I feel obligated to give back what I have been freely
	given." (Mentor #2)
	"It makes me feel good to pass on knowledge that I know
	someone else might not be proficient in." (Mentor #6)
	"I guess for me, the journey was more difficult so I would
	like to help other people not struggle so much." (Mentor
	#5)
Mission to serve	"I am an older student, 57 years old and a lot has been
	given to me from my God, I feel obligated to give back
	what has been freely given." (Mentor #2)
	"He (my mentor) taught us how to teach other people and
	to serve as in servant leadership." (Mentor #1)
	"By helping someone complete college, I can help leave
	footprints in the sand and it just makes me feel good to
	know that I helped them along the way." (Mentor #7)

## Sense of Community

The majority of mentors expressed that persistence was more likely to be achieved when students interact with one another and a "sense of community" has been built. It was clear that they understood their role as a mentor included more than just tutoring. They also focused on creating opportunities for their mentees to get connected with other students. The theme of social involvement as a key to persistence and graduation is presented in Table 22.

Table 22

Theme	Quotes
Social involvement	"When you go to a party and don't know anybody,
	you are likely to leave early. But if you know people,
	you are likely to stay. That also applies to persistence
	in college." (Mentor #3)
	"I think that encouragement helps someone get more
	involved at the college and they are more likely to not give
	up." (Mentor #10)
	"I think that when you are involved, you feel a sense of
	community. To experience the college campus, you need
	to mingle with other students." "I think the students who
	are socially involved, get more out of their education."
	(Mentor #4)

Mentors Believe Social Involvement is Critical to Mentees Persistence and Graduation

### The Challenge of Differentiation

The challenges reported by mentors can be characterized by the need to differentiate their strategies based on the unique attributes of each student. Providing effective academic support involved identifying a tutoring strategy that matched the mentee's approach to learning. Additionally, there was a need for different approaches based on a student's self-esteem, their work ethic, and their commitment to helping themselves. Finally, the nature of the population at the NET, mentees who have been away from school for a long time, created its own challenges as some of the mentees struggled with computer competence and had large skill deficits in math, reading, or writing. For eight out of ten mentors, the challenges evoked their desire to be adaptable and create individualized strategies that would enable their mentees to succeed. Only one mentor expressed frustration with mentees lack of computer skills.

Factors that Impact a Mentor's Ability to Provide Effective Academic Support to Mentees

Theme	Quotes
Individualization	"My perception of learning is that people don't always
	learn the same way." (Mentor #2)
	"Finding the right technique is the most difficult challenge
	for me because I want them to be successful." (Mentor #2)
	"Figuring out how to reach each individual student is my
	biggest challenge in mentoring." (Mentor #7)
Low Self-Esteem	"They say they want to do well, but their actions do not
	match what they are saying. When we give them solutions
	and steps to get there, but they are not putting forth the
	effort. They are afraid to fail, possibly." (Mentor #1)

Attitude	"Trying to help people who won't help themselves. It was
	difficult when students would come into the NET and
	expect you to do their work for them." (Mentor #8)
Age & Educational Gap	"Well, the main thing down there was the older students.
	Getting them past their fears. Some of them had never
	been on a computer and you had to get them past their
	fear." (Mentor #6)

### Win-Win

Nine of the mentors expressed that they would recommend the mentoring experience to other students. The other mentor had concerns about needing more training for mentors to ensure that they have the right skill sets to help other students. All of the mentors spoke about the rewards they received as a result of serving as a mentor. One of the mentors described being a mentor as a win-win, situation, in which the mentors and mentees receive benefits from the relationship. The benefit of increased self-confidence and personal satisfaction are presented in Table 24.

### Table 24

### Benefits of Being a Mentor

Theme	Quotes
Self-Confidence	"Yes, I would recommend it because if you can teach
	someone the knowledge, then you really know the
	material." (Mentor #4)
	"I have a persistent drive and it helps me help other
	people." (Mentor #2)
Satisfaction	"Anybody who has mentored just once, will feel
	satisfaction when these students do well on an assignment,
	test, or graduate." (Mentor #8)
	"If I can encourage someone to do better, this is all worth
	it." (Mentor #3)

Research Question 2: Themes from Interviews with Mentors

The second research question was designed to explore participants' perceptions that impact of the gender or ethnicity of a mentor on their decision to persist and remain enrolled in a technical college. Transcripts of interviews for each of the ten mentors were analyzed by identifying key ideas, phrases, or quotes that represented the essence of their responses to the interview questions (see Appendix D). These themes were then compared across ten mentors. Themes that were found in the majority of the participant responses are presented below with representative quotes from participant interviews.

### We Are All Here To Get An Education

The mentors were unanimous in their assertion that race and gender did not create barriers in mentor-mentee pairings. The general consensus was that while the mentees may come from different backgrounds, everyone is at the college to get an education. In spite of their beliefs that race does not influence the effectiveness of the mentor-mentee relationship, two mentees recommended recruiting more African American mentors and three mentors stated that there was a need for more bi-lingual mentors.

Theme	Quotes
Diversity	"Most of the mentors are white. Maybe have more mentors
	of various races." (Mentor #6)
Bi-lingual	"There were a lot of problems finding students to mentor
	who were bi-lingual." (Mentor #9)
Common goal	"We are all here for the same common goal of learning
	and teaching. Having difference (mentoring students of
	different races), I can learn from them and they can learn
	from me." (Mentor #4)
	"I refer to Dr. King's speech in that one should not be
	judged by the color of their skin, but by the content of their
	character. I have tried to live my life that way." (Mentor
	#2)

Characteristics of Mentor/Mentee Pairings that Influence the Persistence of the Mentee

#### Peer Mentoring in a Technical College

The results of the interviews with ten persistent mentees, ten mentors, and five non- persistent mentees were used to provide insights into the role of a peer mentoring program at a technical college as it relates to student persistence and retention. After coding the interviews and identifying themes for each participant group, a selective coding method was used to develop the overarching themes that were consistent across the three participant groups.

Three overarching themes emerged in response to the first research question: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants? These themes were diamonds in the rough, the silo effect at a technical college, and more than tutoring.

*Diamonds in the Rough.* One of the key components of this peer mentoring program was a pervasive belief by mentors and staff that students who come to the NET have value. This belief surfaced in the mentor interviews and was corroborated by persistent and non-persistent mentees as they spoke about secretaries and other students who welcomed them and did not make them feel stupid for using this support system. One persistent mentee spoke about this when she said, "for some reason, they (peer mentors and the NET) want you to be successful. They give you energy, that we can do it. We are their reputation. We are like diamonds to the people at the NET. We are their diamond in the rough, not completely polished."

The peer mentors are not paid for their work with mentees. There was a sense of mission in the interviews with most of the peer mentors, best characterized by one mentor who said, "I feel obligated to give back what I have been freely given." All of the

mentors had received support from someone in their life. Many of the mentors had the experience of being unsuccessful in college and turning it around because of a mentor. Thus, they understood from first-hand experience that there was value in the "rough diamond" and that effective mentoring could make their mentees shine.

When the peer mentors spoke about the challenges of supporting fellow students, they mentioned the gaps in basic skills, the lack of basic computer skills, and attitudes that made it hard to have a positive impact on the mentee. This was expressed by one peer mentor who said, "They say they want to do well (the mentees), but their actions do not match what they are saying. When we give solutions and steps to get there, but they are not putting forth the effort. They are afraid to fail, possibly." In spite of the challenges, all of the mentors spoke about their drive to find solutions that would help their mentees be successful. One mentor said, "Finding the right technique is the most difficult challenge for me because I want them to be successful."

Peer mentors were described as friendly, encouraging, and supportive by the mentees. Both persistent and non-persistent mentees talked about the energy and enthusiasm of their mentors. One persistent mentee said, "They (mentors) will always talk to you. I feel better coming to the college now, I feel accepted." Even students who did not persist, expressed that mentors believed in them and encouraged them. One non-persistent mentee said, "They give me a sense of calmness and direction that I can do this."

Although the friendly spirit may have come natural for peer mentors, it was also intentional. All of the peer mentors spoke about the importance of providing this friendly environment to enable their mentee's to persist and graduate. One of the peer mentors

said, "When you go to a party and don't know anybody, you are likely to leave early. But if you know people, you are likely to stay. That also applies to persistence in college."

Many of the persistent mentees discussed a positive change in their sense of selfconfidence as it related to achieving their goal of attaining a degree or certificate. One persistent mentee said, "It changed my confidence 90% because it made me believe in myself." Although the persistent mentees spoke about the increased confidence and the role of encouragement in helping them persist, they also were aware of the hard work that they had to do in order to master skills and increase their grade point averages.

Getting encouragement and mastering basic skills resulted in higher grades for some of the persistent mentees. This combination supported an increase in their selfconfidence. Once persistent mentee stated, "They are always trying to build you up. If you do your due diligence, you will be successful." There was also a recognition of some persistent mentees that failure was a part of the learning process. "Even if you stumble, they will help you to get there and keep going."

In contrast, the non-persistent mentees discussed the encouraging nature of the peer mentors, but they did not speak about a change in self-confidence. "If you plan to finish, there are people there to help." It is notable that this non-persistent mentee did not say "when you plan to finish" instead there was an inference that this person was not sure if she would finish. This is not surprising since four of the five non-persistent mentees mentees were dismissed because of low grade point averages.

*The Silo Effect and Social Integration at a Technical College.* The NET is located in a three-story brick structure which serves as the anchor for allied health programs at the college. While the building is near the center of campus, it is not normally visited by

non-allied health students. The center is located on the ground floor and contains three spaces of different sizes to accommodate networking, engaging, and training activities. However, there is no outside directional signage that would indicate the NET's location. Since the NET is open to students from all academic programs at the college, the staff had to be creative in marketing the mentoring center to other academic programs on campus. When asking a question about recommending the NET to other students, this persistent mentee replied, "Yes, I have recommended the NET to a co-worker. I am trying to convince him to come."

The NET provided a comfortable, welcoming environment. The importance of this cannot be understated, since most of the mentees had a gap in their educational journey and were uncertain about their ability to succeed in college. One non-persistent mentee revealed, "I would go to the campus and I would get in the parking lot and I would not even go to class. But when I started going to the NET, I would go to class, they helped me a lot." This was also expressed by one of the persistent mentees, "Yes, it gave me a sense of belonging. There were days that I did not have the confidence. After speaking with my mentor, I was encouraged because they are very positive."

The NET provided a second home for these students. A place where they could socialize with friends, and even get something to eat. One non-persistent mentee described the NET as a "safe haven." Another non-persistent mentee stated, "Even when I did not feel like doing anything, they encouraged me and I felt like I belonged there."

The mentees discussed feeling a sense of belonging at the NET, but this feeling did not generalize to feeling that they were integrated into the larger institution. The NET is still relatively new on the campus as it is in its third year of operation. Many

students do not have classes in this building, so it may seem that it is separate from the rest of the college. The students do not live on the campus and have lives and jobs that take priority over non-academic events and functions at the college. These factors may contribute to its silo effect within the technical college. One persistent mentee said, "It gives me a sense of belonging to the mentoring program but not the college."

*Life Happens*. In spite of the fact that non-persistent mentees felt comfortable and valued at the NET, they did not persist. Additional factors in the lives of the non-persistent mentees had an impact on persistence for some students. While these mentees did not persist, the experience at the NET provided the inspiration and desire to return to the technical college.

In four of the five mentees, dealing with a series of life circumstances took priority over studying and going to the NET. One non-persistent mentee shared, "My dad passed away and then my brother passed away, it was a rough year. I am a school bus driver and I am planning to come back to college this summer."

An analysis of the interviews revealed three critical aspects of the peer mentoring program that influenced student success and persistence, those factors were academic tutoring, a supportive relationship with a peer mentor, and the provision of a comfortable, social environment.

### Research Question 2

Three overarching themes emerged in response to the second research question, in what ways, if any, does the gender or race of the mentor contribute to participants' decisions to persist and remain enrolled in a technical college. Those themes included competence, personal preference, and inclusion.

*Competence*. When considering the impact of having a mentor with similar gender or racial characteristics, nine out of ten, persistent mentees, four out of five non-persistent mentees, and ten out of ten mentors expressed that race was not an important factor in the success of a mentoring relationship. This feeling was expressed by the participants in each of the three participant groups. One persistent mentee stated, "No, the mentors that have assisted me, the color or sex does not matter. They address your needs." One non-persistent mentee said, "I relate to human beings. I am older and I don't have a problem with anyone based on their ethnicity and gender." One mentor replied, "The NET helps everyone. They are here to help everyone."

However, one African American non-persistent mentee stated that although she didn't feel the need to have a mentor of the same race, she thought other students might feel differently. "Most of the mentors are white. An ethnic minority person may feel intimidated. I can see how easy it can be for someone of their own ethnicity understanding each other better." Another non-persistent mentee refused to answer the question.

Most of the mentees expressed that the competence of the peer mentor was more important than their demographic characteristics. There were several comments about the importance of mentors being competent in the subject area they were tutoring. One persistent mentee said, "They have to know their craft and be willing to share and most mentors will share in a way to make sure that you get it." In contrast, one non-persistent mentee stated, "I didn't really have someone who knew CIS. Due to the lack of help, I dropped out. I am in a different college now and am doing well." Additionally, two persistent mentees and one mentor discussed the importance of having bi-lingual mentors

to tutor students whose first language is not English. One of the persistent mentees stated, "There was one girl in my class from Venezuela. She had a hard time, but she spent more time at the NET than I did. I think it would help if they found an interpreter."

*Personal Preference*. Although the majority of participants concluded that race was not a factor in mentoring success, a few participants admitted that they don't feel as comfortable when they are paired with someone of a different gender. One female persistent mentee replied, "I think a woman the same age as me would be ideal." One persistent mentee stated, "I guess that I would prefer someone my age, but then a young person may be more up on different methods to help." One female non-persistent mentee stated, "One time I had a male, and it made me feel uncomfortable. Ethnicity does not matter to me."

*Inclusion.* The predominant belief among participants in this study was that everyone was welcome at the NET regardless of race, gender, ethnicity, or age. One persistent mentee stated, "The NET bridges the gap to bring people together." However, several of the participants mentioned that the lack of bi-lingual mentors might prevent some students from coming to the NET and feeling that sense of belonging. One persistent mentee remarked that since mentors are primarily white, and that since there are many African American students at the technical college, it might be important to recruit more African American mentors. This thought was similar to one of the mentors who stated, "Maybe have more mentors of various races. Most of the mentors are white, maybe a few African American." One mentor stated, "Many students who cannot speak English well probably will not come to the NET. Something geared to having more variety with materials with examples and options for students with other languages. They

would feel more comfortable." Another mentor said, "There were a lot of problems finding mentors who were bi-lingual. It was hard to find the connection. Someone on staff who is bi-lingual would be good."

The results of this study point to the need for diversity in mentors in order to provide opportunities for mentees to choose a mentor based on their personal preferences regarding race, gender, and age. There was a belief among the majority of participants that increasing in the diversity of mentors in the program would lead to an increase in the diversity of students participating in the NET. Participants did express the importance of matching a mentor who was competent in the subject area he/she was tutoring, with mentees needing that expertise. Although the mentors demonstrated competence in their subject areas, there was a lack of available mentors for a few subjects like computer information systems.

#### Summary

In this chapter I discussed the results of the interviews with the three respective groups: persistent mentees, non-persistent mentees, and mentors. Data from the interviews were used to answer two research questions. Initially, themes were identified from each participant group. Overarching themes were developed by combining the central ideas from all three groups in response to the research questions. In Chapter 5, the results and implications of this study for practitioners will be discussed, and recommendations for future studies will be made.

## Chapter V

## DISCUSSION AND CONCLUSION

Colleges and universities have increased their focus on student persistence and retention in response to declining enrollments and budgetary issues (Webster & Showers, 2011). When students drop out of college, it not only affects the welfare of the institution but also the communities they serve. By the year 2025, most jobs in America will require an educational credential beyond a high school diploma (Complete College America, 2009).

The persistence issues at a technical college are unique because of the nature of the student population, primarily non-traditional students (over 25 years of age), the 2year workforce development focus, and the fact that there is no residential component to the institution. This study was designed to explore a gap in existing research on persistence and retention issues in a technical college environment. The technical college that was the site of this research instituted a peer mentoring program to support the academic success of students and encourage persistence toward a degree or certificate.

The purpose of this study was to identify and understand the characteristics of a peer mentoring program that contributes to persistence and retention among participating students in a technical college setting. In this chapter, I will discuss the findings and implications for administrators in technical colleges who are searching for ways to increase student persistence and retention.

### Discussion

Data collected from interviews with ten persistent mentees, five non-persistent mentees, and ten peer mentors were used to answer the first research question: In what ways, if any, do peer mentoring experiences impact student persistence at a technical college as reported by participants? In answering this question, it is essential to be familiar with characteristics of the non-traditional students participating in the program. One of the persistent mentees described herself and other students participating in the NET, as "diamonds in the rough." This phrase represents the nature of students at the technical college who came to the NET for peer mentoring, and peer mentors' commitment to having a positive impact on their mentees despite the challenges that the mentees brought with them.

## Diamonds in the Rough

The mentees in this study tended to be older, with an average age of 47.8 and all mentees had gaps in their educational journey. The majority of the ten participants in the persistent mentee group and the five participants in the non-persistent mentee group did not finish high school at the traditional age of 18. Additionally, many of these students did not receive their GED until several years later. Nine of the ten persistent mentees and four of the five non-persistent mentees enrolled in college after high school but dropped out. One persistent mentee stated, "I went to college for about a year and then I went back to work. I worked for the next 25-30 years without thinking about going back to school. I started thinking about school when I was injured on the job with a broken leg."

Gaps in education are predictable with older student populations that may be working full-time, have families, or have life circumstances that interrupt their college

completion. The findings from this study reflect Bailey and Alfonso's (2005) assertion that interruptions in college enrollment are more likely to occur in non-traditional student populations compared to younger, more traditional college students.

Tinto (2006) asserted that community college students (primarily non-traditional) typically begin college with a different set of challenges when compared to a traditional four-year college student. In this study, participants experienced significant challenges that were consistent with the gap in their educational journey. Some of those challenges were skill and knowledge deficits in basic areas such as reading, math, and computer skills.

All of the mentees expressed an initial lack of self-confidence related to their ability to be successful in college. One persistent mentee stated, "In class, I sometimes felt embarrassed to ask questions, especially when I would as the same question again." This feeling was also experienced by one non-persistent mentee who replied, "When I first started at the NET, I was a little overwhelmed since it had been so long, and I was having health problems relating to memory." Uncertainty about what to expect in college, and a need to get academic support led these mentees to the NET to participate in the peer mentoring program. Their experience aligns with the findings of Williamson, Goosen, and Gonzalez (2014) who reported that most (non-traditional) community college students need significant support and direction in navigating through post education successfully.

Two aspects of the peer mentoring program in this study that contributed to persistence were academic and emotional support. Academic support was provided by volunteer student mentors at the NET in a variety of subjects. Many of the participants

were paired with mentors to improve basic computer, math, and English skills. As a result, some of the mentees reported that their grades improved and they were able to persist to the next semester. One persistent mentee said, "I was very weak in math. They worked with me and did not make me feel foolish." Another persistent mentee stated, "My vocabulary increased. It has helped me in writing. My grade point average has improved since coming to the NET."

It was reported that volunteer student mentors were also flexible in their availability with their mentees. This was particularly important for older, non-traditional students who may have families and jobs competing for time on their schedules. One persistent mentee stated, "I am able to e-mail and call my mentor on the phone. If after school or on weekends, I was still able to receive help." With many of the participants acknowledging being out of the classroom for a long period of time in their educational journey, the NET offered a critical resource for alleviating academic deficiencies. One persistent mentee stated, "My mentor taught me to express myself in words, make a list, make a sentence out of it, and put a paragraph together and express myself."

Emotional support is engrained in the positive atmosphere at the NET, that goes beyond the help that mentees receive from their mentors on the academic side. Mentees are encouraged by their mentors and staff at the mentoring center. The Net provides a sanctuary for these mentees, a place where they can be surrounded by positive people who are there to listen and support each other. The empathy and emotional support provided by the mentors and staff were as critical as the academic support that was provided. One non-persistent mentee, "They were great. They took the pressure off of me in every sense of the word."

The findings from this study supported Ehrich, Hansford, and Tennent's (2004) conclusion that the results of a mentoring program could include increased confidence for the mentees. One persistent mentee confirmed this finding when she said, "I have confidence in myself now and I know that whatever class that I sign up for, the NET is here for support." This feeling was echoed by another persistent mentee who stated, "The NET made me be more open in the classroom and feel more comfortable with my peers. I became unafraid to tell my peers how I felt and what my fears were."

## The Silo Effect and Social Integration at a Technical College

While allied health students represent the largest group at the NET, students in other programs including business management, computer programming, criminal justice, and horticulture are served there. The NET is still relatively new on campus as it is in its third year of operation. Many students do not have classes in this building, so it may seem that it is separate from the rest of the college.

The NET served as a second home for these students. One non-persistent mentee described the NET as a "safe haven." There are computers and soft chairs for students to study and work with their mentors, and snacks that are available at no charge for the mentees and mentors. The importance of having snacks at the NET was stated by this persistent mentee, "I come early in the morning because I do not have time to eat but they provide snacks, fruit, and coffee. Many students do not have the money to eat. I get my bread and coffee in the morning. They feed you mentally and spiritually."

With a place to go that feels like home, the participants expressed they gained confidence and felt prepared to complete their coursework and persist. One mentee from the persistent group stated, "The NET gives you the hope and motivation that you will

make it. When you see students coming in, you feel the motivation that you will make it, and they are there for you. I feel that they are my guardian angels." It is important to note that four of the five non-persistent mentees expressed a connection to the NET as a place they described was like home. One of the persistent mentees stated, "The NET motivated me. That is why I am here and still here. If the NET was not here, I would not be here." One mentee from the non-persistent group said, "I feel like the NET is a little family on the corner. You go to the NET, and they find someone to help you. I feel more at home at the college because of the NET."

The NET afforded a place for the mentees to go, knowing that there would be someone there to listen to them, a place where they would receive encouragement. One of the persistent mentees stated, "Yes, it gave me a sense of belonging. There were days that I did not have the confidence. After speaking with my mentor, I was encouraged because they are very positive."

Tinto (1975) believed that developing a "sense of belonging" is crucial to the success of a college student as related to persistence. The "sense of belonging" can be defined as the sense that members of a community feel that they belong and that they matter to one another (Morrow & Ackermann, 2011). Bean and Metzner (1985) also point to social integration as a factor that influences persistence in non-traditional students. The connection that college students feel towards their college or university can play a key role in their quest to persist. Traditional students may gain that sense of belonging from activities like living in residence halls, attending football games, and joining clubs. Most of the non-traditional students at the technical college have jobs and families leaving little time for social activities at the college. Additionally, they do not

live on campus. In spite of this, all of the mentees expressed that they felt a sense of belonging.

In contrast to Tinto's (1975) assertion that when students feel a sense of belonging to the college, they are more likely to persist, the majority of mentees in this study expressed they did not feel a sense of belonging to the college. Their experiences of belonging and social integration were associated with the NET, not the entire college. One mentee from the persistent group stated, "I don't feel that the college is for me. The NET is the only reason that I am here. The NET gives me a lot more than I get from my instructors."

It appears that sense of belonging and social integration are the critical factors, not whether the students attribute belonging and social integration to the entire college. It is also possible that as these students become more involved in their chosen pathway, they will begin to affiliate with people in the same academic program and increase their sense of belonging to include their academic program area.

## Life Happens

One of the functions of a peer mentor at the NET is tutoring. Although building academic skills and confidence are critical, the data in this study support the notion that it takes more than tutoring to support mentees to persist. The combination of academic support, people who care, a place where a student can be comfortable, and an environment that promotes friendships was effective in supporting the persistent mentees to continue in their academic journey.

The non-persistent mentees experienced these positive aspects of the NET, but it was not enough to keep them enrolled in college. Even though the students in this group

did not persist, the NET made a positive impression while they were there. One nonpersistent mentee said, "When I return to college, I will definitely come back to the NET."

Two variables that might explain the difference between the success of the persistent mentees and the non-persistent mentees are life circumstances and the amount of time they spent at the NET. It is important to note that there was a measurable difference in the number of times the persistent mentees came to the NET compared to the non-persistent mentees. The average number of visits for the persistent mentee group was 30.2 as compared to 4.9 for the semester being studied. Some of the reasons for the low numbers for the latter group were related in part to life events including family emergencies and job schedules. Voorhees (1987) included the number of hours a week spent studying after classes as a factor in his retention and persistence model that focused on non-traditional students.

In four of the five mentees, dealing with a series of life circumstances took priority over studying and going to the NET. The findings in this study support Voorhees (1987) contention that the external environment played more of a role in the persistence of nontraditional students than social integration. The findings in this study reveal that there is a clear relationship between external factors and social integration. If a student is unable to consistently attend classes and tutoring sessions because of life circumstances, the opportunities to integrate are significantly reduced.

There were three critical aspects of the peer mentoring program that influenced student success and persistence. Those factors were academic tutoring, a supportive relationship with a peer mentor, and the provision of a comfortable, social environment.

The availability of volunteer student mentors proved to be the link that provided hope for both the mentees who persisted and for those who plan to re-enroll at the technical college. In spite of the positive impact of the NET on persistence, life circumstances for these non-traditional students had a powerful negative effect on the ability of some of the mentees to persist.

### Research Question 2

Three overarching themes emerged in response to the second question: In what ways if any does the gender or race of the mentor contribute to participants' decision to persist and remain enrolled in a technical college? Those themes included personal preference, competence, and inclusion.

*Personal Preference*. When considering the impact of having a mentor with similar racial characteristics, the majority of participants in my study expressed that the relationship with their mentor was not influenced by the race of the mentor. One of the African American persistent mentees shared that ethnicity mattered to her in relation to success in mentee-mentor pairings and stated, "Ethnic minority students learn differently than other students." This African American non-persistent mentee expressed that it did not bother her to work with a white mentor, but she could understand how it might be an issue for others.

Likewise, one white non-persistent mentee stated, "Everybody seemed to get help when they needed it. My mentor was black, and I did not have any problems." An African American female non-persistent mentee said, "I don't have a preference, but I related to white mentors better than black mentors."

The findings in my study are not consistent with research that revealed mentors with similar backgrounds in relation to students of color enabled the mentees to gain a sense of academic self-efficacy (Syed, Azmitia, & Cooper, 2011). In my study, it appeared that individuals might have preferences regarding the race of the mentor, but those preferences did not generalize to all students.

Several of the mentees remarked that they would like someone closer to their own age but most concluded that younger mentors were probably more current regarding knowledge of the subject matter. One female persistent mentee stated, "I guess that I would prefer someone my age, but then a young person may be more up on different methods to help." However, this female persistent mentee said, "I would like there to be more mature students to help older people. The younger people don't seem to have the confidence that older people have."

A few female participants mentioned that they would be more comfortable with a woman as their mentor. One female non-persistent mentee stated, "Gender makes me a little uncomfortable. One time I had a male and it made me feel uncomfortable." A female persistent mentee replied, "I think a woman the same age as me would be ideal."

There are differing viewpoints in the research regarding the impact of having a mentor of the same race, gender, and sex as the mentee. Lockwood (2006) found that females, but not male students, are more motivated by a role model of their own gender. In contrast, Campbell and Campbell (2007) matched mentors and mentees of the same

gender. They came to the conclusion that gender sameness did not yield any advantages as compared with students whose gender was not matched.

*Competence*. The findings from this study suggest that having a mentor who is competent in teaching the content was more important to mentees than having a mentor matched by gender, race, or age. One persistent mentee said, "They have to know their craft and be willing to share, and most mentors will share in a way to make sure that you get it." Another persistent mentee stated, "The mentor has to know the material and someone who has already had the class has a big advantage." A non-persistent mentee replied, "I really liked that there were students as mentors because they had been there and done that."

*Inclusion.* The predominant belief among participants in this study was that everyone was welcomed at the NET regardless of race, gender, ethnicity, or age. However, several participants remarked about the need to increase the diversity of the mentors. One persistent mentee said that since mentors are primarily white, and there are many African American students at the technical college, it might be important to recruit more African American mentors. One of the mentors stated, "Maybe have more mentors of various races. Most of the mentors are white, maybe a few African American."

Several of the participants mentioned that the lack of bi-lingual mentors might prevent some students from coming to the NET and feeling that sense of belonging. Two persistent mentees and one mentor discussed the importance of having bi-lingual mentors to tutor students whose first language is not English. One of the persistent mentees stated, "There was one girl in my class from Venezuela. She had a hard time, but she spent more time at the NET than I did. I think it would help if they found an interpreter."

Since there are a limited number of mentors and most are young, and white, it is possible that mentees were desperate for the assistance, were able to build a relationship with the mentor, and concluded that race, gender and/or age were not factors. This does not mean that they might not have been more comfortable with a mentor who shared race, gender, or age characteristics with them.

Given the small number of participants in my study, it cannot be concluded that matching mentors with mentees based on race, gender, or age is not necessary. The fact that many of the mentees and mentors at the NET expressed a need for more diversity among mentors suggests that there is a need to increase the diversity of the mentoring staff. If this were accomplished, individuals who do have a preference for same race, age, and gender would have the opportunity to make a choice that was more comfortable for them.

### Limitations of the Study

This study was limited by the extent to which participants were at ease conveying their experiences, feelings, and thoughts during the interviews. The study involved a peer mentoring program for students at one technical college in the southeastern United States. The findings are not generalizable to other technical colleges.

## Implications for Practice

The findings from this study indicate that peer mentoring programs can positively influence persistence and retention at a technical college. Thus, technical college administrators should consider implementing a peer mentoring program with characteristics similar to the ones presented in this study. Attention to the physical environment for the peer mentoring program, as well as the diversity of mentors should

be considered in the development of a program. Identifying peer mentors who can tutor but who also have empathic, responsive, encouraging personality traits will be an important factor in the success of a peer mentoring program at a technical college. Colleges have recognized the importance of developing innovative programs in relation to student engagement. Peer mentoring is just one program that can be implemented by technical college administrators.

## Recommendations for Future Research

Given the low retention rates at technical colleges, administrators need to learn more about intervention programs involving peer mentoring. One recommendation is to study the role of gender, race, and ethnicity in the pairing of mentors by expanding the participant pool at the institution where the study was conducted.

Secondly, there is a need for research that explores whether the sense of belonging expanded beyond the NET once the participants were in their discipline/pathway. It will also be important to identify the number of persistent mentees who achieve their goal of earning a degree or attaining a certificate.

A third recommendation would be to replicate this study in different settings such as a technical or community college in a different region of the United States with comparable demographics.

A final recommendation would be to replicate this study at the same technical college in five years to determine if any changes have occurred in the characteristics of the mentoring program as related to persistence and retention.

## Conclusions

The findings of this study support the need for institutional intervention programs that foster persistence and retention. It would be advisable to deliberate on all aspects of the peer mentoring program that was studied. Considerable emphasis is placed on the mentors and mentees in this program; however, administrative support and a positive college climate are also essential. The college administration must be committed to the peer mentoring program in their thoughts, words, and actions which will affect the college culture. The study revealed that many students are not prepared for college, which, in part, is due to gaps in their respective educational journeys. Therefore, the need for intervention programs that will foster persistence and retention is essential for segments of the technical college student population. Technical colleges that provide peer mentoring will create an opportunity for their students to persist and graduate.

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# APPENDIX A:

Institutional Review Board Protocol Exemption Report



Institutional Review Board (IRB) for the Protection of Human Research Participants

# **PROTOCOL EXEMPTION REPORT**

PROTOCOL NUMBER: 03322-2016

INVESTIGATOR:

Wade Mark Andrews

PROJECT TITLE: The Impact of Peer Mentoring on Persistence and Retention

### INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is **exempt** from Institutional Review Board oversight under Exemption Category(ies) 2. You may begin your study immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (<u>irb@valdosta.edu</u>) before continuing your research.

### ADDITIONAL COMMENTS/SUGGESTIONS:

Although not a requirement for exemption, the following suggestions are offered by the IRB Administrator to enhance the protection of participants and/or strengthen the research proposal:

N/A

If this box is checked, please submit any documents you revise to the IRB Administrator at <u>irb@valdosta.edu</u> to ensure an updated record of your exemption.

# ElizabethW.Olphie

<u>2/10/16</u>

Elizabeth W. Olphie, IRB Administrator Date

Thank you for submitting an IRB application. Please direct questions to <u>irb@valdosta.edu</u> or 229-259-5045.

Revised: 12.13.12

# **APPENDIX B:**

Letter of Cooperation

February 1, 2016

Ms. Leila Wells – Rogers Director of Quality Enhancement Southern Crescent Technical College Griffin, GA 30223

Dear Ms. Wells Rogers:

Per our previous discussions and meetings, I am a student in the Education Leadership Doctoral Program at Valdosta State University. I will be conducting a qualitative study involving the student peer mentoring program at Southern Crescent Technical College (SCTC). The purpose of the study is to identify and understand the characteristics of a peer mentoring program that contribute to persistence and retention among participating students in a technical college environment. Data collection will be achieved through semi-structured interview sessions.

The proposed time frame for data collection will be during spring semester 2016. All research involving student participants will be on the SCTC regular Monday – Thursday schedule, excluding holidays. Please let me know if you have any questions or need additional information. Thank you and I look forward to working with you on my study.

Sincerely,

Mark Andrews

# APPENDIX C:

Institutional Review Board Model Consent

#### VSU MODEL CONSENT STATEMENT FOR ANONYMOUS SURVEY RESEARCH

Instructions: This model consent statement is intended to serve as a guide for addressing informed consent requirements for anonymous survey research. This statement may be modified as appropriate for your research project but must include all the components of consent included in the model. A consent statement should be used in a cover letter or instructions page, placed at the top of a survey instrument, or included in a welcome page for a web-based survey. It may also be read as a script in a group survey situation. Use Option 1 as a model for surveys that do not ask sensitive questions. Use Option 2 as a model, and provide additional explanation if necessary, if questions that participants might find embarrassing or briefly upsetting or might cause recall of trauma and/or result in more than brief and/or serious emotional distress. Do not ask the participant to sign this statement.

#### Option 1 (For use when the survey asks non-sensitive questions):

You are being asked to participate in a research project involving interviews, entitled *"The Impact of Peer Mentoring on Persistence and Retention at a Technical College,"* which is being conducted by Wade Mark Andrews, a student at Valdosta State University. The interview is anonymous. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to participate in the interview, to stop responding at any time, or to skip any questions that you do not want to answer. You must be at least 18 years of age to participate in my study. Your completion of the interview serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older.

Questions regarding the purpose or procedures of the research should be directed to Wade Mark Andrews at 678-603-9388 or wmandrews@valdosta.edu. My study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or irb@valdosta.edu.

NOTES TO RESEARCHER: If you are administering the survey via the Internet, make sure that the software parameters are set to allow participants to skip questions. If you will be making the research results available on a website, you may inform the participant of where and when the results will be posted. Do not instruct the participant to provide his/her name and mailing or email address on any survey documents or suggest any other method of requesting research results that destroys the participant's anonymity. If you will be mailing the results to the participants, provide them with a blank envelope on which they may write their name and address. Collect these envelopes separately from completed surveys so that survey responses cannot be linked to identities.

# APPENDIX D:

Interview Protocol

# Interview Protocol

# Questions for Mentees

RQ 1: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

- 1) What do you hope to achieve through the mentoring program at the college?
- 2) Do you feel that the mentoring program has given you a "sense of belonging" to the college? Why or why not?
- 3) Do you think that the mentoring program has given you additional incentive from a social integration perspective toward the completion of college? Why or why not?
- 4) What types of things does your mentor do to support you in relation to being more engaged at the college?
- 5) While participating in the program, what types of challenges regarding work life balance do you encounter in relation to persisting to the next semester?
- 6) Do you think that the mentoring program helps you in your quest to graduate? Why or why not?

RQ 2: In what ways, if any, does the gender or ethnicity of the mentor contribute to a participant's decision to persist and remain enrolled in a technical college?

- 1) Describe you educational background in relation to preparation for college.
- 2) Do you feel that there are barriers to ethnic minority students at this college that the mentoring program is addressing? Is so, please describe.
- 3) Does the mentoring program provide for a social network for you at the college?
- 4) Do you believe that you relate to your mentor differently based on your ethnicity and/or gender? Why or why not?
- 5) Do you think that the ethnicity or gender of your mentor has any correlation with the incentive toward the completion of college? Why or why not?
- 6) What mentoring experiences that you have had would cause you to recommend the mentoring program to other students?

# Questions for Mentors

RQ 1: In what ways, if any, do peer mentoring experiences impact student persistence and retention at a technical college as reported by participants?

- 1) Did you have a mentor? If so, how has he or she influenced you in your educational journey?
- 2) Do you feel that mentees who are socially involved at the college are more likely to persist? Why or why not?
- 3) What motivates you to mentor other students to persist and complete college?
- 4) What is the most challenging part of mentoring mentees to persist?

5) Do you feel that your commitment has helped your mentee's persistence? If so, how?

RQ 2: In what ways, if any, does the gender or ethnicity of the mentor contribute to a participant's decision to persist and remain enrolled in a technical college?

- 1) Would you recommend the mentoring experience to other students? If so, why?
- 2) Do you feel that you relate to your mentee differently based on your ethnicity and/or gender? Why or why not?
- 3) Give examples of things you have done as a mentor that enabled your student to continue working toward his or her degree.
- 4) In what ways could a mentoring program like the learning center assist ethnic minority students to complete college?

# APPENDIX E:

Interview Schedule

Interview Schedule

1 <sup>st</sup> Interview				2 <sup>nd</sup> Interview	2 <sup>nd</sup> Interview
Category		Date	1 <sup>st</sup> Interview Length	Date	Length
1	AAF	3/7/16	29:55	3/21/16	35:16
2	AAF	2/22/16	20:09	3/23/16	30:20
3	AAF	2/22/16	29:00	3/23/16	36:43
4	AAF	3/30/16	25:42	4/7/16	33:39
5	AAF	2/25/16	25:00	3/29/16	33:00
6	AAM	3/7/16	21:22	3/25/16	30:05
7	WF	3/15/16	29:55	3/22/16	36:43
8	WF	2/24/16	30:20	3/22/16	33:39
9	WM	2/24/16	35:15	4/7/16	38:44
10	WM	3/30/16	36:10	4/5/16	39:10

No	n-Persistent	Mentees	
Cat	egory	Interview Date	Interview Length
1	WM	3/9/16	18:09
2	WF	4/6/16	22:22
3	AAF	4/7/16	25:32
4	AAF	4/10/16	27:00
5	AAF	4/27/16	30:45

Mei	ntors			
Cate	egory	1 <sup>st</sup> Interview Date	1 <sup>st</sup> Interview Length	
1	WF	3/16/16	30:22	
2	WF	3/16/16	37:39	
3	WF	3/16/16	35:00	
4	WF	2/29/16	36:44	
5	WM	2/29/16	35:15	
6	WM	2/27/16	38:02	
7	WM	2/29/16	40:05	
8	AAF	2/29/16	33:35	
9	AAF	2/24/16	36:20	
10	AAM	2/29/16	34:33	

# **Final Approval of Dissertation**

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The Impact of Peer Mentoring on Persistence and Retention at a Technical College Tille of DissertaUon

11-08-2016

Date of Defense

Committee Approval (Check committee member(s) role where appropriate.)

Karla M. Hull

William F.Truby

Dissertation Committee Member

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l.bDate

Dissertation Committee **!!I** Chair D Co-Chair

Dissertation D co.Chair D Member Herbert R. Fiester Dissertation Research Member James G. Archibald Dissertation Committee Member

Signature Date Signature Date ſ

This form must accompany the dissertation and both must be submitted to the Graduate School no later than 2 weeks prior to anticipated graduation.

Accepted by the Graduate School

Signature

Date

Copies to befiled in the major department and the Graduate Dean's Office.

This dissertation, "The Impact of Peer Mentorig on Persistence and Retention at a Technical College," by Wade M. Andrews, is approved by:

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