

DIFFERENCES IN ON-CAMPUS/OFF-CAMPUS RELATIONSHIPS, STUDENT
EFFORTS AND ENGAGEMENT, AND THE USE OF SUPPORT SERVICES
BETWEEN FIRST-TIME IN COLLEGE AND NON FIRST-TIME IN COLLEGE
COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

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Ericka Landry

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Ericka Landry

APPROVED:

Dr. John R. Slate
Dissertation Chair

Dr. Frederick C. Lunenburg
Committee Member

Dr. George W. Moore
Committee Member

Dr. Wally Barnes
Committee Member

Approved:

Dr. Stacey L. Edmonson
Dean, College of Education

DEDICATION

First, I must begin by giving thanks to Almighty God for my life, health, and strength to start and complete this higher educational journey – the dissertation. He that began a good work in me is certainly able to complete it. My God has given me the grace, peace, mental capacity, strength, perseverance, and GRIT to achieve this monumental goal. HALLELUJAH! I am positively sure that without Him I would not have been able to finish this amazing milestone. Next, I must give a special big “Thanks” to my husband, Anthony Landry, for his unwavering diligence, dedication, and support to me and our family during this journey. He was instrumental in this process *before* day one up until the end – graduation. I appreciate all the major sacrifices made to allow me time to work, such as, extra household duties, chauffeuring services, homework help for the children, and many other duties as assigned.

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to see me walk the stage, but I know she is grinning and singing from your heavenly choir.

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ABSTRACT

Landry, Ericka, *Differences in on-campus/off-campus relationships, student efforts and engagement, and the use of support services between first-time in college and non first-time in college community college students: A nationwide study*. Doctor of Education (Educational Leadership), May 2018, Sam Houston State University, Huntsville, Texas.

Purpose

The purpose of this study was to determine the degree to which differences were present between First-Time in College (FTIC) community college students and non-FTIC community college students with respect to specific student behaviors. Of particular interest was whether reported student effort and student engagement differed between these two groups of community college students. Also of interest was whether these two groups of community college students differed with respect to student motivation and academic challenges. By analyzing responses to four survey items on a national dataset, information was obtained concerning the presence, or absence, of differences between FTIC community college students and non-FTIC community college students.

Method

A causal-comparative research design was used in this journal-ready dissertation. Data from the Community College Survey of Student Engagement (CCSSE) were used in this investigation. Specifically analyzed herein were archival data, a 25% random sample from a 2014 three-year CCSSE cohort of community college students.

Findings

Statistically significant differences were revealed in on-campus and off-campus relationships, student engagement and effort, and the use of institutional support services between FTIC and non-FTIC community college students. Overall, higher levels of support from family and friends were reported by FTIC students than by their non-FTIC

peers. However, FTIC students were less likely to report supportive on-campus relational engagement (i.e., student-student, student-faculty, and administrative/personnel) than was indicated by their non-FTIC peers. Results regarding active and collaborative learning and academic challenge benchmark scores were not congruent with the existing literature as both FTIC students and non-FTIC students responded in a similar manner.

Statistically significant differences were revealed between FTIC and non-FTIC students, in their student effort benchmark scores and in their use of institutional support services (i.e., use of academic advising/planning, use of peer tutoring, use of skill labs, use of computer labs, and use of student organizations). Albeit with small effect sizes, FTIC students reported higher levels of student effort and engagement than did their non-FTIC peers. Concerning institutional support services, all FTIC students were more likely to use the support services than were their non-FTIC counterparts at the community college.

Keywords: Academic challenge, Academic support services, Belonging, Community College Survey of Student Engagement (CCSSE), First-time in college (FTIC), First year seminar, Institutional support, Student effort, Student engagement, Student relationships

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CHAPTER I

INTRODUCTION

Community colleges, which began in the early 20th century, continue to thrive in higher education in the United States (Cohen, Brawer, & Kisker, 2014). The original mission of community colleges was to “provide access to postsecondary educational programs and services that lead to stronger, more vital communities” (Vaughan, 2006, p. 3). Although dramatic economic and societal changes have occurred over the past few decades, the basic community college mission remains the same, offering open, affordable access to higher education (Cohen et al., 2014). Providing comprehensive services to all students, maintaining a strong commitment to the community, and promoting life-long learning are all goals of community colleges (Cohen et al., 2014).

Within this paradigm shift, a greater demand for accountability in higher education is imminent. Increased dropout rates (Nora, Crisp, & Matthews, 2011), lower transfer rates, and decreased degree attainment (Kimbark, Peters, & Richardson, 2017; Windham, Reh fuss, Williams, Pugh, & Tinchner-Ladner, 2014) are motivating forces for community colleges to take action. As such, focus has been placed on student engagement as a measure of the effectiveness of higher education institutions to influence student persistence, achievement, and degree attainment (Nora et al., 2011).

Student engagement is a key indicator of learning and enhances educational practices directly related to student retention and persistence (Community College Student Engagement, 2017). In 2006, the Center for Community College Survey of Student Engagement began validation research studies to examine relationships between student engagement and community college student outcomes. The Community College

Survey of Student Engagement (CCSSE) was developed to measure student engagement at community colleges (Nora et al., 2011) and was created to evaluate the frequency of effective educational practices. Student engagement is often defined and measured by how actively involved students become with their educational processes, as represented by their academic and social behavior (Nora et al., 2011). Numerous researchers have established (e.g., Branand, Mashek, Wray-Lake, & Coffey, 2015; Kimbark et al., 2017; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007) that engagement of students on campus is a key component of academic success (e.g., student achievement, satisfaction, persistence, and degree attainment).

In this journal-ready dissertation, student engagement and student relationships, as related to the CCSSE benchmarks, were explored. During this investigation, three major benchmarks were assessed: (a) student-faculty interactions, (b) student effort, and (c) support for learners. Using the first benchmark, student-faculty interactions, frequency of interactions inside and outside of the classroom were examined in this study. Frequent interaction between students and faculty was the most important influence on student motivation and engagement (Chickering & Gamson, 1987; Longerbeam, 2016). The second benchmark, student effort, was examined to determine the degree to which the time and energy a student expends on preparing for class and other educational activities influences student success. Using the final benchmark, support for learners, student perceptions of how committed the college is to their success was analyzed. Several researchers (e.g., Chickering & Gamson, 1987; Longerbeam, 2016; Tinto, 2012; Young-Jones, Burt, Dixon, & Hawthorne, 2013) have contended that students are more satisfied attending colleges at which supportive environments exist.

Review of the Literature on On-Campus and Off-Campus Relationships

Community colleges provide open access, affordability, and flexibility to a growing and diverse student population (American Association of Community Colleges, 2016). For over 100 years, community colleges have increasingly grown and evolved into comprehensive institutions of higher education (Piland, 2016). Of note is that approximately one-half of all of the undergraduates in the United States attend community college (American Association of Community Colleges, 2016).

Unfortunately, approximately half of these students leave before completing their degrees (Kimbark, Peters, & Richardson, 2017; Windham, Reh fuss, Williams, Pugh, & Tinchner-Ladner, 2014). For instance, in 2013, 80% of first-time, full-time degree seeking students who enrolled at 4-year institutions persisted to the following fall semester whereas, only 61% of first-time, full-time degree seeking students who enrolled at 2-year public institutions persisted the following fall semester (National Center for Education Statistics, 2016).

With respect to a theoretical framework in which to bring perspective to the statistical analyses, Tinto's (1975) Interactionalist Model has been one of the most used retention models in the extant literature (Demetriou & Schmitz-Sciborski, 2011). Tinto (1975) stated that students arrive at colleges with characteristics (e.g., family background status, parental educational levels, race, and academic achievement) which influence their institutional commitment. Due to the three aforementioned characteristics, Tinto (1975) contended that students experience three stages of change: (a) the separation stage, (b) the transitions stage, and (c) the incorporation stage. In the separation stage, students are described as leaving behind past support groups such as family, friends, and prior

educational environments. In stage two, the transitions stage, students begin to distance themselves from past support networks; however, they have not fully adjusted to the new environment. During the final stage, incorporation stage, students tend to integrate into the academic and social climate of the higher education institution.

Over 40 years later, Tinto (2012) highlighted the importance of academic and social support for first-year students during the critical first year of college. Tinto (2012) contended that the first weeks and the first semester of college are particularly important for providing academic support for first-year students. Early success during the first year increase the likelihood of these students remaining in college beyond the first year. As such, many colleges and universities have created programs in which emphases have been placed on enhancing non-academic areas, such as (a) first-year seminars, (b) social groups, (c) multicultural centers, and (d) student organizations (Couturier, 2013; Padgett, Keup, & Pascarella, 2013). Couturier (2013) proposed the development of multicultural and student success centers to provide social support, which could connect students with staff and mentors in meaningful ways. Consequently, students gain a higher sense of commitment to the institution, which could potentially increase student persistence. In addition, Kuh, Kinzie, Buckley, Bridges, and Hayek (2007) stated that “social integration as a predictor of persistence is more robust than for academic integration” (p. 14).

Academic and social integration can be displayed differently by community college and university students based on the characteristics of these two student populations. Because community colleges do not have selective admission policies, community college students are typically at higher risk of dropping out of college (Toppers & Powers, 2013) and may need developmental or remedial courses upon

enrollment (Barnes & Slate, 2010; Scherer & Anson, 2014) than do 4-year university students. According to Cohen, Brawer, and Kisker (2014), community college students typically struggle to balance work, family, and parental responsibilities. As such, community colleges typically have an open-door policy and welcome nontraditional students who tend to be 25 years old and older compared to the typical university student who tends to range in age from 18 to 22. According to some researchers: (a) low tuition, (b) ease of access, and (c) the open-door policy have contributed to the increased enrollment of Black and Hispanic students in community colleges (Everett, 2015; Rainey, 2010).

Historically, the majority of college bound students have been young adults who recently graduated from high school. However, these students are now comprised of more non-traditional students (24 years or older), who are typically commuters, and academically underprepared (Kimbark et al., 2017). Scherer and Anson (2014) noted that: (a) many first-year students were over the age of 25, (b) needed academic remediation, and (c) typically attended college part-time while working full-time. Of note to readers is that first-year students typically face several internal and external barriers, which place them at risk of academic failure during the first year of college (Heller & Cassady, 2017). According to Scherer and Anson (2014), community colleges serve a higher percentage of at-risk students who tend to be underprepared for the rigor of academia. Heller and Cassady (2017) reported these first-year students demonstrated less effective resource management skills (e.g., time management and study skills).

Other factors tend to play a role in the success of first-year community college students who are considered at risk. Personal and familial factors (e.g., loss of support

systems, parenthood, and low motivation) were reasons many of these students decided not to pursue postsecondary education. In addition, Scherer and Anson (2014) reported that personal and familial factors negatively influenced achievement outcomes for first-year students. The perceptions first-year students hold regarding these limiting factors differ between traditional and non-traditional students. Awareness of these perceived factors and barriers are even more critical when explored within the community college context (Scherer & Anson, 2014).

Due to changing demographics in the United States, the trend of older adults entering college has increased. The College Board (2016) affirmed community colleges as being important pathways to postsecondary education for many students, specifically: (a) first-generation students, (b) students from low-income families, and (c) older adults returning to school to gain credentials for more gainful employment. Tinto (2012) contended that students are more likely to succeed in settings providing appropriate academic and social support. The first year for the aforementioned students attending community colleges, specifically the first four to six weeks after their enrollment, is particularly important that academic support be provided (Tinto, 2012). Early success during the first year increases the likelihood of future success. Conversely, early failure could potentially undermine future success (Tinto, 2012).

As of fall 2015, 40% of community college students were first-time freshmen (American Association of Community Colleges, 2017). Based on National Center for Education Statistics data, 62% percent of community college students attend part-time, and 38% of community college students attend full-time (American Association of Community Colleges, 2017). With the increased number of first-year students attending

part-time, community college administrators should continue to search for ways to accommodate this growing population of students. One common intervention strategy has been the increased offering and implementation of first-year seminars.

First-year seminars were created to assist students with college preparation, and increase student awareness and intellectual life about how to succeed in college (Tinto, 2012). These seminars also create opportunities for students to build relationships with peers, teachers, mentors, and career contacts (Frazier & Eighmy, 2012). According to Tinto (2012), this type of social and academic integration sustains informal student-faculty relationships and increases persistence to graduation. Branand et al. (2015) asserted that students should form important and powerful relationships within the academic and social college community cultures. Accordingly, students have opportunities to become academically and socially involved creating “unique relational and developmental experiences” (Branand et al., 2015, p. 829). Tinto (2012) agreed that meaningful student-faculty interactions are important for student personal development and success. As a result, students feel more comfortable within the academic environment, which enhances their sense of belonging (Tinto, 2012).

Informal student-faculty interactions, such as outside-of-class discussions and visiting the professor’s residence, have been positively correlated with student learning and development (Fuentes, Alvarado, Berdan, & DeAngelo, 2014). In fact, Fuentes et al. (2014) noted these faculty interactions were even more critical for first-year students to enhance their academic and social acculturation at community colleges. Positive relationships have been documented between higher quality and quantity student-faculty interactions during the first college year (Fuentes et al., 2014).

According to Astin (1993), peers are “the single most potent source of influence affecting student development” (p. 398). Later, Astin reported the three most powerful forms of involvement were: (a) academic involvement, (b) involvement with faculty, and (c) involvement with student peer groups (Foubert & Grainger, 2006; Frazier & Eighmy, 2012). Connecting students with their college peers foster a sense of belonging and community, which potentially leads to greater persistence and student satisfaction (Branand et al., 2015; Foubert & Grainger, 2006; Tinto, 2012).

Although several factors contribute to student success, academic initiatives and higher education professionals play key roles in either facilitating or hindering a student’s matriculation through an institution (Young-Jones et al., 2013). Academic advisors are typically a student’s first point-of-contact on campus. Young-Jones et al. (2013) concluded that female freshmen were more likely to hold higher expectations of advisors than were male freshmen. In addition, Young-Jones et al. (2013) supported the idea that academic advisors create meaningful experiences for freshmen students, which helps them matriculate successfully during their first college year. Thus, focused institutional efforts should be made to ensure students receive quality interactions in a supportive environment. Young-Jones et al. (2013) contended that quality student-advisor exchanges were made through the academic advising process while conveying institutional expectations. Further, Tinto (2007) concluded that when given clear, consistent institutional information, students tend to thrive and persist to degree completion.

Review of the Literature on Student Effort and Student Engagement

Despite the fact that community colleges educate more than half the nation's undergraduates (American Association of Community Colleges, 2016), these 2-year institutions have been called the stepchildren, or the “other college,” of higher education (McIntosh & Rouse, 2009, p. 1). Community colleges consistently strive to provide stronger pathways and support services to meet diverse student needs (Community College Research Center, 2014). Two-year colleges play a critical role in higher education in the United States, serving students who may: (a) be college eligible but not college ready, (b) work full-time and attend college part-time, (c) be single parents of small children, (d) be a member of an underrepresented underserved ethnic/racial group, and/or (e) be socioeconomically disadvantaged (McIntosh & Rouse, 2009; Scherer & Anson, 2014). Of importance to this investigation, McIntosh and Rouse (2009) documented that enrollment at 2-year colleges has grown faster than enrollment at the 4-year colleges and universities.

Over the past few decades, the sole focus of open access and equity at 2-year public postsecondary institutions has shifted to student success and more equity in student outcomes (American Association of Community Colleges, 2015). In the Commission on the Future of Higher Education, Margaret Spellings, the past U.S. Secretary of Education, highlighted the need for both access and success to be increased. According to Spellings:

Over the past decade, literacy among college graduates has actually declined.

Unacceptable numbers of college graduates enter the workforce without the skills employers say they need in an economy where, as the truism holds correctly,

knowledge matters more than ever. (as cited by Department of Education, 2006, p. 17)

A decade later, the lack of persistence and degree completion continues to plague the nation (Kimbark, Peters, & Richardson, 2017). Although these problems have been well-documented for several years, Cohen, Brawer, and Kisker (2014) revealed that a complex issue exists because of the differing characteristics of students who attend 2-year and 4-year postsecondary institutions. McIntosh and Rouse (2009) reported that 2-year college students are far less likely to be traditional-aged students (i.e., ages 18-24) than are 4-year college students. In addition, students who attend 2-year postsecondary institutions are far more likely to be enrolled part-time, employed part-time, and more likely to be of lower socioeconomic status than their 4-year counterparts. According to the Community College Survey of Student Engagement (2005), some of these traits are exhibited by, so called, high-risk students. Several risk factors contribute to low persistence and graduation from college:

Being academically underprepared for college-level work; not entering college directly after high school; attending college part-time; being a single parent; being financially independent; caring for children at home; working more than thirty hours per week; and being a first-generation college student. (Kuh et al., 2007, p. 40)

Community college students are three to four times more likely to reflect four or more of these risk factors than their counterparts attending 4-year colleges and universities.

Community college students are typically first-generation college students who are less academically prepared than their peers who attend 4-year colleges and universities. As

such, these students are less likely to get support and information from family members (Goldrick-Rab, 2010; Kimbrick et al., 2017). Goldrick-Rab (2010) believed; however, that if student engagement levels are increased, colleges could close the persistence gaps between community college students and their 4-year counterparts. In this study, several engagement factors were reviewed and discussed: (a) student effort, (b) student motivation, and (c) academic challenge.

Researchers (e.g., Feldman & Zimbler, 2011; Tinto, 1993, 2012) reported first-time college students as being socially disengaged and having disparate academic needs. These authors agreed that when students fail to persist, academic abilities are not the only factor involved in their lack of persistence. Rather, they believed that students' lack of basic skills in effective college success strategies contributed to their lack of persistence. Feldman and Zimbler (2011) documented the presence of attributable skills, such as time management, writing ability, effective reading strategies, note-taking, and test-taking strategies that hinder student persistence and graduation.

Tinto's (1975) integration framework is foundational with regard to linking student engagement with persistence in postsecondary education (Dudley, Liu, Hao, & Stallard, 2015). In agreement with Tinto (1975), other researchers (e.g., Chickering & Gamson, 1987; Kuh, 2007; Nora, Crisp, & Matthews, 2011) agreed that enhancing student engagement is essential to promoting desirable outcomes such as academic performance and persistence at colleges and universities. Schuetz (2008) defined student engagement as "a state of being that combines high effort, attention, and participation with emotions of interest, enthusiasm, enjoyment, and lack of anxiety or anger" (p. 312). As noted, one component of engagement is student effort (e.g., time on task), which

includes student behaviors that contribute to their learning and the likelihood that they will attain their educational goals.

In a recent study, Dudley et al. (2015) investigated the community college student levels of engagement as demonstrated in the longitudinal Community College Survey of Student Engagement data. Of note in their study were the heavy family and social responsibilities of students. For example, 62% of the students were employed off-campus, of which 35% reported working more than 20 hours per week. In addition, 22% of the student group worked 30 or more hours per week. Dudley et al. (2015) correlated these factors with student levels of engagement and effort. Students reported lack of time as a major obstacle, which hindered them from putting forth more effort toward studies. Specifically, students reported a limited amount of time to prepare additional writing drafts or reading assignments before class. As such, students unprepared or unfamiliar with course topics were much less likely to ask questions or participate in class (Dudley et al., 2015).

The role of student motivation, also known as a non-cognitive factor, is another predictor of college persistence and postsecondary student success (Richardson, Abraham, & Bond, 2012). The term motivation is a Latin derivative meaning “to move” (Lazowski & Hulleman, 2016, p. 603). According to Lazowski and Hulleman (2016), several qualities of motivation exist such as “needs, drives, goals, aspirations, interests, and affects” (p. 603). Motivation tends to be either intrinsic or extrinsic in nature. Intrinsic motivation comes from internal sources such as the pure enjoyment of task engagement (Lazowski & Hulleman, 2016), or enjoyment of a task for its own sake (Ryan & Deci, 2000). Extrinsic motivation is defined as engagement motivated by

external pressures or influences (Ryan & Deci, 2000), such as receiving financial compensation (Lazowski & Hulleman, 2016).

Liao, Edlin, and Ferdenzi (2014) analyzed how motivation and self-efficacy affected community college student persistence. Self-efficacy is the belief in one's ability to accomplish tasks or succeed in specific situations using self-regulation strategies (Liao et al., 2014). Zimmerman (2008) defined self-regulated learning as the "degree to which students are metacognitively, motivationally, and behaviorally active participants in their own learning process" (p. 167). In their study, Liao et al. (2014) reported that self-regulated learning efficacy predicted students' intention to persist, or reenroll, whereas, self-efficacy for academic achievement failed to predict persistence.

In the Liao et al. (2014) study, motivation was examined at two levels: intrinsic motivation and extrinsic motivation. They contended that intrinsically motivated students internally valued learning and wanted to understand the content. Conversely, extrinsically motivated students viewed test preparation activities as leading to an external reward of a grade (Liao et al., 2014). Interestingly, extrinsic motivation predicted persistence or reenrollment; however, the effects of intrinsic motivation were minimal and failed to predict persistence in this study. Further, the four independent variables (i.e., self-regulated learning efficacy, academic achievement efficacy, intrinsic motivation, and extrinsic motivation) were statistically significantly related with each other.

Academic challenge is another factor associated with student engagement. Academic challenge is defined as "challenging intellectual and creative work", which is essential to student learning (Community College Survey of Student Engagement, 2016,

p. 1). Several academic challenge constructs were measured, such as, how much the coursework required:

analyzing the basic elements of an idea, synthesizing and organizing ideas, information, or experiences in new ways, making judgements about the value or soundness of information, applying theories or concepts to practical problems or in new situations, and using information you have read or heard to perform a new skill. (Nora et al., 2011, p. 116)

The emphasis on the academic challenge is the nature and amount of assigned academic work. Further, academic challenge is an effective practice in which the complexity of cognitive tasks presented to students is addressed (Community College Survey of Student Engagement, 2016).

In her study, Longerbeam (2016) examined experiences related to academic challenge and support of first-year college students. In the mixed-methods study, challenge was used to refer to the academic rigor and level of effort required for the student to succeed academically, whereas, support referred to the academic and social encouragement and assistance offered by faculty, staff, and peers. Longerbeam (2016) documented that students who reported, “academic challenge and a supportive campus environment were significantly more likely to report gains in general education- a measure of learning. Students who had enriching educational experiences—the environmental context for challenge and support—were more likely to graduate” (p. 38). As a result of Longerbeam’s (2016) study, several challenge and support themes emerged: (a) embracing struggle and overcoming obstacles, (b) making personal connections with key personnel, (c) reaching out to appropriate contact, and (d)

deepening involvement via academic and co-curricular activities (Longerbeam, 2016).

When academic challenge and support are both present, students thrive.

Review of the Literature on Student Use of Institutional Support Services

Historically, colleges and universities have searched for ways to increase student persistence and retention (Stewart, Lim, & Kim, 2015) and to improve graduation rates (Heller & Cassady, 2017). However, within the past 10 years, these growing concerns of persistence and graduation have gained attention from several national community college organizations, including: (a) American Association of Community Colleges (AACC), (b) Association of Community College Trustees, (c) National Institute for Staff and Organizational Development, (d) League of Innovation in the Community College, (e) Phi Theta Kappa, and (f) The Center for Community College Student Engagement (AACC, 2015). These participating organizations boldly signed a historic commitment to “produce 50% more students with high quality degrees and certificates by 2020, while increasing access and quality” (AACC, 2015, p. 1).

In 2010, the six participating community college organizations mentioned above pledged that they would devote efforts to students and colleges to increase student success. This monumental pledge was considered as “Democracy’s Colleges Call to Action” and stated the following:

We, the leaders of national organizations that represent and serve America’s 1,200 community colleges, recognize and celebrate the colleges’ central role in ensuring an educated U.S. citizenry and a globally competitive workforce. We affirm the need for a dramatic increase in the number of Americans with postsecondary degrees and certifications to fulfill critical state and national goals.

With the ‘completion agenda’ as a national imperative, community colleges have an obligation to meet the challenge while holding firmly to traditional values of access, opportunity, and quality. (AACC, 2015, p. 23)

In 2006, the U. S. Secretary of Education brought national attention to the need for increased access and success for every student. A few years later, in 2009, then-President Obama addressed Congress highlighting the need to increase the number of U.S. citizens with postsecondary education. Further, other national initiatives such as Achieving the Dream (AACC, 2015), Foundations of Excellence, and Completion by Design, focused on increasing student success in community colleges. Chan (2017) later highlighted the need to increase retention and graduation rates as a major institutional challenge facing colleges and universities.

Almost three-fourths of first time students who begin at 4-year institutions, compared to about 50% of first-time students who begin at community colleges, persist to their second year (McIntosh & Rosh, 2009). The experiences of 2-year college and 4-year college and university students are different (Cohen, Brawer, & Kisker, 2014; McIntosh & Rouse, 2009). As such, institutions must provide appropriate programs for these respective students.

Community colleges have made substantial gains in accessibility and enrollment of community college students (Kimbark, Peters, & Richardson, 2017); however, more efforts are still needed to help students succeed. Higher education institutions play a key role in student retention (Musoba, Collazo, & Placide, 2013). Students perform better and are more likely to succeed when higher education institutions provide supportive campus environments (Community College Survey of Student Engagement, 2016;

Longerbeam, 2016). According to Longerbeam (2016), supportive campus environments and enriching educational experiences were predictive of learning, which were related to graduation.

In efforts to create supportive campus environments and to help with retention, colleges and universities created and implemented college survival courses, or programs, with the goal of increasing student awareness of how to succeed in college (Garza & Bowden, 2014). In addition, these intervention courses/programs are referred to as: (a) freshman courses, (b) freshmen seminar, (c) first-year experience, (d) introduction to collegiate studies, or (e) orientation courses. By the 21st century, over 90% of colleges and universities offered some form of these courses (Reid, Reynolds, & Perkins-Auman, 2014).

The origin of first-year experience programs, previously known as first-year orientation programs, dates back to the 1600s when Harvard University began using tutors to befriend younger students (Mayo, 2013). Programs with similar characteristics have gained momentum over the past three decades. The first year is considered an important transitional time for first time in college students. Of all full-time 4-year public institution students who started college in fall 2013, 79% persisted to the next semester and 68% were retained the following year. However, of all part-time 2-year public institution students who started college in fall 2013, only 57% persisted to the next semester and only 52% were retained the following year (National Student Clearinghouse Research Center, 2013). Because of these low percentages, more focus has been placed on finding ways to increase persistence and retention rates among first time in college students.

In one such investigation, Windham, Reh fuss, Williams, Pugh, and Tincher-Ladner (2014) analyzed whether participation in a study skills course was predictive of student retention at a southeast community college. Of the 329 first time, full-time freshmen in their study, 200 students successfully completed the course and 129 students did not complete the course, with 63 students of the non-completers withdrawing from the course. Students who successfully completed the course were 64% more likely to persist than their peers who did not take the course. In contrast, students who withdrew from the course had an 81% lower chance of persisting than their peers who did not take the study skills course. Finally, students who failed the study skills course had a 67% lower likelihood of persisting than their peers who did not take the course. As such, Windham et al. (2014) concluded that student success courses enhance student retention and confirmed the value of taking these courses in community colleges.

In another study, Sidle and McReynolds (2009) analyzed the extent to which participation in a freshman-year experience course was related to student retention and student success. Similar to Windham et al. (2014), Sidle and McReynolds (2009) determined that students who had been enrolled in a freshman-year experience course were retained at a statistically significantly higher rate than students who had not been enrolled in such a course. Of the students who had been enrolled in a freshman-year experience course, 63% re-enrolled for the following fall term, whereas, only 56% of students who did not take the course were retained for the second year. Evidence was clearly present that freshman-year experience courses can be beneficial in increasing student success and retention during the first year of college (Sidle & McReynolds, 2009).

In another study, Cho and Karp (2013) explored whether enrolling in a student success course had positive effects on short-term student outcomes and persistence into the second year of college. A higher percentage of students who completed a student success course persisted compared to their peers who did not complete a student success course. Compared to non-student success course takers, students who took the course during their first 15 credits were 10% more likely to earn college-level credits in their first year. In addition, these students were 10% more likely to persist to the second year. Cho and Karp (2013) concluded that strong positive links were present between enrolling in student success courses during the first semester and short-term outcomes of second year persistence.

Padgett, Keup, and Pascarella (2013) investigated the potential influence of first-year experience seminars in relationship to life-long learning orientations. Padgett et al. (2013) established academically challenging first-year seminars had a far greater benefit for students' life-long learning orientation compared to first-year seminars in which rigor was lacking. As a result, Padgett et al. (2013) concluded participation in first-year seminars increased the likelihood of first year college student's integration of ideas and experiences as well as academic challenge and effort.

Over the past three decades, researchers (e.g., Cho & Karp, 2013; Kuh et al., 2005; McIntosh & Rouse, 2009; Windham et al., 2014) conducted a variety of first-year experience studies regarding persistence and retention. Student success courses, student support systems, and non-cognitive factors have been established as important attributes of a successful experience for first-year students. Mayo (2013) proposed first-year experience programs help students adapt to college life. These programs increase the

likelihood of student success, and they improve learning and retention. A rigorous student success course could be beneficial to students' learning of core skills during their first year in college. Strong internal and external support systems are crucial to a first-year student. These support systems include, but are not limited to, family support, campus employee support, and resources available to students. First-year students should have a sense of belonging. Barbatis (2010) cited that key factors in retention included high levels of "faculty-student interaction, integration of academic and social involvement, mentoring, and cultural and social support" (p. 24). Although much knowledge has been gained from prior first-year experience research, a need exists to continue seeking effective support programs that can help ease the persistence and retention dilemma that continues to affect higher education, especially 2-year public community colleges.

Statement of the Problem

Community colleges are postsecondary institutions that serve more than one half of all undergraduates in the United States (American Association of Community Colleges, 2016). Although community colleges are noted as providing supportive student environments, nearly one half of students who attend community college leave before obtaining a degree or certificate (Windham et al., 2014). Based on National Student Clearinghouse data, 80% of first-time community college students complete 12 or more credits during six years of college and 60% complete 30 or more credits during the same timeframe (College Board, 2013). The highest student drop out rates occurred during the first semester of the freshman year (Xu & Jagers, 2011). If these first-year students are

to be retained, community colleges must find ways to increase student participation and engagement (Kimbark et al., 2017) and to seek avenues to influence student retention.

Purpose of the Study

The purpose of this study was to determine the degree to which differences were present between first-time-in-college (FTIC) community college students and non-FTIC community college students in their on-campus and in their off-campus relationships. First-time-in-college students are those students who have no prior postsecondary experience at the undergraduate level. Specifically examined was the extent to which differences existed between FTIC and non-FTIC community college students in the quality of their relationships with: (a) other students, (b) instructors, (c) administrative personnel, (d) friends, and (e) immediate family members. As such, information was obtained from a national dataset concerning the extent to which these two groups of community college students differed with respect to their on-campus and off-campus relationships.

Significance of the Studies

In past years, much of the extant literature and research has been based on college students from primarily 4-year institutions (Bers & Younger, 2014; Mills, 2010). Few retention studies exist specific to community colleges (Bailey & Alfonso, 2005) and the on-campus relationships and off-campus relationships of their students. Subsequently, concern has increased regarding the lack of synthesis, critique, and dissemination of community college research (Bailey & Alfonso, 2005). This lack of synthesis and critique leaves student affairs professionals searching for ways to identify programmatic efforts to improve student success (Crisp & Taggart, 2013).

There have been growing concerns about the engagement levels of college students over the past few decades. Researchers (e.g., Chickering & Gamson, 1987; Liao et al., 2014; Longerbeam, 2016; Pascarelli & Terenzini, 1991; Tinto, 1993) concurred that student learning and achievement in college are linked to student engagement. By conducting this research and analyzing CCSSE survey data, key information could be gained and shared with educational leaders. In addition, the relationship-based exploration of previous literature and the results of this study may provide these leaders and administrators with ideas for programmatic ways to assist FTIC students with persistence through graduation.

Definition of Terms

The following key terms are defined to assist the reader in understanding the concepts in this journal-ready dissertation.

Academic Challenge

Measured in this benchmark is the extent to which students engage in challenging mental activities, such as evaluation and synthesis, as well as the quantity and rigor of their academic work (Community College Survey of Student Engagement, 2016).

Community College

The AACC refers to community colleges (also called 2-year or junior college) as 2-year institutions originally established to offer job-training programs to assist with widespread unemployment. Joliet Junior College is the oldest community college, which was founded in 1901. In the 1960s, community colleges became a national network and opened 457 public community colleges. Approximately 1,166 community colleges are in existence today (AACC, 2016).

Community College Survey of Student Engagement (CCSSE)

This survey was designed to help colleges measure and track student engagement pertaining to their coursework, peers, college faculty and staff. The survey is administered to undergraduate credit students in community colleges to gather information about their overall college experience. This survey, usually administered in the spring, provides information regarding educational practices and student behaviors associated with high levels of learning, persistence, and completion (CCSSE, 2013). Five institutional benchmarks, directly related to key areas of student engagement, are assessed: (a) active and collaborative learning, (b) academic challenge, (c) support for learners, (d) student effort, and (e) student-faculty interaction (Center for Community College Student Engagement, 2015).

First-time in College Students

This term refers to students who have no prior postsecondary experience attending any institution for the first time at the undergraduate level (National Center for Education Statistics, 1986).

Full-time Student

Undergraduate: A full-time undergraduate refers to a student enrolled for 12 or more semester credits, or 12 or more quarter credits, or 24 or more contact hours a week each term. *Graduate:* A full-time graduate student refers to a student enrolled for nine or more semester credits, or nine or more quarter credits, or a student involved in thesis or dissertation preparation who is considered full time by the institution (National Center for Education Statistics, 2016).

Institutional Support Services

In this study, support for learners was the benchmark used. This benchmark measures students' perceptions of their colleges and assesses their use of advising and counseling services. Based on the survey, student use of tutoring, skill labs, computer labs, and student organizations are assessed (CCSSE, 2006).

Non First-Time in College Students

This term refers to students who have prior postsecondary experience attending another institution for the first time at the undergraduate level.

Non-traditional Aged Students

This term refers to students who are age 25 or older (CCSSE, 2006).

Part-time Student

Undergraduate—A part-time undergraduate refers to a student enrolled for either less than 12 semester or quarter credits or less than 24 contact hours a week each term.

Graduate—A part-time graduate student refers to a student enrolled for less than 9 semester or quarter credits, excluding students involved in thesis or dissertation preparation that is considered full time by the institution (National Center for Education Statistics, 2016).

Student Effort

This term refers to benchmark data in which time on task, preparation, and use of student services are assessed (CCSSE, 2006). Throughout the research, this term is often interchangeable with student engagement.

Student Engagement

This term refers to the amount of time and energy that students invest in meaningful educational practices. It is used to depict the student's willingness to participate in routine school activities, such as attending classes, submitting required paperwork, following teachers' directions in class, and time on-task behaviors (CCSSE, 2006). Student engagement has been documented as having two critical components: (a) a student driven component and (b) an institution driven component. The student driven component refers to the amount of time and effort students put into their studies and educationally purposeful activities. The second component is institution driven: how a school deploys its resources and organizes curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to student success - persistence, satisfaction, learning, and graduation (Upcraft, Gardner, & Barefoot, 2005).

Student-Faculty Interaction

Assessed in this benchmark is the extent to which students and faculty communicate about academic performance, career plans, and course content and assignments (CCSSE, 2006).

Traditional Aged Students

This term refers to students who are between the ages of 18 to 24 (CCSSE, 2006).

Theoretical Framework

Over the past several decades, several theoretical frameworks have been explored to address student retention. Two theoretical perspectives were used to guide the three empirical investigations conducted in this journal-ready dissertation: (a) the Student Integration Model (Tinto, 1975) and (b) the Theory of Student Involvement (Astin,

1984). Both frameworks provide information regarding student behaviors, which could potentially lead to increased student retention.

The Student Integration Model has been a landmark for past and current national dialogue on undergraduate retention (Tinto, 1975; 1993; 2012). In this model, students who are socially involved with the campus community indicate they have increased commitment to the institution (Demetriou & Schmitz-Sciborski, 2011). Tinto believed the central idea of student retention was integration. That is, whether students persist or drop out is strongly predicted by their degree of academic and social integration (Tinto, 1975). In this journal-ready dissertation, Tinto's theory was used to examine first-year student relationships during their first year of college.

The second theoretical framework that was used in this journal-ready dissertation was the Theory of Involvement (Astin, 1984). The basis of this theory, simply stated, is that students get more out of college when they put more into college (Webber, Krylow, & Zhang, 2013). In other words, students will become more engaged with learning from other students and faculty when they are more involved with class discussions and student activities. When students actively participate in curricular and co-curricular events they tend to make friends, get to know faculty members, and become oriented to campus quickly (Astin, 1993; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Webber et al., 2013).

Delimitations

In this journal-ready dissertation, the three studies were delimited to public community college students who participated in the CCSSE survey from the 2012 academic year to the 2014 academic year. This 2014 cohort consisted of a 25% random

sample of responses from students who completed the survey during these years. The data analyzed in this journal-ready dissertation were community college student engagement with regard to on-campus relationships and off-campus relationships. Data were obtained from the Center for Community College Student Engagement, and the data from only the 2012 through the 2014 academic years were analyzed.

Limitations

In this journal-ready dissertation, quantitative self-reported data were analyzed. The data consisted of self-reported data from students who attended a participating community college where the survey was administered. Self-reports lack the internal validity of a pretest–posttest design (Bowman, 2010); however, Pace (1985) argued that self-reported data are considered valid if the information given is known to the students and if the questions are phrased clearly. Another important limitation involves the fact that archival data were analyzed. In causal-comparative studies in which archival data are analyzed, no determination of a cause-effect relationship can be made.

Assumptions

For the purposes of this journal-ready dissertation, a basic assumption is made that the student response sample data provided by the Center for Community College Student Engagement were accurate. This same assumption is made for the FTIC students and the non-FTIC students' statuses reported by students who completed the survey. The data obtained and analyzed from the Center for Community College Student Engagement are believed to be relatively accurate and provide reliable and valid scores of community college student engagement. According to Marti (2008), reliability and validity analyses

provide supporting evidence that student engagement is measured by the Community College Student Report.

Literature Review Search Procedures

For the purpose of this journal-ready dissertation, the literature FTIC student relationships and student engagement was reviewed. The search for FTIC students and first-year students yielded a large number of results. Several articles were identified using Sam Houston State University's library search engine, Engine Orange. All searches were conducted through the EBSCO Host database for academic journals that contained scholarly, peer reviewed articles.

Several different keyword search combinations were used to delimit the search. There were various combinations of keywords used in the search for relevant literature (e.g., *first-time-in-college students*, *first-year students*, *first-year seminar*, *freshmen students*, *student retention*, *student persistence*, *transition to college*, and *student engagement*) to locate sufficient articles. Keyword searches for "first-time-in college students" yielded 8,345 results; however, when community college was added, the results decreased to 730. The keyword searches for "first-year students" yielded 65,999 results, and when community college was added, the number of results was reduced to 5463. A keyword search for "first-year seminar" yielded 3,158 results; however, when community college was added, the results decreased to 496. Keyword searches for "student engagement" yielded 104,848 results; however, when community college was added, the results decreased to 8,771. The outcome of this search yielded a quantity of journal articles, reports, and books.

Organization of the Study

Three research studies were conducted for this journal-ready dissertation. In the first study, research questions addressed were on the on-campus and off-campus relationships of FTIC and non-FTIC community college students. In the second study, research questions were on student effort and student engagement differences between FTIC and non-FTIC community college students. Finally, for the third study, research questions were on the use of institutional support services between FTIC and non-FTIC community college students.

This journal-ready dissertation is composed of five chapters, and three different manuscripts were produced. Chapter I includes the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, theoretical framework, delimitations, limitations, assumptions, and the organization of the journal-ready dissertation. In Chapter II, the framework for the first journal-ready dissertation investigation on FTIC student relationships was discussed. In Chapter III, the second journal-ready research study on FTIC and non-FTIC student engagement and student efforts was provided. In Chapter IV, the third journal-ready research investigation on the student use of institutional support services was discussed. Finally, Chapter V contains (a) a summary, (b) a discussion of findings, (c) recommendations for future research, (d) implications for policy and practice, and (e) the conclusion. In Chapter V, the findings of the three studies were discussed and connected with the literature reviewed in this dissertation.

CHAPTER II

DIFFERENCES IN ON-CAMPUS AND OFF-CAMPUS RELATIONSHIPS BY COMMUNITY COLLEGE FIRST TIME IN COLLEGE STUDENT STATUS: A NATIONAL INVESTIGATION

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

Specifically addressed in this investigation was the degree to which First-Time in College (FTIC) community college students and non-FTIC community college students differed in their quality of on-campus and off-campus relationships. Inferential statistical analyses of responses to a national survey revealed the presence of statistically significant differences between these two groups of students in all dependent variables. Students who were FTIC indicated that administrative personnel and family were more supportive, whereas, FTIC students were less likely to respond that other students, instructors, and friends were more supportive than indicated by their non-FTIC peers. Male FTIC students reported higher levels of support from administration and family than did their male non-FTIC peers. Female FTIC students were less likely to indicate supportive relationships between student-student and student-faculty than did their female non-FTIC peers. Implications and recommendations for future research were provided.

Keywords: First-time in college, first year student, non-first time in college, student engagement, student relationships, student-faculty interactions, CCSSE survey, gender differences

DIFFERENCES IN ON-CAMPUS AND OFF-CAMPUS RELATIONSHIPS BY
COMMUNITY COLLEGE FIRST TIME IN COLLEGE STUDENT STATUS: A
NATIONAL INVESTIGATION

Community colleges provide open access, affordability, and flexibility to a growing and diverse student population (American Association of Community Colleges, 2016). For over 100 years, community colleges have increasingly grown and evolved into comprehensive institutions of higher education (Piland, 2016). Of note is that approximately one-half of all of the undergraduates in the United States attend community colleges (American Association of Community Colleges, 2016). Unfortunately, nearly half of these students leave before completing their degrees (Kimbark, Peters, & Richardson, 2017; Windham, Reh fuss, Williams, Pugh, & Tinchner-Ladner, 2014). For instance, in 2013, 80% of first time, full-time degree seeking students who enrolled at 4-year institutions persisted to the following fall semester whereas, only 61% of first time, full-time degree seeking students who enrolled at 2-year institutions persisted to the following fall semester (National Center for Education Statistics, 2016).

With respect to a theoretical framework in which to place these statistics, Tinto's (1975) interactionist model has been one of the most used retention models in the extant literature. He stated students arrive at colleges with characteristics (e.g., family background status, parental educational levels, race, and academic achievement) which influence their institutional commitment. He contended that students experience three developmental stages as they integrate themselves into the academic and social environments on college campuses: (a) the separation stage, (b) the transitions stage, and (c) the incorporation stage. In the separation stage, students are described as leaving

behind past support groups such as family, friends, and prior educational environments. In stage two, the transitions stage, students begin to distance themselves from past support networks; however, they have not fully adjusted to the new environment. During the final stage, incorporation stage, students tend to integrate into the academic and social climate of the higher education institution.

Approximately 37 years after developing the Student Integration Model, Tinto (2012) highlighted the importance of academic and social support for first-year students during the critical first year of college. These first-year students are typically first-time in college (FTIC) students, who have no prior postsecondary experience attending any institution for the first time at the undergraduate level. Tinto (2012) contended the first weeks of the first semester of college are particularly important for providing academic support for first-year students. Early success during the first year increases the likelihood of these students remaining in college beyond the first year. As such, many colleges and universities have created programs in which emphases have been placed on enhancing non-academic areas, such as: (a) first-year seminars, (b) social groups, (c) multicultural centers, and (d) student organizations (Couturier, 2013; Padgett et al., 2013). Couturier (2013) proposed the development of multicultural and student success centers to provide social support, which could connect students with staff and mentors in meaningful ways. Consequently, students gain a higher sense of commitment to the institution, which could potentially increase student persistence. In fact, Kuh, Kinzie, Buckley, Bridges, and Hayek (2007) stated “social integration as a predictor of persistence is more robust than for academic integration” (p. 14).

Community college and university students, based on the diverse characteristics of these two student populations, can display academic and social integration differently. Because community colleges do not have selective admission policies, community college students are typically at higher risk of dropping out of college (Toppers & Powers, 2013), and may need developmental or remedial courses upon enrollment (Barnes & Slate, 2010; Scherer & Anson, 2014) than do 4-year university students. According to Cohen, Brawer, and Kisker (2014), community college students typically struggle to balance work, family, and parental responsibilities. As such, community colleges typically have an open-door policy and welcome students who tend to be older, 25 years and older, than the average university student. Researchers (e.g., Everett, 2015; Rainey, 2010) agreed that low tuition, ease of access, and the open-door policy have contributed to the increased enrollment of Black and Hispanic students in community college.

Historically, most college bound students were young adults who recently graduated from high school. However, college-bound students groups are now comprised of more non-traditional students (24 years or older), who are typically commuters and academically underprepared (Kimbark et al., 2017). Scherer and Anson (2014) noted first-year students are over the age of 25, in need of academic remediation, and typically attend college part-time while working full-time. Of note to readers, first-year students typically face several internal and external barriers that place them at risk of academic failure during the first year of college (Heller & Cassady, 2017). According to Scherer and Anson (2014), community colleges serve a higher percentage of at-risk students who tend to be underprepared for the rigor of academia. Heller and Cassady

(2017) reported these first-year students demonstrated less effective resource management skills (e.g., time management and study skills).

Other factors tend to play a role in the success of students who are considered at risk. Personal and familial factors (e.g., loss of support systems, parenthood, and low motivation) were reasons many of these students decided not to pursue postsecondary education. In addition, Scherer and Anson (2014) reported that these personal and familial factors negatively influenced achievement outcomes for first-year students. The perceptions first-year students hold regarding these limiting factors differ between traditional and non-traditional students. Awareness of these perceived factors and barriers are even more critical when explored within the community college context (Scherer & Anson, 2014).

Due to changing demographics in the United States, the trend of older adults entering college has increased. The College Board (2016) affirmed community colleges as being important pathways to postsecondary education for many students, specifically, first-generation students, students from low-income families, and older adults returning to school. Tinto (2012) contended students are more likely to succeed in settings providing appropriate academic and social support. The first year for students, specifically the first weeks and the first semester, academic support being provided is particularly important (Tinto, 2012). Early success during the first year increases the likelihood of future success. On the other hand, early failure could potentially undermine future success (Tinto, 2012).

As of fall 2015, 40% of community college students were first-time freshmen (American Association of Community Colleges, 2017). Based on National Center for

Education Statistics data, 62% percent of community college students attend part-time, and 38% of community college students attend full-time (American Association of Community Colleges, 2017). With the increased number of first-year students attending part-time, colleges and universities should continue to search for ways to accommodate this growing population of students. One common intervention strategy has been the creation and implementation of first-year seminars.

First-year seminars were created to assist students with college preparation, and to increase student self-awareness and intellectual life about how to succeed in college (Tinto, 2012). These seminars also create opportunities for students to build relationships with peers, teachers, mentors, and career contacts (Frazier & Eighmy, 2012). According to Tinto (2012), this type of social and academic integration sustains informal student-faculty relationships and increases persistence to graduation. Branand, Mashek, Wray-Lake, and Coffey (2015) later asserted students could form important and powerful relationships within the college community. Accordingly, students have opportunities to become academically and socially involved creating “unique relational and developmental experiences” (Branand et al., 2015, p. 829). Tinto (2012) agreed that meaningful student-faculty interactions are important for students’ personal development and success. As a result, students feel more comfortable within the academic environment, which enhances their sense of belonging (Tinto, 2012).

Informal student-faculty interactions, such as outside-of-class discussions and visiting the professor’s residence, have been positively correlated with student learning and development (Fuentes, Alvarado, Berdan, & DeAngelo, 2014). In fact, Fuentes et al. (2014) noted these faculty interactions were even more critical for first-year students

because of academic and social transitions that are implicitly required to be successful. Positive relationships have been documented between higher quality and quantity student-faculty interactions during the first college year (Fuentes et al., 2014).

According to Astin (1993), peers are “the single most potent source of influence affecting student development” (p. 398). Later, Astin reported the three most powerful forms of involvement were: (a) academic involvement, (b) involvement with faculty, and (c) involvement with student peer groups (Astin as cited in Foubert & Grainger, 2006; Astin as cited in Frazier & Eighmy, 2012). Connecting students with their college peers foster a sense of belonging and community, which potentially leads to greater persistence and student satisfaction (Branand et al., 2015; Foubert & Grainger, 2006; Tinto, 2012).

Although several factors contribute to student success, academic initiatives and higher education professionals play key roles in either facilitating or hindering a student’s matriculation through an institution (Young-Jones, Burt, Dixon, & Hawthorne, 2013). Academic advisors are typically a student’s first point-of-contact on campus. Young-Jones et al. (2013) concluded that female freshmen were more likely to hold higher expectations of advisors than were male freshmen. In addition, Young-Jones et al. (2013) supported the idea that academic advisors create meaningful experiences for these students, which helps them matriculate successfully during their first college year. Thus, focused institutional efforts should be made to ensure students receive quality interactions in a supportive environment. Young-Jones et al. (2013) contended that these quality exchanges were made through the academic advising process while conveying institutional expectations. Furthermore, Tinto (2007) concluded that when given clear,

consistent institutional information, students tend to thrive and persist to degree completion.

Research Questions

In this empirical investigation, the following overarching research question was addressed: What is the difference between FTIC and non-FTIC community college students in their on-campus and off-campus relationships? Specific research sub-questions were: (a) What is the difference between FTIC and non-FTIC students in the quality of their relationships with other students at public community colleges?; (b) What is the difference between FTIC and non-FTIC students in the quality of their relationships with instructors at public community colleges?; (c) What is the difference between FTIC and non-FTIC students in the quality of their relationships with administrative personnel at public community colleges?; (d) What is the difference between FTIC and non-FTIC students in the quality of their relationships with friends at public community colleges?; and (e) What is the difference between FTIC and non-FTIC students in the quality of their relationships with immediate family at public community colleges? These research questions were addressed for all students in the sample and then separately for male students and for female students.

Method

Research Design

A causal-comparative research design (Creswell, 2014; Johnson & Christensen, 2012) was used in this investigation. Specifically analyzed herein were archival data that represented events that had already occurred (Creswell, 2014). In this investigation, the independent variable was the status of community college students who participated in

the CCSSE survey. That is, student status consisted of FTIC students and students who were not FTIC students. The dependent variables were the quality of on-campus relationships and the quality of off-campus relationships of the community college students who participated in the CCSSE survey. Because both the independent variable and the dependent variables had already occurred, neither set of variables could be manipulated nor could any extraneous variables be controlled. As such, the research design used herein is necessarily a causal-comparative one (Creswell, 2014; Johnson & Christensen, 2012).

Participants and Instrumentation

Archival data was obtained from The Center for Community College Student Engagement. The sample for this study was the 2014 CCSSE cohort (i.e., 2012, 2013, and 2014 academic years). This cohort consisted of 684 participating institutions from 48 states the District of Columbia, three Canadian provinces, plus Bermuda, Micronesia, and the Marshall Islands (CCSSE, 2017). The survey instrument, Community College Student Report (CCSR), is a national instrument developed to capture experiences and activities of students in 2-year colleges. This survey, administered via random sampling for each participating college, includes 38 questions with several subquestions, of which six subquestions were used in this study.

Included in these data were student responses related to the CCSSE student-faculty interaction benchmark. Assessed in the student-faculty interaction benchmark was the use of email to instructor, discussing grades/assignments with instructor, discussing career plans with instructor/advisor, receiving prompt feedback from instructor, and working with instructors on activities other than coursework (CCSSE,

2017). Participants responded to these survey items through a 4-item Likert response scale (i.e., Never, Sometimes, Often, and Very often).

Results

To determine whether statistically significant differences were present in the on-campus relationships and off-campus relationships between FTIC and non-FTIC community college students, Pearson chi-square statistical procedures were calculated. Categorical data were present for FTIC status (i.e., a first-time-in-college student or not a first-time-in-college student) as well as for the categorical responses (i.e., friendly, supportive, sense of belonging, unfriendly, unsupportive, and sense of alienation) to the dependent variables. Because frequency data were present for the independent variable and for all of the dependent variables, the Pearson chi-square procedure was an appropriate statistical procedure to use (Slate & Rojas-LeBouef, 2011). With the large sample size, the available sample size per cell was more than five. Therefore, the assumptions were met for utilizing a chi-square.

Results for All Students

For the first research question, in which the focus was placed on the quality of relationships with other students at public community colleges between FTIC and non-FTIC college students, the result was statistically significant, $\chi^2(6) = 20.82, p = .002$. The effect size for this finding, Cramer's V, was below small, .014 (Cohen, 1988). A smaller percentage, 27.7%, of FTIC students stated other students at the community college were friendly and supportive than was noted by non-FTIC college students, 28.9%. Delineated in Table 2.1 are the descriptive statistics for this analysis.

Insert Table 2.1 about here

Regarding the second research question, a Pearson chi-square procedure revealed the presence of a statistically significant difference, $\chi^2(6) = 120.76, p < .001$, between FTIC and non-FTIC college students in the quality of their relationships with public community college instructors. The effect size for this finding, Cramer's V , was below small, .034 (Cohen, 1988). Again, a lower percentage of FTIC students, 30.1%, stated instructors were friendly, supportive, and helped them feel a sense of belonging than was reported by non-FTIC college students, 33.2%. Table 2.2 contains the descriptive statistics for this analysis.

Insert Table 2.2 about here

Concerning the third research question regarding the quality of relationships with administrative personnel between FTIC and non-FTIC college students, the result was statistically significant, $\chi^2(6) = 62.18, p < .001$. The effect size for this finding, Cramer's V , was below small, .024 (Cohen, 1988). A larger percentage, 22.5%, of FTIC students responded that administrative personnel were friendly and supportive compared to 22.1% that was indicated by non-FTIC students. Readers are referred to Table 2.3 for the descriptive statistics for this analysis.

Insert Table 2.3 about here

The categorical responses (i.e., Extremely, Quite a Bit, Somewhat, Not Very) for the final two research questions were different from the categorical responses previously analyzed. With respect to the quality of relationships with friends at public community colleges between FTIC and non-FTIC college students, a statistically significant difference was present, $\chi^2(3) = 21.57, p < .001$. Again, the effect size for this finding, Cramer's V, was below small, .014 (Cohen, 1988). Regarding FTIC students, 50.4%, reported friends as being extremely supportive and non-FTIC students, 51.5%, reported friends as being extremely supportive. Presented in Table 2.4 are the descriptive statistics for this analysis.

Insert Table 2.4 about here

Regarding the final research question on the quality of relationships with family at public community colleges between FTIC and non-FTIC college students, the result was statistically significant, $\chi^2(3) = 134.22, p < .001$. The effect size for this finding, Cramer's V, was below small, .036 (Cohen, 1988). A higher percentage of FTIC students (68.7%) indicated their family was extremely supportive, whereas 65.3% of non-FTIC students indicated their family was extremely supportive. Table 2.5 contains the descriptive statistics for this analysis.

 Insert Table 2.5 about here

Results for Male Students

With respect to the quality of their relationships with other students at the community college, the result was not statistically significant, $\chi^2(6) = 7.24, p = .30$, for male students by their FTIC status. Both male FTIC and non-FTIC students indicated a similar degree of quality of relationships with other students at their community college. Presented in Table 2.6 are the descriptive statistics for this analysis.

 Insert Table 2.6 about here

For relationships with their community college instructors, a statistically significant result, $\chi^2(6) = 20.08, p = .003$, was revealed. The effect size for this finding, Cramer's V , was below small, .021 (Cohen, 1988). A lower percentage, 28.8%, of male FTIC students reported instructors at their community college were friendly and supportive than was indicated by male non-FTIC college students, 30.6%. Table 2.7 contains the descriptive statistics for this analysis.

 Insert Table 2.7 about here

Concerning the quality of their relationships with administrative personnel, a statistically significant difference, $\chi^2(6) = 25.44, p < .001$, was revealed. The effect size

for this finding, Cramer's V , was below small, .024 (Cohen, 1988). A larger percentage, 20.4%, of male FTIC students believed administrative personnel were friendly and supportive than was noted by male non-FTIC college students, 19.9%. Readers are referred to Table 2.8 for the descriptive statistics for this analysis.

Insert Table 2.8 about here

For the fourth research question regarding the quality of relationships with their friends, a statistically significant difference, $\chi^2(3) = 21.05, p < .001$, was yielded. The effect size for this finding, Cramer's V , was below small, .021 (Cohen, 1988). Regarding male FTIC males, 1.9% were less likely to indicate that their friends were extremely supportive at the community college than were their male non-FTIC counterparts. Delineated in Table 2.9 are the descriptive statistics for this analysis.

Insert Table 2.9 about here

Regarding the final research question related to the quality of relationships with their family, a statistically significant difference, $\chi^2(3) = 57.64, p < .001$, was revealed. The effect size for this finding, Cramer's V , was below small, .035 (Cohen, 1988). A larger percentage, 64.6%, of male FTIC students responded that their family was extremely supportive than was indicated by male non-FTIC students, 61.1%. Table 2.10 contains the descriptive statistics for this analysis.

Insert Table 2.10 about here

Results for Female Students

Concerning the quality of relationships with other students at their community college, the result was statistically significant, $\chi^2(6) = 26.23, p < .001$. The effect size for this finding, Cramer's V, was below small, .021 (Cohen, 1988). A smaller percentage, 29.9%, of female FTIC students stated other students at the community college were friendly and supportive than was noted by female non-FTIC college students, 31.9%. Readers are referred to Table 2.11 for the descriptive statistics for this analysis.

Insert Table 2.11 about here

With respect to the quality of their relationships with their community college instructors, a statistically significant difference was yielded, $\chi^2(6) = 106.20, p < .001$. The effect size for this finding, Cramer's V, was below small, .042 (Cohen, 1988). A lower percentage of female FTIC students, 31.2%, responded that the instructors at their community college were friendly and supportive in comparison to female non-FTIC students, 35.0%. Presented in Table 2.12 are the descriptive statistics for this analysis.

Insert Table 2.12 about here

Regarding the quality of relationships with administrative personnel at their community college, the result was statistically significant, $\chi^2(6) = 43.31, p < .001$. The effect size for this finding, Cramer's V, was below small, .027 (Cohen, 1988). A larger percentage, 22.4%, of female FTIC students reported administrative personnel were friendly and supportive than was indicated by female non-FTIC females, 21.8%. Table 2.13 contains a summary of the descriptive statistics for this analysis.

 Insert Table 2.13 about here

Concerning relationships with their community college friends, a statistically significant difference was not yielded, $\chi^2(3) = 4.41, p = .22$. Similar percentages were revealed between female FTIC students and female non-FTIC students with regard to the quality of relationships with their community college friends. Presented in Table 2.14 are the descriptive statistics for this analysis.

 Insert Table 2.14 about here

Regarding the final research question related to the quality of relationships with their family, a statistically significant difference, $\chi^2(3) = 91.16, p < .001$, was yielded. The effect size for this finding, Cramer's V, was below small, .039 (Cohen, 1988). A larger percentage, 72.1%, of female FTIC students indicated that their family was extremely supportive at their community college than was noted by female non-FTIC students, 68.5%. Delineated in Table 2.15 are the descriptive statistics for this analysis.

Insert Table 2.15 about here

Discussion

Addressed in this investigation was the extent to which differences were present between FTIC and non-FTIC community college student in their on-campus and off-campus relationships. Archival data from the 2014 three-year cohort were obtained from the Community College Survey of Student Engagement, which consisted of nearly 108,000 students who completed the survey. Inferential statistical analyses were conducted for all students and separately for male and female college students.

Overall, FTIC students were less likely to indicate higher levels of on-campus relational engagement (i.e., student-student, student-faculty, and with friends) than were their non-FTIC peers. Regarding other relationships for all FTIC students, they reported administrative personnel were more supportive than did their non-FTIC counterparts. In addition, FTIC students noted higher levels of support from family than did their non-FTIC peers.

Interestingly, for male FTIC and non-FTIC students, a statistically significant difference was not revealed regarding student-student relationships at the community college. Male FTIC students responded that higher levels of support from administration/personnel and family than did their male non-FTIC peers. In contrast, a smaller percentage of male FTIC students reported that faculty and friends were supportive than indicated by their male non-FTIC peers.

Female FTIC students were less likely to indicate supportive relationship between student-student and student-faculty than were their female non-FTIC peers. However, female FTIC students were more likely to indicate that administrative personnel and family were supportive than were their female non-FTIC peers. A statistically significant difference was not present between female FTIC and female non-FTIC students with regard to their relationships with friends.

Connection with Existing Literature

As noted by Tinto (2012), academic and social supports are critical for students during their first year of college. As students transition, they distance themselves from past networks, and integrate into the new academic and social higher education climate. In this study, FTIC students reported lower levels of relational engagement with other students than did their non-FTIC counterparts, a finding that was not consistent with the literature. Branand et al. (2015) reported that connecting students with college peers fosters a sense of belonging and community, which could lead to greater persistence and student satisfaction.

Fuentes et al. (2014) established that student-faculty interactions had positive correlations with student learning and development. In this study, a smaller percentage of FTIC students reported faculty as being supportive than did their non-FTIC counterparts. However, consistent with the literature (Cohen et al., 2014; Kimbark et al., 2017) family support structures were indicative of student decisions to stay or not to stay and pursue their postsecondary educational goals. Based on this study, FTIC students were more likely to indicate family as being supportive than were their non-FTIC peers.

As noted by Young-Jones et al. (2013), higher education professionals play a key role in either facilitating or hindering a student's matriculation through an institution. As indicated in the results, FTIC students were more likely to report administrative personnel and advisors as being more supportive than were their non-FTIC peers. Similarly, Young-Jones et al. (2013) contended that female freshmen were more likely to hold higher expectations of advisors than were male freshmen. Consistent with this conclusion, female FTIC students in this study were more likely to respond that advisors were friendly and supportive than were male FTIC students.

Implications for Policy and Practice

Based on the findings of this study, several implications for policy and practice can be made. First, because community college students are at higher risk of dropping out (Toppers & Powers, 2013) and typically need remedial courses (Scherer & Anson, 2014), community colleges should provide academic and social support for FTIC students (Tinto, 2012). Courtier (2013) suggested student success centers as an option to assist these students. Similarly, Padgett (2013) recommended offering programs to help support students in non-academic areas such as student organizations and social groups.

Second, with the increase in the first-year student population in community colleges (American Association of Community Colleges, 2017), higher education leaders and administrators should accommodate this growing population by providing appropriate resources and support services for these students. As such, another implication and potential program implementation or program review opportunity is the use of first-year seminars. First-year seminars typically offer smaller class sizes and foster student-faculty interaction and peer relationships (Padgett, 2013).

Third, because academic advisors are usually the first point of contact for FTIC students, community college leaders should make concerted efforts to ensure meaningful experiences are created early for freshmen students. Young-Jones et al. (2013) suggested these experiences could convey institutional expectations and either hinder or advance students matriculation through their first year at the institution. Thus, focused institutional efforts should be made to ensure students receive quality interactions in a supportive environment. Tinto (2007) further concluded that when given clear, consistent institutional information, students tend to thrive and persist to degree completion.

Fourth, participants in this study were both FTIC students and non-FTIC students who identified several relational engagement factors (i.e., student-student, student-faculty, administrative personnel, friends, and family). The results of this study can be shared with community college administrators, faculty, staff, students, and other stakeholders responsible for providing support services to improve student retention and persistence. Further, if specific programs or initiatives are currently implemented, this information can guide them in conducting program evaluations to determine the effectiveness of such programs.

Recommendations for Future Research

Based upon the results of this national investigation, several recommendations for future research can be made. First, this study should be replicated at the community college level with more current data that were analyzed herein. The degree to which results from this empirical investigation would be generalizable to community college students today is not known. Second, this study should be extended to 4-year universities

using the National Survey of Student Engagement data. Until such a study is conducted, readers should not assume that the findings delineated herein on community college students would be generalizable to 4-year university students. Third, future studies could be conducted using the Community College Faculty Survey of Student Engagement data, which elicits information from a faculty perspective regarding students' educational experiences.

Fourth, another recommendation would be to conduct a qualitative research study on the influence of these particular relational interactions with these specific groups. Because much emphasis and several programs have been implemented for FTIC and first-year students, these researchers could determine specific emergent themes or program components that are beneficial for the student success. Fifth, an examination of CCSSE benchmark data could provide insight into the extent to which differences might exist between FTIC students who voluntarily enrolled in first year experience courses compared to FTIC students who were mandated to take the course.

Conclusion

In this investigation, the degree to which differences were present between FTIC community college students and non-FTIC community college students in their on-campus and in their off-campus relationships was addressed through the analysis of CCSSE data. Statistically significant differences, albeit below small effect sizes, were revealed in the level of relational interactions between FTIC students and non-FTIC students. For FTIC students, administrative personnel and family were more supportive and created a sense of belonging during their community college experience. However, FTIC students were less likely to respond that other students, instructors, and friends

were more supportive than were their non-FTIC peers. Students who were FTIC indicated that administrative personnel and family were more supportive and created a sense of belonging during their community college experience, whereas, FTIC students were less likely to respond that other students, instructors, and friends were more supportive than indicated by their non-FTIC peers.

With respect to gender, male FTIC students reported higher levels of support from administration/personnel and family than did male non-FTIC peers. In contrast, a smaller percentage of male FTIC students responded that faculty and friends were supportive than did their male non-FTIC peers. Female FTIC students were less likely to indicate the presence of supportive relationships between student-student and student-faculty than were their female non-FTIC peers. However, female FTIC students were more likely to respond that administrative personnel and family were supportive than were their female non-FTIC peers.

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Table 2.1

Descriptive Statistics for Student-to-Student Relationships by FTIC Status

	FTIC students	Non-FTIC students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 21,451) 27.7%	(<i>n</i> = 8,446) 28.9%
Friendly/Supportive L-6	(<i>n</i> = 21,239) 27.4%	(<i>n</i> = 7,844) 26.9%
Friendly/Supportive L-5	(<i>n</i> = 16,859) 21.8%	(<i>n</i> = 6,207) 21.3%
Friendly/Supportive L-4	(<i>n</i> = 11,855) 15.3%	(<i>n</i> = 4,344) 14.9%
Friendly/Supportive L-3	(<i>n</i> = 3,611) 4.7%	(<i>n</i> = 1,400) 4.8%
Friendly/Supportive L-2	(<i>n</i> = 1,656) 2.1%	(<i>n</i> = 654) 2.2%
Unfriendly/Unsupportive	(<i>n</i> = 809) 1.0%	(<i>n</i> = 301) 1.0%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.2

Descriptive Statistics for Student-to-Instructor Relationships by FTIC Status

	FTIC students	Non-FTIC students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 23,330) 30.1%	(<i>n</i> = 9,687) 33.2%
Friendly/Supportive L-6	(<i>n</i> = 24,340) 31.4%	(<i>n</i> = 9,075) 31.1%
Friendly/Supportive L-5	(<i>n</i> = 16,293) 21.0%	(<i>n</i> = 5,584) 19.1%
Friendly/Supportive L-4	(<i>n</i> = 8,952) 11.6%	(<i>n</i> = 3,126) 10.7%
Friendly/Supportive L-3	(<i>n</i> = 2,825) 3.6%	(<i>n</i> = 1,016) 3.5%
Friendly/Supportive L-2	(<i>n</i> = 1,205) 1.6%	(<i>n</i> = 482) 1.7%
Unfriendly/Unsupportive	(<i>n</i> = 547) 0.7%	(<i>n</i> = 229) 0.8%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.3

Descriptive Statistics for Student-Administrative Personnel Relationships by FTIC Status

	FTIC students	Non-FTIC students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 16,619) 21.5%	(<i>n</i> = 6,078) 20.9%
Friendly/Supportive L-6	(<i>n</i> = 17,406) 22.5%	(<i>n</i> = 6,438) 22.1%
Friendly/Supportive L-5	(<i>n</i> = 16,664) 21.5%	(<i>n</i> = 6,067) 20.8%
Friendly/Supportive L-4	(<i>n</i> = 14,280) 18.5%	(<i>n</i> = 5,613) 18.9%
Friendly/Supportive L-3	(<i>n</i> = 6,314) 8.2%	(<i>n</i> = 2,354) 8.1%
Friendly/Supportive L-2	(<i>n</i> = 3,614) 4.7%	(<i>n</i> = 1,563) 5.4%
Unfriendly/Unsupportive	(<i>n</i> = 2,495) 3.2%	(<i>n</i> = 1,136) 3.9%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.4

Descriptive Statistics for Student-Friend Relationships by FTIC Status

	FTIC students	Non-FTIC students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 38,858) 50.4%	(<i>n</i> = 15,021) 51.5%
Quite a Bit Supportive	(<i>n</i> = 21,575) 28.0%	(<i>n</i> = 7,742) 26.6%
Somewhat Supportive	(<i>n</i> = 13,754) 17.8%	(<i>n</i> = 5,270) 18.1%
Not Very Supportive	(<i>n</i> = 2,978) 3.9%	(<i>n</i> = 1,120) 3.8%

Table 2.5

Descriptive Statistics for Student-Family Relationships by FTIC Status

	FTIC students	Non-FTIC students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 52,839) 68.7%	(<i>n</i> = 19,000) 65.3%
Quite a Bit Supportive	(<i>n</i> = 14,456) 18.8%	(<i>n</i> = 5,763) 19.8%
Somewhat Supportive	(<i>n</i> = 7,497) 9.7%	(<i>n</i> = 3,368) 11.6%
Not Very Supportive	(<i>n</i> = 2,145) 2.8%	(<i>n</i> = 957) 3.3%

Table 2.6

Descriptive Statistics for Student-to-Student Relationships for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 8,421) 24.9%	(<i>n</i> = 2,986) 24.7%
Friendly/Supportive L-6	(<i>n</i> = 9,578) 28.4%	(<i>n</i> = 3,461) 28.7%
Friendly/Supportive L-5	(<i>n</i> = 7,765) 23.0%	(<i>n</i> = 2,697) 22.3%
Friendly/Supportive L-4	(<i>n</i> = 5,322) 15.8%	(<i>n</i> = 1,889) 15.7%
Friendly/Supportive L-3	(<i>n</i> = 1,529) 4.5%	(<i>n</i> = 571) 4.7%
Friendly/Supportive L-2	(<i>n</i> = 729) 2.2%	(<i>n</i> = 296) 2.5%
Unfriendly/Unsupportive	(<i>n</i> = 432) 1.3%	(<i>n</i> = 168) 1.4%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.7

Descriptive Statistics for Student-to-Instructor Relationships for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 9,713) 28.9%	(<i>n</i> = 3,691) 30.6%
Friendly/Supportive L-6	(<i>n</i> = 11,168) 33.1%	(<i>n</i> = 3,998) 33.1%
Friendly/Supportive L-5	(<i>n</i> = 7,220) 21.4%	(<i>n</i> = 2,427) 20.1%
Friendly/Supportive L-4	(<i>n</i> = 3,766) 11.1%	(<i>n</i> = 1,277) 10.6%
Friendly/Supportive L-3	(<i>n</i> = 1,130) 3.3%	(<i>n</i> = 400) 3.3%
Friendly/Supportive L-2	(<i>n</i> = 520) 1.5%	(<i>n</i> = 176) 1.5%
Unfriendly/Unsupportive	(<i>n</i> = 263) 0.8%	(<i>n</i> = 98) 0.8%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.8

Descriptive Statistics for Student-Administrative Personnel Relationships for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 6,894) 20.4%	(<i>n</i> = 2,362) 19.6%
Friendly/Supportive L-6	(<i>n</i> = 7,901) 23.4%	(<i>n</i> = 2,745) 22.8%
Friendly/Supportive L-5	(<i>n</i> = 7,407) 22.0%	(<i>n</i> = 2,570) 21.3%
Friendly/Supportive L-4	(<i>n</i> = 6,326) 18.8%	(<i>n</i> = 2,359) 19.6%
Friendly/Supportive L-3	(<i>n</i> = 2,598) 7.7%	(<i>n</i> = 938) 7.8%
Friendly/Supportive L-2	(<i>n</i> = 1,464) 4.3%	(<i>n</i> = 596) 4.9%
Unfriendly/Unsupportive	(<i>n</i> = 1,145) 3.4%	(<i>n</i> = 480) 4.0%
Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.		

Table 2.9

Descriptive Statistics for Student-Friend Relationships for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 14,136) 41.8%	(<i>n</i> = 5,288) 43.7%
Quite a Bit Supportive	(<i>n</i> = 10,712) 31.7%	(<i>n</i> = 3,574) 29.5%
Somewhat Supportive	(<i>n</i> = 7,205) 21.3%	(<i>n</i> = 2,606) 21.5%
Not Very Supportive	(<i>n</i> = 1,738) 5.1%	(<i>n</i> = 632) 5.2%

Table 2.10

Descriptive Statistics for Student-Family Relationships for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 21,751) 64.6%	(<i>n</i> = 7,376) 61.1%
Quite a Bit Supportive	(<i>n</i> = 7,255) 21.5%	(<i>n</i> = 2,719) 22.5%
Somewhat Supportive	(<i>n</i> = 3,675) 10.9%	(<i>n</i> = 1,528) 12.7%
Not Very Supportive	(<i>n</i> = 1,012) 3.0%	(<i>n</i> = 445) 3.7%

Table 2.11

Descriptive Statistics for Student-to-Student Relationships for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 12,741) 29.9%	(<i>n</i> = 5,352) 31.9%
Friendly/Supportive L-6	(<i>n</i> = 11,380) 26.7%	(<i>n</i> = 4,299) 25.6%
Friendly/Supportive L-5	(<i>n</i> = 8,864) 20.8%	(<i>n</i> = 3,436) 20.5%
Friendly/Supportive L-4	(<i>n</i> = 6,328) 14.9%	(<i>n</i> = 2,932) 14.3%
Friendly/Supportive L-3	(<i>n</i> = 2,015) 4.7%	(<i>n</i> = 816) 4.9%
Friendly/Supportive L-2	(<i>n</i> = 891) 2.1%	(<i>n</i> = 346) 2.1%
Unfriendly/Unsupportive	(<i>n</i> = 354) 0.8%	(<i>n</i> = 125) 0.7%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.12

Descriptive Statistics for Student-to-Instructor Relationships for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 13,306) 31.2%	(<i>n</i> = 5,875) 35.0%
Friendly/Supportive L-6	(<i>n</i> = 12,869) 30.2%	(<i>n</i> = 4,971) 29.6%
Friendly/Supportive L-5	(<i>n</i> = 8,824) 20.7%	(<i>n</i> = 3,093) 18.4%
Friendly/Supportive L-4	(<i>n</i> = 5,029) 11.8%	(<i>n</i> = 1,803) 10.8%
Friendly/Supportive L-3	(<i>n</i> = 1,625) 3.8%	(<i>n</i> = 604) 3.6%
Friendly/Supportive L-2	(<i>n</i> = 665) 1.6%	(<i>n</i> = 300) 1.8%
Unfriendly/Unsupportive	(<i>n</i> = 262) 0.6%	(<i>n</i> = 126) 0.8%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.13

Descriptive Statistics for Student-Administrative Personnel Relationships for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Friendly/Supportive L-7	(<i>n</i> = 9,509) 22.4%	(<i>n</i> = 3,648) 21.8%
Friendly/Supportive L-6	(<i>n</i> = 9,281) 27.8%	(<i>n</i> = 3,607) 21.5%
Friendly/Supportive L-5	(<i>n</i> = 9,025) 21.2%	(<i>n</i> = 3,418) 20.4%
Friendly/Supportive L-4	(<i>n</i> = 7,734) 18.2%	(<i>n</i> = 3,097) 18.5%
Friendly/Supportive L-3	(<i>n</i> = 3,617) 8.5%	(<i>n</i> = 1,390) 8.3%
Friendly/Supportive L-2	(<i>n</i> = 2,078) 4.9%	(<i>n</i> = 940) 5.6%
Unfriendly/Unsupportive	(<i>n</i> = 1,290) 3.0%	(<i>n</i> = 642) 3.8%

Level 7 represents friendly/supportive student relationships, Level 1 represents unfriendly/unsupportive.

Table 2.14

Descriptive Statistics for Student-Friend Relationships for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 24,382) 57.2%	(<i>n</i> = 9,634) 57.3%
Quite a Bit Supportive	(<i>n</i> = 10,662) 25.0%	(<i>n</i> = 4,089) 24.3%
Somewhat Supportive	(<i>n</i> = 6,423) 15.1%	(<i>n</i> = 2,619) 15.6%
Not Very Supportive	(<i>n</i> = 1,190) 2.8%	(<i>n</i> = 472) 2.8%

Table 2.15

Descriptive Statistics for Student-Family Relationships for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Quality of Relationship	<i>n</i> and %	<i>n</i> and %
Extremely Supportive	(<i>n</i> = 30,666) 72.1%	(<i>n</i> = 11,493) 68.5%
Quite a Bit Supportive	(<i>n</i> = 7,047) 16.6%	(<i>n</i> = 2,988) 17.8%
Somewhat Supportive	(<i>n</i> = 3,725) 8.8%	(<i>n</i> = 1,808) 10.8%
Not Very Supportive	(<i>n</i> = 1,102) 2.6%	(<i>n</i> = 495) 2.9%

CHAPTER III

DIFFERENCES IN COMMUNITY COLLEGE STUDENT EFFORTS AND ENGAGEMENT BY FIRST-TIME IN COLLEGE STATUS: A NATIONAL INVESTIGATION

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the degree to which First-Time in College (FTIC) and non-FTIC community college students differed in their student engagement was addressed. Data from the Community College Survey of Student Engagement were analyzed. Inferential statistics yielded a statistically significant difference in only one of three engagement components (i.e., student effort benchmark) for all students. For male FTIC students, a statistically significant difference was present in their student effort and academic challenge. No statistically significant differences were present for female FTIC students. Implications of these results and recommendations for future research were discussed.

Keywords: First-time in college, first year student, student motivation, student effort, student engagement, academic challenge, gender, CCSSE

DIFFERENCES IN COMMUNITY COLLEGE STUDENT EFFORTS AND ENGAGEMENT BY FIRST-TIME IN COLLEGE STATUS: A NATIONAL INVESTIGATION

Despite the fact that community colleges educate more than half the nation's undergraduates (American Association of Community Colleges, 2016), these 2-year public institutions have been called the stepchildren, or the “other college” of higher education (McIntosh & Rouse, 2009, p. 1). Community colleges consistently strive to provide stronger pathways and support services to meet diverse student needs (Community College Research Center, 2014). Two-year colleges play a critical role in higher education in the United States, serving students who may: (a) be college eligible but not college ready, (b) work full-time and attend college part-time, (c) be single parents of small children, (d) be a member of an underrepresented underserved ethnic/racial group, and/or (e) be socioeconomically disadvantaged (McIntosh & Rouse, 2009; Scherer & Anson, 2014). Of importance to this investigation, McIntosh and Rouse (2009) documented the enrollment at 2-year colleges has grown faster than enrollment at the 4-year colleges and universities.

Over the past few decades, the sole focus of open access and equity at 2-year postsecondary institutions has shifted to student success and more equity in student outcomes (American Association of Community Colleges, 2015). In the Commission on the Future of Higher Education, Margaret Spellings, the past U.S. Secretary of Education, highlighted the need for both access and success to be increased. As stated by Spellings:

Over the past decade, literacy among college graduates has actually declined.

Unacceptable numbers of college graduates enter the workforce without the skills

employers say they need in an economy where, as the truism holds correctly, knowledge matters more than ever. (Department of Education, 2006, p. 17)

A decade later, the lack of persistence and degree completion has continued to plague the nation (Kimbark, Peters, & Richardson, 2017). Although this problem has been a well-known fact for several years, Cohen, Brawer, and Kisker (2014) documented that a complex issue exists because of the differing characteristics of students who attend 2-year and those students who attend 4-year postsecondary institutions. McIntosh and Rouse (2009) reported 2-year college students are far less likely to be traditional-aged students (i.e., ages 18-24) than are 4-year college students. In addition, students who attend 2-year postsecondary institutions are far more likely to be enrolled part-time, employed part-time, and more likely to be of lower socioeconomic status than their 4-year counterparts. According to the Community College Survey of Student Engagement (2005), some of these traits are exhibited by, so called, high-risk students. Several risk factors contribute to low persistence and graduation from college:

Being academically underprepared for college-level work; not entering college directly after high school; attending college part-time; being a single parent; being financially independent; caring for children at home; working more than thirty hours per week; and being a first-generation college student. (Kuh et al., 2007, p. 40)

Community college students are three to four times more likely to reflect four or more of these risk factors than their counterparts attending 4-year colleges and universities.

Community college students are typically less academically prepared than their 4-year peers and are frequently first-generation college students. As such, these students are less

likely to get support and information from family members (Goldrick-Rab, 2010; Kimbrick et al., 2017). Goldrick-Rab (2010) asserted, however, that if student engagement levels are increased, colleges could close the persistence gaps between community college students and their 4-year counterparts. In this study, several engagement factors were reviewed and discussed: (a) student effort, (b) student motivation, and (c) academic challenge.

Researchers (e.g., Feldman & Zimbler, 2011; Tinto, 1993, 2012) reported first-time college students, those who have no prior postsecondary higher education experience, as being socially disengaged and having disparate academic needs. These authors agreed that when students fail to persist, academic abilities are not the only factor involved in their lack of persistence. Rather, they believed that students' lack of basic skills in effective college success strategies contributed to their lack of persistence. Feldman and Zimbler (2011) documented the presence of attributable skills, such as time management, writing ability, effective reading strategies, note-taking, and test-taking strategies that hinder student persistence and graduation.

Tinto's (1975) integration framework is foundational with regard to linking student engagement with persistence in postsecondary education (Dudley, Liu, Hao, & Stallard, 2015). In agreement with Tinto (1975), other researchers (e.g., Chickering & Gamson, 1987; Kuh, 2007; Nora, Crisp, & Matthews, 2011) concurred that enhancing student engagement is essential to promoting desirable outcomes such as academic performance and persistence in colleges or universities. Schuetz (2008) defined student engagement as "a state of being that combines high effort, attention, and participation with emotions of interest, enthusiasm, enjoyment, and lack of anxiety or anger" (p. 312).

As noted, one component of engagement is student effort (e.g., time on task), which includes student behaviors that contribute to their learning and the likelihood that they will attain their educational goals.

In a recent study, Dudley et al. (2015) investigated the community college student levels of engagement as demonstrated in longitudinal Community College Survey of Student Engagement (CCSSE) data. Of note in their study were the heavy family and social responsibilities of students. For example, 62% of the students were employed off-campus, of which 35% reported working more than 20 hours per week. In addition, 22% of the student group worked 30 or more hours per week. Dudley et al. (2015) correlated these factors with student levels of engagement and effort. Students reported lack of time as a major obstacle, which hindered them from putting forth more effort toward studies. Specifically, students reported a limited amount of time to prepare additional writing drafts or reading assignments before class. As such, students unprepared or unfamiliar with course topics were much less likely to ask questions or participate in class (Dudley et al., 2015).

The role of student motivation, also known as a non-cognitive factor, is another predictor of college persistence and postsecondary student success (Richardson, Abraham, & Bond, 2012). The term motivation is a Latin derivative meaning “to move” (Lazowski & Hulleman, 2016, p 603). According to Lazowski and Hulleman (2016), several qualities of motivation exist such as “needs, drives, goals, aspirations, interests, and affects” (p. 603.). Motivation tends to be either intrinsic or extrinsic in nature. Intrinsic motivation comes from internal sources such as the pure enjoyment of task engagement (Lazowski & Hulleman, 2016), or enjoyment of a task for its own sake

(Ryan & Deci, 2000). Extrinsic motivation is defined as engagement motivated by external pressures or influences (Ryan & Deci, 2000), such as receiving financial compensation (Lazowski & Hulleman, 2016).

In a 2014 investigation, Liao, Edlin, and Ferdenzi (2014) analyzed how motivation and self-efficacy affected community college student persistence. Self-efficacy, defined as the belief that of being capable of accomplishing a specific task (Liao et al., 2014), was viewed through the lens of self-regulated learning efficacy and self-efficacy for academic achievement. Zimmerman (2008) defined self-regulated learning as the “degree to which students are metacognitively, motivationally, and behaviorally active participants in their own learning process” (p. 167). In his study, Liao (2014) reported self-regulated learning efficacy predicted student intention to persist, or reenroll, whereas, self-efficacy for academic achievement failed to predict persistence.

In the Liao et al. (2014) study, motivation was examined at two levels: intrinsic motivation and extrinsic motivation. He contended that intrinsically motivated students internally valued learning and wanted to understand the content. Conversely, extrinsically motivated students viewed test preparation activities as leading to an external reward of a grade (Liao et al., 2014). Interestingly, extrinsic motivation predicted persistence or reenrollment; however, the effects of intrinsic motivation were minimal and failed to predict persistence in this study. Further, the four independent variables (i.e., self-regulated learning efficacy, academic achievement efficacy, intrinsic motivation, and extrinsic motivation) were statistically significantly related with each other.

Academic challenge is another factor associated with student engagement.

Academic challenge is defined as “challenging intellectual and creative work”, which is essential to student learning (CCSSE, 2016, p. 1). Several academic challenge constructs are measured, such as, how much the coursework required “analyzing the basic elements of an idea, synthesizing and organizing ideas, information, or experiences in new ways, making judgements about the value or soundness of information, applying theories or concepts to practical problems or in new situations, and using information you have read or heard to perform a new skill” (Nora et al., 2011, p. 116). The emphasis in the academic challenge is on the nature and amount of assigned academic work. Further, academic challenge is an effective practice in which the complexity of cognitive tasks presented to students is addressed (CCSSE, 2016).

Longerbeam (2016) examined experiences related to academic challenge and support of first-year college students. In her mixed-methods study, challenge was used to refer to the academic rigor and level of effort required for the student to succeed academically, whereas, support referred to the academic and social encouragement and assistance offered by faculty, staff, and peers. Longerbeam (2016) documented that students who reported, “academic challenge and a supportive campus environment were significantly more likely to report gains in general education- a measure of learning. Students who had enriching educational experiences—the environmental context for challenge and support—were more likely to graduate.” (p. 38). As a result of Longerbeam’s (2016) study, several challenge and support themes emerged: (a) embracing struggle and overcoming obstacles, (b) making personal connections with key personnel, (c) reaching out to appropriate contact, and (d) deepening involvement via

academic and co-curricular activities (Longerbeam, 2016). When academic challenge and support are both present, students thrive.

Statement of the Problem

Several researchers (e.g., Everett, 2015; McIntosh & Rouse, 2009; Scrivener, Weiss, Ratledge, Rudd, Sommo, & Fescues, 2015) established that graduation rates have remained around 50% over the past few decades. Low persistence rates and low retention rates are serious concerns for many 2- and 4-year colleges and universities (Chan, 2017; Stewart, Lim, & Kim, 2015). To meet the needs of the nation and produce and graduate more educated citizens, the quality of student learning must improve. Higher education institutions must find ways to help support, motivate, and actively engage students to continue through graduation.

According to D'Lima, Winsler, and Kitsantas (2014) academic achievement, motivation, and self-efficacy play major roles in student persistence. As suggested by D'Lima et al. (2014), the time and energy students devote to educationally purposeful activities are excellent predictors of personal learning and development (Astin, 1993; CCSSE, 2016). Based on national reports, student development during college depends on a variety of factors and conditions (CCSSE, 2016). One of these important concepts is the student engagement benchmark. Emphasized in student engagement are two key components: (a) time and effort students put into their studies and (b) how institutions utilize resources and structure learning opportunities, which allow students to participate in activities linked to student learning. Academic challenge is another factor essential to student learning. As reported by Price and Tovar (2015), academic challenge is positively correlated to degree and certificate attainment.

Purpose of the Study

The purpose of this study was to determine the degree to which differences were present between FTIC community college students and non-FTIC community college students with respect to specific student behaviors. Of particular interest was whether reported student effort and student engagement differed between these two groups of community college students. Also of interest was whether these two groups of community college students differed with respect to student motivation and academic challenges. By analyzing responses to four survey items on a national dataset, information was obtained concerning the presence, or absence, of differences between FTIC community college students and non-FTIC community college students.

Significance of the Study

For decades, growing concerns exist about the engagement levels of college students. Several researchers (e.g., Chickering & Gamson, 1987; Liao et al., 2014; Longerbeam, 2016; Pascarelli & Terenzini, 1991; Tinto, 1993) concurred student learning and achievement in college have strong associations with student engagement. Community colleges are challenged with finding innovative ways to: (a) improve curriculum, (b) provide quality-teaching strategies, and (c) maintain accountability standards. By analyzing CCSSE survey data, key information could be gained. The results of this study may provide higher education administrators, policymakers, faculty, and student support personnel with necessary information and knowledge to help increase the engagement levels of community college students. Further, these higher education professionals may be able to develop or enhance current programs at their respective colleges.

Research Questions

In this investigation, the following research questions were addressed: (a) What is the difference between FTIC and non-FTIC community college students in their student effort?; (b) What is the difference between FTIC and non-FTIC community college students in their student engagement?; and (c) What is the difference between FTIC and non-FTIC community college students in their academic challenge? These research questions were addressed for all students and then separately for male and for female students.

Method

Research Design

A causal-comparative research design (Creswell, 2014; Johnson & Christensen, 2012) was used in this investigation. Specifically analyzed herein were archival data that represented events that had already occurred (Creswell, 2014). In this investigation, the independent variable was the status of community college students who participated in the CCSSE survey. That is, student status was FTIC students and students who were not FTIC students. The dependent variables that were analyzed in this study were student engagement and the amount of effort put forth by community college students who participated in the CCSSE survey. Because both the independent variable and the dependent variables had already occurred, neither can be manipulated nor can any extraneous variables be controlled. As such, the research design used herein is necessarily a causal-comparative one (Creswell, 2014; Johnson & Christensen, 2012).

Participants and Instrumentation

Archival data had previously been obtained from The Center for Community College Student Engagement. The sample for this study was the 2014 CCSSE cohort (i.e., 2012, 2013, and 2014 academic years). This cohort consisted of 684 participating institutions from 48 states the District of Columbia, three Canadian provinces, plus Bermuda, Micronesia, and the Marshall Islands (CCSSE, 2017).

The survey instrument, Community College Student Report (CCSR), is a national instrument developed to capture experiences and activities of students in 2-year colleges. This survey, administered via random sampling for each participating college, includes 38 questions with several subquestions, of which eight subquestions were used in this study. Also present were five CCSSE benchmarks: (a) active and collaborative learning, (b) student effort, (c) academic challenge, (d) student-faculty interaction, and (e) support for learners (CCSSE, 2017). In this study, the student effort benchmark was examined.

Included in these data are student responses related to the CCSSE benchmark related to student effort. Measured in the student effort benchmark was the use of tutoring, computer labs, skill labs, updating two or more assignment drafts before submission, using various sources for papers or projects, the number of non-assigned books read for enrichment, and hours spent preparing for class (CCSSE, 2017). Participants responded to these survey items through the use of a 4-item Likert response scale (i.e., Often, Sometimes, Rarely/Never, and Don't Know/NA).

Results

The three dependent variables (i.e., student effort, student engagement, and academic challenge) in this research article consisted of continuous and interval level

data. These three dependent variables had been converted by the CCSSE staff into *T*-scores. *T*-scores are a type of standard score with a *M* of 50 and a *SD* of 10. The independent variable in this article was the student status that consisted of two groups – FTIC and non-FTIC. To determine whether statistically significant differences were present in these student engagement benchmark scores between FTIC and non-FTIC students in public community colleges, a multivariate analysis of variance (MANOVA) procedure was calculated. Although some of the underlying assumptions were not met, due to the robustness of the MANOVA procedure, it was appropriate to use in this study (Field, 2013).

Results for All Students

A statistically significant difference was revealed, Wilks' $\Lambda = .99, p < .001$, partial $\eta^2 = .008$, in the student engagement benchmark scores between FTIC and non-FTIC community college students. The effect size was reflective of a below small effect (Cohen, 1988). Following this overall analysis, univariate follow up analysis of variance procedures were calculated. A statistically significant difference was not yielded between FTIC and non-FTIC students in their active and collaborative learning benchmark scores, $F(1, 108192) = 0.14, p = .71$, nor in their academic challenge benchmark scores, $F(1, 108192) = 1.03, p = .31$. A statistically significant result was present, however, in student effort benchmark scores, $F(1, 108192) = 618.97, p < .001$, partial $\eta^2 = .006$. The effect size for this finding, Cramer's *V*, was below small, (Cohen, 1988). With respect to active and collaborative learning and academic challenge, FTIC students and non-FTIC students were similar in their responses. Presented in Tables 3.1

and 3.2 are the descriptive statistics for the active and collaborative learning analysis and for the academic challenge analysis.

 Insert Tables 3.1 and 3.2 about here

Concerning the student effort benchmark scores, the average benchmark scores for FTIC students were 4.2 points higher than for their non-FTIC peers. These differences in benchmark scores displayed more student effort by FTIC students in academic preparation, synthesis of information, frequency of attending classes unprepared, personal reading, and preparation for classes than displayed by their non-FTIC peers. Delineated in Table 3.3 are the descriptive statistics for this analysis.

 Insert Table 3.3 about here

Results for Male Students

Concerning the student engagement benchmark scores for male FTIC students, the result was statistically significant, Wilks' $\Lambda = .99$, $p < .001$, partial $\eta^2 = .004$. The effect size was reflective of a below small effect (Cohen, 1988). Following this analysis, univariate follow up analysis of variance procedures were calculated. A statistically significant difference was not present between male FTIC and male non-FTIC students in their active and collaborative learning benchmark scores, $F(1, 76778) = 1.84$, $p = .17$. Similar average scores were present for both groups of students in their active and collaborative learning. Table 3.4 contains the descriptive statistics for this analysis.

Insert Table 3.4 about here

Regarding student effort benchmark scores, a statistically significant difference was revealed for male FTIC students, $F(1, 76778) = 183.93, p < .001$, partial $\eta^2 = .004$; a below small effect size (Cohen, 1988) was revealed. The average student effort benchmark scores for male FTIC students were 3.5 points higher than for male non-FTIC students. As such, male FTIC students put forth more effort toward preparing for class activities and completing class assignments. Presented in Table 3.5 are the descriptive statistics for this analysis.

Insert Table 3.5 about here

With respect to academic challenge benchmark scores, a statistically significant difference was revealed, $F(1, 76778) = 22.80, p < .001$, partial $\eta^2 = .001$. The effect size for this finding was below small (Cohen, 1988). The average academic challenge benchmark scores for male FTIC students was 1 point higher than for male non-FTIC students. Academically, the male FTIC students perceived that coursework was more rigorous and intellectually challenging than male non-FTIC students. Delineated in Table 3.6 are the descriptive statistics for this analysis.

Insert Table 3.6 about here

Results for Female Students

Concerning the student engagement benchmark scores for female FTIC students, a statistically significant result was present, Wilks' $\Lambda = .99$, $p < .001$, partial $\eta^2 = .012$. The effect size was reflective of a small effect (Cohen, 1988). Following this overall analysis, univariate follow up analysis of variance procedures were calculated. A statistically significant difference was not yielded between female FTIC and female non-FTIC students in their active and collaborative learning benchmark scores, $F(1, 120319) = 1.90$, $p = .168$, nor in their academic challenge benchmark scores, $F(1, 120319) = 2.97$, $p = .085$. As such, female FTIC and female non-FTIC students were similar in their responses for both of these benchmark areas. Table 3.7 and 3.8 contains the descriptive statistics for these analyses.

 Insert Table 3.7 and 3.8 about here

Regarding the student effort benchmark scores, a statistically significant difference was revealed for female FTIC students, $F(1, 120319) = 501.41$, $p < .001$, partial $\eta^2 = .001$, a below small effect size (Cohen, 1988). The average student effort benchmark scores for female FTIC students was approximately 5 points higher than for their female non-FTIC peers. For this benchmark, female FTIC students reported exhibiting great effort with regard to completing assignments and time on task than reported by their female non-FTIC peers. Presented in Table 3.9 are the descriptive statistics for this analysis.

Insert Table 3.9 about here

Discussion

In this investigation, the degree to which differences were present in college student engagement benchmark scores between FTIC students and non-FTIC students was addressed. National data from the CCSSE were analyzed to answer these research questions. Statistically significant differences were revealed in student effort. For the student effort benchmark score, FTIC students had an average score that was approximately four points higher than their non-FTIC peers. This group of students reported that they expended more effort toward assignments and time on task than indicated by their non-FTIC peers. Male FTIC students had an average benchmark score 3.5 points higher in their student efforts than did their male non-FTIC peers. This score was reflective that male FTIC students reported that they exhibited more effort when completing assignments and preparing for classes than was indicated by their male non-FTIC peers. For female FTIC students, the average benchmark score was 5 points higher in their student efforts than was reported by their female non-FTIC peers. As such, more effort in their academic assignments and preparation for classes was noted by female FTIC students than by their female non-FTIC peers.

Connection with Existing Literature

Past researchers (e.g., Dudley et al., 2015) linked student engagement with persistence in postsecondary education. Student engagement is often defined and measured by the degree to which students become actively involved with their

educational processes, as represented by their academic and social behavior (Nora et al., 2011). Researchers (e.g., Chickering & Gamson, 1987; Kuh, 2007; Nora et al., 2011; Tinto, 1975) agreed that enhancing student engagement is essential to promoting desirable outcomes such as academic achievement and persistence in higher education institutions.

Concerning active and collaborative learning, Price and Tovar (2014) suggested this component as being the greatest predictive value regarding student graduation rates. Conducting the literature review confirmed that heavy family and social obligations detracted from student's level of engagement, such as less classroom participation and being unprepared and unfamiliar with course topics. In this investigation, FTIC student and non-FTIC students were similar in their active and collaborative learning benchmark scores.

The time and energy students devote to purposeful, educational activities are excellent predictors of personal learning and development (Astin, 1993; CCSSE, 2016; D'Lima et al., 2014). In this study, measurements used for the student effort benchmark were the use of tutoring, computer labs, skill labs, updating two or more assignment drafts before submission, using various sources for papers or projects, the number of non-assigned books read for enrichment, and hours spent preparing for class. Revealed in this study was an average student effort benchmark score approximately 4 points higher for FTIC students than indicated by their non-FTIC peers. In essence, FTIC students put forth greater effort when completing assignments and preparing for classes than did their non-FTIC peers.

Academic challenge, challenging intellectual and creative work, is another important student engagement component. Longerbeam (2016) examined experiences related to academic challenge and support of first-year college students. She referenced academic challenge as academic rigor and level of effort required for students to succeed academically. Further, Longerbeam (2016) reported students who had academic challenge and a supportive campus environment were significantly more likely to report gains in general education and more likely to graduate. Revealed in this study were similarities between FTIC students and non-FTIC students in their academic challenge.

Recommendations for Future Research

Based on the results of this national investigation, several recommendations for future research can be made. First, researchers should replicate this study with more current CCSSE data. This replication would help determine the degree to which the results presented are generalizable to other community college students today. Second, this study should be extended to 4-year universities using National Survey of Student Engagement data. Until such a study is conducted, readers should not assume that the findings delineated herein on community college students would be generalizable to 4-year university students. Third, opportunities exist for researchers to use quantitative, qualitative, and mixed methodologies to explore the experiences of FTIC community college students. These explorations would provide insight into ways to enhance FTIC student engagement at the community college level. Finally, more research is needed to understand the underlying reasons for the lack of student engagement among FTIC students at the community college level.

Implications for Policy and Practice

As a result of this investigation, several implications for policy and practice can be suggested. First, Scherer and Anson (2014) reported that personal and familial factors negatively influenced achievement outcomes for first-year students. Awareness of these perceived factors and barriers are even more critical when explored within the community college context. Community college leaders and administrators are encouraged to continue to seek ways to explore FTIC student perceptions and provide a variety of engagement opportunities, which should include family participation. Second, in this investigation, no statistically significant differences were revealed between FTIC and non-FTIC students in their active and collaborative learning and academic challenge. As such, educational leaders must develop and implement ways to increase these student engagement components. Third, student effort benchmark scores, in this study, were higher for FTIC students than for non-FTIC students. Therefore, educational leaders and college faculty need to encourage and motivate students to increase individual student efforts at community colleges.

Conclusion

In this investigation, the degree to which differences were present between FTIC community college students and non-FTIC community college students in their student engagement was addressed through the analysis of CCSSE data. Statistically significant differences were revealed for only student effort when all FTIC students were analyzed. Interestingly, statistically significant differences were not present with respect to active and collaborative learning and academic challenge for these groups of students. For male FTIC students, statistically significant differences were revealed in their student effort and academic challenges benchmark scores. Similarly, female FTIC students yielded

statistically significant differences in their student effort benchmark scores. Community college leaders and policymakers should continue to search for, develop, and implement ways to increase student engagement activities which are beneficial for FTIC student success. In doing so, leaders should make these engagement activities family friendly and offerings should be available at times that are conducive to FTIC student and family involvement.

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Table 3.1

Descriptive Statistics for Active and Collaborative Learning Benchmark Scores by FTIC

Status

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	78,550	52.66	24.99
Non First-Time in College	29,646	52.72	25.84

Table 3.2

Descriptive Statistics for Student Academic Challenge Benchmark Scores by FTIC Status

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	78,550	52.64	24.21
Non First-Time in College	29,646	52.47	25.86

Table 3.3

Descriptive Statistics for Student Effort Benchmark Scores by FTIC Status

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	78,550	53.31	24.55
Non First-Time in College	29,646	49.10	25.64

Table 3.4

Descriptive Statistics for Active and Collaborative Learning Benchmark Scores by FTIC

Status for Male Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	34,121	52.10	25.06
Non First-Time in College	12,213	51.74	25.75

Table 3.5

Descriptive Statistics for Student Effort Benchmark Scores by FTIC Status for Male

Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	34,121	49.26	24.23
Non First-Time Time in College	12,213	45.76	25.17

Table 3.6

Descriptive Statistics for Academic Challenge Benchmark Scores by FTIC Status for

Male Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	34,121	49.99	23.58
Non First-Time in College	12,213	48.79	24.73

Table 3.7

Descriptive Statistics for Active and Collaborative Learning Benchmark Scores by FTIC

Status for Female Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	42,955	53.12	24.88
Non First-Time in College	16,935	53.43	25.86

Table 3.8

Descriptive Statistics for Academic Challenge Benchmark Scores by FTIC Status for Female Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	42,955	54.85	24.40
Non First-Time in College	16,935	55.24	26.20

Table 3.9

Descriptive Statistics for Student Effort Benchmark Scores by FTIC Status for Female Students

Enrollment Status	<i>n</i>	<i>M</i>	<i>SD</i>
First Time in College	42,955	56.45	24.27
Non First-Time in College	16,935	51.44	25.66

CHAPTER IV

DIFFERENCES IN THE USE OF INSTITUTIONAL SUPPORT SERVICES BY COMMUNITY COLLEGE FIRST-TIME IN COLLEGE STUDENT STATUS: A NATIONAL INVESTIGATION

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the degree to which First-Time in College (FTIC) and non-FTIC community college students differed in their use of institutional support services was addressed. Data from the Community College Survey of Student Engagement were analyzed. Statistically significant differences between these two groups of students were revealed in academic advising and planning, peer and other tutoring, use of skill labs, use of computer labs, and use of student organizations. In each analysis, FTIC students were more likely to use the institutional support services at the community college than were their non-FTIC counterparts. With respect to gender, statistically significant differences were yielded for male and for female students. Similar to the overall results, both male and female FTIC students were more likely to use the institutional support services of peer tutoring, skill labs, computer labs, and student organizations than were their male and female non-FTIC peers.

Keywords: Community College Survey of Student Engagement (CCSSE), first-time in college, first year student, institutional support services, support for learners

DIFFERENCES IN THE USE OF INSTITUTIONAL SUPPORT SERVICES BY COMMUNITY COLLEGE FIRST-TIME IN COLLEGE STUDENT STATUS: A NATIONAL INVESTIGATION

Historically, colleges and universities have searched for ways to increase student persistence and retention (Stewart, Lim, & Kim, 2015) and to improve graduation rates (Heller & Cassady, 2017). However, within the past 10 years, these major concerns of persistence and graduation have gained attention from several national community college organizations. These six national community college organizations include: (a) American Association of Community Colleges (AACC), (b) Association of Community College Trustees, (c) National Institute for Staff and Organizational Development, (d) League of Innovation in the Community College, (e) Phi Theta Kappa, and (f) The Center for Community College Student Engagement (AACC, 2015). These participating organizations boldly signed a historic commitment to “produce 50% more students with high quality degrees and certificates by 2020, while increasing access and quality” (AACC, 2015, p. 1).

In 2010, the six participating community college organizations mentioned above pledged that they would devote efforts to colleges and students toward increased student success. This monumental pledge was considered as Democracy’s Colleges Call to Action and stated:

We, the leaders of national organizations that represent and serve America’s 1,200 community colleges, recognize and celebrate the colleges’ central role in ensuring an educated U.S. citizenry and a globally competitive workforce. We affirm the need for a dramatic increase in the number of Americans with

postsecondary degrees and certifications to fulfill critical state and national goals.

With the ‘completion agenda’ as a national imperative, community colleges have an obligation to meet the challenge while holding firmly to traditional values of access, opportunity, and quality. (AACC, 2015, p. 23)

In 2006, the U. S. Secretary of Education brought national attention to the need for increased access and success for every student. A few years later, in 2009, then-President Obama addressed Congress, highlighting the need to increase the number of U.S. citizens with postsecondary education. Further, other national initiatives, such as Achieving the Dream (AACC, 2015), Foundations of Excellence, and Completion by Design, focused on increasing student success in community colleges. Chan (2017) highlighted the need to increase retention and graduation rates as a major institutional challenge facing colleges and universities.

Almost three-fourths of first time students who begin at 4-year institutions, compared to about 50% of first-time students who begin at community colleges, persist to their second year (McIntosh & Rosh, 2009). The experiences of 2-year and 4-year college students are vastly different (Cohen, Brawer, & Kisker, 2014; McIntosh & Rouse, 2009). As such, institutions must provide appropriate programs for these respective students.

Community colleges have made substantial gains in accessibility and enrollment of community college students (Kimbark, Peters, & Richardson, 2017); however, more efforts are still needed to help students succeed. Higher education institutions play a key role in student retention (Musoba, Collazo, & Placide, 2013). Students perform better and are more likely to succeed when higher education institutions provide supportive

campus environments (Community College Survey of Student Engagement [CCSSE], 2016; Longerbeam, 2016). Longerbeam (2016) reported that supportive campus environments and enriching educational experiences were predictive of learning, which were related to graduation.

In efforts to create supportive campus environments and to help with retention, colleges and universities have implemented college survival courses, or programs, with the goal of increasing student awareness of how to succeed in college (Garza & Bowden, 2014). These intervention courses/programs are referred to as: (a) freshman courses, (b) freshmen seminars, (c) first-year experience programs, or (d) orientation courses. By the 21st century, over 90% of colleges and universities offered some form of these courses (Reid, Reynolds, & Perkins-Auman, 2014).

The origin of first-year experience programs, previously known as first-year orientation programs, dates back to the 1600s when Harvard University began utilizing tutors to befriend younger students (Mayo, 2013). Programs with similar characteristics have gained momentum over the past three decades. The first year is considered an important transitional time for first-year students. Of all full-time 4-year public institution students who started college in fall 2013, 79% persisted to the next semester and 68% were retained the following year. However, of all full-time 2-year public institution students who started college in fall 2013, only 57% persisted to the next semester and only 47% were retained the following year (National Student Clearinghouse Research Center, 2013). Because of these low percentages, more focus has been placed on finding ways to increase persistence and retention rates among first-year students.

In one such investigation, Windham, Reh fuss, Williams, Pugh, and Tincher-Ladner (2014) analyzed whether participation in a study skills course was predictive of student retention at a southeast community college. Of the 329 first-time, full-time freshmen in their study, 200 students successfully completed the course and 129 students did not complete the course, with 63 of the non-completers withdrawing from the course. Students who successfully completed the course were more likely to persist, 64% more likely, than their peers who did not take the course. In contrast, students who withdrew from the course had an 81% lower chance of persisting than their peers who did not take the study skills course. Finally, students who failed the study skills course had a 67% lower likelihood of persisting than their peers who did not take the course. As such, Windham et al. (2014) concluded that student success courses enhance student retention and confirmed the value of taking these courses in community colleges.

In another study, Sidle and McReynolds (2009) analyzed the extent to which participation in a freshman-year experience course was related to student retention and student success. Like Windham et al. (2014), Sidle and McReynolds (2009) determined that students who successfully completed a freshman-year experience course were retained at a statistically significantly higher rate than students who did not complete a freshman-year experience course. Of the students successfully completed a freshman-year experience course, 63% of them re-enrolled for the following fall term, whereas, only 56% of the students who did not take the course were retained for the second year. Evidence was clearly present that completing freshman-year experience courses can be beneficial in increasing student success and retention during the first year in college (Sidle & McReynolds, 2009).

In another study, Cho and Karp (2013) explored whether successfully completing a student success course had positive effects on short-term student outcomes and persistence into the second year of college. A higher percentage of students persisted who were enrolled in the student success course, than students who were not enrolled in the course. Compared to non-student success course takers, students who successfully completed the course during their first 15 credits were 10% more likely to earn college-level credits in their first year. In addition, these students were 10% more likely to persist to the second year. Cho and Karp (2013) concluded that strong positive links were present between completing student success courses during the first semester and short-term outcomes of second year persistence.

Padgett, Keup, and Pascarella (2013) investigated the potential influence of first-year experience seminars in relationship to life-long learning orientations. Padgett et al. (2013) established academically challenging first-year seminars had a far greater benefit for students' life-long learning orientation compared to first-year seminars that lacked rigor. As a result, Padgett et al. (2013) concluded participation in rigorous first-year seminars increased the likelihood of first year college students' integration and experiences.

Over the past three decades, researchers (e.g., Cho & Karp, 2013; Kuh et al., 2005; McIntosh & Rouse, 2009; Windham et al., 2014) have conducted a variety of first-year experience studies regarding persistence and retention. Student success courses, student support systems, and non-cognitive factors have been established as important attributes of a successful experience for first-year students. Mayo (2013) proposed that first-year experience programs help students adapt to college life. These programs

increase the likelihood of student success and improves learning and retention. Rigorous student success courses could be beneficial to students learning core skills during their first year in college. Strong internal and external support systems are crucial to first-year students. These support systems include, but are not limited to, family support, campus employee support, and resources available to students. First-year students should develop a sense of belonging. Barbatis (2010) cited that key factors in retention included high levels of “faculty-student interaction, integration of academic and social involvement, mentoring, and cultural and social support” (p. 24). Although much knowledge has been gained from prior first-year experience research, a need exists to continue seeking effective support programs that can help ease the persistence and retention dilemmas that continue to affect higher education.

As noted previously, community colleges must create supportive campus environments by making beneficial and useful resources available to students. Stewart, Lim, and Kim (2015) concluded that interventions such as tutoring, academic advising, and counseling programs should be available to assist students during their transitional first college year. These types of interventions and services can help students persist and succeed in higher education. Grillo and Leist (2013) further stated that academic support services such as tutoring, specifically peer tutoring, could have positive effects on student performance. He suggested that frequent engagement with academic support services throughout the student’s college experience was associated with higher GPA and increased the likelihood of graduation.

Academic advising is another important support service provided by colleges and universities, which offers assist to students. The academic advisor is often the initial

point of contact for first year students. These professionals play critical roles in either facilitating or hindering a student's matriculation through an institution (Young-Jones, Burt, Dixon, & Hawthorne, 2013).

Community colleges should provide rich, supportive environments creating interactions with students from various backgrounds (Lundberg, 2014). In a recent study, Lundberg (2014) contended that community college students had limited time to participate in student organizations and other social groups on campus due to other obligations. He suggested offering incentives to students to increase involvement in campus activities such as these, which had promise for enhancing student learning. Demetriou and Schmitz-Sciborski (2011) stated participating in student organizations and engaging in campus social traditions can positively influence institutional commitment. Similarly, Branand (2015) suggested the importance of student's developing identity and social involvement during college is critical to a satisfactory college experience.

Statement of the Problem

Low retention, transfer, and graduation rates (Nora, Crisp, & Matthews, 2011) remain challenges for higher education institutions across the nation. According to the ACT (2013) reports, between 32% to 35% of 4-year college and university students dropped out or withdrew from school during their first year. For community colleges, the problem was even greater, with 42% to 45% of first-year students not being retained. Only 22% of community college students completed a degree in three years (ACT, 2013). These low retention and completion rates have a direct influence on the economy, postsecondary institutions, and workforce needs. For instance, formula funding in higher education is typically connected to on-time graduation rates and student retention.

Further, Myran and Ivery (2013) noted these community college failures negatively influenced the community by limiting pathways to career development opportunities and economic stability.

Due to governmental and economic pressures placed on community colleges, Heller and Cassady (2017) documented a higher level of attention given to academic achievement, specifically during the critical first year. Only a limited number of research studies has been devoted to the relationship between academic support services and retention to graduation (Grillo & Leist, 2013). As such, higher education institutions should seek ways to improve and increase institutional support services provided to all students, specifically first-year students. Some of these institutional support services include: (a) tutoring, (b) mentoring, (c) advising, (d) counseling, (e) early intervention, (f) financial aid assistance, (g) supplemental instruction, (h) summer bridge programs, and (i) learning communities (Grillo & Leist, 2013; Myran & Ivery, 2013; Stewart, Lim & Kim, 2015).

Purpose of the Study

The purpose of this study was to ascertain the extent to which FTIC community college students differed from non-FTIC community college students in their use of institutional support services. Specifically addressed was the degree to which differences were present between FTIC students and non-FTIC students in their use of academic advising/planning, academic peer or other tutoring, skill labs, computer labs, and student organizations. Through analyzing a national dataset, the extent to which these two groups of community college students differed in their use of institutional support services was determined.

Significance of the Study

By 2018, almost two thirds of all American jobs will require a postsecondary certificate or degree (AACC, 2014). With a continued national focus on community college student achievement gaps and completion rates, educational leaders and policy makers are seeking answers. Higher education institutions are responsible for ensuring cultural, academic, and social supports are in place for community college students, specifically FTIC students. These institutions must help students resolve any first-year transitional concerns early in their college experience (Stewart et al., 2015). Community college officials, community leaders, and other stakeholders should work together to provide solutions to help students persist and complete their educational goals. Results of this study could be used to provide educational leaders information to develop strategies and implement programs to increase student achievement with regard to persistence and completion.

Research Questions

In this study, the following overarching research question was addressed: What is the difference between FTIC and non-FTIC community college students in their use of institutional support services? Specific research sub-questions addressed were: (a) What is the difference between FTIC and non-FTIC community college students in their use of academic advising/planning?; (b) What is the difference between FTIC and non-FTIC community college students in their use of academic peer or other tutoring?; (c) What is the difference between FTIC and non-FTIC community college students in their use of skill labs?; (d) What is the difference between FTIC and non-FTIC community college students in their use of computer labs?; and (e) What is the difference between FTIC and

non-FTIC community college students in their use of student organizations? These research questions were addressed first for all students, and then separately for male and for female students.

Method

Research Design

A causal-comparative research design (Creswell, 2014; Johnson & Christensen, 2012) was used in this investigation. Specifically analyzed herein were archival data that represented events that had already occurred (Creswell, 2014). In this investigation, the independent variable was the status of community college students who participated in the CCSSE survey. In other words, student status consisted of two groups: FTIC students and non-FTIC students. The dependent variables that were analyzed herein were the use of institutional support services by community college students who participated in the CCSSE survey. Because both the independent variable and the dependent variables had already occurred, neither can be manipulated nor can any extraneous variables be controlled. As such, the research design used herein is necessarily a causal-comparative one (Creswell, 2014; Johnson & Christensen, 2012).

Participants and Instrumentation

Archival data previously obtained from The Center for Community College Student Engagement were analyzed herein. The sample was from the 2014 CCSSE cohort (i.e., 2012, 2013, and 2014 academic years). This cohort consisted of 684 participating institutions from 48 states (CCSSE, 2017).

The survey instrument, Community College Student Report (CCSR), is a national instrument developed to capture experiences and activities of students in 2-year colleges.

This survey, administered via random sampling for each participating college, includes 38 questions with several subquestions of which seven subquestions were used in this study. Also present were five CCSSE benchmarks: (a) active and collaborative learning, (b) student effort, (c) academic challenge, (d) student-faculty interaction, and (e) support for learners (CCSSE, 2017). In this study, the support for learners' benchmark was examined.

Included in these data are student responses related to the CCSSE benchmark related to student use of institutional support services. Assessed in the support for learner's benchmark was the college support provided for academic and social student success, encouraging contact with diverse student populations, college support regarding non-academic responsibilities, college financial support, academic advising, and career counseling (CCSSE, 2017). Participants responded to these survey items through the use of a 4-item Likert response scale (i.e., Often, Sometimes, Rarely/Never, Don't know/NA).

Results

To determine whether statistically significant differences were present in the use of institutional support services between FTIC and non-FTIC community college students, Pearson chi-square statistical procedures were conducted. Categorical data were present for FTIC status (i.e., a first-time-in-college student or not a first-time-in-college student) as well as for the categorical responses (i.e., Often, Sometimes, Rarely/Never, Don't Know/NA) to the dependent variables. Because frequency data were present for the independent variable and for all of the dependent variables, the Pearson chi-square procedure was an appropriate statistical procedure to use (Slate & Rojas-

LeBouef, 2011). With the large sample size, the available sample size per cell was more than five. As such, the assumptions for utilizing a chi-square were met. Results will be reported first for all students, and then for male and for female students.

Results for All Students

Concerning the first research question in which the focus was placed on the use of academic advising and planning services at community colleges between FTIC and non-FTIC college students, the result was statistically significant, $\chi^2(3) = 423.56, p < .001$. The effect size for this finding, Cramer's V, was below small, .064 (Cohen, 1988). The FTIC students were 2.4% more likely to Often use academic advising and planning services than were their non-FTIC counterparts. In addition, FTIC students were 3.6% more likely to Sometimes use academic advising and planning services than were their non-FTIC peers. Descriptive statistics for this analysis are presented in Table 4.1.

Insert Table 4.1 about here

Regarding the use of academic peer or other tutoring at their community colleges between FTIC and non-FTIC college students, the Pearson chi square procedure revealed a statistically significant result, $\chi^2(3) = 326.02, p < .001$. The effect size for this finding, Cramer's V, was below small, .056 (Cohen, 1988). A larger percentage of FTIC students, 33.5%, Often or Sometimes used academic peer or other tutoring services than did their non-FTIC student peers, 27.5%. Table 4.2 contains the descriptive statistics for this analysis.

Insert Table 4.2 about here

For the third research question on the use of skill labs at community colleges between FTIC and non-FTIC college students, a statistically significant difference, $\chi^2(3) = 1341.26, p < .001$, was yielded. The effect size, Cramer's V, was small, .114 (Cohen, 1988). The FTIC students indicated that they used skill labs 5.4% more Often than was indicated by did their non-FTIC peers. Delineated in Table 4.3 are the descriptive statistics for this analysis.

Insert Table 4.3 about here

Regarding the fourth research question on the use of computer labs at community colleges between FTIC and non-FTIC college students, a statistically significant difference, $\chi^2(3) = 501.51, p < .001$, was revealed. Again, the effect size for this finding, Cramer's V, was below small, .07 (Cohen, 1988). Regarding FTIC students, a higher percentage, 34.8%, reported they Often used computer labs at the community college than was indicated by the non-FTIC students, 30.8%. Table 4.4 contains the descriptive statistics for this analysis.

Insert Table 4.4 about here

Regarding the final research question on involvement in student organizations at community colleges between FTIC and non-FTIC college students, a statistically significant difference, $\chi^2(3) = 505.78, p < .001$, was yielded. The effect size for this finding, Cramer's V, was below small, .07 (Cohen, 1988). The FTIC students were 6.3% more likely as indicated by Often or Sometimes to be involved in a student organization at the community college than were their non-FTIC peers. Revealed in Table 4.5 are the descriptive statistics for this analysis.

 Insert Table 4.5 about here

Results for Male Students

With respect to the frequency of use of the academic advising and planning at the community college, the Pearson chi square procedure did not reveal a statistically significant difference at the conventional level of statistical significance, $\chi^2(3) = 128.06, p = .06$, for male students by their FTIC status. Approximately 14% of male FTIC students indicated using academic advising/ planning services Often, whereas 12% of male non-FTIC students reported using academic advising/planning services. More than 31% of male FTIC students responded they Rarely/Never used academic advising/planning services compared to male non-FTIC students, 36.9%. Table 4.6 contains the descriptive statistics for this analysis.

 Insert Table 4.6 about here

Concerning the frequency of use of peer or other tutoring at the community college, a statistically significant difference was yielded, $\chi^2(3) = 103.36, p < .001$, for male students by their FTIC status. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). More than 9% of male FTIC students reported Often using peer or other tutoring services compared to their male non-FTIC counterparts, 7.7%. Interestingly, approximately 47% of male FTIC students indicated Rarely/Never using peer or other tutoring services and almost 50% of male non-FTIC students indicated they Rarely/Never used the peer tutoring services. Contained in Table 4.7 are the descriptive statistics for this analysis.

Insert Table 4.7 about here

For the third research question on the frequency of use of skill labs at the community college, a statistically significant difference, $\chi^2(3) = 463.03, p < .001$, was revealed. The effect size for this finding, Cramer's V, was small, .10 (Cohen, 1988). Male FTIC students were 10% more likely to Sometimes used skill labs than were their male non-FTIC counterparts. Almost 32% of male FTIC students and approximately 38% of male non-FTIC responded that they Rarely/Never used skill labs at the community college. Delineated in Table 4.8 are the descriptive statistics for this analysis.

Insert Table 4.8 about here

With respect to the frequency of use of computer labs at the community college, the Pearson chi square procedure yielded a statistically significant difference, $\chi^2(3) = 122.81, p < .001$, for male students by their FTIC status. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). The percentage of male FTIC students who indicated they Sometimes used the computer labs was 3% higher than for male non-FTIC students. Readers are referred to Table 4.9 for the descriptive statistics for this analysis.

Insert Table 4.9 about here

Concerning the final research question on the use of student organizations at the community college, a statistically significant difference, $\chi^2(3) = 167.22, p < .001$, was revealed. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). Approximately 7% of male FTIC students reported they Often use student organizations and almost 6% of male non-FTIC students indicated they Often use student organizations. For male FTIC students, 44% responded they Rarely/Never used student organizations, whereas 47% of male non-FTIC students responded they Rarely/Never used student organizations at the community college. Presented in Table 4.10 are the descriptive statistics for this analysis.

Insert Table 4.10 about here

Results for Female Students

With respect to the first research question on the use of academic advising and planning at the community college, a statistically significant difference, $\chi^2(3) = 327.12$, $p < .001$, was revealed. The effect size for this finding, Cramer's V , was below small, .07 (Cohen, 1988). More than 47% of female FTIC students responded Sometimes using academic advising services, compared to almost 43% of female non-FTIC students who responded Sometimes using academic advising services. A smaller percentage of female FTIC students, 27.5%, responded Rarely/Never using academic advising and planning services as indicated by their female non-FTIC peers, 33.9%. Presented in Table 4.11 are the descriptive statistics for this analysis.

 Insert Table 4.11 about here

Concerning the second research question on the use of peer and other tutoring at the community college, a statistically significant difference, $\chi^2(3) = 238.61$, $p < .001$, was revealed. The effect size for this finding, Cramer's V , was below small, .06 (Cohen, 1988). The percentage of female FTIC students who reported Often using peer and other tutoring was higher, 11.8%, than indicated by female non-FTIC students, 9.5%. Furthermore, almost 45% of female FTIC students indicated Rarely/Never using peer and other tutoring services, compared to approximately 47% of female non-FTIC students who responded Rarely/Never using peer and other tutoring services. Table 4.12 contains the descriptive statistics for this analysis.

Insert Table 4.12 about here

Regarding the frequency of use of skill labs at the community college, a statistically significant difference, $\chi^2(3) = 888.02, p < .001$, was revealed. The effect size for this finding, Cramer's V, was small, .12 (Cohen, 1988). Concerning the use of skill labs, female FTIC students were more 6% more likely to Often use them at the community college than indicated by their female non-FTIC peers. Similarly, female FTIC students were 6% less likely to report Rarely/Never using the skill labs, compared to their female non-FTIC peers at the community college. Delineated in Table 4.13 are the descriptive statistics for this analysis.

Insert Table 4.13 about here

With respect to the fourth research question on the frequency of use of computer labs at the community college, a statistically significant difference, $\chi^2(3) = 423.05, p < .001$, was revealed. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). Nearly 38% of female FTIC students reported Often using the computer labs and approximately 32% of female non-FTIC students indicated using the computer labs at the community college. The percentage of female FTIC students who reported Rarely/Never using the computer labs was smaller, 21.8%, compared to female non-FTIC students, 25.1%, who reported Rarely/Never using the computer labs at the community college. Revealed in Table 4.14 are the descriptive statistics for this analysis.

Insert Table 4.14 about here

Regarding the final research question on the use of student organizations at the community college, a statistically significant difference, $\chi^2(3) = 350.46, p < .001$, was revealed. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). The percentage of female FTIC students who responded Often or Sometimes using student organizations was 23.1%, compared to female non-FTIC students, 16.3% who indicated Often or Sometimes using student organizations at the community college. That statistic was almost 7% higher for female FTIC students than for female non-FTIC students. Table 4.15 contains the descriptive statistics for this analysis.

Insert Table 4.15 about here

Discussion

In this investigation, the extent to which differences were present between FTIC and non-FTIC community college student in their use of institutional support services was addressed. Archival data from the 2014 three-year cohort were obtained from the Community College Survey of Student Engagement, which consisted of nearly 108,000 students who completed the survey. Inferential statistical analyses were conducted for all students and separately for male and female college students. Statistically significant differences were revealed between the FTIC students and non-FTIC students with regard

to all five survey items analyzed (i.e., use of academic advising/planning, use of peer tutoring, use of skill labs, use of computer labs, and use of student organizations).

For each survey item analyzed, FTIC students were more likely to use the institutional services at the community college than were their non-FTIC counterparts. With respect to male FTIC students, a statistically significant difference was not revealed in their use of academic advising/planning when compared to the non-FTIC male students. However, for male students, statistically significant differences were yielded for the other four survey items (i.e., use of peer tutoring, use of skill labs, use of computer labs, and use of student organizations). Male FTIC students were more likely to use the institutional support services of peer tutoring, skill labs, computer labs, and student organizations than were their male non-FTIC peers. Interestingly, for three survey items (i.e., academic advising, peer tutoring, and skill labs), more than 30% of male FTIC students indicated Rarely/Never using the support services. Further, for the same three survey items, male non-FTIC reported Rarely/Never using the support services more than 35% of the time. Concerning female FTIC students, each of the five survey items revealed statistically significant differences. In each analysis, female FTIC were more likely to use the institutional support services than were their female non-FTIC peers.

Connection with Existing Literature

The results of this study were consistent with existing literature (Grillo & Leist, 2013; Stewart, Lim, & Kim 2015; Young-Jones, Burt, Dixon, & Hawthorne, 2013). These researchers contended that interventions such as tutoring, academic advising, and counseling programs should be available to assist students during their transitional first college year. Colleges and universities have implemented freshmen seminars to provide

supportive campus environments, which increases student awareness of how to succeed in college (Garza & Bowden, 2014). Furthermore, Longerbeam (2016) suggested that supportive campus environments and enriching educational experiences were predictive of learning, which were related to graduation.

In this study, FTIC students reported using institutional support services more often than non-FTIC students. In the CCSSE survey, FTIC students indicated using each of the support services (i.e., academic advising/planning, peer tutoring, skill labs, computer labs, and student organizations) more often than did the non-FTIC students. According to Lundberg (2014), community college students typically have limited time to participate in student organizations and other social groups on campus because of other obligations and responsibilities. Similarly, Demetriou and Schmitz-Sciborski (2011) indicated that participating in student organizations and engaging in campus social traditions could positively influence institutional commitment, which could lead to increases in student retention.

Implications for Policy and Practice

In this analysis, FTIC students were more likely to use institutional support services than were non-FTIC students. Based on the findings in this study, implications for policy and practice can be generated. First, because approximately half of community college students leave within their first year, institutions should provide supportive campus environments and enriching educational experiences for these students (Longerbeam, 2016). Although community colleges offer several support services to students, measuring the effectiveness of these services is critical to determine if they are beneficial for FTIC students. Second, over 90% of community colleges reported offering

a first-year seminar/course (Reid, Reynolds, & Perkins-Auman, 2014). On many campuses, intrusive advising is one component of this course. Young-Jones et al. (2013) suggested that quality student-advisor exchanges were important during the academic advising process to ensure institutional expectations were conveyed. Third, Couturier (2013) recommended the development of multicultural and student success centers to provide social support, which could connect students with staff and mentors in meaningful ways. Similarly, Padgett et al. (2013) suggested offering programs to help support students in non-academic areas such as student organizations and social groups. Offering such programs would allow students to gain a greater sense of belonging and commitment to the institution, which could potentially increase student persistence.

Recommendations for Future Research

Based on the findings of this study, several recommendations for future research can be generated. First, this quantitative study should be replicated by community colleges using more current data for analysis. The degree to which results from this investigation would be generalizable to community college students today is not known. A second recommendation is for researchers to conduct this investigation with 4-year university students using data from the National Survey of Student Engagement to ascertain the degree to which the results obtained herein on community college students would be generalizable to 4-year university students. Third, because first year seminar courses are prominent, college leaders should conduct program evaluations to ensure the effectiveness of these support programs. By providing these program evaluations, campus leaders and student affairs professionals will be better equipped to offer essential academic support services to the students. Fourth, future research is encouraged with

regard to using qualitative and quantitative methods to examine the experiences of FTIC and non-FTIC student use of institutional support services at community colleges. Using these different methodologies could provide valuable insight to higher education professionals regarding ways to increase student utilization of the support services.

Conclusion

In this empirical investigation, the extent to which differences were present in the use of institutional support services between FTIC and non-FTIC students was examined. Statistically significant differences were revealed in the use of each of the five survey items analyzed: academic advising/planning, peer tutoring, skill labs, computer labs, and student organizations. Overall, FTIC students were more likely to use each of the institutional support services than were their non-FTIC peers. Concerning male FTIC students, a statistically significant difference was not revealed in their use of academic advising/planning when compared to male non-FTIC students. However, for male students, statistically significant differences were yielded for the other four survey items (i.e., use of peer tutoring, use of skill labs, use of computer labs, and use of student organizations). In other words, male FTIC students were more likely to use the institutional support services of peer tutoring, skill labs, computer labs, and student organizations than were their male non-FTIC peers. Similarly, for female FTIC students, each of the five survey items revealed statistically significant differences. In each analysis, female FTIC students were more likely to use institutional support services than were their female non-FTIC peers.

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Table 4.1

Descriptive Statistics for Student Use of Academic Advising and Planning Services by FTIC Status

	FTIC students	Non-FTIC students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 13,370) 17.6%	(<i>n</i> = 4,337) 15.0%
Sometimes	(<i>n</i> = 35,987) 47.3%	(<i>n</i> = 12,409) 43.0%
Rarely/Never	(<i>n</i> = 22,236) 29.4%	(<i>n</i> = 10,130) 35.1%
Don't Know/NA	(<i>n</i> = 4,405) 5.8%	(<i>n</i> = 1,966) 6.8%

Table 4.2

Descriptive Statistics for Student Use of Peer or Other Tutoring Services by FTIC Status

	FTIC students	Non-FTIC students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 7,962) 10.6%	(<i>n</i> = 2,501) 8.8%
Sometimes	(<i>n</i> = 17,171) 22.9%	(<i>n</i> = 5,430) 19.0%
Rarely/Never	(<i>n</i> = 34,169) 45.5%	(<i>n</i> = 13,731) 48.2%
Don't Know/NA	(<i>n</i> = 15,760) 21.0%	(<i>n</i> = 6,851) 24.0%

Table 4.3

Descriptive Statistics for Student Use of Skills Labs by FTIC Status

	FTIC students	Non-FTIC students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 15,097) 20.2%	(<i>n</i> = 4,201) 14.8%
Sometimes	(<i>n</i> = 20,628) 27.5%	(<i>n</i> = 5,862) 20.6%
Rarely/Never	(<i>n</i> = 26,161) 34.9%	(<i>n</i> = 11,647) 40.9%
Don't Know/NA	(<i>n</i> = 13,025) 17.4%	(<i>n</i> = 6,744) 23.7%

Table 4.4

Descriptive Statistics for Student Use of Computer Labs by FTIC Status

	FTIC students	Non-FTIC students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 26,130) 34.8%	(<i>n</i> = 8,795) 30.8%
Sometimes	(<i>n</i> = 24,180) 32.2%	(<i>n</i> = 8,378) 29.4%
Rarely/Never	(<i>n</i> = 17,256) 23.0%	(<i>n</i> = 7,454) 26.1%
Don't Know/NA	(<i>n</i> = 7,445) 9.9%	(<i>n</i> = 3,900) 13.7%

Table 4.5

Descriptive Statistics for Student Involvement in Student Organizations by FTIC Status

	FTIC students	Non-FTIC students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 5,663) 7.6%	(<i>n</i> = 1,514) 5.3%
Sometimes	(<i>n</i> = 11,873) 15.9%	(<i>n</i> = 3,362) 11.9%
Rarely/Never	(<i>n</i> = 33,362) 44.8%	(<i>n</i> = 13,319) 47.0%
Don't Know/NA	(<i>n</i> = 23,620) 31.7%	(<i>n</i> = 10,137) 35.8%

Table 4.6

Descriptive Statistics for Student Use of Academic Advising and Planning Services for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 4,782) 14.4%	(<i>n</i> = 1,485) 12.4%
Sometimes	(<i>n</i> = 15,673) 47.1%	(<i>n</i> = 5,173) 43.3%
Rarely/Never	(<i>n</i> = 10,542) 31.7%	(<i>n</i> = 4,405) 36.9%
Don't Know/NA	(<i>n</i> = 2,245) 6.8%	(<i>n</i> = 881) 7.4%

Table 4.7

Descriptive Statistics for Student Use of Peer or Other Tutoring Services for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 2,990) 9.1%	(<i>n</i> = 911) 7.7%
Sometimes	(<i>n</i> = 7,248) 22.1%	(<i>n</i> = 2,184) 18.5%
Rarely/Never	(<i>n</i> = 15,403) 46.9%	(<i>n</i> = 5,831) 49.5%
Don't Know/NA	(<i>n</i> = 7,205) 21.9%	(<i>n</i> = 2,862) 24.3%

Table 4.8

Descriptive Statistics for Student Use of Skills Labs for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 5,999) 18.3%	(<i>n</i> = 1,657) 14.1%
Sometimes	(<i>n</i> = 9,222) 28.1%	(<i>n</i> = 2,482) 21.1%
Rarely/Never	(<i>n</i> = 11,823) 36.1%	(<i>n</i> = 4,974) 42.2%
Don't Know/NA	(<i>n</i> = 5,745) 17.5%	(<i>n</i> = 2,669) 22.7%

Table 4.9

Descriptive Statistics for Student Use of Computer Labs for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 10,193) 31.1%	(<i>n</i> = 3,389) 28.7%
Sometimes	(<i>n</i> = 11,000) 33.5%	(<i>n</i> = 3,599) 30.4%
Rarely/Never	(<i>n</i> = 8,066) 24.6%	(<i>n</i> = 3,247) 27.5%
Don't Know/NA	(<i>n</i> = 3,534) 10.8%	(<i>n</i> = 1,585) 13.4%

Table 4.10

Descriptive Statistics for Student Involvement in Student Organizations for Males by FTIC Status

	FTIC male students	Non-FTIC male students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 2,306) 7.1%	(<i>n</i> = 665) 5.7%
Sometimes	(<i>n</i> = 5,515) 16.9%	(<i>n</i> = 1,476) 12.6%
Rarely/Never	(<i>n</i> = 14,625) 44.9%	(<i>n</i> = 5,548) 47.4%
Don't Know/NA	(<i>n</i> = 10,138) 31.1%	(<i>n</i> = 4,024) 34.4%

Table 4.11

Descriptive Statistics for Student Use of Academic Advising and Planning Services for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 8,447) 20.1%	(<i>n</i> = 2,808) 16.9%
Sometimes	(<i>n</i> = 19,923) 47.4%	(<i>n</i> = 7,121) 42.8%
Rarely/Never	(<i>n</i> = 11,567) 27.5%	(<i>n</i> = 5,627) 33.9%
Don't Know/NA	(<i>n</i> = 2,085) 5.0%	(<i>n</i> = 1,066) 6.4%

Table 4.12

Descriptive Statistics for Student Use of Peer or Other Tutoring Services for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 4,877) 11.8%	(<i>n</i> = 1,564) 9.5%
Sometimes	(<i>n</i> = 9,723) 23.5%	(<i>n</i> = 3,184) 19.3%
Rarely/Never	(<i>n</i> = 18,462) 44.5%	(<i>n</i> = 7,785) 47.3%
Don't Know/NA	(<i>n</i> = 8,382) 20.2%	(<i>n</i> = 3,935) 23.9%

Table 4.13

Descriptive Statistics for Student Use of Skills Labs for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 8,958) 21.7%	(<i>n</i> = 2,502) 15.2%
Sometimes	(<i>n</i> = 11,173) 27.0%	(<i>n</i> = 3,327) 20.3%
Rarely/Never	(<i>n</i> = 14,097) 34.1%	(<i>n</i> = 6,577) 40.1%
Don't Know/NA	(<i>n</i> = 7,143) 17.3%	(<i>n</i> = 4,013) 24.4%

Table 4.14

Descriptive Statistics for Student Use of Computer Labs for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 15,704) 37.8%	(<i>n</i> = 5,331) 32.4%
Sometimes	(<i>n</i> = 12,927) 31.2%	(<i>n</i> = 4,706) 28.6%
Rarely/Never	(<i>n</i> = 9,039) 21.8%	(<i>n</i> = 4,130) 25.1%
Don't Know/NA	(<i>n</i> = 3,824) 9.2%	(<i>n</i> = 2,286) 13.9%

Table 4.15

Descriptive Statistics for Student Involvement in Student Organizations for Females by FTIC Status

	FTIC female students	Non-FTIC female students
Frequency of Use	<i>n</i> and %	<i>n</i> and %
Often	(<i>n</i> = 3,285) 8.0%	(<i>n</i> = 823) 5.0%
Sometimes	(<i>n</i> = 6,224) 15.1%	(<i>n</i> = 1,851) 11.3%
Rarely/Never	(<i>n</i> = 18,467) 44.8%	(<i>n</i> = 7,665) 46.8%
Don't Know/NA	(<i>n</i> = 13,246) 32.1%	(<i>n</i> = 6,031) 36.8%

CHAPTER V

DISCUSSION

The purpose of this journal-ready dissertation was to determine the degree to which differences were present between FTIC students and non-FTIC students in their on-campus and off-campus relationships, student effort and engagement benchmarks, and in their use of institutional support services at the community college. Synthesized in this chapter are the results of all three studies. In the first journal article, the degree to which differences existed in the on-campus and off-campus relationships of FTIC and non-FTIC community college students was examined. In the second journal article, the extent to which differences were present between FTIC and non-FTIC community college students in their student effort and student engagement was analyzed. Examined in the third journal article was the degree to which differences existed between FTIC and non-FTIC community college students in their use of institutional support services. The results of each individual article will now be discussed.

Summary of Study One Results

In the first article, the research questions involved the degree to which FTIC and non-FTIC community college students differed in their on-campus and off-campus relationships. Specifically analyzed were FTIC student relationships (i.e., student-student, student-faculty, administrative personnel, family, and friends) at their community college. In the first article, data on all students were analyzed, and then data on male students and data on female students were analyzed. All FTIC students reported that they were less likely to indicate higher levels of on-campus relational engagement (i.e., student-student, student-faculty, and with friends) than was reported by their non-

FTIC peers. All FTIC students reported having more supportive relationships with administrative personnel and family than was indicated by their non-FTIC peers.

Presented in Table 5.1 are the results for these statistical analyses.

Table 5.1

Summary of Results for On-Campus and Off-Campus Relationships by FTIC Enrollment

Status for All Students

Relational Engagement	Statistically Significant	Effect Size	Higher Support Group
Student-to-Student	Yes	Below Small	Non-FTIC
Student-to-Faculty	Yes	Below Small	Non-FTIC
Administrative Personnel	Yes	Below Small	FTIC
Friends	Yes	Below Small	Non-FTIC
Family	Yes	Below Small	FTIC

With respect to gender, male FTIC students indicated that they had higher levels of support from administrative personnel and their family than did their male non-FTIC peers. A smaller percentage of male FTIC students indicated that faculty and friends were supportive than was indicated by their male non-FTIC peers. A statistically significant difference was not present between male FTIC and male non-FTIC students in their student-to-student responses. Delineated in Table 5.2 are the results for these statistical analyses.

Table 5.2

*Summary of Results for On-Campus and Off-Campus Relationships by FTIC Enrollment**Status for Male Students*

Relational Engagement	Statistically Significant	Effect Size	Higher Support Group
Student-to-Student	No	None	N/A
Student-to-Faculty	Yes	Below Small	Non-FTIC
Administrative Personnel	Yes	Below Small	FTIC
Friends	Yes	Below Small	Non-FTIC
Family	Yes	Below Small	FTIC

Female FTIC students indicated they had less supportive relationships for student-to-student and student-to-faculty relationships than was noted by their female non-FTIC peers. Female FTIC student responses indicated that administrative personnel and family were supportive than was indicated by their female non-FTIC peers. A statistically significant difference was not present between female FTIC and female non-FTIC students with regard to their relationships with friends. Table 5.3 contains the results for these statistical analyses.

Table 5.3

Summary of Results for On-Campus and Off-Campus Relationships by FTIC Enrollment Status for Female Students

Relational Engagement	Statistically Significant	Effect Size	Higher Support Group
Student-to-Student	Yes	Below Small	Non-FTIC
Student-to-Faculty	Yes	Below Small	Non-FTIC
Administrative Personnel	Yes	Below Small	FTIC
Friends	No	None	N/A
Family	Yes	Below Small	FTIC

Summary of Study Two Results

Examined in the second article was the degree to which differences were present between FTIC and non- FTIC community college students in their student effort, student engagement (i.e., active and collaborative learning), and the academic challenge benchmark scores. Statistically significant differences were revealed for all FTIC and non-FTIC students in their student effort benchmark scores, however, a statistically significant difference was not revealed for active and collaborative learning or academic challenge. These results are summarized in Table 5.4.

Table 5.4

*Summary of Results for Student Engagement Benchmark Scores by FTIC Enrollment**Status*

Benchmark	Statistically Significant	Effect Size	Higher Use Group
Student Effort	Yes	Below Small	FTIC
Active and Collaborative Learning	No	None	N/A
Academic Challenge	No	None	N/A

Regarding male students, FTIC and non-FTIC students reported similar responses in their active and collaborative learning benchmark scores. Student effort and academic challenge scores, however, were reported at higher levels for male FTIC students than for male non-FTIC students at the community college. Delineated in Table 5.5 are the results for these statistical analyses.

Table 5.5

*Summary of Results for Student Engagement Benchmark Scores by FTIC Enrollment**Status for Male Students*

Benchmark	Statistically Significant	Effect Size	Higher Use Group
Student Effort	Yes	Below Small	FTIC
Active and Collaborative Learning	No	None	N/A
Academic Challenge	Yes	Below Small	FTIC

Female FTIC students were more likely to exhibit greater student effort than their female non-FTIC counterparts. Female FTIC and female non-FTIC students had similar responses in their active and collaborative learning and academic challenge benchmark scores. Contained in Table 5.6 are the results for these statistical analyses.

Table 5.6

Summary of Results for Student Engagement Benchmark Scores by FTIC Enrollment Status for Female Students

Benchmark	Statistically Significant	Effect Size	Higher Use Group
Student Effort	Yes	Below Small	FTIC
Active and Collaborative Learning	No	None	N/A
Academic Challenge	No	None	N/A

Summary of Study Three Results

Examined in the final article was the extent to which differences were present between FTIC and non-FTIC community college students in their use of institutional support services (i.e., academic advising/planning, peer and other tutoring, skill labs, computer labs, and student organizations) at the community college. First, inferential statistics were calculated for all FTIC students, and then separately for male and for female college students. Concerning all FTIC students, they were more likely to use the institutional support services at the community college than were their non-FTIC counterparts. Presented in Table 5.7 are the results for these statistical analyses.

Table 5.7

Summary of Results for Institutional Support Service Use by FTIC Student Enrollment Status for All Students

Support Service	Statistically Significant	Effect Size	Higher Use Group
Academic Advising	Yes	Below Small	FTIC
Peer/Other Tutoring	Yes	Below Small	FTIC
Skill Labs	Yes	Small	FTIC
Computer Labs	Yes	Below Small	FTIC

Concerning male FTIC students, a statistically significant difference was not revealed in their use of academic advising/planning when compared to the non-FTIC male students. Statistically significant differences were revealed for the other four survey items (i.e., use of peer tutoring, use of skill labs, use of computer labs, and use of student organizations). Male FTIC students were more likely to use the institutional support services of peer tutoring, skill labs, computer labs, and student organizations than were their male non-FTIC peers. Interestingly, for three survey items (i.e., academic advising, peer tutoring, and skill labs), more than 30% of male FTIC students indicated that they Rarely/Never used these support services. Further, for the same three survey items, 35% of male non-FTIC students reported Rarely/Never using the support services. Table 5.8 contains the results for these statistical analyses.

Table 5.8

*Summary of Results for Institutional Support Service Use by FTIC Student Enrollment**Status for Male Students*

Support Service	Statistically Significant	Effect Size	Higher Use Group
Academic Advising	No	None	N/A
Peer/Other Tutoring	Yes	Below Small	FTIC
Skill Labs	Yes	Small	FTIC
Computer Labs	Yes	Below Small	FTIC
Student Organizations	Yes	Below Small	FTIC

Concerning female FTIC students, each of the five survey items revealed statistically significant differences. In each survey item, female FTIC students were more likely to use the specific institutional support services than were their female non-FTIC peers. Table 5.9 contains the results for these statistical analyses.

Table 5.9

*Summary of Results for Institutional Support Service Use by FTIC Student Enrollment**Status for Female Students*

Support Service	Statistically Significant	Effect Size	Higher Use Group
Academic Advising	Yes	Below Small	FTIC
Peer/Other Tutoring	Yes	Below Small	FTIC
Skill Labs	Yes	Small	FTIC
Computer Labs	Yes	Below Small	FTIC
Student Organizations	Yes	Below Small	FTIC

Summary of Results

Across the three empirical investigations in this journal-ready dissertation, statistically significant differences were present for all FTIC students in their on-campus and off-campus relationships, student effort and engagement benchmarks, and in their use of institutional support services at the community college. In regard to campus relationships, all FTIC students reported having more supportive relationships with administrative personnel and family and were less likely to report supportive relationships with other students, with faculty, and with friends than was indicated by their non-FTIC peers.

Regarding gender, a larger percentage of male FTIC students reported higher levels of support from faculty and family than did male non-FTIC students. A smaller percentage of male FTIC students indicated supportive relationships with administrative personnel and friends than did their non-FTIC peers. Statistically significant differences were not present between male FTIC and male non-FTIC students in their relationships with other students. Concerning female FTIC students in their campus relationships, statistically significant differences were revealed for four of the five survey items analyzed (i.e., student-student, student-faculty, administrative personnel, and family). Female FTIC and female non-FTIC students responded in a similar manner regarding their relationships with friends at the community college.

In the second study in this journal-ready dissertation, the extent to which differences were present between FTIC and non-FTIC community college students in their student effort, student engagement (i.e., active and collaborative learning), and academic challenge benchmark scores were analyzed. Statistically significant differences

were revealed for all FTIC and non-FTIC students in their student effort benchmark scores, but not in their active and collaborative learning and academic challenge benchmark scores. For males, student effort and academic challenge were reported at higher levels for male FTIC students than for male non-FTIC students at the community college. Male FTIC and male non-FTIC students responded similarly on their active and collaborative learning benchmark scores. Female FTIC students were more likely to exhibit greater student effort than their female non-FTIC counterparts. Female FTIC and female non-FTIC students responded in a similar manner on their active and collaborative learning and academic challenge benchmark scores.

In the third and final study, statistically significant differences were present for all FTIC students in their use of institutional support services at the community college. For male FTIC students, statistically significant differences were not revealed in their use of academic advising/planning; however, differences were present in their use of peer tutoring, skill labs, computer labs, and student organizations compared to their male non-FTIC peers. Male FTIC students were more likely to use institutional support services (i.e., peer tutoring, skill labs, computer labs, and student organizations) than were their male non-FTIC peers. Female FTIC students reported higher levels of use of each institutional support service than did their female non-FTIC peers.

Connections with Theoretical Framework

Two theoretical perspectives were used to guide the three empirical investigations conducted in this journal-ready dissertation: the Student Integration Model (Tinto, 1975) and the Theory of Student Involvement (Astin, 1984). The Student Integration Model has been a landmark for past and current national dialogue on undergraduate retention

(Tinto, 1975, 1993, 2012). In this model, students who are socially involved with the campus community indicate they have increased commitment to the institution (Demetriou & Schmitz-Sciborski, 2011). Tinto believed the central idea of student retention was integration. That is, whether students persist or drop out is strongly predicted by their degree of academic and social integration (Tinto, 1975). In this journal-ready dissertation, Tinto's theory was (1975) Student Integration Model was used to examine first-year student relationships during their first year of college.

The second theoretical framework used in this journal-ready dissertation was the Theory of Student Involvement (Astin, 1984). The basis of this theory, simply stated, is that students get more out of college when they put more into college (Webber et al., 2013). In other words, students become more engaged with learning from other students and faculty when they are more involved with class discussions and student activities. When students actively participate in curricular and co-curricular events they tend to make friends, get to know faculty members, and become oriented to campus quickly (Astin, 1993; Kuh et al., 2007; Webber et al., 2013).

Implications for Policy and Practice

Based upon the findings of this journal-ready dissertation, several implications for policy and practice can be made. First, because community college students are at higher risk of dropping out (Toppers & Powers, 2013) and typically need remedial courses (Scherer & Anson, 2014), community colleges should provide academic and social support for FTIC students (Tinto, 2012). Courtier (2013) suggested student success centers as an option to assist these students. Similarly, Padgett (2013) recommended offering programs to help support FTIC students in non-academic areas such as student

organizations and social groups. Second, with the increase in the first-year student population in community colleges (American Association of Community Colleges, 2017), higher education leaders and administrators should accommodate this growing population by providing appropriate resources and support services for these first-year students. As such, another implication and potential program implementation or program review opportunity is the use of first-year seminars. First-year seminars typically offer smaller class sizes and foster student-faculty interaction and peer relationships (Padgett, 2013). Third, because academic advisors are usually the first point of contact for FTIC students, community college leaders should make concerted efforts to ensure meaningful experiences are created early for freshmen students. Young-Jones et al. (2013) suggested these experiences could convey institutional expectations and either hinder or advance students matriculation through their first year at the institution. Thus, focused institutional efforts should be made to ensure students receive quality interactions in a supportive environment.

Fourth, Scherer and Anson (2014) reported that personal and familial factors negatively influenced achievement outcomes for first-year students. Awareness of these perceived factors and barriers are even more critical when explored within the community college context. Community college leaders and administrators are encouraged to continue to seek ways to explore FTIC student perceptions and provide a variety of engagement opportunities, which should include family participation. Fifth, student effort benchmark scores were higher for FTIC students than for non-FTIC students in this study. Therefore, educational leaders and college faculty need to encourage and motivate students to increase individual student efforts at community

colleges. Sixth, because approximately half of community colleges leave within their first year, institutions should provide supportive campus environments and enriching educational experiences for these students (Longerbeam, 2016). Although community colleges offer several support services to students, it is critical that these services are measured for effectiveness and are beneficial for FTIC students.

Seventh, over 90% of community colleges reported having a first year seminar/course on their campus (Reid, et al., 2014). On many campuses, intrusive advising is one component of this course. Young-Jones et al. (2013) suggested that quality student-advisor exchanges were important during the academic advising process to ensure institutional expectations were conveyed. Eighth, Couturier (2013) recommended the development of multicultural and student success centers to provide social support for students which could connect students with staff and mentors in meaningful ways. Similarly, Padgett et al. (2013) suggested offering programs to help support students in non-academic areas such as student organizations and social groups. Offering such programs would allow students to gain a greater sense of belonging and commitment to the institution, which could potentially increase student persistence.

Recommendations for Future Research

Based on the results of the three empirical investigations conducted in this journal-ready dissertation, recommendations for future research can be made. First, researchers should replicate this study with more current data. Replication of the study could ensure the validity and reliability of the results and determine generalizeability to community college students. Second, researchers are encouraged to extend this research to 4-year universities with National Survey of Student Engagement data. This extension

would allow for comparison data and assist with transfer and collaboration opportunities between 2-year and 4-year institutions. Third, researchers should examine best practices of community colleges regarding appropriate and effective institutional support services that are beneficial to FTIC students.

A fourth recommendation would be to conduct a qualitative research study on the influence of these particular relational interactions with FTIC student groups. Because much emphasis has been placed on student success and several programs have been implemented for FTIC and first-year students, these researchers could determine specific emergent themes or program components that are beneficial for student success. Fifth, future studies could be conducted using the Community College Faculty Survey of Student Engagement data, which elicits information from a faculty perspective regarding students' educational experiences. Sixth, because first year seminar courses are prominent, college leaders should conduct program evaluations to ensure the effectiveness of these support programs. By providing these program evaluations, campus leaders and student affairs professionals will be better equipped to offer essential academic support services to the students. Finally, more research is needed to understand the underlying reasons for the lack of student engagement among FTIC students at the community college level.

Conclusion

In this journal-ready dissertation, the degree to which FTIC students differed from non-FTIC students in on-campus and off-campus relationships, student effort and engagement benchmarks, and in their use of institutional support services at the community college were examined. Statistically significant differences were revealed

between these two groups of students in each survey item analyzed (i.e., quality of on-campus and off-campus relationships, student effort and student engagement, and their use of institutional support services). In regard to campus relationships, all FTIC students reported having more supportive relationships with administrative personnel and family and were less likely to report supportive relationships with other students, with faculty, and with friends than reported by their non-FTIC peers. Albeit small effect sizes, FTIC students reported higher levels of student effort and engagement than did their non-FTIC peers. Concerning institutional support services (i.e., academic advising/planning, peer tutoring, skill labs, computer labs, and student organizations), all FTIC students were more likely to use the support services than were their non-FTIC counterparts at the community college. Implications for policy and for practice were made. Finally, recommendations for future research were provided.

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APPENDIX



Institutional Review Board
 Office of Research and Sponsored Programs
 903 Bowers Blvd, Huntsville, TX 77341-2448
 Phone: 936.294.4875
 Fax: 936.294.3622
irb@shsu.edu
www.shsu.edu/~rgs_www/irb/

DATE: November 26, 2017

TO: Ericka Landry [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Differences in Success Rates of First Time in College Students in Community Colleges: A Nationwide Study [T/D]*

PROTOCOL #: 2017-10-28727

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: November 26, 2017

REVIEW CATEGORY: Category 4—research involving existing, publicly available data usually has little, if any, associated risk, particularly if subject identifiers are removed from the data or specimens.

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

*** What should investigators do when considering changes to an exempt study that could make it nonexempt?**

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research. In this case, please make available sufficient information to the IRB so it can make a correct determination.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Donna Desforges
 IRB Chair, PHSC

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

VITA

Ericka Landry
Email: elandry@lonestar.edu

Academic Degrees

Doctor of Education – Educational Leadership, May 2018

Sam Houston State University, Huntsville, TX

Dissertation: Differences in On-Campus and Off-campus Relationships, Student Efforts and Engagement, and the use of Support Services Between First-Time in College and Non First-Time in College Community College Students: A Nationwide Study

Master of Education, Houston Baptist University, Curriculum & Instruction

Bachelor of Arts, University of Arkansas, Monticello, Business Administration

Publications

Esparza, D. E., Friday, A. R., Hinshaw, M. M, Landry, E., Thomas, J. C. (2016). A new view of organizational development: Culture as a catalyst for transformation. *League of Innovation Leadership Abstracts*, 29(11).

Landry, E., & Slate, J. R. (2017). Differences in orientation program enrollment as a function of gender and ethnicity for community college students. *Journal of Advances in Education Research*
<http://isaacpub.org/Submit/user/mySubmittedPapers.aspx>

Professional Experience

2010-current	Lone Star College – North Harris Faculty Fellow, 2014-current Associate Professor/Lead Faculty 2012-2014 Adjunct Instructor, 2010-2012
2004-2009	Aldine Independent School District, Reed Academy, Intermediate Language Arts Teacher
2001-2003	Lone Star College, formerly North Harris Community College District Adjunct Instructor of Business and Computer courses

Presentations

- Landry, E., Esparza, D., Friday, A., Hinshaw, M. & Thomas, J. (2016, May). *A new view of the classroom: Organizational culture as a vehicle for student success*. Conference presentation for National Institute for Staff and Organizational Development, Austin, TX.
- Landry, E. (2016, April). *New employee orientation: A system-wide implementation*. Capstone presentation presented to administrators and employees of Lone Star College System as partial fulfillment of the inaugural Leadership Excellence Administrative Development Institute, The Woodlands, TX.
- Landry, E., Boyd, C., Herrera, E., & Moore, A. (2016, February). *What they didn't tell you in school: Advice from women in leadership*. Conference presentation for the 12th Annual Diversity Leadership Conference presented at Sam Houston State University, Huntsville, TX.
- Landry, E., Hendricks, C. (2016, February). *Investing in your future*. Invited presentation presented to TRIO middle and high school students, Houston, TX.
- Catalla, P. C., Holmes, D. L., Lue King, K. A., Korah, A. P., & Landry, E. Y. (2016, February). *Where do I belong? A multi-site campus ecology case study*. Paper proposal presented at Southwest Educational Research Association, New Orleans, LA.
- Landry, E. (2016, February). *Professionalism*. Invited presentation presented to students and employees of Lone Star College System, Houston, TX.
- Landry, E., & Shade, C. (2015, July). *Video captioning: A faculty sample of the process*. Invited presentation for The Teaching and Learning Conference at Lone Star College System, Tomball, TX.
- Landry, E. (2015, July). *Resumes and interviewing skills*. Workshop presentation for Lone Star College System college students, Houston, TX.
- Landry, E. (2015, March). *Teaching with your mouth shut: Strategies for student engagement*. Invited presentation for the annual teaching and learning conference presented to employees of Lone Star College System, The Woodlands, TX.
- Landry, E., & Perucca, A. (2015, March). *Making your lesson BOPPP*. Invited presentation for the annual teaching and learning conference presented to employees of Lone Star College System, The Woodlands, TX.
- Landry, E., & Allen, C. (2015, January) *Effective strategies for student engagement*. Workshop presentation for the faculty institute at Lone Star College-North Harris, Houston, TX.

Recognitions

The Academy Leadership Program, 2017
Leadership Excellence and Administrative Development, 2016
Dean's and Chairs Institute, 2016
Higher Education Teaching Institute, 2015
Adjunct Certification Program, 2012