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FACTORS ASSOCIATED WITH STUDENT WITHDRAWAL AT A MISSISSIPPI COMMUNITY COLLEGE

A Dissertation in Practice
presented in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Higher Education
The University of Mississippi

by

KATHRYN HARLOW COX

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ABSTRACT

The three manuscript dissertation examines the factors associated with student withdrawal at a Mississippi Community College. Student withdrawal is a consistent concern for administration at this institution. The research focuses on reasons for withdrawal, student demographics, and subject withdrawal. Understanding the factors associated with student withdrawal at this institution could encourage retention and persistence. Manuscript One will provide an overview of the problem of practice, review of literature, and guidance from successful retention programs. Manuscript Two will provide a summary of data collection and presentation of findings from each of the four research questions. Manuscript Three will provide a summary of findings and meaning making from the data. Recommendations will be made in Manuscript Three.

Key Words: Student Withdrawal, Student Demographics, Retention Programs

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My husband, Michael, and my children, Camden and Harper, have been the support and drive to keep me going when I wanted to give up. I am so blessed to have a husband who will invest time in our children when I have other obligations. He is a true blessing. I pray one day my children will look back on the time when I was pursing this degree with pride. It is my hope that it adds to their love and respect for education.

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Retention and student persistence in higher education is a concern on college campuses across the nation. The National Center for Education Statistics (NCES) gathers data from all participating institutions to offer national data and trends in education. In May of 2018, NCES released data showing that about sixty percent of the fall 2010 cohort completed their undergraduate degree in six years (NCES, 2018). Understanding why students do not complete their degree is crucial to efforts by higher education institutions to provide appropriate assistance.

Public two-year institutions offer a variety of programs, schedules, and locations to assist students in their educational pursuits. Twenty-four percent of community college students who began their degree in 2013 graduated within three years (IPEDS report, 2017). These results can be attributed to numerous personal and educational challenges often encountered by community college students (Cohen, Brawer, and Kisker, 2014).

This Mississippi Community College offers students numerous educational opportunities. With three campuses spread strategically across Mississippi, community members in the area are provided with options to fit their interests, schedules, and lifestyles. Unfortunately, the institution's student retention continues to fall below the national average of sixty-nine percent (IPEDS report, 2017).

Student Enrollment and Success in the United States

Undergraduate enrollment has continued to fluctuate over the past several decades. National undergraduate enrollment in the fall of 1976 was just over five million full-time students (NCES, n.d.). Full-time student enrollment showed consistence growth to eight million in 2000 at which point enrollment jumped a vast forty-five percent between 2000 and 2010 (NCES, n.d.). The growth seen in 2010 fell by 2016 when enrollment reports showed a nine percent decrease (NCES, n.d.).

Habley, Bloom, and Robbins (2012) state that approximately one-third of first-year college students in the United States do not return for their second year. For example, a large institution in Texas, reported an enrollment of 51,331 students for the Fall 2016 term, which about 17,000 of those students not returning for their second year of course work (*IPEDS report, 2017*). With enrollment trends continuing to fluctuate, it is essential to improve student persistence and retention rates to support educational pursuits around the country.

Student Success and the Carnegie Classification System

Across the United States, higher education provides unique and diverse educational options including public and private four-year institutions and community colleges. Educational degree options range from terminal degrees to certificate and workforce training with many degree options in between. To help navigate the different institutions, the Carnegie Classification system helps by organizing institutions based on recognized degrees.

The Carnegie Classification system organizes institutions from doctorial to associate degree to special focus institutions. Retention programs and student persistence differ among each of these types of institutions (Wild & Ebbers, 2002). For example, four-year institutions are divided into several distinct categories based upon the degree levels offered (Carnegie

Classification, 2018). The retention data reported for a research one (R1) institution vary from retention data at a master's one (M1) institution (*College Scorecard, 2018*). These reports differ due to the vast differences in enrollment and student demographics (Cohen, et al., 2014).

Nationally, the retention and persistence rates vary even among institutions with similar institutional organization. For example, a research one (R1) institution in Mississippi reports a sixty-one percent graduation rate where another research one (R1) institution in a neighboring state reports a seventy-nine percent graduation rate (*College Scorecard, 2018*). While the Integrated Postsecondary Education Data System (IPEDS) data reports an increase in student retention for both four –year and two-year institutions, the retention statistics in public four-year institutions are almost twenty percent higher than those of public two-year institutions (IPEDS, December 2017). These differences could also be due to the vast differences in enrollment and student demographics in two - and four- year institutions (Cohen, et al., 2014).

Student Enrollment and Success at Community Colleges

Cohen, Brawer, and Kisker (2014, p. 70), state that, "among first-time, degree-seeking community college students in fall 2009, only sixty percent returned for fall 2010." While there are many well-developed theories regarding student retention, some are based on four-year institutions and their student demographics. Higher education theorists, such as John Bean, examine the combination of student background with institutional interaction (Fike & Fike, 2008). Bean and others are well-known for their contributions to the research on student retention, but the community college student brings about unique student demographics and academic characteristics (Wild & Ebbers, 2002).

According to the American Association of Community Colleges (AACC) (2018), the average age of community college students nationally is 28 years old. Many community college

students are more academically underprepared when compared to university students (Crews & Aragon, 2007). According to Fike and Fike (2008, p 70), "Forty-one percent of entering community college students and 29 percent of all entering college students are underprepared in at least one basic skill."

Not only are community college students older than university students, but they also experience different priorities and strife. Cohen, Brawer, and Kisker (2014) emphasize that community college students often struggle to manage their educational and personal responsibilities. The authors illustrate this point stating that community college students often struggle to coordinate their class schedule with the full-time or part-time jobs they must maintain (Cohen, et al., 2014). Community college students struggle to balance family commitments, work, and commutes to name a few (Cohen et al., 2014).

Community College students also report a higher acceptance of federal aid. The AACC reported sixty-two percent of community colleges students nationally applied for federal aid and thirty-four percent of those received federal financial aid in 2015-2016 (Fast Facts, 2018). Arum and Roska (2011) state that most college students require some form of financial aid.

Community colleges offer a unique opportunity for students to obtain their associate degree from an affordable, convenient setting. Many community colleges offer commuter campuses with small class sizes and a friendly environment for the students. This unique environment requires different retention strategies from residential four-year institutions. Across the United States, the completion rates for males and females at a community college have steadily declined since the early 2000's (*IPEDS report, 2017*).

Student Enrollment and Success in Mississippi

Mississippi Institutions of Higher Learning (IHL) serves as the governing body for the eight public universities within the state. During the Fall 2017 term, Mississippi IHL enrolled 81,378 students (Atchison, 2018). Out of the total enrollment for the 2016-2017 academic year, eighty-three percent of the students were enrolled full-time at one of the eight state institutions (Atchison, 2018). The student demographics for the year consisted of fifty-eight percent Caucasian and thirty-two percent African American and of forty-one percent male and fifty-eight percent female (Atchison, 2018). Mississippi IHL reports a growth in student enrollment from the 2009-2010 academic year to the 2017-2018 year of five percent. Institutions also reported an increase in average student ACT score from a system average of 22 in 2010 to an average of 23.5 in 2017 (Atchison, 2018). With fewer than six community colleges in the surrounding states reporting retention rates above the national average, Mississippi's Community College statistics are no different (*United States Department of Education*, 2017). In Mississippi, the College Scorecard (2017) indicates only two community colleges with retention rates close to the national average of sixty-nine percent.

The Mississippi Community College Board governs all fifteen community colleges in the state (*MCCB report, 2017*). With Mississippi community college enrollment increasing over 15,000 students from fall 2007 to fall 2010, there was an increase in demand; and many Mississippi community colleges expanded their course offerings as well as additional facilities (*MCCB report, 2017*). This growth took a dramatic decline in the fall of 2011 dropping 3,000 students within a year. This decline continues today with the latest enrollment data reporting the Mississippi Community College system down over 12,000 students since the fall of 2010 (*MCCB report, 2017*).

Student Enrollment and Success at Mississippi Community College

This community college in Mississippi feels the burden of student persistence and retention. This community college serves seven rural counties and offers 3 campus locations. The main campus houses all athletic teams except for the soccer program, which is located on one of the commuter campuses. Each of these three campuses has multiple buildings as well as staff members in areas such as financial aid, admissions, recruiting, and counseling.

Mississippi Community College serves a diverse student population. The average age for the Fall 2017 term is 23 years old. This average has shifted down due to the growing number of dual enrollment/dual credit (high school) students. Only thirty-six percent of total student enrollment were males. The ethnicity of the student body is split relatively equally with forty-four percent African American and fifty percent Caucasian (Mississippi Community College Factbook, 2017).

From a recruiting standpoint, one of the largest groups of students is from adult education centers around the state where they received their high school equivalency diploma (MCC report card, 2017). Many of the institution's students are academically underprepared and require remedial courses in math and English. The average ACT score in 2017 was 19.5. Fifty-nine percent of first-time enrolled students at this Mississippi Community College in the fall of 2015 were enrolled in at least one remedial course (MCC report card, 2017).

For the Fall 2016 term, this community college enrolled 5,256 students across its three campuses. Nearly 1,200 of those students were enrolled in career technical programs while the remainder was in academic programs. Of the students enrolled in the Fall 2016 term sixty-four percent were enrolled as full-time students (15 hours or more).

The enrollment and student demographics have shifted since the 2009-2010 academic year. During the Fall of 2009, enrollment at this Mississippi Community College was at one of

its highest enrollments at 6,463 enrolled students. Similar to 2017 most students were enrolled in academic programs and sixty-nine percent of total enrollment were full-time students (12 hours or more). The student enrollment by ethnicity was similar to that seen in 2017 with 45.8 percent African American and 45.1 percent Caucasian. The average ACT score for in 2010 was 18.3.

At this Mississippi Community College, the graduation rate for the Fall 2016 term was twenty-six percent and student persistence was fifty-eight percent, both below the national averages (*IPEDS report, 2017*). The diversity of students suggests the importance of considering a variety of retention variables.

Problem of Practice

This study will seek to identify the factors associated with student withdrawal at a Mississippi Community College. Student withdrawal will be measured by identifying students who withdrew from any or all courses during the semester. I also plan to identify patterns and groups within student withdrawals.

Having identified the problem of practice being addressed in this study, I will explain the personal and professional experiences that have shaped my view of higher education. I will then address how this research project is influenced by the program design used by The University of Mississippi, The Carnegie Project for the Educational Doctorate and the three focuses of this program. Following that, I will then describe the conceptual framework for this study as well as literature related to the issues of student retention and persistence in higher education. Finally, I will explain the methods I plan to use to gather and interpret the data collected for this study, including research questions to be addressed.

Positionality

The issue of student retention and persistence is of importance to me personally and professionally. To better understand my view and reason for investigating this problem it is important to consider my personal and professional background as well as my future goals.

Personal

My father, Rusty Harlow, and mother, Connie Poss, received their bachelor's degrees from Delta State University. They both continued their education at The University of Mississippi. My mother obtained her Master's degree in speech and hearing sciences, and my father completed his Juris Doctorate while I was still a small child. My parents have always placed a high value on education and work ethic. My mother has found great success working with young children to overcome their speech and hearing deficiency. My father has worked hard to maintain and grow his private practice and was recently asked to serve on as a member of the Defender Services Advisory Group (DSAG) for the 5th Circuit.

When I was a small child my parents divorced and both later remarried. The blending of our families was a very significant process in my life. Similar to my parents, my step parents also placed a great emphasis on education and hard work. My step-father started in K-12 public education as a teacher and continued to advance into administration until he retired as a district superintendent. He received his Ph. D in Curriculum and Instruction from The University of Mississippi. My step-mother moved to Mississippi from Colorado and holds a Bachelor of Science in Nursing from Purdue University. She now works in the Mississippi Delta as the clinic director of a growing cardiovascular clinic.

Education. As a high school student I was surrounded with very educated adults as well as very intelligent high school students. Most of the classmates I surrounded myself with in high school graduated in the top 10 of a class of 220 students. I was not as academically driven as my

friends. I knew I would go onto college, but my studies were not of great importance to me at that time.

Many of those same friends planned to attend larger four-year institutions in Mississippi. I, however, was looking to continue my education in a smaller institutional setting. A small Division II institution from which my parents matriculated offered me an opportunity to compete on an athletic team. I knew the small environment and the opportunity to continue to play sports was the right fit for me to continue my education.

Professional

After graduating with my undergraduate degree in Psychology my plans were to continue my education by completing my masters in school counseling. I had plans to work as a graduate assistant while completing my degree. Opportunities arose, and I was offered my first full-time position in higher education. This opportunity ignited a passion for higher education I would not have experienced in any other environment.

As a college student I never imagined myself working in higher education and definitely never thought I would be working on my doctorate degree. I was not what I would call an academic, and I still hold onto that belief. It is this idea of myself and my current position in life that solidifies my ideas that it is hard work that makes the world twirl. Angela Duckworth (2016) writes about the differences in hard work and talent. This thought from her text seems to fit into my ideals around hard work,

> "Without effort, your talent is nothing more than your unmet potential. Without effort, your skill is nothing more than what you could have done but didn't. With effort, talent becomes skill and, at the very same time, effort makes skill productive (Duckworth, 2016, p.51).

Future Plans

As I work to complete my degree and move forward with my career I hope to obtain an administrative role within this Community College. Having the ability to work in the town where I grew up is very special to me. I feel very passionate about the education and success of the community and Mississippi. I plan to assist with the growth of community members in whatever capacity I am afforded.

The experiences mentioned in this section have molded me into the employee I am today. As I potentially move into an administrative role at this or another institution, I plan to use the education and experiences from my life to develop future educational leaders. I believe one of the most important roles of an administrator is to mold and develop the future leaders in higher education.

Why Community College Retention and Persistence?

Prior to my time as an employee at a community college, I did not have much first-hand experience in the community college setting. My prior work experiences had been at a four-year institution. I began working as a recruiter for the graduate school where I was recruiting students to graduate programs, but not assisting them to degree completion.

It was not until I met my husband, Michael, that I understood the impact of a community college education. Michael attended his local community college after high school graduation. He became involved in campus ministry and intramural sports. Unfortunately, he was more focused on having fun with his friends than he was his grade point average. He was not invited into Phi Theta Kappa, because his grade point average fell below the requirements. The scholarship opportunities associated with membership in Phi Theta Kappa are extremely

significant when transferring to a four-year institution. Losing these scholarships ended up costing us several thousand dollars in student loans.

As previously mentioned, education has been a significant part of my life and the lives of my family members. However, I have two older siblings who have not completed their bachelor's degree. They both graduated high school with very high grade point averages and high ACT scores. I have consistently been puzzled by the fact that they have disregarded their education in this way. The realization of the benefits of a community college education and witnessing the struggles for family members who do not complete their education places special interest on the topic of student persistence and retention.

Carnegie Project on the Education Doctorate

The Carnegie Project on the Education Doctorate (CPED) program is designed to challenge the thinking behind the educational doctorate. The CPED program is a practitioner-based practice which focuses on equity, ethics, and social justice (Carnegie project on the educational doctorate, n.d.). This study is conducted in fulfillment of degree requirements for a doctoral program affiliated with CPED. Therefore, it is important to discuss the connection between these three principles and this study. An article by David Labaree (1997) explains these concepts as they pertain to higher education.

The three areas of education discussed in this document facilitate the topic of education from different vantage points. Democratic equality approaches education as a public good available to society. From this point of view, education is accessible to all and intended to prepare students for society (Labaree, 1997). Social efficiency also regards education as a public good. Social efficiency emphasizes the education of the public with the importance of all members of society benefiting from an educated and prepared individual (Labaree, 1997). Lastly,

social mobility is a private good provided to offer students a competitive advantage towards their personal and professional goals (Labaree, 1997). The Labaree article offers beneficial information when considering retention in higher education.

Conceptual Framework

Two constructs and bodies of theory shape this research: student persistence and institutional retention. The intent of this section is to examine and present the relevant research and theories in these areas. To understand the information presented in this document, it is essential to understand the definitions of student persistence and student retention.

Student Persistence

Student persistence is defined in numerous ways, but in the context of this discussion I value Vincent Tinto's thoughts of student persistence as a "longitudinal process that involves the meaning the individuals place on their interactions with the formal and informal dimensions of a college or university" (Braxton, Doyle, & Jones, 2013). Braxton, Doyle, and Jones (2013) examine different areas that can affect student persistence through economic, organizational, psychological, and sociological means.

Economic factors include financial matters such as the cost associated with pursuing a college degree. The students' perception of the cost benefit relationship associated with higher education can impact their persistence (Braxton, et al., 2013). Financial barriers affect many students who wish to pursue their degree. Tuition costs have increased at an average of four and a half percent a year from 1996 to 2006 (Robb, Moody, and Abdel-Ghany, 2011). During the 2005-2006 academic year, over 5 million students received student loans to pay for their tuition as well as living expenses while pursuing their degree (Perna, 2008). Student's perception of the

price of their education can affect their degree attainment. Students' who feel satisfied with the price of their education are more likely to persist (Braxton, et al., 2013).

Psychological factors influencing student persistence are thought to be academic skill, personality traits, and student development (Braxton, et al., 2013). D'Lima, Winsler, and Kitsantas (2014) offer an extensive study into the psychological factors affecting students showing that students with higher self-efficacy are more apt to conquer challenges. Academic self-efficacy is explained as the students' perceived ability to meet a certain academic standard (D'Lima, et al., 2014). A students' psychological traits play a vital role in their perceived ability to complete their degree (Braxton, et al., 2013).

Sociological factors affecting student persistence include socioeconomic background, financial status, emotional support, and student peers (Braxton, et al., 2013). The emotional support found in student involvement has shown to improve student persistence (Braxton, et al., 2013). The potential for student success increases as students increase their academic and social engagement in the institution (Habley, Bloom, Robbins, 2012). The socioeconomic factors impacting student retention are endless. Arum and Roksa's (2011) text *Academically Adrift*, discusses the numerous socioeconomic factors affecting students. The list includes student financial status, parent's education, academic preparation prior to enrollment, and student involvement in the institution, to name a few (Arum & Roska, 2011).

Student Retention

Student retention described by Vincent Tinto (2012, p. 127) in C*ompleting College: rethinking institutional action* is "the rate an institution retains and gradates students who first enter the institution as freshman." Student retention measures the institutions ability to graduate students who attend the institution. Student completion is more important than ever for potential

employees with the anticipation of two-thirds of jobs requiring postsecondary education by the year 2020 ("Fact Sheet," 2015). Not only is it beneficial to student to complete their degree, it is most cost efficient for the institution to retain the enrolled students compared to spending money on the recruitment of new students (Sousa, 2015).

At the national level, six-year graduation rates have fluctuated from fifty-three percent in 2000, up to fifty-five percent in 2010, and back down to fifty-three percent in 2015 (*NCHEMS data, 2018*). The Mississippi four-year institutions report an increase in fall to fall retention from seventy-six percent in 2011 to eighty percent in 2017 (Atchison, 2018). Mississippi Community Colleges are also reporting a growth of eighteen percent from 2011 to 2017 (*MCCB report, 2017*).

The growth shown in these areas is encouraging, too many students remain without having achieved their degree. The 2015 six-year graduation rates mentioned above from the 4-year institutions leave 826,801 students without a degree (Atchison, 2018). The data from this year alone shows room for improvement at the institutional level. The completion rate for this community college is twenty-six percent, which is below the national average of forty-two percent.

Organizational factors can play a role in student persistence. The organization and involvement of institutional faculty and staff can affect students' engagement and attachment to the institution (Braxton, et al., 2013, Tinto, 2012). In the community college setting, engagement seems to be immensely important. Chang (2005) explains that the commuter mentality at the community college, the classroom is the main source of student engagement. Cohen, Brawer, and Kisker (2014) emphasize that retention can be improved when action is taken to integrate the student and the institution.

The student-instructor relationship is significant to the students' academic and social engagement in the institution (Turner & Thompson, 2014). Drouin (2008) states that there is a positive correlation between students and instructors and the students' satisfaction with their institution. Flynn states (2014) students who show academic engagement with faculty are more likely to move onto degree completion. In Arum and Roska's (2011, p.64) research, students who reported low interaction with faculty were at an increased risk of lower academic achievement and noncompletion.

Use of Framework

The conceptual framework discussed provides a lens to view the data gathered during this study. As the data is gathered and reviewed, the information outlined provides a guide for cataloging the factors associated with student withdrawal from this Mississippi Community College. Student retention and persistence are viewed and examined in many different ways. This framework explains how I plan to view the factors associated with student persistence as economic, organizational, psychological, and sociological. These categories cover a wide range of factors student are able to self-identify when they withdraw from this community college. The information explained in the retention portion of the framework provides background information beneficial to best understand retention at both national and institutional levels.

Review of Literature

The research on student persistence and retention is abundant. Well-known researchers such as Vincent Tinto and John Bean have made historic contributions to the field. The most helpful literature that I found reviewed studies on effective retention and persistence efforts. I will discuss a few of these programs and factors shown to affect these areas in the paragraphs below.

Effective Programs

There are many programs and initiatives suggested to improved student retention. A 2004 study conducted by Derby and Smith assessed the relationship between enrollment in an orientation course and student retention. The study examined the retention of a sample of 7,000 students. The students in the study enrolled in an orientation course that emphasized small group activities, college adjustment, goal attainment, and personal development (Derby & Smith, 2004). The results showed a connection between the orientation course and associate degree attainment (Derby & Smith, 2004). Assisting students in degree completion provides society with educated and skilled employees.

Creating an orientation or first year program to improve student retention should involve academic as well as non-academic components (Mayo, 2013). In the initial stages of the program, it would be beneficial to assemble a committee of employees from different disciplines across the institution. Mayo (2013) also states that it is essential to incorporate student-to-student engagement to establish and promote peer support.

Sacramento Community College offers a student service program called RISE, which stands for Respect, Integrity, Self-Determination, and Education (Cohen, et al., 2015, p 215). The institutional website describes the program as taking a "family approach" for students to feel welcomed on campus (RISE, n.d.). The program involves many different options for student involvement and assistance such as academic and personal counseling, tutoring, a book loan program, computer labs, transfer college tours, and food distribution (RISE, n.d.). From July 2017 to June 2018, the RISE program impacted 1,981 students in one or more of these areas (K. Muraki, personal communication, October 3, 2018).

Obtaining a higher education degree can often seem like an unattainable goal, even to those already in the classroom. It is retention programs such as the one modeled at Paragon Community College that allow individuals to realize the attainability of their educational goals. McKinney (2010) highlights the retention efforts of Paragon Community College (PCC) and their Student Success Initiative (SSI). Paragon Community College recognized the considerable loss of African American males between their first and second year. This realization prompted the development of the SSI program. The SSI offers mentoring, tutoring, scholarships, personal development, among others (McKinney, 2010).

In the Paragon Community College's Student Success Initiative, the mentors consisted of employees from all campus departments. The mentorship program consisted of thirty-six mentors to approximately three hundred students (McKinney, 2010, p. 303). The mentors were provided information regarding appropriate mentoring as well as an orientation into the SSI program. In addition to their respective teaching and administrative duties, the mentors met with their student mentees once a week for approximately one hour (McKinney, 2010). After conducting a program review of the Student Success Initiative program, the author stated that he was anticipating the addition of new mentors to alleviate the number of mentees to each employee.

Faculty Impact

Faculty are the heart of the institution and student learning. Arum and Roksa (2011) emphasized the importance of student interactions with faculty members. The research explained in *Academically Adrift*, illustrates the impact of students perception of faculty approachability and expectations. The research also indicated that students are more likely to perform better on academic skills when their instructors held higher expectations in the classroom (Arum & Roksa,

2011). Students are shown to achieve greater learning when faculty are viewed as approachable (Arum & Roksa, 2011).

The ability to connect with a faculty member outside of the classroom can prove to be crucial to students. The most important aspect of a successful first year program is effective faculty involvement (Mayo, 2013, p. 766). June Chang (2005) supports the importance of student-faculty interactions with the study of 2,500 community college students' interaction with faculty. Chang (2005) showed special interest in interactions and student ethnicity.

The results of Chang's study showed data contrary to the original hypothesis. The data revealed students of color are more likely to approach faculty members regarding academic matters (Chang, 2005). These results were contrary to the literature mentioned in the article. Prior research does show that minority students show an increase in student satisfaction when faculty-student interaction is increased (Chang, 2005). This data is applicable to this Mississippi Community College with half the student population being minority students.

Student Involvement

Student persistence can be influenced by student involvement and engagement (Tinto, 2012; Arum & Roska, 2011, Cohen, et al, 2014). Tuner and Thompson (2014) conducted a qualitative study including 30 participants who were classified as freshmen, sophomores, or non-returning freshmen. The goal of the study was to better understand the obstacles these students faced integrating into college (Turner & Thompson, 2014). The interviews consisted of 30 open-ended questions regarding the students' experience thus far. The results showed fifty-seven percent having of students reporting no interaction with faculty (Turner & Thompson, 2014).

Self-efficacy is an individuals' belief in themselves and their abilities. Students who report higher self-efficacy are more likely to complete or plan to return to complete their

education (Luke et al., 2015). Involvement in support services during the student first semester can increase student's self-efficacy and increase chances of future success (Tinto, 2012). Research has named academic self-efficacy as the strongest predictor of college performance (D'Lima, Winsler, & Kitsantas, 2014, p. 342). While considering a retention plan, it would be beneficial to identify psychological factors such as self-efficacy to offer support to all students.

D'Lima et al. (2014) offered suggestions for administrators and faculty members to promote students' academic self-efficacy. The authors suggest faculty and administration review the literature regarding facilitating student motivation (D'Lima et al., 2014). The presentation of research can be conducted as a faculty and staff presentation to allow discussion among faculty members. Additional strategies to develop student self-efficacy are peer models, online resources, and mastery-orientated learning environment (Derby & Smith, 2004, p. 353).

Vincent Tinto and Model of Institutional Action

Vincent Tinto (2012) illustrates the importance of the institution to student retention with the model of institutional action. Tinto (2012) describes four institutional areas that research suggests impact student retention as expectations, support, feedback, and involvement. Tinto (2012) explains expectations in three general groups; course expectation, program of study expectations, and general institutional expectations. Once again, the importance of the faculty is shown in the creation of the expectations in the classroom. Tinto (2012) states that students' classroom expectations come from the faculty's presentation of the class with the syllabi and course requirements.

The program of study Tinto is referring to can be influenced heavily by student advising (Tinto, 2012). It is reported that students who meet with an advisor multiple times within the first semester are twenty percent more likely to persist than those students who had only the initial

meeting with their advisors (Tinto, 2012). The institution also sets academic expectations for the students. Tinto (2012) emphasizes the importance of high expectations for students' academic achievement.

Institutional support mentioned by Tinto encompasses all areas of institutional life including academic, personal, and social support (Tinto, 2012). Academic support comes in forms such as development of study skills, tutoring, academic support programs, and remedial courses (Tinto, 2012). The successful completion of remedial courses has been shown to increase students' persistence (Tinto, 2012). Social support is crucial to all students and should include stress management, mentoring, offering student activities, and financial advisement (Tinto, 2012).

Feedback is important for students, faculty, and administrators. The feedback can come from an instructor to a student or from a campus climate assessment (Tinto, 2012). This area of the model is helpful to provide information and safeguards to assist with students success and progress towards completion (Tinto, 2012). An example of feedback is use of immediate feedback techniques known as student response systems (Tinto, 2012). These systems provide the faculty with student feedback prior to the end of class to allow time for topic clarification (Tinto, 2012).

A retention and persistence topic discussed in multiple research avenues is also a key element to Tinto's model of institutional action: involvement. Student involvement applies to academic and social involvement (Tinto, 2012). Tinto (2012) expressed the importance of both academic and social involvement and how the two components are often woven together. While involvement is important for all students, it is shown to be more influential for minority and low-income students (Tinto, 2012).

Research Questions

This research seeks to identify the factors associated with student withdrawals at a Mississippi Community College. Not only is it important to understand the critical factors associated with student withdrawals at this Mississippi Community College, but it is also important to examine patterns of the factors associated with the student withdrawals. Before offering suggestions to lower student withdrawal rates it is essential to investigate the following questions:

1. What are the reasons students give for withdrawal?
2. How do the reasons given differ among key demographic variables?
    a. Student gender
    b. Student ethnicity
    c. Student age
3. What courses show the highest number of withdrawals?
4. Among those courses with the highest number of withdrawals, what patterns emerge regarding the withdrawal reason and student demographics?

Methodology

Due to the fact that the documents I plan to analyze are specific to this Mississippi Community College this research project will be designed as a case study. A case study is defined by John Creswell (2008) in his text as "an in-depth exploration of a bounded system." The bounded system mentioned in the definition refers to the case being separated in terms of time or place (Creswell, 2008). The data collection for this project is bound to a term of enrollment and specific to this Mississippi Community College and its students. The case study will follow an intrinsic research design. Hancock and Algonzzine (2017, p.38) define an intrinsic

design as “a work with the focus of learning more about a particular individual, group, event, or organization.”

A quantitative study will be utilized to identify the factors associated with student withdrawals at this Mississippi Community College as well as the significant variations in the data. Creswell (2008) explains quantitative research as an analysis of data using statistics.

Research Setting and Sample

The research setting will be all of the campuses at this Mississippi Community College. The sample will be gathered from six semesters of students who completed a withdrawal request from for one or more classes. The six consecutive semesters include fall and spring of 2016, 2017, and 2018. The sample will include only students taking on-campus classes and will not include dual enrollment/dual credit students.

Data

The data collection will involve data gathered from two institutional data sets. The information obtained when students withdraw from a course(s) at this community college is compiled with the student data from the main organization system for the institution (Internet Native Banner). For example, when a student wishes to withdraw after the add/drop date (end of the first full week of class), the student is required to complete a withdrawal request form in their student portal.

Student withdrawals will be defined as students who drop one or more of their classes during the term. The withdrawal form requires the students to identify the course(s) they wish to drop and then prompts a survey. The survey lists 16 options for the student to select for their withdrawal reason. Students are allowed to select more than one option. These options are:

- no financial aid

- transportation problems
- health problems
- personal problems
- work conflict
- moving
- called to active duty military
- difficulty catching up due to late registration
- difficulty acquiring textbook and materials for course
- taking too many courses
- overwhelmed with the volume of work
- difficult time with time management
- no computer available
- lack of computer skills
- unable to get a dorm room
- other

Demographics associated with individual students are combined with the withdrawal data. The student demographics that will be investigated in the study are gender, ethnicity, and age.

Data Analysis

I will use a frequency test to analyze research questions 1 and 3. The frequency test will be used to determine the highest selected reasons for withdrawal as well as the courses with the highest withdrawals. Chi-Square will be utilized to analyze the relationships between the variables for research questions 2 and 4 (Hinkle, et al., 2003).

Institutional Review Board

The individual students will not be contacted to participate in this study. Due to the use of existing institutional data, there will be no need for students to complete an informed consent. The students willingly participated in the completion of the withdrawal survey upon withdrawing from their class(s). The students were given no monetary reward or gift for completing the survey at the time of withdrawal. The study will be approved by the Institutional Review Board (IRB) at Mississippi Community College and The University of Mississippi.

Summary

This information concludes the first manuscript for this study. In the second manuscript I will present an overview of the data and presentation of the findings. In the third and final manuscript I will present the summary of the findings and suggested improvements.

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MANUSCRIP TWO: DATA AND DATA INTERPRETATION

MANUSCRIPT TWO: DATA AND DATA INTERPRETATION

Student retention and completion is a concern for higher education institutions across the nation. Nationwide about 60% of the Fall 2010 cohort completed their undergraduate degree in six years (NCES, 2018). Community college students are no exception to these statistics. Habley, Bloom, and Robbins (2012) note that approximately one-third of first-year college students do not return for their second year. Cohen, Brewer, and Kisker (2014) state that only 60% of first-time, degree –seeking community college students beginning in Fall 2009 returned by Fall 2019.

Community colleges serve a uniquely diverse student population in higher education. The average age for community college students is 28 years, but 54% are under 22 years (American Association of Community Colleges (AACC), 2019). The national gender percentages show 56% are female and 44% are male. In addition to diversity of age and gender, community college student enrollment is racially diverse. The AACC notes that 46% of community college students are Caucasian, 13% African American, 25% Hispanic, 6% Asian, and 3% two or more races (2019).

Purpose and Context of Study

This study focuses on withdrawal from courses, one dimension of student success, at a Mississippi community college. In particular, the focus of the study is identifying the factors associated with student withdrawal at a particular community college. The community college at the center of this study serves seven rural counties in Mississippi, offers athletics opportunities on 2 of the 3 campuses, and campus housing on the main campus. The average age at this

community college for the fall 2018 term was 23 years old. The most recent ethnicity data for the fall 2018 term shows the student population as 51% Caucasian, 44% African American, 1% Hispanic, 1% Asian, and 1% two or more races (Mississippi Community College Factbook, 2019). This study will investigate reasons for student withdrawal and the associated key demographic variables.

Methodology

Data was compiled from two institutional databases. The information obtained when students withdraw from a course(s) is compiled with the student data from the main organization system for the institution, Banner by Ellucian. For example, when a student wishes to withdraw after the add/drop date (end of the first full week of class) the student is required to complete a withdrawal request form in the student portal. The data from the withdrawal request form is compiled with the student demographic data and organized in an Argos report.

The Argos report provides demographics and course withdrawal requests data. The data for this study was obtained from Argos for six consecutive fall and spring semesters, including 2016, 2017, and 2018. Summer terms were not included in the data due to the high percentage of transient students. This information was then compiled into an Excel spreadsheet and formatted for entry into SPSS.

Students were allowed to select more than one reason for course withdrawal when they completed the withdrawal report. The Argos report listed all reasons selected by each student. Once the data was exported to an Excel spreadsheet, each student was assigned a student number to keep student demographics associated with the reasons selected. For example, student 1 selected personal problems and work conflict for reasons to withdraw from a PSY (Psychology) course. The student demographics for student 1 were assigned to each reason and the PSY course withdrawal.

The courses from which students withdrew were combined into subject prefixes. For example, a student withdrew from ACC 2213 (Principles of Accounting I) and BIO 1113 (Principles of Biology I), the withdrawal data will show under ACC and BIO subjects. The withdrawal request form offers sixteen options for possible reasons for withdrawal. These sixteen options were combined into nine categories. Table 1 illustrates the consolidated reasons

Table 1: *Withdrawal Reasons*

Original Withdrawal Reasons	**Consolidated Reasons**
No Financial Aid	No Financial Aid
Transportation Issues	Transportation Issues
Health Problems	Health Problems
Personal Problems	Personal Problems
Work Conflict	Work Conflict
Coursework Issues	Coursework Issues
Overwhelmed with the amount of work	
Issues with time management	
Difficulty catching up due to late registration	
Taking too many courses	
Issues requiring a textbook	Class Requirement Issues
No computer available	
Lack of computer skills	
Moving	Moving
Called to active duty military	
Other	Other

For the six semester sample (fall and spring of 2016, 2017, 2018), 3,220 students withdrew from at least one course. Within this sample, there were 7,142 withdrawals. Of those 3,220 students, the following demographics were represented in the sample.

Table 2: *Sample gender*

Female	60.6%
Male	39.4%

Table 3: *Sample ethnicity*

Caucasian	46.3%
African American	49.6%
Hispanic	2.0%
Asian	0.7%
Two or more races	1.4%

Table 4: *Sample Age*

under 20	57.1%
20 -29	35.0%
30-39	5.1%
40-49	2.1%
50 or over	0.7%

Research Questions and Hypothesis

Four research questions were addressed in this study. Each question along with associated hypothesis are listed below:

RQ1: What are the reasons students give for withdrawal?

RQ2: How do the reasons given differ among key demographic variables?

RQ2a. Student gender

H_o= There is no relationship between student gender and withdrawal reason.

H_1= There is a relationship between student gender and withdrawal reason.

RQ2b. Student ethnicity

H_o= There is no relationship between student ethnicity and withdrawal reason.

H_2= There is a relationship between student ethnicity and withdrawal reason.

RQ2c. Student age

H_o= There is no relationship between student age and withdrawal reason.

H_3= There is a relationship between student age and withdrawal reason.

RQ3. What courses show the highest number of withdrawals?

RQ4. Among those subjects with the highest number of withdrawals, what patterns emerge regarding the withdrawal reasons and student demographics?

RQ4a. Student gender

H_o= There is no relationship between student gender and subject withdrawal.

H_4= There is a relationship between student gender and subject withdrawal.

RQ4b. Student ethnicity

H_o= There is no relationship between student ethnicity and subject withdrawal.

H_5= There is a relationship between student ethnicity and subject withdrawal.

RQ4c. Student age

H_o= There is no relationship between student age and subject withdrawal.

H_6= There is a relationship between student age and subject withdrawal.

RQ4d. Withdrawal reason

H_o= There is no relationship between withdrawal reason and subject withdrawal.

H_7= There is a relationship between withdrawal reason and subject withdrawal.

Research Design

The data were analyzed using SPSS version 24. The first and third research questions were examined using a frequency test. The second research question and its sub questions were analyzed using a Chi-Squared test and cross tabulation comparison for each demographic variable listed. Analysis of the sub questions for the fourth research question also used a Chi-Squared test and cross tabulation comparison. Research question four will review subject to student demographics, as well as subject to withdrawal reason.

Presentation of Data

The data from the study are shared in this section. The data presented were gathered through the sources and process explained above.

RQ1: What Are the Reasons Students Give for Withdrawal?

Table 5: *Frequency Results of Withdrawal Reasons*

Reason	Frequency	Percent
Transportation Issues	39	0.5%
Moving	150	2.1%
Course Requirement Issues	327	4.6%
Health Problems	331	4.6%

Reason	Frequency	Percent
No Financial Aid	458	6.4%
Work Conflict	818	11.5%
Other	882	12.3%
Coursework Issues	2017	28.2%
Personal Problems	2120	29.7%
Total	7142	100.0%

Table 5 shows the number of times a withdrawal reason was selected and at what percentage of the total. The top four withdrawal reasons are personal problems at 29.7%, coursework issues at 28.2%, other at 12.3%, and work conflict at 11.5%. It is worth noting that the withdrawal reason other is the third highest selected reason. It is also interesting that personal problems, coursework issues, and work conflict are the most common withdrawal reasons. These three reasons encompass a large area of student life.

RQ2: How Do the Reasons Given Differ Among Key Demographic Variables?

This section features discussion of the data disaggregated across several key demographic variables. Those variables are: gender, ethnicity, and age.

Gender. Tables 6 and 7 illustrate the statistical results for withdrawal reason and student gender.

Table 6: *Chi-Square Results for Withdrawal Reason and Student Gender*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.982[a]	8	0.010

Likelihood Ratio	20.252	8	0.009
Linear-by-Linear Association	1.692	1	0.193
N of Valid Cases	7142		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.08.

As shown in Table 6, the Chi-Square results indicate a relationship between withdrawal reason and student gender. The null hypothesis was that there was no relationship between withdrawal reason and student gender. Therefore, the null is rejected as the p value is .01, which is less than alpha .05.

Table 7: *Cross Tabulation of Withdrawal Reason and Student Gender*

		GENDER		
		Male	Female	Total
No Financial Aid	Count	152	306	458
	Expected Count	177.1	280.9	458.0
	% within REASON	33.2%	66.8%	100.0%
	% within GENDER	5.5%	7.0%	6.4%
	% of Total	2.1%	4.3%	6.4%
	Standardized Residual	-1.9	1.5	
Transportation Issues	Count	16	23	39
	Expected Count	15.1	23.9	39.0
	% within REASON	41.0%	59.0%	100.0%
	% within GENDER	0.6%	0.5%	0.5%
	% of Total	0.2%	0.3%	0.5%
	Standardized Residual	0.2	-0.2	
Health Problems	Count	104	227	331
	Expected Count	128.0	203.0	331.0
	% within REASON	31.4%	68.6%	100.0%
	% within GENDER	3.8%	5.2%	4.6%
	% of Total	1.5%	3.2%	4.6%
	Standardized Residual	-2.1	1.7	
Personal	Count	838	1282	2120

		GENDER		
		Male	Female	Total
Problems	Expected Count	819.9	1300.1	2120.0
	% within REASON	39.5%	60.5%	100.0%
	% within GENDER	30.3%	29.3%	29.7%
	% of Total	11.7%	18.0%	29.7%
	Standardized Residual	0.6	-0.5	
Work Conflict	Count	347	471	818
	Expected Count	316.3	501.7	818.0
	% within REASON	42.4%	57.6%	100.0%
	% within GENDER	12.6%	10.8%	11.5%
	% of Total	4.9%	6.6%	11.5%
	Standardized Residual	1.7	-1.4	
Coursework Issues	Count	795	1222	2017
	Expected Count	780.0	1237.0	2017.0
	% within REASON	39.4%	60.6%	100.0%
	% within GENDER	28.8%	27.9%	28.2%
	% of Total	11.1%	17.1%	28.2%
	Standardized Residual	0.5	-0.4	
Course Requirement Issues	Count	122	205	327
	Expected Count	126.5	200.5	327.0
	% within REASON	37.3%	62.7%	100.0%
	% within GENDER	4.4%	4.7%	4.6%
	% of Total	1.7%	2.9%	4.6%
	Standardized Residual	-0.4	0.3	
Other	Count	331	551	882
	Expected Count	341.1	540.9	882.0
	% within REASON	37.5%	62.5%	100.0%
	% within GENDER	12.0%	12.6%	12.3%
	% of Total	4.6%	7.7%	12.3%
	Standardized Residual	-0.5	0.4	
Moving	Count	57	93	150
	Expected Count	58.0	92.0	150.0
	% within REASON	38.0%	62.0%	100.0%
	% within GENDER	2.1%	2.1%	2.1%

		GENDER		
		Male	Female	Total
	% of Total	0.8%	1.3%	2.1%
	Standardized Residual	-0.1	0.1	
Total	Count	2762	4380	7142
	Expected Count	2762.0	4380.0	7142.0
	% within REASON	38.7%	61.3%	100.0%
	% within GENDER	100.0%	100.0%	100.0%
	% of Total	38.7%	61.3%	100.0%

The cross tabulation results in Table 7 indicate personal problems and coursework issues were the most common withdrawal reasons for males (personal problems at 838 and coursework issues at 795) and females (personal problems at 1282 and coursework issues at 1222). Health problems for males was a major contributor to the significance of chi square with a standardized residual of -2.1.

Ethnicity. Tables 8 and 9 illustrate the statistical results for withdrawal reason and student ethnicity.

Table 8: *Chi-Square Results for Withdrawal Reason and Student Ethnicity*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	202.539[a]	32	0.000
Likelihood Ratio	215.511	32	0.000
Linear-by-Linear Association	4.768	1	0.029
N of Valid Cases	7142		

a. 10 cells (22.2%) have expected count less than 5. The minimum expected count is .23.

The chi-square test shows a relationship between student ethnicity and reason for course withdrawal. The null hypothesis states that there is no relationship between withdrawal reason and student ethnicity. Therefore, the null is rejected as the p value is .00 which is less than .05.

Table 9: *Cross Tabulation of Withdrawal Reason and Student Ethnicity*

		ETHNICITY					
		Caucasian	African American	Hispanic	Asian	Two or more races	Total
No Financial Aid	Count	111	333	5	0	9	458
	Expected Count	201.7	235.9	9.5	2.8	8.1	458.0
	% within REASON	24.2%	72.7%	1.1%	0.0%	2.0%	100.0 %
	% within ETHNICITY	3.5%	9.1%	3.4%	0.0%	7.1%	6.4%
	Standardized Residual	-6.4	6.3	-1.5	-1.7	0.3	
Transportation Issues	Count	6	33	0	0	0	39
	Expected Count	17.2	20.1	0.8	0.2	0.7	39.0
	% within REASON	15.4%	84.6%	0.0%	0.0%	0.0%	100.0 %
	% within ETHNICITY	0.2%	0.9%	0.0%	0.0%	0.0%	0.5%
	Standardized Residual	-2.7	2.9	-0.9	-0.5	-0.8	
Health Problems	Count	163	156	5	2	5	331
	Expected Count	145.8	170.5	6.9	2.0	5.9	331.0
	% within REASON	49.2%	47.1%	1.5%	0.6%	1.5%	100.0 %
	% within ETHNICITY	5.2%	4.2%	3.4%	4.7%	3.9%	4.6%
	Standardized Residual	1.4	-1.1	-0.7	0.0	-0.4	
Personal Problems	Count	1002	1022	39	16	41	2120
	Expected Count	933.5	1092.1	43.9	12.8	37.7	2120.0
	% within REASON	47.3%	48.2%	1.8%	0.8%	1.9%	100.0 %

		ETHNICITY					
		Caucasian	African American	Hispanic	Asian	Two or more races	Total
	% within ETHNICITY	31.9%	27.8%	26.4%	37.2%	32.3%	29.7%
	Standardized Residual	2.2	-2.1	-0.7	0.9	0.5	
Work Conflict	Count	341	441	13	7	16	818
	Expected Count	360.2	421.4	17.0	4.9	14.5	818.0
	% within REASON	41.7%	53.9%	1.6%	0.9%	2.0%	100.0 %
	% within ETHNICITY	10.8%	12.0%	8.8%	16.3%	12.6%	11.5%
	Standardized Residual	-1.0	1.0	-1.0	0.9	0.4	
Coursework Issues	Count	967	954	51	11	34	2017
	Expected Count	888.2	1039.0	41.8	12.1	35.9	2017.0
	% within REASON	47.9%	47.3%	2.5%	0.5%	1.7%	100.0 %
	% within ETHNICITY	30.7%	25.9%	34.5%	25.6%	26.8%	28.2%
	Standardized Residual	2.6	-2.6	1.4	-0.3	-0.3	
Course Requirement Issues	Count	86	229	5	0	7	327
	Expected Count	144.0	168.4	6.8	2.0	5.8	327.0
	% within REASON	26.3%	70.0%	1.5%	0.0%	2.1%	100.0 %
	% within ETHNICITY	2.7%	6.2%	3.4%	0.0%	5.5%	4.6%
	Standardized Residual	-4.8	4.7	-0.7	-1.4	0.5	
Other	Count	412	428	26	7	9	882
	Expected Count	388.4	454.3	18.3	5.3	15.7	882.0
	% within REASON	46.7%	48.5%	2.9%	0.8%	1.0%	100.0 %
	% within ETHNICITY	13.1%	11.6%	17.6%	16.3%	7.1%	12.3%
	Standardized Residual	1.2	-1.2	1.8	0.7	-1.7	

		ETHNICITY					
		Caucasian	African American	Hispanic	Asian	Two or more races	Total
Moving	Count	57	83	4	0	6	150
	Expected Count	66.1	77.3	3.1	0.9	2.7	150.0
	% within REASON	38.0%	55.3%	2.7%	0.0%	4.0%	100.0 %
	% within ETHNICITY	1.8%	2.3%	2.7%	0.0%	4.7%	2.1%
	Standardized Residual	-1.1	0.7	0.5	-1.0	2.0	
Total	Count	3145	3679	148	43	127	7142
	Expected Count	3145.0	3679.0	148.0	43.0	127.0	7142.0
	% within REASON	44.0%	51.5%	2.1%	0.6%	1.8%	100.0 %
	% within ETHNICITY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %
	% of Total	44.0%	51.5%	2.1%	0.6%	1.8%	100.0 %

The cross tabulation in Table 9 demonstrates significant residuals values for personal problems and coursework issues and Caucasian and African Americans. Each ethnic group selected personal problems and coursework issues as withdrawal reasons over 25% of the time. Additional major contributors to the significance of Table 9 included No Financial Aid (Caucasian -6.4 and African American 6.3), Transportation Issues (Caucasian -2.7 and African American 2.9), and Course Requirement Issues (Caucasian -4.8 and African American at 4.7).

The number of African American students who selected no financial aid as a withdrawal reason was nearly 100 greater than expected. The number of Caucasian students selecting no financial aid was nearly 100 less than expected. This leads to the high residual values shown for African American and Caucasian students and no financial aid. The cross tabulation showed no major contributors for other ethnic groups and withdrawal reasons.

Age. Tables 10 and 11 illustrate the statistical results for withdrawal reason and student age.

Table 10: *Chi-Square Results for Withdrawal Reason and Student Age*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	250.955[a]	32	0.000
Likelihood Ratio	234.870	32	0.000
Linear-by-Linear Association	42.099	1	0.000
N of Valid Cases	7142		

a. 8 cells (17.8%) have expected count less than 5. The minimum expected count is .39.

The chi-square test in Table 10 shows a relationship between student age and reason for course withdrawal. The null hypothesis was that there is no relationship between withdrawal reason and student age. Therefore, the null is rejected as the p value is .00 which is less than .05.

Table 11: *Cross Tabulation of Withdrawal Reason and Student Age*

		AGE					Total
		Under 20	20-29	30-39	40-49	Over 50	
No Financial Aid	Count	173	226	45	8	6	458
	Expected Count	248.8	168.8	24.1	11.8	4.6	458.0
	% within REASON	37.8%	49.3%	9.8%	1.7%	1.3%	100.0 %
	% within AGE	4.5%	8.6%	12.0%	4.3%	8.5%	6.4%
	Standardized Residual	-4.8	4.4	4.3	-1.1	0.7	
Transportation Issues	Count	15	20	4	0	0	39
	Expected Count	21.2	14.4	2.1	1.0	0.4	39.0
	% within	38.5%	51.3%	10.3%	0.0%	0.0%	100.0

		AGE					Total
		Under 20	20-29	30-39	40-49	Over 50	
	REASON						%
	% within AGE	0.4%	0.8%	1.1%	0.0%	0.0%	0.5%
	Standardized Residual	-1.3	1.5	1.4	-1.0	-0.6	
Health Problems	Count	137	128	30	22	14	331
	Expected Count	179.8	122.0	17.4	8.5	3.3	331.0
	% within REASON	41.4%	38.7%	9.1%	6.6%	4.2%	100.0 %
	% within AGE	3.5%	4.9%	8.0%	12.0%	19.7%	4.6%
	Standardized Residual	-3.2	0.5	3.0	4.6	5.9	
Personal Problems	Count	1194	749	101	57	19	2120
	Expected Count	1151.4	781.3	111.6	54.6	21.1	2120. 0
	% within REASON	56.3%	35.3%	4.8%	2.7%	0.9%	100.0 %
	% within AGE	30.8%	28.5%	26.9%	31.0%	26.8%	29.7%
	Standardized Residual	1.3	-1.2	-1.0	0.3	-0.5	
Work Conflict	Count	390	345	51	30	2	818
	Expected Count	444.3	301.5	43.1	21.1	8.1	818.0
	% within REASON	47.7%	42.2%	6.2%	3.7%	0.2%	100.0 %
	% within AGE	10.1%	13.1%	13.6%	16.3%	2.8%	11.5%
	Standardized Residual	-2.6	2.5	1.2	1.9	-2.2	
Coursework Issues	Count	1240	652	69	39	17	2017
	Expected Count	1095.5	743.3	106.2	52.0	20.1	2017. 0
	% within REASON	61.5%	32.3%	3.4%	1.9%	0.8%	100.0 %
	% within AGE	32.0%	24.8%	18.4%	21.2%	23.9%	28.2%
	Standardized Residual	4.4	-3.3	-3.6	-1.8	-0.7	
Course Requirement Issues	Count	150	151	22	2	2	327
	Expected Count	177.6	120.5	17.2	8.4	3.3	327.0
	% within	45.9%	46.2%	6.7%	0.6%	0.6%	100.0

		AGE					Total
		Under 20	20-29	30-39	40-49	Over 50	
	REASON						%
	% within AGE	3.9%	5.7%	5.9%	1.1%	2.8%	4.6%
	Standardized Residual	-2.1	2.8	1.2	-2.2	-0.7	
Other	Count	505	300	41	26	10	882
	Expected Count	479.0	325.0	46.4	22.7	8.8	882.0
	% within REASON	57.3%	34.0%	4.6%	2.9%	1.1%	100.0 %
	% within AGE	13.0%	11.4%	10.9%	14.1%	14.1%	12.3%
	Standardized Residual	1.2	-1.4	-0.8	0.7	0.4	
Moving	Count	75	61	13	0	1	150
	Expected Count	81.5	55.3	7.9	3.9	1.5	150.0
	% within REASON	50.0%	40.7%	8.7%	0.0%	0.7%	100.0 %
	% within AGE	1.9%	2.3%	3.5%	0.0%	1.4%	2.1%
	Standardized Residual	-0.7	0.8	1.8	-2.0	-0.4	
Total	Count	3879	2632	376	184	71	7142
	Expected Count	3879.0	2632.0	376.0	184.0	71.0	7142. 0
	% within REASON	54.3%	36.9%	5.3%	2.6%	1.0%	100.0 %
	% within AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %
	% of Total	54.3%	36.9%	5.3%	2.6%	1.0%	100.0 %

The cross tabulation results recorded in Table 11 illustrate that personal problems and coursework issues were the most prevalent reasons for student withdrawals across all age groups. Each age subgroup showed personal problems as a withdrawal reason over 26% of the time. Only in the subgroup of students who were less than twenty years old did coursework issues exceed personal problems as a reason for withdrawal and only slightly in that case. As expected,

health problems increased as a withdrawal reason as student age increased. Major contributors for health problems were under 20 (-3.2), 30 to 39 (3.0), 40 to 49 (4.6), and over 50 (5.9).

Many of the withdrawal reasons showed to be major contributors in at least one or more age subgroups. No financial aid was a major contributor for students under 20 to 39 years old. Table 11 displays that students under 20 years old are selecting no financial aid less than expected, while ages 20 to 39 are selecting this reason more than expected. Work conflicts showed major contributing residual values for students under 20 years old (-2.6), 20 to 29 (2.5) year olds, and over 50 year olds (-2.2). Additional major contributors in Table 11 include Coursework Issues (under 20 to 39), Course Requirement Issues (under 20 to 29 and 40 to 49), and Moving (40 to 49).

RQ3: What Courses Show the Highest Number of Withdrawals?

Table 12 illustrates the frequency results for course withdrawals.

Table 12: *Frequency Results for Course Withdrawals*

Subjects	Frequency	Percent
Education	14	0.2%
Philosophy	16	0.2%
Economics	23	0.3%
Political Science	24	0.3%
Criminal Justice	37	0.5%
Foreign Language	84	1.2%
Computer Science	85	1.2%
Physical Science	106	1.5%

Subjects	Frequency	Percent
Business Administration	119	1.7%
Learning and Life Skills	152	2.1%
Art	161	2.3%
Accounting	180	2.5%
Health, Physical Education, and Recreation	232	3.2%
Music	268	3.8%
Speech	285	4.0%
Chemistry	301	4.2%
Psychology	376	5.3%
Sociology	416	5.8%
History	601	8.4%
English	888	12.4%
Biology	1233	17.3%
Math	1541	21.6%
Total	7142	100.0%

Table 12 shows the frequency at which students drop each subject. The data shows the top subject students withdrawal from is MAT (Math). Students dropped MAT courses at 21.6%. The second highest withdrawal was BIO (Biology) courses at 17.3%. The frequency drops off slightly moving onto the third highest withdrawal was ENG (English) at 12.4%. The fourth highest withdrawal was HIS (History) at 8.4%.

The subject withdrawals shown in this sample align with the national data. Pistilli and Koch (n.d.) showed the courses and the rate at which students receive a D, F, W, or I grade in a course. For 2-year colleges, Math, English, Biology, and History courses each reported within the top ten D, F, W, or I rate (Pistilli & Koch, n.d.). For the purpose of this reference, the grades mentioned are as defined: D (poor), F (unsatisfactory), W (withdrew), and I (incomplete).

RQ4. Among Those Courses with the Highest Number of Withdrawals, What Patterns Emerge Regarding Withdrawal Reason and Student Demographics?

This section looks at those courses with the highest number of withdrawals. Specifically, it disaggregates with withdrawal data for those courses while focusing on patterns related to either the three key student demographic variables discussed earlier or the reasons for withdrawal.

Gender. Tables 13 and 14 illustrated the statistical results for subject withdrawal and student gender.

Table 13: *Chi-Square Results for Subject Withdrawal and Student Gender*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	216.572[a]	21	0.000
Likelihood Ratio	218.653	21	0.000
Linear-by-Linear Association	15.510	1	0.000
N of Valid Cases	7142		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.41.

The chi-square test shows a relationship between subject withdrawal and student gender. The null hypothesis was that there is no relationship between subject withdrawal and student gender. The null is rejected as the p value is .00 which is less than .05.

Table 14: *Cross Tabulation Results for Subject Withdrawal and Student Gender*

		GENDER		
		Male	Female	Total
BIO	Count	317	916	1233
	Expected Count	476.8	756.2	1233.0
	% within SUBJECT	25.7%	74.3%	100.0%
	% within GENDER	11.5%	20.9%	17.3%
	Standardized Residual	-7.3	5.8	
ENG	Count	366	522	888
	Expected Count	343.4	544.6	888.0
	% within SUBJECT	41.2%	58.8%	100.0%
	% within GENDER	13.3%	11.9%	12.4%
	Standardized Residual	1.2	-1.0	
HIS	Count	206	395	601
	Expected Count	232.4	368.6	601.0
	% within SUBJECT	34.3%	65.7%	100.0%
	% within GENDER	7.5%	9.0%	8.4%
	Standardized Residual	-1.7	1.4	
MAT	Count	659	882	1541
	Expected Count	595.9	945.1	1541.0
	% within SUBJECT	42.8%	57.2%	100.0%
	% within GENDER	23.9%	20.1%	21.6%
	Standardized Residual	2.6	-2.1	
	Count	2762	4380	7142
	Expected Count	2762.0	4380.0	7142.0
	% within SUBJECT	38.7%	61.3%	100.0%
	% within GENDER	100.0%	100.0%	100.0%
	% of Total	38.7%	61.3%	100.0%

To maintain a concise study, I selected the top four subjects with the highest withdrawal rates (MAT, BIO, ENG, HIS). These four subject areas make up 59.7 % of the course

withdrawals for the six semesters. The subject with the highest withdrawal percentage was MAT (Math) at 21.6%. Table 14 shows that females withdrew from MAT courses more than males. Both male and females showed to be major contributors with residual values of 2.6 for males and -2.1 for females.

The subject with the second highest percentage of withdrawals was BIO (Biology) at 17.3%. Females withdrew from BIO courses more than males. The standardized residuals showed -7.3 for males and 5.8 for females proving to be major contributors. This gender data aligns with the national data trends reporting females withdraw from sciences more frequently than males (Beasley & Fisher, 2012). ENG and HIS subjects showed similar gender data with females withdrawing more than males. There are no residual values shown to be contributing factors for ENG or HIS courses.

Ethnicity. Tables 15 and 16 illustrated the statistical results for subject withdrawal and student ethnicity.

Table 15: *Chi-Square Results for Subject Withdrawal and Student Ethnicity*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	249.593[a]	84	0.000
Likelihood Ratio	251.492	84	0.000
Linear-by-Linear Association	5.616	1	0.018
N of Valid Cases	7142		

a. 46 cells (41.8%) have expected count less than 5. The minimum expected count is .08.

The chi-square test shows a relationship between subject withdrawal and student ethnicity. The null hypothesis stated there was no relationship between subject withdrawal and student ethnicity. Therefore, the null is rejected as the p value is .00 which is less than .05.

Table 16: *Cross Tabulation Results for Subject Withdrawal and Student Ethnicity*

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
BIO	Count	576	616	11	11	19	1233
	Expected Count	543.0	635.1	25.6	7.4	21.9	1233.0
	% within SUBJECT	46.7%	50.0%	0.9%	0.9%	1.5%	100.0%
	% within ETHNICITY	18.3%	16.7%	7.4%	25.6%	15.0%	17.3%
	Standardized Residual	1.4	-0.8	-2.9	1.3	-0.6	
ENG	Count	372	470	14	11	21	888
	Expected Count	391.0	457.4	18.4	5.3	15.8	888.0
	% within SUBJECT	41.9%	52.9%	1.6%	1.2%	2.4%	100.0%
	% within ETHNICITY	11.8%	12.8%	9.5%	25.6%	16.5%	12.4%
	Standardized Residual	-1.0	0.6	-1.0	2.4	1.3	
HIS	Count	190	389	6	2	14	601
	Expected Count	264.7	309.6	12.5	3.6	10.7	601.0
	% within SUBJECT	31.6%	64.7%	1.0%	0.3%	2.3%	100.0%
	% within ETHNICITY	6.0%	10.6%	4.1%	4.7%	11.0%	8.4%
	Standardized Residual	-4.6	4.5	-1.8	-0.9	1.0	
MAT	Count	668	797	44	8	24	1541
	Expected Count	678.6	793.8	31.9	9.3	27.4	1541.0
	% within SUBJECT	43.3%	51.7%	2.9%	0.5%	1.6%	100.0%
	% within ETHNICITY	21.2%	21.7%	29.7%	18.6%	18.9%	21.6%
	Standardized	-0.4	0.1	2.1	-0.4	-0.6	

	ETHNICITY					
Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
Residual						
Count	3145	3679	148	43	127	7142
Expected Count	3145.0	3679.0	148.0	43.0	127.0	7142.0
% within SUBJECT	44.0%	51.5%	2.1%	0.6%	1.8%	100.0%
% within ETHNICITY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	44.0%	51.5%	2.1%	0.6%	1.8%	100.0%

Again, to maintain a concise study, I selected the top four subjects with the highest withdrawal rate (MAT, BIO, ENG, HIS). These four subject areas make up 59.7 % of the course withdrawals for the six semesters.

African American and Caucasian students showed the highest withdrawal count for MAT, BIO, ENG, and HIS courses. It is necessary to note that these ethnic groups represent over 95% of the sample population. The residual values for each subject provide the following major contributors: MAT (Hispanic at 2.1), BIO (Hispanic at -2.9), ENG (Asian at 2.4), and HIS (Caucasian at -4.6 and African American at 4.5).

Other major contributors are shown on the full cross-tabulation table in the appendix. ACC courses showed residual values of 3.3 for Caucasian students and -3.4 for African American students. CHE courses indicated that the number of Caucasian and students of two or more races was more than expected with a residual value of 2.0. Data for SPT courses showed the number of Caucasian students was higher than expected with a residual value of 2.7, African American students was lower than expected with a residual value of -3.2, and Hispanic students was higher than expected with a residual value of 2.5.

Age. Tables 17 and 18 illustrated the statistical results for subject withdrawal and student age.

Table 17: *Chi-Square Results for Subject Withdrawal and Student Age*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	249.382[a]	84	0.000
Likelihood Ratio	246.184	84	0.000
Linear-by-Linear Association	1.378	1	0.240
N of Valid Cases	7142		

a. 37 cells (33.6%) have expected count less than 5. The minimum expected count is .14.

The chi-square test shows a relationship between student age and the course withdrawal reasons. The null hypothesis stated there was no relationship between subject withdrawal and student age. The null is rejected as the p value is .00 which is less than .05.

Table 18: *Cross Tabulation Results for Subject Withdrawal and Student Age*

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
BIO	Count	661	460	74	29	9	1233
	Expected Count	669.7	454.4	64.9	31.8	12.3	1233.0
	% within SUBJECT	53.6%	37.3%	6.0%	2.4%	0.7%	100.0 %
	% within AGE	17.0%	17.5%	19.7%	15.8%	12.7%	17.3%
	Standardized Residual	-0.3	0.3	1.1	-0.5	-0.9	
ENG	Count	458	354	54	17	5	888
	Expected Count	482.3	327.2	46.7	22.9	8.8	888.0
	% within SUBJECT	51.6%	39.9%	6.1%	1.9%	0.6%	100.0 %
	% within AGE	11.8%	13.4%	14.4%	9.2%	7.0%	12.4%
	Standardized Residual	-1.1	1.5	1.1	-1.2	-1.3	

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
HIS	Count	357	202	34	5	3	601
	Expected Count	326.4	221.5	31.6	15.5	6.0	601.0
	% within SUBJECT	59.4%	33.6%	5.7%	0.8%	0.5%	100.0 %
	% within AGE	9.2%	7.7%	9.0%	2.7%	4.2%	8.4%
	Standardized Residual	1.7	-1.3	0.4	-2.7	-1.2	
MAT	Count	873	492	97	63	16	1541
	Expected Count	837.0	567.9	81.1	39.7	15.3	1541.0
	% within SUBJECT	56.7%	31.9%	6.3%	4.1%	1.0%	100.0 %
	% within AGE	22.5%	18.7%	25.8%	34.2%	22.5%	21.6%
	Standardized Residual	1.2	-3.2	1.8	3.7	0.2	
	Count	3879	2632	376	184	71	7142
	Expected Count	3879.0	2632.0	376.0	184.0	71.0	7142.0
	% within SUBJECT	54.3%	36.9%	5.3%	2.6%	1.0%	100.0 %
	% within AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0 %
	% of Total	54.3%	36.9%	5.3%	2.6%	1.0%	100.0 %

Using the same four subjects with the highest withdrawal rate (MAT, BIO, ENG, HIS) I will explain the data in Table 14. These four subject areas make up 59.7 % of the course withdrawals for the six semesters. The cross tabulation table shows that students under 20 years old withdrew from MAT, BIO, ENG, and HIS courses more than other age subgroups. The demographic data shown in Table 4 reflects that over 50% of the sample is under 20 years old. These four subjects show the withdrawal counts decrease as the age subgroups increase. The major contributors from Table 14 are shown in HIS (40 to 49 years old at -2.7) and MAT (20 to 29 years old at -3.9 and 40 to 49 years old at 3.7).

The full table listed in the appendix shows data for each of the 22 subjects.

ACC show high residual values for students ages 20 to 39. ACC courses indicate more than expected 20 to 29-year-old students withdrew and less than expected 30 to 39 year olds withdrew. HPR courses illustrate the major contributors as under 20-year-old students (-2.2) and over 50-year-old students (6.5). CSC courses showed high residual values for students over 50 years old (3.4).

Reason for withdrawal. Tables 19 and 20 illustrate the statistical findings for subject and withdrawal reason.

Table 19: *Chi-Square Results for Subject Withdrawal and Withdrawal Reason*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	397.870[a]	168	0.000
Likelihood Ratio	391.174	168	0.000
Linear-by-Linear Association	21.854	1	0.000
N of Valid Cases	7142		

a. 68 cells (34.3%) have expected count less than 5. The minimum expected count is .08.

The Chi-Square results in Table 19 show a relationship between withdrawn subject and withdrawal reasons. The null hypothesis stated there was no relationship between subject and withdrawal reason. The null is rejected as the p value is .00 which is less than .05.

Table 20: *Cross Tabulation Results for Subject Withdrawal and Withdrawal Reason*

		REASON									
		No Fin Aid	Transp Iss	Hlth Prob	Pers Prob	Wk Conf	Cwork Iss	CRequir Iss	Other	Mvin	Ttal
BIO	Count	57	5	52	333	142	394	64	165	21	1233

		REASON									
		No Fin Aid	Transp Iss	Hlth Prob	Pers Prob	Wk Conf	Cwork Iss	CRequir Iss	Other	Mvin	Ttal
	Expected Count	79.1	6.7	57.1	366.0	141.2	348.2	56.5	152.3	25.9	1233.0
	% within SUBJECT	4.6%	0.4%	4.2%	27.0%	11.5%	32.0%	5.2%	13.4%	1.7%	100.0%
	% within REASON	12.4%	12.8%	15.7%	15.7%	17.4%	19.5%	19.6%	18.7%	14.0%	17.3%
	Standardized Residual	-2.5	-0.7	-0.7	-1.7	0.1	2.5	1.0	1.0	-1.0	
ENG	Count	65	9	45	285	117	235	43	66	23	888
	Expected Count	56.9	4.8	41.2	263.6	101.7	250.8	40.7	109.7	18.7	888.0
	% within SUBJECT	7.3%	1.0%	5.1%	32.1%	13.2%	26.5%	4.8%	7.4%	2.6%	100.0%
	% within REASON	14.2%	23.1%	13.6%	13.4%	14.3%	11.7%	13.1%	7.5%	15.3%	12.4%
	Standardized Residual	1.1	1.9	0.6	1.3	1.5	-1.0	0.4	-4.2	1.0	
HIS	Count	38	2	37	172	71	161	24	82	14	601
	Expected Count	38.5	3.3	27.9	178.4	68.8	169.7	27.5	74.2	12.6	601.0
	% within SUBJECT	6.3%	0.3%	6.2%	28.6%	11.8%	26.8%	4.0%	13.6%	2.3%	100.0%
	% within REASON	8.3%	5.1%	11.2%	8.1%	8.7%	8.0%	7.3%	9.3%	9.3%	8.4%
	Standardized Residual	-0.1	-0.7	1.7	-0.5	0.3	-0.7	-0.7	0.9	0.4	

		REASON									
		No Fin Aid	Transp Iss	Hlth Prob	Pers Prob	Wk Conf	Cwork Iss	CRequir Iss	Other	Mvin	Ttal
MAT	Count	83	6	57	439	150	480	59	246	21	1541
	Expected Count	98.8	8.4	71.4	457.4	176.5	435.2	70.6	190.3	32.4	1541.0
	% within SUBJECT	5.4%	0.4%	3.7%	28.5%	9.7%	31.1%	3.8%	16.0%	1.4%	100.0%
	% within REASON	18.1%	15.4%	17.2%	20.7%	18.3%	23.8%	18.0%	27.9%	14.0%	21.6%
	Standardized Residual	-1.6	-0.8	-1.7	-0.9	-2.0	2.1	-1.4	4.0	-2.0	
Total	Count	458	39	331	2120	818	2017	327	882	150	7142
	Expected Count	458.0	39.0	331.0	2120.0	818.0	2017.0	327.0	882.0	150.0	7142.0
	% within SUBJECT	6.4%	0.5%	4.6%	29.7%	11.5%	28.2%	4.6%	12.3%	2.1%	100.0%
	% within REASON	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Again, to maintain a concise study, I examined the four subjects with the highest withdrawals (MAT, BIO, ENG, HIS). Table 20 shows the two highest withdrawal reasons for all four subjects were personal problems and coursework issues. Major contributors for BIO courses were no financial aid (-2.5) and coursework issues (2.5). The single major contributor for ENG courses was other (-4.2). MAT courses showed the highest number of major contributors with work conflict (-2.0), coursework issues (2.1), other (4.0), and moving (-2.0). There were no

major contributors for HIS courses. The full table shown in the appendix illustrates the major contributors for each subject.

Interpretation of the Data

The purpose of this study is to examine the relationship between withdrawal reasons, subjects withdrawn, and student demographics data at a Mississippi community college. The student demographics data reviewed were student gender, ethnicity, and age. The results show there is a relationship between student withdrawal reason, subjects, and key demographic characteristics. The implications for each research question are highlighted below.

RQ1: What Are the Reasons Students Give for Withdrawal?

The first research question is designed to outline the reasons for student withdrawal. These reasons are selected by students when they complete a withdrawal request form. Students withdrawing have the option to select more than one withdrawal reason when they complete the form. The results in Table 5 show the withdrawal reasons and the number of times they were selected by students. The top four reasons shown for student withdrawal are personal problems, coursework issues, other, and work conflict.

RQ2: How Do the Reasons Given Differ Among Key Demographic Variables?

The second research question investigated the relationship between student demographics and reason for withdrawal.

H_o= There is no relationship between student gender and withdrawal reason.

H_1= There is a relationship between student gender and withdrawal reason.

H_o= There is no relationship between student ethnicity and withdrawal reason.

H_2= There is a relationship between student ethnicity and withdrawal reason.

H_o= There is no relationship between student age and withdrawal reason.

H_3= There is a relationship between student age and withdrawal reason.

The data shows there is a relationship between all three student demographics and withdrawal reason. Therefore, the null hypothesis was rejected for student gender, ethnicity, and age. Implications for each withdrawal reason are highlighted below beginning with the most selected reason.

Personal problem was the most selected withdrawal reason. The data reflects that this reason is selected frequently by all of these student demographics. The only contributing factors for personal problems were Caucasian (2.2) and African American (-2.1). The data did not show high residual values for gender or age subgroups.

The second most selected reason was coursework issue. The data revealed that this reason is also selected frequently by all presented demographics. This reason did show slight differences when compared among the age subgroups. Coursework issues showed a less than expected count for students in the age range of 30 to 39 years old. The standardized residuals for coursework issues shows contributing factors as: Caucasian students (2.6), African American students (-2.6), under 20-year-old students (4.4), 20 to 29-year-old students (-3.3), and 30 to 39-year-old students (-3.6).

The third most selected reason is Other. This reason was selected 882 times within the six semester sample. The residual values for this withdrawal reason did not show any student demographics as contributing factors. Work conflict is the next most selected withdrawal reason. This reason showed a higher than expected count for males and students in the 40 to 49 age range. The only demographics showing to be a contributing factor for work conflict was student age. The values show the contributing factors as students under 20 to 29, and over 50 years old. The fifth most selected reason was no financial aid. The data showed no financial aid affecting student withdrawal in each demographic area. The major contributors for this withdrawal reason

were Caucasian (-6.5), African American (6.3), under 20 years old (-4.8), 20 to 29 years old (4.4), and 30 to 39 years old (4.3). The data did not reflect a major contributor for gender. It did show that females selected no financial aid more than expected.

Next, health problem was selected 331 times in the six semesters. Health problem was selected as a reason most often by females and Caucasian students. The frequency with which students above 20 years of age selected health problems was greater than Health problem was a significant contributor to withdrawal for males and all age groups other than 20 to 29 years of age.

The final three reasons for student withdrawal are course requirement issues, moving, and transportation issues. Combined, these three reasons represent only 7.2% of the withdrawal reasons. These reasons did not show a difference with gender subgroups. Course requirement showed contributing factors to be ages under 20 to 29, and 40 to 49. Contributing factors for student ethnicity and course requirement issues were Caucasians (-4.8) and African American students (4.7). Moving showed contributing factors for students of two or more races and students 40 to 49 years old. Transportation issues was the lowest selected withdrawal reason and showed contributing factors as Caucasian (-2.7) and African American (2.9) students.

RQ3: What Courses Show the Highest Number of Withdrawals?

This research question was designed to identify which subjects show the highest withdrawal request. A frequency table is used to identify these courses, the number of times the subject is withdrawn, and at what percentage of the total. Table 12 shows the subjects with the highest withdrawals as Math, Biology, English, and History. The information from this question is used in research question 4.

RQ4. Among Those Courses with the Highest Withdrawal Rate, What Patterns Emerge Regarding Withdrawal Reason and Student Demographics?

This research question was developed to understand the relationship between the results of research question 3, withdrawal reason, and student demographic data.

H_o= There is no relationship between student gender and subject withdrawal.

H_4= There is a relationship between student gender and subject withdrawal.

H_o= There is no relationship between student ethnicity and subject withdrawal.

H_5= There is a relationship between student ethnicity and subject withdrawal.

H_o= There is no relationship between student age and subject withdrawal.

H_6= There is a relationship between student age and subject withdrawal.

H_o= There is no relationship between withdrawal reason and subject withdrawal.

H_7= There is a relationship between withdrawal reason and subject withdrawal.

The results of the Chi-Square analysis showed a relationship between all three demographic areas and subject withdrawals. The null hypothesis was rejected for withdrawal reason and student gender, ethnicity, and age. Implications for the relationship between subject, withdrawal reason, and student demographics are highlighted below beginning with the most selected subjects.

The highest number of withdrawals was for MAT (Math) courses. Females withdrew from this subject more than males. The ethnicity and age data show that African Americans, Hispanics, and all age subgroups except those in the 20 to 29-year-old subgroup withdrew more than expected. The contributing factors associated with MAT courses are as follows: male students at 2.6, female students at -2.1, Hispanic students at 2.1, ages 20 to 29 at -3.2, and ages

40 to 49 at 3.7. The contributing factors for withdrawal reason from MAT courses were work conflict at -2.0, coursework issues at 2.1, other at 4.0, and moving at -2.0.

Biology courses showed the second highest number of withdrawals. The demographics with the highest withdrawals for BIO were females, African Americans, and students under 20 years old. The contributing factors associated with BIO courses are related to gender and ethnicity: males (-7.3), females (5.8), and Hispanic (-2.9). Student age did not show a contributing factor for BIO course. The contributing factors shown for withdrawal reason for BIO courses were no financial aid (-2.5) and coursework issues (2.5).

The subject with the third highest withdrawal percentages was English. The single contributing factor associated with ENG courses was Asian students at 2.4. Student gender and age did not show to be a contributing factor for ENG courses. The contributing factor shown for withdrawal reason for ENG courses was other at -4.2.

Finally, the subject with the fourth highest withdrawal percentage was History. The contributing factors associated with HIS courses are ethnicity and age: Caucasian (-4.6), African American (4.5), and ages 40 to 49 (-2.7). Student gender did not show to be a contributing factor for HIS courses. The data did not show a contributing factor for withdrawal reason for HIS courses.

Summary

The above manuscript illustrates the findings for all research questions involved in this study. The data show interesting findings between student demographics and reason for withdrawal. The Chi-Square analysis shows a relationship between each demographic variable and withdrawal reason.

Personal problems and coursework issues are two of the highest selected withdrawal reasons and show to be major contributors to many of the demographic areas. No financial aid shows to be a withdrawal reason selected by all demographic subgroups with the exception of Asian students. The data did not show this reason to be as significant to student withdrawal as anticipated. Analysis and future implications from the data will be discussed in manuscript three.

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MANUSCRIPT THREE: INTERPRETATION AND DISSEMINATION PLAN

MANUSCRIPT THREE: IMPLENTATION AND DISSEMINATION PLAN

Retention in higher education is a concern on college campuses across the nation. In May 2018, the National Center for Education Statistics (NCES) released data showing that sixty percent of the fall 2010 cohort completed their undergraduate degree in six years (NCES, 2018). While there is much data regarding retention at four-year institutions, for the purpose of this research we will look closely at community college retention data.

The community college student presents unique student demographics and academic characteristics (Wild & Ebbers, 2002). According to the American Association of Community Colleges (AACC) (2018), nationally, the average age of the community college student is 28 years old. With this and other demographics in mind, it is not surprising that community college students struggle with unique trials. Cohen, Brawer, and Kisker (2014) explain that community college students in particular struggle to balance family commitments, work, and commutes.

The Mississippi Community College in this study is no exception to these statistics. The college serves seven rural Mississippi counties, has multiple commuter campuses, and one main campus with housing. For the fall of 2018, the average student age was 23 years old and sixty percent of students were enrolled full-time (15 or more hours) (Mississippi Community College Factbook, 2019).

The problem of practice discussed in this quantitative study focuses on one dimension of student success, withdrawal from courses, at a Mississippi Community College. The focus of this study is identifying the factors associated with student withdrawal at this specific institution. The

research questions are designed to gain understanding of reasons for student withdrawals and the relationships with key student demographics. The relationship between subject withdrawal, student demographics, and withdrawal reason was also addressed in the research questions.

The conceptual framework used to investigate this research is twofold: student persistence and institutional retention. In the context of this study, I value Vincent Tinto's definitions of persistence and retention. Tinto views persistence as a "longitudinal process that involves the meaning the individual places on their interactions with the formal and informal dimensions of a college or university" (Braxton, Doyle, & Jones, 2013). Braxton, Doyle, and Jones (2013) further explain that Tinto's ideas of student persistence can be driven by four factors: economic, organizational, psychological, and sociological. In contrast, Tinto (2012) defines retention as the rate at which an institution retains and graduates students who entered the institution as a freshmen. Retention could be influenced by the institutional policies, procedures, and support available to students. The framework and review of literature provided in Manuscript One validate and offer support for future programs to increase retention at this Mississippi community college.

Summary of Findings and Meaning Making

The findings for each of the four research questions addressed in the study are briefly summarized in this section. In addition, recommendations for practice and future research are addressed below.

RQ1: What Are the Reasons Students Give for Withdrawal?

The data show the most frequently selected reasons for withdrawal are personal problems, coursework issues, other, and work conflict. For reference the nine withdrawal reasons

are: no financial aid, transportation issues, health problems, personal problems, work conflict, coursework issues, class requirement issues, moving, and other. These withdrawal reasons lack a specificity that would lead straight to improvement. **I am able to offer speculation to address these issues due to the vagueness of the withdrawal.**

Personal problems was the most selected reason for withdrawal during these six semesters. It is not possible from the responses to know if the personal problems are social or academic, but it is clear the institution needs to gain a better understanding of this withdrawal reason. **A potential action would be to add additional counseling support for students. This support could take several forms. Examples might include encouragement for students to visit with campus counselors or an institutional referral list to allow students an easy transition to a professional counselor.**

The withdrawal reason other is the third highest selected reason. This is problematic as clearly there may be some significant reasons for withdrawal that are not yet among the response options being made available to students. For example,.the available withdrawal reasons do not include an option to indicate an issue with the instructor or an issue with the instruction. I suspect based on my experiences in meeting with students that these two circumstances may account for some substantial portion of the current responses in the other category.

Allowing students to select unlimited reasons for withdrawal further complicates the data. There were countless students who selected three or more reasons for withdrawal from each course. This could reflect the lack of specificity of the response options which, as noted above, are confusing and all similar. **Consequently, I recommend evaluating and producing concise withdrawal reasons. I also recommend limiting the selection to one reason per course or requiring students to rank reasons in order of importance.**

R2: How Do the Reasons Given Differ Among Key Demographic Variables?

The second research question provides abundant data regarding student withdrawal reasons and key demographic variables (gender, ethnicity, and age). Recommendations for each demographic are listed below.

Gender. There were no statistically significant reasons for withdrawal for males or females. However, females selected health problems more than expected. My experience counseling students considering withdrawal has been female students consider withdrawal to become a full-time caregiver for a family member. This data supports my experience. **Offering a withdrawal option for health (self) and health (family) could provide clarity and enhance support for students in these situations.**

Males selected no financial aid less than expected and work conflict more than expected. From these results, I conclude that men are not selecting no financial aid due to their primary obstacle being their work schedule. **The institution could aid in student completion by developing options for students with mid- semester scheduling conflict, such as work.** An example of this would be allowing on-campus students to switch to the same courses in an online format and vice versa. This adjustment would allow the student to complete the semester and improve institutional retention.

Ethnicity. The data shows beneficial information for student ethnicity. The number of African Americans withdrawing due to no financial aid is nearly 100 more than expected. Caucasians students selected no financial aid nearly 100 less than expected. While this Mississippi Community College offers exceptional scholarships, these numbers show African American students are not receiving enough financial aid support or scholarships. My experience

working closely with Financial Aid is many students withdraw due to late completion of their FASFA. Last year the institution started FASFA Fridays to encourage early completion.

The data also show that zero Asian students selected no financial aid as a withdrawal reason. This could be the case because Asian students were on scholarship or paying tuition out of pocket. Asian students could have also viewed their reason for withdrawal as personal problems, which showed a higher percentage of this subgroup.

To provide an informed recommendation, it is important to review the demographics for the institutional scholarships. This information will provide clarity for additional recommendations. **My recommendation to increase FASFA completion and scholarship for African American students is a resource center providing financial aid education.** Ideally, this financial aid education would be offered to current students and the surrounding communities. Education would be offered by way of speaking events at local high schools, FASFA and scholarship completion assistance.

Course requirement issues also indicate interesting data for Caucasian and African American students. Caucasian students selected this reason less than expected and African American students selected it more than expected. Course requirement issues include getting a textbook, access to a computer, and computer skills. There is a clear association between course requirement issues and no financial aid. Students at this institution have access to the on-campus library computers, but not laptop computers. **The development of a resource center allowing students to check out textbooks and laptop computers could lessen the burden of course requirement issues for students. These resources will allow students who are waiting to receive financial aid to begin and progress through their courses efficiently. To further**

address issues with course requirements, I recommend a faculty/student forum to encourage feedback and solutions from both teacher and student.

Caucasian and Hispanic students selected coursework issues more than expected and African American students less than expected. My interpretation of the data shows Caucasian and Hispanic students obtained the materials for the course, but withdrew due to difficulty managing the academic rigor.

Age. The results for student age and withdrawal reasons were not unexpected. Personal problems and work conflict showed to affect all age subgroups. Not surprisingly, health problems increased as students aged. Coursework issues showed to decrease as student age increased. The results for older students' could exhibit the older student's commitment to their courses. Personal problems was the most selected reason for the over 50 subgroup.

Students under 20 years old selected no financial aid less than expected. These students are typically coming straight from a high school or high school equivalency program. This subgroup receives support and financial aid literacy from their high school counselors or college recruiters. Many non-traditional students are missing the benefits of these resources.

Community colleges are known for their non-traditional student population, yet this institution offers no additional resources for this subgroup. **Creating a resource center for non-traditional students could benefit the college beyond these withdrawal reasons.** The resource center could offer financial aid workshops, educational materials, and year-round financial aid assistance.

Data for work conflict and student age align with the information mentioned above regarding traditional and non-traditional students. Students under 20 years old show to withdraw from classes for work conflict less than expected potentially because they are receiving

scholarships and/or financial aid. The non-traditional students ages 20 to 49 selected work conflict more than expected. Community college students in this age range are usually balancing work, school, and family life. In my experience counseling these students, often they are forced to put school on hold to support their family and continue working.

R3: What Courses Show the Highest Number of Withdrawals?

The third research question results show the subjects with the highest number of withdrawals. The subjects with the highest withdrawal were Math (MAT), Biology (BIO), English (ENG), and History (HIS). The results are supported by existing data stating that these subjects often are not successfully completed by students at 2-year institutions (Pistilli & Kosh, n.d.). These top four subjects are not surprising, but it does cause me to wonder if these are the highest withdrawn courses because they are required for graduation and for transfer to man four-year institution in the state. **My recommendation for increasing completion in these courses is to encourage the use of existing resources and enhance resources with additional tutors in these subjects. For example, encourage students to consult their campus writing center for assistance with assignments and increasing student support services by adding available tutors in MAT, BIO, and HIS.**

R4: Among Those Subjects with the Highest Number of Withdrawals, What Patterns Emerge Regarding Withdrawal Reasons and Student Demographics?

The fourth research question offers extensive results for student withdrawal reason, withdrawal subjects, and student demographics. Interestingly, gender results showed that males withdrew from Accounting (ACC) and Business Administration (BAD) subjects more than females. BAD and ACC courses are typically taught by the same instructor on each campus. In line with existing research regarding females in the STEM field, females withdrew from BIO and

MAT more than males. Males and females are major contributors to the withdrawal of BIO and MAT subjects.

Student ethnicity and withdrawal subjects showed interesting data for all ethnic groups. Hispanic students showed to withdraw from Computer Science (CSC), MAT, Political Science (PSC), and Public Speaking (SPT) subjects more than expected. Asian students showed to withdraw from ENG courses more than expected. With the location of this institution in rural Mississippi, it is essential to consider whether these withdrawal patterns are related to language or cultural barriers. The data in this area leads me to ask additional questions. **Additional study into this area would allow the institution a clearer view of why these demographics are withdrawing from these subjects. The data from further research could indicate if additional language assistance is needed to support these demographics. These services could be housed into the previously mentioned resource center.**

HIS courses showed African Americans withdrawing much more than expected and Caucasian students less than expected. The majority of the on campus HIS courses at this Mississippi Community College are American History I and II and Western Civilization. When considering the content of these courses, it is compelling to consider if course content is an issue for these students. Unfortunately, the data from this study does not clearly answer this equity issue. **Further research into these withdrawals would be beneficial to the institution and offer insight into curriculum updates. Additional data could indicate if increasing in HIS course offerings to include an African American studies course encourages student learning and support for this demographic.**

The age group results show students of all ages withdraw from MAT courses, but the 40 to 49 subgroup withdrew more than expected. The data also show younger students withdraw

from HIS, ART, and MUS courses more than older students. The data for this age subgroup leads to more questions. **Additional research into the withdrawals for this subgroup would be beneficial and offer the institution possible solutions. A possible solution from additional data could be updating the course curriculum to reflect more relevant content to encourage students in this subgroup to continue towards completion of the courses. Updates in curriculum could include providing examples how the content of the course could be applicable to students' sense of identities or to their career aspirations.**

The final portion of research question four offers extensive information for student withdrawal reason and subjects withdrawn. Coursework issues are shown to be a major contributor for BIO and Chemistry (CHE) courses. This data is not surprising as these areas offer some of the institutions most difficult courses. While this institution offers tutors for MAT and ENG courses, it does not currently have tutors available for the sciences. **This data indicates students in science courses could benefit from the assistance of tutors.**

Interestingly, SOC courses showed higher withdrawals numbers in course requirement issues. The only course requirements for this subject would be a book and access to a computer to complete assignments. SOC courses recently moved to an includEd textbook; I conclude these withdrawal reasons would be for lack of access to a computer and/or reliable internet. **As mentioned earlier, a resource center allowing students to check out laptop computers could alleviate some of this burden. Extended library hours would benefit students who have difficulty with reliable internet.**

MAT courses showed high residual values for coursework issues and other. Coursework issues are not surprising as MAT courses are difficult for many students. **The high residual**

value for other is compelling and should serve as a reminder that other offers undefined data for the institution.

Additional Overarching Recommendation

It is clear that the data being collected on student withdrawals, even in its present form, can have significant value in informing interventions related to improving student success at MCC. Improving the data collection through recommendations offered earlier coupled with regular and ongoing analysis of the data is essential to maximizing the benefits to both students and the institution. **The Academic Programs Office of MCC should be charged with developing a schedule for the regular and ongoing analysis of the data. The schedule should provide for overall analysis at least every two years.**

Limitations

There were no limitations with data collection. The six-semester time frame for this study allowed for a solid data sample.

Dissemination of Findings and Products from Research

To benefit the faculty, staff, and students at this Mississippi Community College, the dissemination of findings would begin with the President's Executive Cabinet. The Cabinet is composed of administrators representing all areas of the College including Academics, Career-Technical Education, Student Life, and Support Services. The support of this group is critical to implement future retention strategies. After the research and recommendations are presented to College administrators, discussion will move to each area of the institution for implementation.

My current position serves as an administrator on a commuter campus. This position allows me a unique opportunity to implement change. It is my hope that this commuter campus would serve a pilot for the retention program. The student population on the commuter campus is

a good sample population to gain an understanding of how the resource center would work on our larger campuses.

The next step towards disseminating would be to educate the faculty and staff of the research findings. When I began this research, I was unaware of general demographic data for the institution. I have become a better administrator simply from educating myself on student demographics. Educating the faculty and staff of this research and demographic data will hopefully enhance their ability to serve the student body.

It is my hope that the results of these research questions will spark conversations and growth for this Mississippi Community College. The research should provide an opportunity for administration to reflect on the withdrawal process. The data reflect room for improvement for future research. I will strongly advocate for the recommended retention resource center that will impact numerous students and encourage their success.

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APPENDIX

Appendix A: Cross Tabulation Results for Subject Withdrawal and Student Gender

		GENDER		
	Subject	Male	Female	Total
ACC	Count	113	67	180
	Expected Count	69.6	110.4	180.0
	% within SUBJECT	62.8%	37.2%	100.0%
	% within GENDER	4.1%	1.5%	2.5%
	% of Total	1.6%	0.9%	2.5%
	Standardized Residual	5.2	-4.1	
ART	Count	52	109	161
	Expected Count	62.3	98.7	161.0
	% within SUBJECT	32.3%	67.7%	100.0%
	% within GENDER	1.9%	2.5%	2.3%
	% of Total	0.7%	1.5%	2.3%
	Standardized Residual	-1.3	1.0	
BAD	Count	66	53	119
	Expected Count	46.0	73.0	119.0
	% within SUBJECT	55.5%	44.5%	100.0%
	% within GENDER	2.4%	1.2%	1.7%
	% of Total	0.9%	0.7%	1.7%
	Standardized Residual	2.9	-2.3	
BIO	Count	317	916	1233
	Expected Count	476.8	756.2	1233.0
	% within SUBJECT	25.7%	74.3%	100.0%
	% within GENDER	11.5%	20.9%	17.3%
	% of Total	4.4%	12.8%	17.3%
	Standardized Residual	-7.3	5.8	
CHE	Count	115	186	301
	Expected Count	116.4	184.6	301.0
	% within SUBJECT	38.2%	61.8%	100.0%
	% within GENDER	4.2%	4.2%	4.2%
	% of Total	1.6%	2.6%	4.2%
	Standardized Residual	-0.1	0.1	
CRJ	Count	17	20	37

		GENDER		
	Subject	Male	Female	Total
	Expected Count	14.3	22.7	37.0
	% within SUBJECT	45.9%	54.1%	100.0%
	% within GENDER	0.6%	0.5%	0.5%
	% of Total	0.2%	0.3%	0.5%
	Standardized Residual	0.7	-0.6	
CSC	Count	59	26	85
	Expected Count	32.9	52.1	85.0
	% within SUBJECT	69.4%	30.6%	100.0%
	% within GENDER	2.1%	0.6%	1.2%
	% of Total	0.8%	0.4%	1.2%
	Standardized Residual	4.6	-3.6	
ECO	Count	6	17	23
	Expected Count	8.9	14.1	23.0
	% within SUBJECT	26.1%	73.9%	100.0%
	% within GENDER	0.2%	0.4%	0.3%
	% of Total	0.1%	0.2%	0.3%
	Standardized Residual	-1.0	0.8	
EDU	Count	8	6	14
	Expected Count	5.4	8.6	14.0
	% within SUBJECT	57.1%	42.9%	100.0%
	% within GENDER	0.3%	0.1%	0.2%
	% of Total	0.1%	0.1%	0.2%
	Standardized Residual	1.1	-0.9	
ENG	Count	366	522	888
	Expected Count	343.4	544.6	888.0
	% within SUBJECT	41.2%	58.8%	100.0%
	% within GENDER	13.3%	11.9%	12.4%
	% of Total	5.1%	7.3%	12.4%
	Standardized Residual	1.2	-1.0	
HIS	Count	206	395	601
	Expected Count	232.4	368.6	601.0
	% within SUBJECT	34.3%	65.7%	100.0%
	% within GENDER	7.5%	9.0%	8.4%

		GENDER		
	Subject	Male	Female	Total
	% of Total	2.9%	5.5%	8.4%
	Standardized Residual	-1.7	1.4	
HPR	Count	87	145	232
	Expected Count	89.7	142.3	232.0
	% within SUBJECT	37.5%	62.5%	100.0%
	% within GENDER	3.1%	3.3%	3.2%
	% of Total	1.2%	2.0%	3.2%
	Standardized Residual	-0.3	0.2	
LLS	Count	48	104	152
	Expected Count	58.8	93.2	152.0
	% within SUBJECT	31.6%	68.4%	100.0%
	% within GENDER	1.7%	2.4%	2.1%
	% of Total	0.7%	1.5%	2.1%
	Standardized Residual	-1.4	1.1	
MAT	Count	659	882	1541
	Expected Count	595.9	945.1	1541.0
	% within SUBJECT	42.8%	57.2%	100.0%
	% within GENDER	23.9%	20.1%	21.6%
	% of Total	9.2%	12.3%	21.6%
	Standardized Residual	2.6	-2.1	
MFL	Count	38	46	84
	Expected Count	32.5	51.5	84.0
	% within SUBJECT	45.2%	54.8%	100.0%
	% within GENDER	1.4%	1.1%	1.2%
	% of Total	0.5%	0.6%	1.2%
	Standardized Residual	1.0	-0.8	
MUS	Count	105	163	268
	Expected Count	103.6	164.4	268.0
	% within SUBJECT	39.2%	60.8%	100.0%
	% within GENDER	3.8%	3.7%	3.8%
	% of Total	1.5%	2.3%	3.8%
	Standardized Residual	0.1	-0.1	
PHI	Count	8	8	16

		GENDER		
	Subject	Male	Female	Total
	Expected Count	6.2	9.8	16.0
	% within SUBJECT	50.0%	50.0%	100.0%
	% within GENDER	0.3%	0.2%	0.2%
	% of Total	0.1%	0.1%	0.2%
	Standardized Residual	0.7	-0.6	
PHY	Count	44	62	106
	Expected Count	41.0	65.0	106.0
	% within SUBJECT	41.5%	58.5%	100.0%
	% within GENDER	1.6%	1.4%	1.5%
	% of Total	0.6%	0.9%	1.5%
	Standardized Residual	0.5	-0.4	
PSC	Count	9	15	24
	Expected Count	9.3	14.7	24.0
	% within SUBJECT	37.5%	62.5%	100.0%
	% within GENDER	0.3%	0.3%	0.3%
	% of Total	0.1%	0.2%	0.3%
	Standardized Residual	-0.1	0.1	
PSY	Count	139	237	376
	Expected Count	145.4	230.6	376.0
	% within SUBJECT	37.0%	63.0%	100.0%
	% within GENDER	5.0%	5.4%	5.3%
	% of Total	1.9%	3.3%	5.3%
	Standardized Residual	-0.5	0.4	
SOC	Count	176	240	416
	Expected Count	160.9	255.1	416.0
	% within SUBJECT	42.3%	57.7%	100.0%
	% within GENDER	6.4%	5.5%	5.8%
	% of Total	2.5%	3.4%	5.8%
	Standardized Residual	1.2	-0.9	
SPT	Count	124	161	285
	Expected Count	110.2	174.8	285.0
	% within SUBJECT	43.5%	56.5%	100.0%
	% within GENDER	4.5%	3.7%	4.0%

		GENDER		
	Subject	Male	Female	Total
	% of Total	1.7%	2.3%	4.0%
	Standardized Residual	1.3	-1.0	
	Count	2762	4380	7142
	Expected Count	2762.0	4380.0	7142.0
	% within SUBJECT	38.7%	61.3%	100.0%
	% within GENDER	100.0%	100.0%	100.0%
	% of Total	38.7%	61.3%	100.0%

Appendix B: Cross Tabulation Results for Subject Withdrawal and Student Ethnicity

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
ACC	Count	109	60	6	0	5	180
	Expected Count	79.3	92.7	3.7	1.1	3.2	180.0
	% within SUBJECT	60.6%	33.3%	3.3%	0.0%	2.8%	100.0%
	% within ETHNICITY	3.5%	1.6%	4.1%	0.0%	3.9%	2.5%
	% of Total	1.5%	0.8%	0.1%	0.0%	0.1%	2.5%
	Standardized Residual	3.3	-3.4	1.2	-1.0	1.0	
ART	Count	72	86	2	0	1	161
	Expected Count	70.9	82.9	3.3	1.0	2.9	161.0
	% within SUBJECT	44.7%	53.4%	1.2%	0.0%	0.6%	100.0%
	% within ETHNICITY	2.3%	2.3%	1.4%	0.0%	0.8%	2.3%
	% of Total	1.0%	1.2%	0.0%	0.0%	0.0%	2.3%
	Standardized Residual	0.1	0.3	-0.7	-1.0	-1.1	
BAD	Count	60	53	4	1	1	119
	Expected Count	52.4	61.3	2.5	0.7	2.1	119.0
	% within SUBJECT	50.4%	44.5%	3.4%	0.8%	0.8%	100.0%
	% within ETHNICITY	1.9%	1.4%	2.7%	2.3%	0.8%	1.7%
	% of Total	0.8%	0.7%	0.1%	0.0%	0.0%	1.7%
	Standardized Residual	1.0	-1.1	1.0	0.3	-0.8	
BIO	Count	576	616	11	11	19	1233
	Expected Count	543.0	635.1	25.6	7.4	21.9	1233.0
	% within SUBJECT	46.7%	50.0%	0.9%	0.9%	1.5%	100.0%
	% within	18.3%	16.7%	7.4%	25.6%	15.0%	17.3%

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
	ETHNICITY						
	% of Total	8.1%	8.6%	0.2%	0.2%	0.3%	17.3%
	Standardized Residual	1.4	-0.8	-2.9	1.3	-0.6	
CHE	Count	155	132	4	0	10	301
	Expected Count	132.5	155.1	6.2	1.8	5.4	301.0
	% within SUBJECT	51.5%	43.9%	1.3%	0.0%	3.3%	100.0%
	% within ETHNICITY	4.9%	3.6%	2.7%	0.0%	7.9%	4.2%
	% of Total	2.2%	1.8%	0.1%	0.0%	0.1%	4.2%
	Standardized Residual	2.0	-1.9	-0.9	-1.3	2.0	
CRJ	Count	24	13	0	0	0	37
	Expected Count	16.3	19.1	0.8	0.2	0.7	37.0
	% within SUBJECT	64.9%	35.1%	0.0%	0.0%	0.0%	100.0%
	% within ETHNICITY	0.8%	0.4%	0.0%	0.0%	0.0%	0.5%
	% of Total	0.3%	0.2%	0.0%	0.0%	0.0%	0.5%
	Standardized Residual	1.9	-1.4	-0.9	-0.5	-0.8	
CSC	Count	35	42	7	0	1	85
	Expected Count	37.4	43.8	1.8	0.5	1.5	85.0
	% within SUBJECT	41.2%	49.4%	8.2%	0.0%	1.2%	100.0%
	% within ETHNICITY	1.1%	1.1%	4.7%	0.0%	0.8%	1.2%
	% of Total	0.5%	0.6%	0.1%	0.0%	0.0%	1.2%
	Standardized Residual	-0.4	-0.3	3.9	-0.7	-0.4	
ECO	Count	10	13	0	0	0	23
	Expected Count	10.1	11.8	0.5	0.1	0.4	23.0

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
	% within SUBJECT	43.5%	56.5%	0.0%	0.0%	0.0%	100.0%
	% within ETHNICITY	0.3%	0.4%	0.0%	0.0%	0.0%	0.3%
	% of Total	0.1%	0.2%	0.0%	0.0%	0.0%	0.3%
	Standardized Residual	0.0	0.3	-0.7	-0.4	-0.6	
EDU	Count	9	5	0	0	0	14
	Expected Count	6.2	7.2	0.3	0.1	0.2	14.0
	% within SUBJECT	64.3%	35.7%	0.0%	0.0%	0.0%	100.0%
	% within ETHNICITY	0.3%	0.1%	0.0%	0.0%	0.0%	0.2%
	% of Total	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
	Standardized Residual	1.1	-0.8	-0.5	-0.3	-0.5	
ENG	Count	372	470	14	11	21	888
	Expected Count	391.0	457.4	18.4	5.3	15.8	888.0
	% within SUBJECT	41.9%	52.9%	1.6%	1.2%	2.4%	100.0%
	% within ETHNICITY	11.8%	12.8%	9.5%	25.6%	16.5%	12.4%
	% of Total	5.2%	6.6%	0.2%	0.2%	0.3%	12.4%
	Standardized Residual	-1.0	0.6	-1.0	2.4	1.3	
HIS	Count	190	389	6	2	14	601
	Expected Count	264.7	309.6	12.5	3.6	10.7	601.0
	% within SUBJECT	31.6%	64.7%	1.0%	0.3%	2.3%	100.0%
	% within ETHNICITY	6.0%	10.6%	4.1%	4.7%	11.0%	8.4%
	% of Total	2.7%	5.4%	0.1%	0.0%	0.2%	8.4%
	Standardized Residual	-4.6	4.5	-1.8	-0.9	1.0	

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
HPR	Count	114	112	3	1	2	232
	Expected Count	102.2	119.5	4.8	1.4	4.1	232.0
	% within SUBJECT	49.1%	48.3%	1.3%	0.4%	0.9%	100.0%
	% within ETHNICITY	3.6%	3.0%	2.0%	2.3%	1.6%	3.2%
	% of Total	1.6%	1.6%	0.0%	0.0%	0.0%	3.2%
	Standardized Residual	1.2	-0.7	-0.8	-0.3	-1.0	
LLS	Count	50	95	3	0	4	152
	Expected Count	66.9	78.3	3.1	0.9	2.7	152.0
	% within SUBJECT	32.9%	62.5%	2.0%	0.0%	2.6%	100.0%
	% within ETHNICITY	1.6%	2.6%	2.0%	0.0%	3.1%	2.1%
	% of Total	0.7%	1.3%	0.0%	0.0%	0.1%	2.1%
	Standardized Residual	-2.1	1.9	-0.1	-1.0	0.8	
MAT	Count	668	797	44	8	24	1541
	Expected Count	678.6	793.8	31.9	9.3	27.4	1541.0
	% within SUBJECT	43.3%	51.7%	2.9%	0.5%	1.6%	100.0%
	% within ETHNICITY	21.2%	21.7%	29.7%	18.6%	18.9%	21.6%
	% of Total	9.4%	11.2%	0.6%	0.1%	0.3%	21.6%
	Standardized Residual	-0.4	0.1	2.1	-0.4	-0.6	
MFL	Count	26	56	0	0	2	84
	Expected Count	37.0	43.3	1.7	0.5	1.5	84.0
	% within SUBJECT	31.0%	66.7%	0.0%	0.0%	2.4%	100.0%
	% within ETHNICITY	0.8%	1.5%	0.0%	0.0%	1.6%	1.2%
	% of Total	0.4%	0.8%	0.0%	0.0%	0.0%	1.2%

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
	Standardized Residual	-1.8	1.9	-1.3	-0.7	0.4	
MUS	Count	125	135	4	3	1	268
	Expected Count	118.0	138.1	5.6	1.6	4.8	268.0
	% within SUBJECT	46.6%	50.4%	1.5%	1.1%	0.4%	100.0%
	% within ETHNICITY	4.0%	3.7%	2.7%	7.0%	0.8%	3.8%
	% of Total	1.8%	1.9%	0.1%	0.0%	0.0%	3.8%
	Standardized Residual	0.6	-0.3	-0.7	1.1	-1.7	
PHI	Count	8	6	0	0	2	16
	Expected Count	7.0	8.2	0.3	0.1	0.3	16.0
	% within SUBJECT	50.0%	37.5%	0.0%	0.0%	12.5%	100.0%
	% within ETHNICITY	0.3%	0.2%	0.0%	0.0%	1.6%	0.2%
	% of Total	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
	Standardized Residual	0.4	-0.8	-0.6	-0.3	3.2	
PHY	Count	63	38	5	0	0	106
	Expected Count	46.7	54.6	2.2	0.6	1.9	106.0
	% within SUBJECT	59.4%	35.8%	4.7%	0.0%	0.0%	100.0%
	% within ETHNICITY	2.0%	1.0%	3.4%	0.0%	0.0%	1.5%
	% of Total	0.9%	0.5%	0.1%	0.0%	0.0%	1.5%
	Standardized Residual	2.4	-2.2	1.9	-0.8	-1.4	
PSC	Count	9	13	2	0	0	24
	Expected Count	10.6	12.4	0.5	0.1	0.4	24.0
	% within SUBJECT	37.5%	54.2%	8.3%	0.0%	0.0%	100.0%
	% within	0.3%	0.4%	1.4%	0.0%	0.0%	0.3%

		ETHNICITY					
	Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
	ETHNICITY						
	% of Total	0.1%	0.2%	0.0%	0.0%	0.0%	0.3%
	Standardized Residual	-0.5	0.2	2.1	-0.4	-0.7	
PSY	Count	142	214	10	4	6	376
	Expected Count	165.6	193.7	7.8	2.3	6.7	376.0
	% within SUBJECT	37.8%	56.9%	2.7%	1.1%	1.6%	100.0%
	% within ETHNICITY	4.5%	5.8%	6.8%	9.3%	4.7%	5.3%
	% of Total	2.0%	3.0%	0.1%	0.1%	0.1%	5.3%
	Standardized Residual	-1.8	1.5	0.8	1.2	-0.3	
SOC	Count	172	226	11	2	5	416
	Expected Count	183.2	214.3	8.6	2.5	7.4	416.0
	% within SUBJECT	41.3%	54.3%	2.6%	0.5%	1.2%	100.0%
	% within ETHNICITY	5.5%	6.1%	7.4%	4.7%	3.9%	5.8%
	% of Total	2.4%	3.2%	0.2%	0.0%	0.1%	5.8%
	Standardized Residual	-0.8	0.8	0.8	-0.3	-0.9	
SPT	Count	156	108	12	0	9	285
	Expected Count	125.5	146.8	5.9	1.7	5.1	285.0
	% within SUBJECT	54.7%	37.9%	4.2%	0.0%	3.2%	100.0%
	% within ETHNICITY	5.0%	2.9%	8.1%	0.0%	7.1%	4.0%
	% of Total	2.2%	1.5%	0.2%	0.0%	0.1%	4.0%
	Standardized Residual	2.7	-3.2	2.5	-1.3	1.7	
	Count	3145	3679	148	43	127	7142
	Expected Count	3145.0	3679.0	148.0	43.0	127.0	7142.0

	ETHNICITY					
Subject	Caucasian	African American	Hispanic	Asian	Two or more races	Total
% within SUBJECT	44.0%	51.5%	2.1%	0.6%	1.8%	100.0%
% within ETHNICITY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	44.0%	51.5%	2.1%	0.6%	1.8%	100.0%

Appendix C: Cross Tabulation Results for Subject Withdrawal and Student Age

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
ACC	Count	87	90	0	3	0	180
	Expected Count	97.8	66.3	9.5	4.6	1.8	180.0
	% within SUBJECT	48.3%	50.0%	0.0%	1.7%	0.0%	100.0%
	% within AGE	2.2%	3.4%	0.0%	1.6%	0.0%	2.5%
	% of Total	1.2%	1.3%	0.0%	0.0%	0.0%	2.5%
	Standardized Residual	-1.1	2.9	-3.1	-0.8	-1.3	
ART	Count	96	56	4	5	0	161
	Expected Count	87.4	59.3	8.5	4.1	1.6	161.0
	% within SUBJECT	59.6%	34.8%	2.5%	3.1%	0.0%	100.0%
	% within AGE	2.5%	2.1%	1.1%	2.7%	0.0%	2.3%
	% of Total	1.3%	0.8%	0.1%	0.1%	0.0%	2.3%
	Standardized Residual	0.9	-0.4	-1.5	0.4	-1.3	
BAD	Count	59	54	6	0	0	119
	Expected Count	64.6	43.9	6.3	3.1	1.2	119.0
	% within SUBJECT	49.6%	45.4%	5.0%	0.0%	0.0%	100.0%
	% within AGE	1.5%	2.1%	1.6%	0.0%	0.0%	1.7%
	% of Total	0.8%	0.8%	0.1%	0.0%	0.0%	1.7%
	Standardized Residual	-0.7	1.5	-0.1	-1.8	-1.1	
BIO	Count	661	460	74	29	9	1233
	Expected Count	669.7	454.4	64.9	31.8	12.3	1233.0
	% within SUBJECT	53.6%	37.3%	6.0%	2.4%	0.7%	100.0%
	% within AGE	17.0%	17.5%	19.7%	15.8%	12.7%	17.3%
	% of Total	9.3%	6.4%	1.0%	0.4%	0.1%	17.3%

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
	Standardized Residual	-0.3	0.3	1.1	-0.5	-0.9	
CHE	Count	162	114	12	9	4	301
	Expected Count	163.5	110.9	15.8	7.8	3.0	301.0
	% within SUBJECT	53.8%	37.9%	4.0%	3.0%	1.3%	100.0%
	% within AGE	4.2%	4.3%	3.2%	4.9%	5.6%	4.2%
	% of Total	2.3%	1.6%	0.2%	0.1%	0.1%	4.2%
	Standardized Residual	-0.1	0.3	-1.0	0.4	0.6	
CRJ	Count	19	16	2	0	0	37
	Expected Count	20.1	13.6	1.9	1.0	0.4	37.0
	% within SUBJECT	51.4%	43.2%	5.4%	0.0%	0.0%	100.0%
	% within AGE	0.5%	0.6%	0.5%	0.0%	0.0%	0.5%
	% of Total	0.3%	0.2%	0.0%	0.0%	0.0%	0.5%
	Standardized Residual	-0.2	0.6	0.0	-1.0	-0.6	
CSC	Count	33	39	5	4	4	85
	Expected Count	46.2	31.3	4.5	2.2	0.8	85.0
	% within SUBJECT	38.8%	45.9%	5.9%	4.7%	4.7%	100.0%
	% within AGE	0.9%	1.5%	1.3%	2.2%	5.6%	1.2%
	% of Total	0.5%	0.5%	0.1%	0.1%	0.1%	1.2%
	Standardized Residual	-1.9	1.4	0.2	1.2	3.4	
ECO	Count	8	11	3	0	1	23
	Expected Count	12.5	8.5	1.2	0.6	0.2	23.0
	% within SUBJECT	34.8%	47.8%	13.0%	0.0%	4.3%	100.0%
	% within AGE	0.2%	0.4%	0.8%	0.0%	1.4%	0.3%
	% of Total	0.1%	0.2%	0.0%	0.0%	0.0%	0.3%

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
	Standardized Residual	-1.3	0.9	1.6	-0.8	1.6	
EDU	Count	2	12	0	0	0	14
	Expected Count	7.6	5.2	0.7	0.4	0.1	14.0
	% within SUBJECT	14.3%	85.7%	0.0%	0.0%	0.0%	100.0%
	% within AGE	0.1%	0.5%	0.0%	0.0%	0.0%	0.2%
	% of Total	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
	Standardized Residual	-2.0	3.0	-0.9	-0.6	-0.4	
ENG	Count	458	354	54	17	5	888
	Expected Count	482.3	327.2	46.7	22.9	8.8	888.0
	% within SUBJECT	51.6%	39.9%	6.1%	1.9%	0.6%	100.0%
	% within AGE	11.8%	13.4%	14.4%	9.2%	7.0%	12.4%
	% of Total	6.4%	5.0%	0.8%	0.2%	0.1%	12.4%
	Standardized Residual	-1.1	1.5	1.1	-1.2	-1.3	
HIS	Count	357	202	34	5	3	601
	Expected Count	326.4	221.5	31.6	15.5	6.0	601.0
	% within SUBJECT	59.4%	33.6%	5.7%	0.8%	0.5%	100.0%
	% within AGE	9.2%	7.7%	9.0%	2.7%	4.2%	8.4%
	% of Total	5.0%	2.8%	0.5%	0.1%	0.0%	8.4%
	Standardized Residual	1.7	-1.3	0.4	-2.7	-1.2	
HPR	Count	101	92	17	10	12	232
	Expected Count	126.0	85.5	12.2	6.0	2.3	232.0
	% within SUBJECT	43.5%	39.7%	7.3%	4.3%	5.2%	100.0%
	% within AGE	2.6%	3.5%	4.5%	5.4%	16.9%	3.2%
	% of Total	1.4%	1.3%	0.2%	0.1%	0.2%	3.2%

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
	Standardized Residual	-2.2	0.7	1.4	1.6	6.4	
LLS	Count	66	61	13	10	2	152
	Expected Count	82.6	56.0	8.0	3.9	1.5	152.0
	% within SUBJECT	43.4%	40.1%	8.6%	6.6%	1.3%	100.0%
	% within AGE	1.7%	2.3%	3.5%	5.4%	2.8%	2.1%
	% of Total	0.9%	0.9%	0.2%	0.1%	0.0%	2.1%
	Standardized Residual	-1.8	0.7	1.8	3.1	0.4	
MAT	Count	873	492	97	63	16	1541
	Expected Count	837.0	567.9	81.1	39.7	15.3	1541.0
	% within SUBJECT	56.7%	31.9%	6.3%	4.1%	1.0%	100.0%
	% within AGE	22.5%	18.7%	25.8%	34.2%	22.5%	21.6%
	% of Total	12.2%	6.9%	1.4%	0.9%	0.2%	21.6%
	Standardized Residual	1.2	-3.2	1.8	3.7	0.2	
MFL	Count	48	30	1	1	4	84
	Expected Count	45.6	31.0	4.4	2.2	0.8	84.0
	% within SUBJECT	57.1%	35.7%	1.2%	1.2%	4.8%	100.0%
	% within AGE	1.2%	1.1%	0.3%	0.5%	5.6%	1.2%
	% of Total	0.7%	0.4%	0.0%	0.0%	0.1%	1.2%
	Standardized Residual	0.4	-0.2	-1.6	-0.8	3.5	
MUS	Count	168	83	9	4	4	268
	Expected Count	145.6	98.8	14.1	6.9	2.7	268.0
	% within SUBJECT	62.7%	31.0%	3.4%	1.5%	1.5%	100.0%
	% within AGE	4.3%	3.2%	2.4%	2.2%	5.6%	3.8%
	% of Total	2.4%	1.2%	0.1%	0.1%	0.1%	3.8%

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
	Standardized Residual	1.9	-1.6	-1.4	-1.1	0.8	
PHI	Count	10	6	0	0	0	16
	Expected Count	8.7	5.9	0.8	0.4	0.2	16.0
	% within SUBJECT	62.5%	37.5%	0.0%	0.0%	0.0%	100.0%
	% within AGE	0.3%	0.2%	0.0%	0.0%	0.0%	0.2%
	% of Total	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
	Standardized Residual	0.4	0.0	-0.9	-0.6	-0.4	
PHY	Count	63	41	1	0	1	106
	Expected Count	57.6	39.1	5.6	2.7	1.1	106.0
	% within SUBJECT	59.4%	38.7%	0.9%	0.0%	0.9%	100.0%
	% within AGE	1.6%	1.6%	0.3%	0.0%	1.4%	1.5%
	% of Total	0.9%	0.6%	0.0%	0.0%	0.0%	1.5%
	Standardized Residual	0.7	0.3	-1.9	-1.7	-0.1	
PSC	Count	11	12	0	0	1	24
	Expected Count	13.0	8.8	1.3	0.6	0.2	24.0
	% within SUBJECT	45.8%	50.0%	0.0%	0.0%	4.2%	100.0%
	% within AGE	0.3%	0.5%	0.0%	0.0%	1.4%	0.3%
	% of Total	0.2%	0.2%	0.0%	0.0%	0.0%	0.3%
	Standardized Residual	-0.6	1.1	-1.1	-0.8	1.6	
PSY	Count	204	143	17	10	2	376
	Expected Count	204.2	138.6	19.8	9.7	3.7	376.0
	% within SUBJECT	54.3%	38.0%	4.5%	2.7%	0.5%	100.0%
	% within AGE	5.3%	5.4%	4.5%	5.4%	2.8%	5.3%
	% of Total	2.9%	2.0%	0.2%	0.1%	0.0%	5.3%

		AGE					
	Subject	Under 20	20-29	30-39	40-49	Over 50	Total
	Standardized Residual	0.0	0.4	-0.6	0.1	-0.9	
SOC	Count	226	164	16	10	0	416
	Expected Count	225.9	153.3	21.9	10.7	4.1	416.0
	% within SUBJECT	54.3%	39.4%	3.8%	2.4%	0.0%	100.0%
	% within AGE	5.8%	6.2%	4.3%	5.4%	0.0%	5.8%
	% of Total	3.2%	2.3%	0.2%	0.1%	0.0%	5.8%
	Standardized Residual	0.0	0.9	-1.3	-0.2	-2.0	
SPT	Count	167	100	11	4	3	285
	Expected Count	154.8	105.0	15.0	7.3	2.8	285.0
	% within SUBJECT	58.6%	35.1%	3.9%	1.4%	1.1%	100.0%
	% within AGE	4.3%	3.8%	2.9%	2.2%	4.2%	4.0%
	% of Total	2.3%	1.4%	0.2%	0.1%	0.0%	4.0%
	Standardized Residual	1.0	-0.5	-1.0	-1.2	0.1	
	Count	3879	2632	376	184	71	7142
	Expected Count	3879.0	2632.0	376.0	184.0	71.0	7142.0
	% within SUBJECT	54.3%	36.9%	5.3%	2.6%	1.0%	100.0%
	% within AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	54.3%	36.9%	5.3%	2.6%	1.0%	100.0%

Appendix D: Cross Tabulation Results for Subject Withdrawal and Withdrawal Reason

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
ACC	Count	10	1	4	42	18	61	14	28	2	180
	Expected Count	11.5	1.0	8.3	53.4	20.6	50.8	8.2	22.2	3.8	180.0
	% within SUBJECT	5.6%	0.6%	2.2%	23.3%	10.0%	33.9%	7.8%	15.6%	1.1%	100.0 %
	% within REASON	2.2%	2.6%	1.2%	2.0%	2.2%	3.0%	4.3%	3.2%	1.3%	2.5%
	Standardized Residual	-0.5	0.0	-1.5	-1.6	-0.6	1.4	2.0	1.2	-0.9	
ART	Count	8	2	9	54	18	45	6	16	3	161
	Expected Count	10.3	0.9	7.5	47.8	18.4	45.5	7.4	19.9	3.4	161.0
	% within SUBJECT	5.0%	1.2%	5.6%	33.5%	11.2%	28.0%	3.7%	9.9%	1.9%	100.0 %
	% within REASON	1.7%	5.1%	2.7%	2.5%	2.2%	2.2%	1.8%	1.8%	2.0%	2.3%
	Standardized Residual	-0.7	1.2	0.6	0.9	-0.1	-0.1	-0.5	-0.9	-0.2	
BAD	Count	13	2	3	33	11	25	9	22	1	119

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Expected Count	7.6	0.6	5.5	35.3	13.6	33.6	5.4	14.7	2.5	119.0
	% within SUBJECT	10.9%	1.7%	2.5%	27.7%	9.2%	21.0%	7.6%	18.5%	0.8%	100.0 %
	% within REASON	2.8%	5.1%	0.9%	1.6%	1.3%	1.2%	2.8%	2.5%	0.7%	1.7%
	Standardized Residual	1.9	1.7	-1.1	-0.4	-0.7	-1.5	1.5	1.9	-0.9	
BIO	Count	57	5	52	333	142	394	64	165	21	1233
	Expected Count	79.1	6.7	57.1	366.0	141.2	348.2	56.5	152.3	25.9	1233.0
	% within SUBJECT	4.6%	0.4%	4.2%	27.0%	11.5%	32.0%	5.2%	13.4%	1.7%	100.0 %
	% within REASON	12.4%	12.8%	15.7%	15.7%	17.4%	19.5%	19.6%	18.7%	14.0%	17.3%
	Standardized Residual	-2.5	-0.7	-0.7	-1.7	0.1	2.5	1.0	1.0	-1.0	
CHE	Count	10	4	5	69	33	109	11	52	8	301
	Expected Count	19.3	1.6	14.0	89.3	34.5	85.0	13.8	37.2	6.3	301.0
	% within SUBJECT	3.3%	1.3%	1.7%	22.9%	11.0%	36.2%	3.7%	17.3%	2.7%	100.0 %

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	% within REASON	2.2%	10.3%	1.5%	3.3%	4.0%	5.4%	3.4%	5.9%	5.3%	4.2%
	Standardized Residual	-2.1	1.8	-2.4	-2.2	-0.3	2.6	-0.7	2.4	0.7	
CRJ	Count	2	0	3	16	3	7	0	6	0	37
	Expected Count	2.4	0.2	1.7	11.0	4.2	10.4	1.7	4.6	0.8	37.0
	% within SUBJECT	5.4%	0.0%	8.1%	43.2%	8.1%	18.9%	0.0%	16.2%	0.0%	100.0%
	% within REASON	0.4%	0.0%	0.9%	0.8%	0.4%	0.3%	0.0%	0.7%	0.0%	0.5%
	Standardized Residual	-0.2	-0.4	1.0	1.5	-0.6	-1.1	-1.3	0.7	-0.9	
CSC	Count	5	1	3	22	8	29	5	12	0	85
	Expected Count	5.5	0.5	3.9	25.2	9.7	24.0	3.9	10.5	1.8	85.0
	% within SUBJECT	5.9%	1.2%	3.5%	25.9%	9.4%	34.1%	5.9%	14.1%	0.0%	100.0%
	% within REASON	1.1%	2.6%	0.9%	1.0%	1.0%	1.4%	1.5%	1.4%	0.0%	1.2%
	Standardized	-0.2	0.8	-0.5	-0.6	-0.6	1.0	0.6	0.5	-1.3	

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Residual										
ECO	Count	0	0	0	6	4	4	0	9	0	23
	Expected Count	1.5	0.1	1.1	6.8	2.6	6.5	1.1	2.8	0.5	23.0
	% within SUBJECT	0.0%	0.0%	0.0%	26.1%	17.4%	17.4%	0.0%	39.1%	0.0%	100.0%
	% within REASON	0.0%	0.0%	0.0%	0.3%	0.5%	0.2%	0.0%	1.0%	0.0%	0.3%
	Standardized Residual	-1.2	-0.4	-1.0	-0.3	0.8	-1.0	-1.0	3.7	-0.7	
EDU	Count	0	1	0	4	1	4	2	2	0	14
	Expected Count	0.9	0.1	0.6	4.2	1.6	4.0	0.6	1.7	0.3	14.0
	% within SUBJECT	0.0%	7.1%	0.0%	28.6%	7.1%	28.6%	14.3%	14.3%	0.0%	100.0%
	% within REASON	0.0%	2.6%	0.0%	0.2%	0.1%	0.2%	0.6%	0.2%	0.0%	0.2%
	Standardized Residual	-0.9	3.3	-0.8	-0.1	-0.5	0.0	1.7	0.2	-0.5	
ENG	Count	65	9	45	285	117	235	43	66	23	888

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Expected Count	56.9	4.8	41.2	263.6	101.7	250.8	40.7	109.7	18.7	888.0
	% within SUBJECT	7.3%	1.0%	5.1%	32.1%	13.2%	26.5%	4.8%	7.4%	2.6%	100.0 %
	% within REASON	14.2%	23.1%	13.6%	13.4%	14.3%	11.7%	13.1%	7.5%	15.3%	12.4%
	Standardized Residual	1.1	1.9	0.6	1.3	1.5	-1.0	0.4	-4.2	1.0	
HIS	Count	38	2	37	172	71	161	24	82	14	601
	Expected Count	38.5	3.3	27.9	178.4	68.8	169.7	27.5	74.2	12.6	601.0
	% within SUBJECT	6.3%	0.3%	6.2%	28.6%	11.8%	26.8%	4.0%	13.6%	2.3%	100.0 %
	% within REASON	8.3%	5.1%	11.2%	8.1%	8.7%	8.0%	7.3%	9.3%	9.3%	8.4%
	Standardized Residual	-0.1	-0.7	1.7	-0.5	0.3	-0.7	-0.7	0.9	0.4	
HPR	Count	25	0	20	78	30	43	6	24	6	232
	Expected Count	14.9	1.3	10.8	68.9	26.6	65.5	10.6	28.7	4.9	232.0
	% within SUBJECT	10.8%	0.0%	8.6%	33.6%	12.9%	18.5%	2.6%	10.3%	2.6%	100.0 %

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	% within REASON	5.5%	0.0%	6.0%	3.7%	3.7%	2.1%	1.8%	2.7%	4.0%	3.2%
	Standardized Residual	2.6	-1.1	2.8	1.1	0.7	-2.8	-1.4	-0.9	0.5	
LLS	Count	23	1	11	57	15	23	6	12	4	152
	Expected Count	9.7	0.8	7.0	45.1	17.4	42.9	7.0	18.8	3.2	152.0
	% within SUBJECT	15.1%	0.7%	7.2%	37.5%	9.9%	15.1%	3.9%	7.9%	2.6%	100.0%
	% within REASON	5.0%	2.6%	3.3%	2.7%	1.8%	1.1%	1.8%	1.4%	2.7%	2.1%
	Standardized Residual	4.2	0.2	1.5	1.8	-0.6	-3.0	-0.4	-1.6	0.5	
MAT	Count	83	6	57	439	150	480	59	246	21	1541
	Expected Count	98.8	8.4	71.4	457.4	176.5	435.2	70.6	190.3	32.4	1541.0
	% within SUBJECT	5.4%	0.4%	3.7%	28.5%	9.7%	31.1%	3.8%	16.0%	1.4%	100.0%
	% within REASON	18.1%	15.4%	17.2%	20.7%	18.3%	23.8%	18.0%	27.9%	14.0%	21.6%
	Standardized	-1.6	-0.8	-1.7	-0.9	-2.0	2.1	-1.4	4.0	-2.0	

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Residual										
MFL	Count	5	0	7	28	10	21	3	7	3	84
	Expected Count	5.4	0.5	3.9	24.9	9.6	23.7	3.8	10.4	1.8	84.0
	% within SUBJECT	6.0%	0.0%	8.3%	33.3%	11.9%	25.0%	3.6%	8.3%	3.6%	100.0 %
	% within REASON	1.1%	0.0%	2.1%	1.3%	1.2%	1.0%	0.9%	0.8%	2.0%	1.2%
	Standardized Residual	-0.2	-0.7	1.6	0.6	0.1	-0.6	-0.4	-1.0	0.9	
MUS	Count	28	0	13	91	25	63	17	24	7	268
	Expected Count	17.2	1.5	12.4	79.6	30.7	75.7	12.3	33.1	5.6	268.0
	% within SUBJECT	10.4%	0.0%	4.9%	34.0%	9.3%	23.5%	6.3%	9.0%	2.6%	100.0 %
	% within REASON	6.1%	0.0%	3.9%	4.3%	3.1%	3.1%	5.2%	2.7%	4.7%	3.8%
	Standardized Residual	2.6	-1.2	0.2	1.3	-1.0	-1.5	1.4	-1.6	0.6	
PHI	Count	1	1	0	7	3	3	0	1	0	16

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Expected Count	1.0	0.1	0.7	4.7	1.8	4.5	0.7	2.0	0.3	16.0
	% within SUBJECT	6.3%	6.3%	0.0%	43.8%	18.8%	18.8%	0.0%	6.3%	0.0%	100.0 %
	% within REASON	0.2%	2.6%	0.0%	0.3%	0.4%	0.1%	0.0%	0.1%	0.0%	0.2%
	Standardized Residual	0.0	3.1	-0.9	1.0	0.9	-0.7	-0.9	-0.7	-0.6	
PHY	Count	2	0	2	35	8	36	3	18	2	106
	Expected Count	6.8	0.6	4.9	31.5	12.1	29.9	4.9	13.1	2.2	106.0
	% within SUBJECT	1.9%	0.0%	1.9%	33.0%	7.5%	34.0%	2.8%	17.0%	1.9%	100.0 %
	% within REASON	0.4%	0.0%	0.6%	1.7%	1.0%	1.8%	0.9%	2.0%	1.3%	1.5%
	Standardized Residual	-1.8	-0.8	-1.3	0.6	-1.2	1.1	-0.8	1.4	-0.2	
PSC	Count	3	0	1	9	1	7	1	2	0	24
	Expected Count	1.5	0.1	1.1	7.1	2.7	6.8	1.1	3.0	0.5	24.0
	% within SUBJECT	12.5%	0.0%	4.2%	37.5%	4.2%	29.2%	4.2%	8.3%	0.0%	100.0 %

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	% within REASON	0.7%	0.0%	0.3%	0.4%	0.1%	0.3%	0.3%	0.2%	0.0%	0.3%
	Standardized Residual	1.2	-0.4	-0.1	0.7	-1.1	0.1	-0.1	-0.6	-0.7	
PSY	Count	34	1	24	120	49	80	16	34	18	376
	Expected Count	24.1	2.1	17.4	111.6	43.1	106.2	17.2	46.4	7.9	376.0
	% within SUBJECT	9.0%	0.3%	6.4%	31.9%	13.0%	21.3%	4.3%	9.0%	4.8%	100.0%
	% within REASON	7.4%	2.6%	7.3%	5.7%	6.0%	4.0%	4.9%	3.9%	12.0%	5.3%
	Standardized Residual	2.0	-0.7	1.6	0.8	0.9	-2.5	-0.3	-1.8	3.6	
SOC	Count	33	1	17	124	63	97	30	41	10	416
	Expected Count	26.7	2.3	19.3	123.5	47.6	117.5	19.0	51.4	8.7	416.0
	% within SUBJECT	7.9%	0.2%	4.1%	29.8%	15.1%	23.3%	7.2%	9.9%	2.4%	100.0%
	% within REASON	7.2%	2.6%	5.1%	5.8%	7.7%	4.8%	9.2%	4.6%	6.7%	5.8%
	Standardized	1.2	-0.8	-0.5	0.0	2.2	-1.9	2.5	-1.4	0.4	

		REASON									
		No Fin Aid	Transport Issues	Hlth Problems	Per Problems	Work Cflict	Coursewk Issues	Course Rqment Issues	Other	Mving	Total
	Residual										
SPT	Count	13	2	18	96	38	90	8	13	7	285
	Expected Count	18.3	1.6	13.2	84.6	32.6	80.5	13.0	35.2	6.0	285.0
	% within SUBJECT	4.6%	0.7%	6.3%	33.7%	13.3%	31.6%	2.8%	4.6%	2.5%	100.0 %
	% within REASON	2.8%	5.1%	5.4%	4.5%	4.6%	4.5%	2.4%	1.5%	4.7%	4.0%
	Standardized Residual	-1.2	0.4	1.3	1.2	0.9	1.1	-1.4	-3.7	0.4	
	Count	458	39	331	2120	818	2017	327	882	150	7142
	Expected Count	458.0	39.0	331.0	2120.0	818.0	2017.0	327.0	882.0	150.0	7142.0
	% within SUBJECT	6.4%	0.5%	4.6%	29.7%	11.5%	28.2%	4.6%	12.3%	2.1%	100.0 %
	% within REASON	100.0%	100.0%	100.0%	100.0%	100.0 %	100.0%	100.0%	100.0 %	100.0 %	100.0 %

VITA

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