An Investigation in the Relationship between Institutional Incentives and Student Persistence at a Southeastern Technical College

by

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Abstract

The purpose of this study was to examine connections between student engagement in institutional incentives and student persistence until graduation or program completion. Students ranked their ascribed levels of importance regarding institutional incentives and their satisfaction with the current implementation of those efforts at a technical college in Georgia.

Following the data collection and analysis phases of this study, the results revealed that, overall, every objective stated in questions 1-50 of the Adult Student Priorities Survey was considered important to the student persisters who took the survey. Further, overall, persisters were satisfied with these objectives. The results from this study showed that student persisters were significantly less satisfied with safety and security, registration effectiveness, admissions and financial aid, and service excellence at their institution than the surveyed group of national adult students. Further, these data results showed that student persisters were significantly more satisfied with the notions of valuable course content within their majors, tuition payments as worthwhile investments, and their advisors' help in applying their academic majors to specific career goals then the national adult student comparison group.

Above all, future research should strive to examine connections between student engagement within traditional four-year and community college institutions with that of technical and vocational schools. While this research adds to the body of knowledge regarding student persistence in technical and vocational education institutions, there is

also a need to further explore relationships between student engagement in institutional incentives and persistence prior to program completion. This research would provide information to assist legislators, as well as institutional administrators, faculty, and staff as they work to increase student persistence and retention until graduation.

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CHAPTER 1

INTRODUCTION

General Introduction

Nationwide, attrition rates have risen across all areas of postsecondary education (Braxton, 2002; Pascarella & Terenzini, 2005), and, even though more students continue to pursue higher education opportunities a large number leave during their first year or depart before attaining a degree or credential (Horn, Berger & Carroll, 2005). These numbers are reflected in a report by the National Center for Enrollment Statistics, which reveal an increase of students under 25 enrolling in undergraduate programs and in graduate studies enrollment, and first-professional, or vocational education, which increased by 12 percent between 1990 and 2000 (2002). These percentages and concerns are reflected in the state of Georgia, as it spends approximately 11 percent of its state budget on public four-year higher education institutions and finds that only 44 percent of its in-state students attend these institutions within six years. Currently, projections for Georgia indicate that about 60 percent of occupations will require education after high school by 2020; only 42 percent of Georgians are able to currently meet this standard (Diamond, 2012). Thus, these low persistence rates are of concern to students who are unable to meet their educational or career goals, states that need employable workforces, and individual institutions that depend on student performance to meet their educational outcomes and funding requirements.

In an effort to find a solution to these concerns, J. Bray, Executive Director of the Association for Career and Technical Education (ACTE), R. Painter, Chief Executive Officer of the National Association of Workforce Boards (NAWB), and M. Rosin, Director of Adult Education and Workforce Initiatives for McGraw-Hill Education released their 2011 policy paper Developing Human Capital: Meeting the Growing Global Need for a Skilled and Educated Workforce. They proposed that the area where business and education goals most overlap is in the technical education sector since technical education students have more specific education goals. Therefore, technical education providers are more accountable to their 'customers' who want to see value in exchange for the time and effort they expend in focused study. In this way, they indicate that technical education is "leading the way in this regard for the rest of the education community" (2011, p. 2) and can aid in addressing attrition concerns by focusing on meeting the specific needs of its constituents.

Although focused on community colleges rather than technical education institutions, this mindset expressed by Bray, Painter, and Rosin (2011) was recently reflected nationwide through the unveiling President Obama's call for 5 million additional community college graduates and plan to make that happen through the American Graduation Initiative. This initiative comprises the creation of the community college challenge fund, which provides institutional and statewide competitive grants for innovating and expanding successful reforms, along with creating a new research center dedicated to developing and implementing new measures of describing and promoting community colleges' success (The White House, 2009). Further, this initiative will create The College Access and Completion Fund that will finance the development, growth, and

evaluation of efforts to increase college graduation rates and close achievement gaps through performance-based scholarships, learning communities of students, professors, and counselors, colleges tailored to promote the success of working adults, and funding formulas related to student progress, success, and initial enrollment—as well as tracking this data (The White House, 2009). In addition, this initiative proposed the furthering of online instruction and the creation of a $2.5 billon fund to jump start a $10 billon investment in community college facility updates (The White House, 2009).

In order to entice more students to join in this effort, President Obama and Vice President Biden also announced their Agenda for College Affordability, which provides for the expanding of Pell Grants by $500 to $5,350 and created the $2,500 American Opportunity Tax Credit for four years of college tuition. This reformed the student loan program by replacing guaranteed loans with direct loans administered by private-sector companies. Further, by expanding the Perkins Loan Program from $1 billion to $6 billion a year, this makes loans available to 2.7 million more students and at 2,600 additional colleges and universities (The White House, 2009). Moreover, The Department of Education has clarified that unemployed workers should be extended student aid regardless of incomes they no longer earned, and the Department of Labor is working with states in order to allow workers to keep their unemployment benefits while receiving education and training (The White House, 2009). Considered clusters of environmental measures and environmental variables by Astin (1993) these incentive programs are also available to technical education students, and individual technical education institutions are creating comparable incentives such as these in attempts to develop their own persistence and retention variables. However, determining which incentives might most

attract students and encourage their persistence toward program completion is not readily available since little research on student persistence and engagement has been conducted within technical education settings.

Statement of the Problem

Prior to December 2012, technical education institutions in Georgia received state funding based on student enrollment. However, since that time a new formula known as the Complete College Georgia initiative was initiated in which this policy was altered to provide funding to educational institutions based on outcomes such as the number of certificates awarded by technical colleges and number of bachelor's, master's, and doctoral degrees awarded by research universities once the 2015 fiscal year begins (Diamond, 2012). Further, all schools in the university and technical college systems were required to develop detailed plans relating to how they will help more students earn degrees (Diamond, 2012).

This new funding structure puts extra strain on institutional accountability in order to both attract students and retain them through program completion. Student development theorists, including Astin (1993), Kuh (2009), Pascarella and Terenzini (2005), and Tinto (1993) have researched student persistence, engagement, and retention extensively, but little research has been done to examine connections between their arenas of traditional four-year and community college education with that of technical and vocational schools. Currently, there is a lack of research relating to student persistence in technical education institutions (Bailey & Alfonso, 2005), as well as the relationship between student engagement in institutional incentive structures and programs and persistence prior to program completion.

Purpose of the Study

The purpose of this study was to examine connections between student engagement in institutional incentives and student persistence until graduation or program completion. Students ranked their ascribed levels of importance regarding institutional incentives and their satisfaction with the current implementation of those efforts at a technical college in Georgia.

Research Questions

The following research questions were designed to assess the levels of importance regarding institutional incentives and the level of student satisfaction with these efforts at a southeastern technical college. These questions aided in determining identifiable patterns in this study.

This study investigated the following research questions:

1. What was the relationship between student satisfaction with academic advising effectiveness and persistence?
2. What was the relationship between student satisfaction with academic services and persistence?
3. What was the relationship between student satisfaction with admissions and financial aid and persistence?
4. What was the relationship between student satisfaction with campus climate and persistence?
5. What was the relationship between student satisfaction with instructional effectiveness and persistence?

6. What was the relationship between satisfaction with registration effectiveness and persistence?
7. What was the relationship between satisfaction with safety and security and persistence?
8. What was the relationship between satisfaction with service excellence and persistence?

Significance of the Study

Since scholarship relating to technical colleges is limited, this study adds to existing literature on student persistence, institutional incentives, and student involvement and engagement in this arena and provides a framework from which additional scholars might build additional research relating specifically to technical education. Specifically, the findings from this particular study could be used to aid technical college executive leadership, program administrators, and current scholars as they seek to develop ways in which to increase student persistence in technical college settings. Additionally, ways could be considered to apply traditional student development theorists' research and theories, namely that of Astin (1993), Kuh (2009), Pascarella and Terenzini (2005), and Tinto (1993), within the technical education system.

Assumptions

The assumptions of this study are:

1. Participants responded honestly to this study's survey because there was no benefit to responding inappropriately or dishonestly.
2. Participants who self-selected to take the survey were indeed persister students enrolled in their fourth semester or higher of coursework.

Limitations

The limitations of this study are:

1. Since the sample for this study was obtained from one technical college in the southeastern United States, the results should not be generalized to other technical colleges.
2. The survey used in this study was lengthy, which could have deterred participants from fully reading or engaging in all survey questions.

Definitions

The following terms appear throughout this study. The section defines commonly used terms that may be specific to the field of technical education:

1. Academic Needs/Variables: "areas of education that impact learning. They include: developmental courses, class offerings, tutoring assistance, instructional delivery, remediation, faculty accessibility, and the teaching-learning process" (Countryman, 2006, p. 9)
2. Attrition: "students who fail to reenroll at an institution in consecutive semesters" (Berger & Lyon, 2005, p. 7).
3. Career Technical Education: while referred to as technical education in this study, this term is derived from career technical education, which "organized educational activities that — (A) offer a sequence of courses that—(i) provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; (ii) provides technical skill proficiency, and industry-recognized credential, a certificate, or an

associate degree; and (iii) may include prerequisite courses (other than a remedial course) that meet the requirements of this subparagraph; and (B) include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, or an individual" (Carl D. Perkins Career and Technical Education Act of 2006, p. S250).

4. Environmental Needs/Variables: "the entire external learning atmosphere. They include: financial aid, student health services, library services, location of college, physical impairments/handicaps or accommodations, transportation, job placement, and career development" (Countryman, 2006, p. 10).
5. Institutions of Higher Education (IHE): see postsecondary educational institution
6. Involvement: the amount of physical and psychological energy that the student devotes to the academic experience (Astin, 1999).
7. Incentive: A motivational structure such as easily accessible support staff and parking options, tools such as computer labs and library resources, and programs that provide financial, educational, or emotional support that are applied to encourage student persistence and retention.
8. Persistence: "the degree to which an individual is repetitively and/or continuously enrolled at an educational organization in order to achieve his or her goal of eventual graduation" (Mangold, Bean, & Adams, 2003, p. 541).

9. Persister: In this study, a student who has completed more than three semesters of coursework.
10. Postsecondary Educational Institution: "(A) an institution of higher education that provides not less than a 2-year program of instruction that is acceptable for credit toward a bachelor's degree; (B) a tribally controlled college or university; or (C) a nonprofit educational institution offering certificate or apprenticeship programs at the postsecondary level" (Carl D. Perkins Career and Technical Education Act of 2006, p. S250).
11. Retention: "the ability of an institution to retain a student from admission to the university through graduation" (Berger & Lyon, 2005, p. 7).
12. Student engagement: "the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (Kuh, 2009, p. 683). In this study, this definition is combined with Astin's definition of involvement and thereby broadened to include the time and effort that students devote to actively participating in institutional and academic structures.
13. Student success: "academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desire knowledge, skills and competencies, persistence, attainment of educational objectives, and postcollege performance" (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006, p. 7)
14. Support services: "services related to curriculum modification, equipment modification, classroom modification, supportive personnel, and instructional aids

and devices" (Carl D. Perkins Career and Technical Education Act of 2006, p. S250-7).

15. Vocational education: "Organized educational programs offering a sequence of courses that are directly related to the preparation of individuals in paid or unpaid employment and in current or emerging occupations requiring other than a baccalaureate or advanced degree. Such programs should include competency-based applied learning, which contributes to an individual's academic knowledge, higher-order reasoning, problem-solving skills, work attitudes, general employability skills, and the occupational specific skills necessary for economic independence as a productive and contributing member of society" (Gordon, 1999, p. 196).

Organization of the Study

Chapter 1 introduces the study by presenting the problem, purpose, significance, research questions, limitations, and definitions of terms. Chapter 2 provides a review of related literature concerning technical education, a brief history of the creation of technical education in the United States, and scholarship related to student involvement engagement, persistence, and institutional incentives. Chapter 3 reports the methods utilized in this study, including the population and sample, instrumentation, and data collection and analysis. The findings from this study are presented in Chapter 4. Finally, Chapter 5 includes a summary of the study, as well as conclusions, implications, and recommendations for further practice and research.

Summary

This section introduced the growing concern related to student attrition in postsecondary education with a special emphasis placed on technical institutions within the state of Georgia, and relayed current incentive programs related to increasing student persistence at these institutions. Further, this section described the emergence of the Complete College Georgia initiative and expressed the need to study institutional incentives in order to seek ways to increase student persistence in technical education schools in the state of Georgia. Finally, this section also provided definitions for key terms and phrases that will be applied throughout the course of this study.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

The first section of this literature review will explore the creation and development of technical colleges within the United States by detailing important legislative acts that led to the creation of vocational technical education opportunities for all students, regardless of age, disability, or other prior limitations. Also, this section will conclude with a brief history of the origins of technical education in the state of Georgia, where this study was conducted.

The second section will explore theories and prior research and applications as it relates to student persistence, student engagement, and student success, as well as ways in which this research does or does not transfer to the technical college student population. This connection to transferability will be applied by considering findings both related to technical and community college population research. For instance, the Educational Testing Service found that seven demographic factors put students at risk of not attaining a degree or finishing a program, including delayed entry, part-time enrollment, full-time work, financial independence, dependents, single parenthood, and community college attendance without a high school diploma; further research determined these factors to be much more prevalent among community college students than those who attend four-year public universities (Coley, 2000). Research such as this provides a framework from which to consider barriers that may be present in technical college student populations as

well, and are therefore transferable when considering persistence research in technical institutions due to the overlap in student population demographics. Further, this section will highlight foundational theories in the field of persistence by focusing on the work of Tinto (1993) and Astin (1993), and including others relevant to this research through student engagement and success such as Kuh, Kinzie, Schuh, Whitt, and Associates (2005) and Pascarella and Terenzini (2005).

Historical Overview of Technical Institutions

Vocational education preparation is rooted in both theory and practice through early professional schools apprenticeship systems. Apprenticeships have long been established as ways in which practitioners instructed and trained beginners into their field through hands-on training methods, such as washing bottles, mixing drugs, bloodletting, and accompanying the doctor on calls to observe and learn about diagnosis and therapy for the would-be physician. These apprentices also read extensively about their subject from whatever resources their practitioners happened to possess, but did not pursue a systematic course of readings (Brubacher & Rudy, 1997). Thus, these apprenticeship systems differed from early professional schools, which began as in the United States as theology programs at Harvard and Yale before the middle of the eighteenth century, in that they tended to be didactic and substituted hands-on learning for lectures. These lectures were given by professionals in the field, but did not replace or exceed the popularity of the apprenticeship system because the standards for receiving diplomas were so low that the aptitude of those who passed remained in question for some despite the impressive quality of having a degree (Brubacher & Rudy, 1997).

It is this parallel and competition between apprenticeship systems and proprietary schools and the demand for practical education by would-be students that continued to advance and led to the creation of two year junior colleges, which began as ways for local communities to have access to higher education in order to earn Associate's degrees and needed credits prior to enrolling in four year universities. However, as Thelin (2011) noted, "over time the original two-year academic emphasis was supplemented—and sometimes eclipsed—by the inclusion of a technical or vocational curriculum" (p. 250), and ultimately led to the creation of specialized technical education divisions within community colleges and separate technical training institutions within the United States.

The Morrill Act

Vocational higher education was first stimulated by the Land-Grant Act of 1862, also known as the Morrill Act, which donated certain lands to several states and territories in order to provide colleges of agriculture and mechanic arts (Struck, 1945). However, the primary difficulty that these new institutions encountered was the lack of students who were adequately prepared for higher education, and this perceived failure of the current public education system led to the permanent altering of the secondary school curriculum by creating university high schools that placed vocational preparation training at the forefront of their curriculum (Gordon, 1999). Nevertheless, by 1900 few schools offered classes in farm and garden, sewing, and cooking, and a strong public sentiment that skilled workers were needed to aid in the expansion of the Industrial Revolution was expressed by the public at large, particularly businessmen and labor leaders, especially those in rural America (Thompson, 1973). These rural Americans began to question the relevance of traditional education and pushed to have agriculture play a more prominent

role in school programs (Finch & Crunkilton, 1979). For example, as the state of Georgia's economy had been devastated by the Civil War, the cotton industry was declining, and the Great Depression threatened ahead, Georgia Senator, later governor, Smith recognized that there was a need for training in modern industry if the state was to progress (Breeden, 2003). The response to these programs was evident, because by 1910 over 20,000 students enrolled in agriculture at 965 schools, while nearly 33,000 enrolled in domestic economy courses in 591 schools. During this same period, the U.S. Department of the Interior reported that enrollments reached nearly 111,000 in commercial education, which was a growth of 42,000 students (Thompson, 1973). However, a concern remained regarding how these programs should grow, what they should teach, and whom they should serve.

The Smith-Hughes Act of 1917

To address this growing concern, President Wilson appointed a commission to study national aid for vocational education in 1914. Senator Smith of Georgia was elected chairman, and through the commission Smith introduced Senate Bill 703 on December 7, 1915, which provided for the promotion of vocational education, cooperation with states in advancement of such education in agriculture, trades, and industries, in preparation of teaching vocational subjects, and appropriate money and regulation of expenditures (Plawin, 1992). Consequently, another Georgian and member of the commission, Representative Hughes, introduced similar legislation in House Bill 11250 (Gordon, 1999). Subsequently, these feelings of the public, enrollment by students, and work of Smith, Hughes, and organizations such as the National Society for the Promotion of Industrial Education and the Association of Agricultural Colleges and Experiment Station

were presented, which paved the way to securing federal aid for vocational education and culminated in the passage of the Smith-Hughes Act of 1917 (Finch & Crunkilton, 1979).

The Smith-Hughes Act of 1917 was the nation's first vocational education act, and contained several specific elements that contributed to the separation of vocational education from other sections within current high school curriculums. For example, in order to receive federal funds each state was required to establish a state board of vocational education, which led some states to establish an additional board that was separate from their already-existing state board of education. This, in turn, fostered the notion that vocational and academic educations were separate entities, along with the segregation of curriculum that the act promoted (Gordon, 1999). Further, the subjects taught, hours spent on instruction, and amount of time for supervised work in the field were all prescribed in the law, as well as how funds could be used and the specifics regarding the participating states' require plans for review by the Federal Board of Vocational Education (FBVE), a body expressly established by the law that could withhold funding if any provisions to the act were not upheld (Cuban, 1982). This act was later adapted to reflect new technological opportunities and a changing workforce.

The Servicemen's Readjustment Act of 1944 (The GI Bill)

One example of a changing workforce can be found after World War II, as service members returned home and needed ways in which to assimilate into society and support themselves and their families. Plawin (1992) notes that vocational education had been a integral part of the National Defense Training Program, which trained nearly 7,500,000 individuals for defense and war production employment, but that structures were needed to support these veterans. In response to this need, the Veterans Administration (VA)

developed a plan of rehabilitation for life, a process by which a trainee would be able to find a job anywhere at any time, and the first most important step in expanding this program would be in the realm of higher education (Frydl, 2009). This effort by the VA, which led to the passage of Public Law 16, eventually led to the passage of the Servicemen's Readjustment Act of 1944 (better known as the GI Bill). This bill was an entitlement, which stated that all veterans who met the eligibility criteria were guaranteed the educational benefits regardless of the number of participants (Thelin, 2011). The benefits, which were available for one year of enrollment as a full-time student plus an additional month for each month served, included a year of unemployment insurance, medical care, counseling services, and tuition, books, and living expenses while enrolled in any educational program (Cohen, 1998). Further, these tuition and benefits payments were portable and would remain with a veteran at the institution of his or her choice, including undergraduate and junior colleges, trade schools, vocational programs, or graduate professional schools such as law, medicine, dentistry, pharmacy, architecture, or engineering, as long as that institution met the government's approval criteria (Thelin, 2011). This bill offered veterans the opportunity to pursue whatever sort of educational training they desired, and institution enrollments skyrocketed (Frdyl, 2009, p. 305).

The Vocational Education Act of 1963, and Vocational Education Amendments of 1968 and 1976

As a result of the Smith-Hughes Act of 1917, secondary options for education were reconsidered, such as the Commission on the Reorganization of Secondary Educations of the National Association of the United States' 1918 report that set forth

seven major objectives of secondary education: health, command of fundamental processes, worth home membership, vocational success, civic education, worthy use of leisure, and ethical character (Struck, 1945). These options for education continued to adapt and change with the nation's needs as the Smith-Hughes Act was extended and expanded by the George-Reed Act of 1929, which authorized additional increasing appropriations annually to a maximum of $2.5 million over five years for education and home economics (Plawin, 1992). Other pieces of legislation included the George-Ellzey Act of 1934, the George-Dean Act of 1936, and the George-Barden Act of 1946, which all increased vocational education spending. Further, amendments were made to these laws and other legislation that included vocational education, including the National Defense Education Act of 1958, the Area Redevelopment Act of 1961, and the Manpower Development Training Act of 1962 (Cuban, 1982). However, it was the Perkin-Morse Bill, better known as the Vocational Education Act (VEA) of 1963, that differed dramatically from the goals of the Smith-Hughes law and its subsequent extensions in the following ways: total appropriations were enlarged; non-categorical grants were increased, which created further state funds for program development; states were given more autonomy to allocated funds between categories; this new law focused on high school and postsecondary training in a way that included handicapped and disadvantaged individuals, and upgrading the skills of those who were under or unemployed; further, funds for innovative programs, research and curriculum development, and residential education were included (Cuban, 1982). One element that did not change was that this new bill continued the funding of the Smith-Hughes occupational categories, so in effect it broadened the definition of vocational education in

a way that would help prepare people for a multitude of jobs rather that just fit specific market demands by mandating program flexibility and encouraging experimentation and research (Cuban, 1982).

Following the Smith-Hughes Act, many historians consider the VEA of 1963 as the most significant piece of legislative history of vocational education. The overall purposes of the VEA were to maintain, extend, and improve existing vocational education programs, as well as provide part-time employment for youth who needed earnings to continue their educations on a full-time basis (Gordon, 1999). The act's intent was to ensure that people of all ages and in all communities would have access to vocational training or retraining that matched their personal interests, abilities, and needs; the act also stipulated that funds must be used to assist those whose academic, socioeconomic, or other handicaps prevented them from being successful in regular vocational education programs (Gordon, 1999). As a result, vocational education was mandated to meet the needs of individual students and not just the employment needs of industry for the first time (Gordon, 1999).

This act was spearheaded by Carl D. Perkins, a Kentucky House Representative who is considered "one of the best friends vocational education ever had in Congress" for this action and his later pieces of legislation (Plawin, 1992, p. 32). Five years later, the act was renamed the Vocational Education Amendment (VEA) of 1968 and updated to emphasize vocational education in postsecondary educational institutions and broaden the definition of vocational education in order to bring in closer to general education (Gordon, 1999). In 1976, the VEA was adapted once more for a variety of reasons: requiring that funds be authorized in order to ensure that states improved their planning

by including interested agencies and making use of all available resources for vocational education; assisting states in overcoming sex discrimination and stereotyping in their programs, and increasing funding originally provided for in the Vocational Education Act of 1963 and Vocational Education Amendment of 1968 (Gordon, 1999). Ultimately, the extension of this act and amendments helped to further priorities identified by Congress and provide quality control to a wider range of vocational and technical curricula to U.S. citizens (Finch & Crunkilton, 1979, pp. 4-5).

Carl D. Perkins Vocational and Technical Education Acts of 1984, 1990, 1998, and 2006; Workforce Investment Act of 1998

Following his work with the VEA of 1963 and 1968, Perkin's work continued with the passage of the Carl D. Perkins Vocational Educational Act of 1984, along with other supporting pieces of legislation such as the Education for All Handicapped Children Act of 1975 and the Vocational Rehabilitation Act of 1973, which mandated that vocational education must assess the vocational skills of students with handicaps, make vocational education part of the total education plan, and provide vocational education and counseling to individuals with handicaps in a non-discriminatory manner (Mason, 1989). Specifically, the Carl D. Perkins Act of 1984 required that states provide vocational education programs to students with handicaps in the least restrictive environment, which meant that no student with a handicap should be provided with a separate vocational education program unless it can be demonstrated that that student needed a restrictive learning environment (Mason, 1989). Further, this act also provided the largest set-aside amount of vocational education monies ever for single parents and homemakers (Mason, 1989). In 1990, this act was amended and extended to emphasize

"integration of academic and vocational education, articulation between segments of education engaged in workforce preparation… and closer linkages between school and work" (Gordon, 1999, p. 79) and renamed the Carl D. Perkins Vocational and Applied Technology Act; this new name signaled congressional interest in emphasizing academic and vocational skills that would be necessary to work in a global and technologically advanced society, and shifted the way that vocational education was historically provided in the U.S. by no longer separating vocational students, teachers, and curriculum from the rest of the school community (Gordon, 1999).

The act was amended again in 1998, and most recently in 2006 in order to provide "an increased focus on the academic achievement of career and technical education students, strengthen the connections between secondary and postsecondary education, and improve state and local accountability" (U.S. Department of Education Carl D. Perkins Career and Technical Education Act of 2006, 2007, para.1). Also in 1998, the Workforce Investment Act was created, which reformed federal employment, adult education, and vocational rehabilitation programs to create a one-stop system for workforce and education programs for youth and adults. With the creation of this act, it became required for every entity that provides postsecondary educational institutional vocational and technical education programs that fall under the Perkins Vocational and Technical Education Act to partner with system created by the Workforce Investment Act (U.S. Department of Education Carl D. Perkins Vocational and Technical Education Act of 1998, 2003).

The Development of the Technical College System of Georgia

Just as the progress of the technical college system has been connected with the changing needs of the U.S. population, the development of the technical college system of Georgia is based on the evolving needs of Georgia's businesses (Breeden, 2003). For example, the state's first trade school, North Georgia Trade and Vocational School, opened in 1944 after significant federal funds were made available through the GI Bill; the second, South Georgia Trade and Vocational School, opened in 1948 (Breeden, 2003). Similarly, W.M. Hicks, the State Supervisor of Trade and Industrial Education, lobbied to have the State Board of Education approve a set a policies for establishing what would be known as area vocational-technical schools in response to the need to provide technical training for Korean War veterans and rural constituents who had ben displaced by the increasing mechanization of agriculture in the state (Breeden, 2003). Georgia legislators continued to create further workforce training programs over the next several decades, and in 1988 created the Department of Technical and Adult Education (DTAE), which began to facilitate the state's adult literacy programs and work alongside these technical schools and programs like Quickstart, a workforce training program; this creation is noted as the first time in Georgia history that a state agency became dedicated to the full scope of workforce development services, including literacy, technical education, and economic development and served as an essential element of economic and community development (Breeden, 2003).

By 2000, more than 1 billion dollars had been invested into modernizing the technical college system, including officially renaming schools as technical colleges and creating funding formulas to accommodate the system's enrollment growth, building new

campuses, and expanding the HOPE scholarship program to make technical college students eligible recipients (Breeden, 2003). Then, on July 1, 2008, the DTAE's name was officially changed to the Technical College System of Georgia (TCSG), which the state feels better communicates the organization's mission of providing technical education, adult education programs, and customized training for businesses and industry to all residents (Breeden, 2003). This mission has continued to progress, as can be reflected when the TCSG State Board adapted their mission statement in 2011 to state that it "provides technical, academic, and adult education and training focused on building a well-educated, globally competitive workforce for Georgia" (Technical College System of Georgia Mission Statement, 2011, para. 1).

The Complete College Georgia Initiative

Prior to December 2012, technical college system institutions in Georgia received state funding based on student enrollment. Much of this funding was considered unlimited to all Georgia residents, military, and dependents seeking technical certificates and diplomas through free financial aid consultation and involvement in activities designed to promote financial literacy and default prevention. This organization supports "students in achieving their educational goals directly and indirectly, providing a wide range of financial aid services to Georgia's high schools, colleges, universities, technical colleges, and commercial lenders" (Georgia Student Finance Commission, 2013, para.5). Since that time a formula known as the Complete College Georgia initiative the policy altered to provide funding to educational institutions based on outcomes such as the number of certificates awarded by technical colleges and number of bachelor's, master's, and doctoral degrees awarded by research universities once the 2015 fiscal year begins

(Diamond, 2012). Further, all schools in the university and technical college systems were required to develop detailed plans relating to how they will help more students earn degrees (Diamond, 2012). The Complete College Georgia initiative, which is being implemented through the Georgia Higher Education Completion Plan, is a branch of a nationwide Complete College America project. The goal of this initiative is to increase graduates within the Georgia Technical College system by nearly 50,000 through 2020, which will require an additional 1,100 graduates per year and is reflected in the fiscal year projections of 2012 and 2013 (Technical College System of Georgia FY 2013 Strategic Plan Update, 2013).

This new funding structure for achieving this enrollment and graduation growth calls for increased institutional accountability in order to both attract students and retain them through program completion. Student development theorists, including Astin, Kuh, Pascarella and Terenzini, and Tinto have researched student persistence, involvement and engagement, and retention extensively, but little research has been accomplished to examine connections between their arenas of traditional four-year and community college education with that of technical and vocational schools.

Persistence, Engagement, and Student Success Theory in Higher Education

Student Persistence

Student persistence has been difficult to both define and track for centers of community and technical education. Thelin (2011) outlines two mains theories associated with the difficulty that administrators face while addressing issues of student persistence: (1) the idea that since students enter with diverse backgrounds and preparation that it is

difficult and perhaps inappropriate to subject the institution to conventional models of monitoring student retention patterns, and (2) the idea that if a student drops out of a technical course then the college was serving them well. Counterarguments to the first theory suggest that these institutions might in fact be admitting ill-prepared students and therefore serve as a revolving door college or promoting a cooling out function whereby students who stood little chance of academic survival or success blamed themselves for their eventual inability to persist. Regarding the second notion, examined as a paradox, Thelin provides the example of air conditioning repair classes and questioned, "If a student quickly acquired the requisite skills for a well-paying job in this field, why bother to complete the course, let alone the two-year degree?" (2011, p. 333).

Thelin's remarks reflect Astin's (1993) statement regarding traditional college students, who are also more likely to drop out if they have off-campus jobs related to career goals. Further, Tinto (1982) elaborated on the issue of differing goals among students as he wrote:

> Within any institution, there will always be some individuals whose educational goals are either more limited or more extensive than those of the institution into which first entry way gained. Among students with more limited educational goals, participation in higher education often involves accumulating a limited number of credits for occupational certification and/or job promotion. For part-time working students, participation may require the acquisition of a specific (rather than a general) set of skills needed for on-the-job activities. For these students, as for others, completing a degree program may not be the desired end;

> short-term rather than full-term attendance may be sufficient to achieve their goals. (p. 4)

Thus, based on Thelin and Tinto's explanations, defining what constitutes as a dropout, or whether or not that should be considered a negative term, is relative when comparing individual students' needs and desires against their decision to persist in a field of study or particular program. Therefore, it remains important for institutions to answer these questions on individual levels in order to best meet and serve their student populations.

Questions similar to those raised in Thelin's example, Tinto's rationale, and the relationship between educational goals and retention were asked during an extensive cohort study from the fall 1997 through every following fall and spring semester until 2001 at two community colleges (Goel & L'heureux, 2003). A major finding of the study revealed how much a student's lack of an educational goal could affect their persistence in a program and retention status as Goel and L'heureux found that almost all of 625 students from first cohort of 1,844 and 293 from the second cohort of 1,137 cohort that left their programs reported that they did not have an educational goal (2003). Prior to this study, Pascarella (1982) determined that participation in career counseling programs had a direct positive effect on persistence, and that the concept of social involvement held little importance to commuter students. Similarly, following a study on student success and retention, Tracy-Mumford and Others (1994) recommended that institutions assist students in establishing educational goals and provided the rationale that one must first have an educational goal before persisting in getting a degree or obtaining that goal. This recommendation aligns with findings by Camburn (1990), Carter (2002), and Pascarella and Terenzini (1991), who relayed that degree aspirations are strongly and positively

related to attaining subsequent levels of education. Tinto (1993) addressed students' abilities to overcome or relent to financial barriers based on these same levels of degree aspiration in connection with their real-world goals. He wrote, "Students who see their college experiences as rewarding and/or as being tied to their adult futures will continue to bear great financial burdens and accept considerable short-term debt in order to complete a degree program. When college is seen as irrelevant and/or as unrewarding, however, even the slightest financial pressure will lead to withdrawal" (p. 66). Further, Napoli and Wortman (1998) indicated that academic and social integration have both indirect and direct effects on persistence in college, especially that students who are integrated in college life have strong goal and institutional commitments – which in turn influence their persistence.

Other factors beyond educational goals have also been found to increase or hinder student persistence. For example, following a nine-year study, Pascarella, Smart, and Ethington (1986) relayed that academic and social integration had a significant positive direct effect on degree completion for both sexes, and that secondary school academic achievement had significantly positive indirect effects on degree persistence and completion, which was seen primarily thorough its influence on academic integration at the last institution attended. Further, Bean (1980) sought to explore links between student dropout and rank self-reported student variables by the extent to which they explained the noted variations in student attrition. To do this, he adapted a causal model similar to Price's (1977) employee turnover work in organizations to student attrition in institutions of higher education (IHEs) and collected self-reported data from a freshmen composition program at a major Midwestern university in December 1977 on organizational

determinants expected to affect satisfaction, which in turn was expected to influence dropout or persistence/retention.

This model, A Causal Model of Student Attrition (see Figure 1), which is included below, represents the causal relationships between the variables defined further in the article (for example, performance in this model is defined as "the degree to which a student has demonstrated past academic achievement" (Bean, 1980, p. 159). Bean explained that the arrows represented the direction of the causation, and the sign indicates whether the relationship between the two variables is positive or negative. Bean then applied Zetterberg's (1965) logic to determine that each proportion takes the form that successively higher amounts of x (the determinant) will likely produce successively higher amounts of student attrition, and vice versa for lower amounts. Further, Bean (1980) noted that the determinants are additive rather than multiplicative, and the each of the proportions if qualified by the phrase other things being equal that was supported by his previous research in 1978 and 1979.

This model indicated that background characteristics of students must be considered in order to understand their interactions within the environment of the IHE, as noted by Spady (1970) and Tinto's (1975) work on the longitudinal nature of the dropout process. Further, the objective variables, such as grade point average, and subjective measures, such as the practical value of the education, were expected to influence the student's degree of satisfaction with the IHE. This level of satisfaction was hypothesized to increase the student's level of institutional commitment, which was considered as leading to a degree rather than dropping out (Bean, 1980). Following the conclusion of

the study, Bean (1980) made the following recommendations for reducing student attrition:

1. (As a practical implication for the IHE) members, as well as student affairs staff, should be advised that men and women leave universities for different reasons;
2. (As practical implications for students of both sexes) admit student with the highest high school grade point averages possible, and
3. (As a practical implication for the IHE) members, as well as student affairs staff, should be advised that men and women leave universities for different reasons;
4. (As practical implications for students of both sexes) admit student with the highest high school grade point averages possible, and
5. The staff and faculty of an IHE should realize the perceived quality of the education the student is receiving is one of the most important variables for both men and women in influencing institutional commitment;
6. (Implications specifically for women are to) encourage or require women to join campus organizations, and
7. In recruiting or orientation programs, emphasize the usefulness of a women's education for her securing future employment, and
8. Maintain an active and effective placement program, focusing on employment opportunities for women;
9. (Implications specifically for men are to) offer an educational program which provides the best opportunity for men to fell that they are developing personal, intellectual, creative, and interpersonal skills, and
10. Avoid too rigid scheduling for men in their first semester.

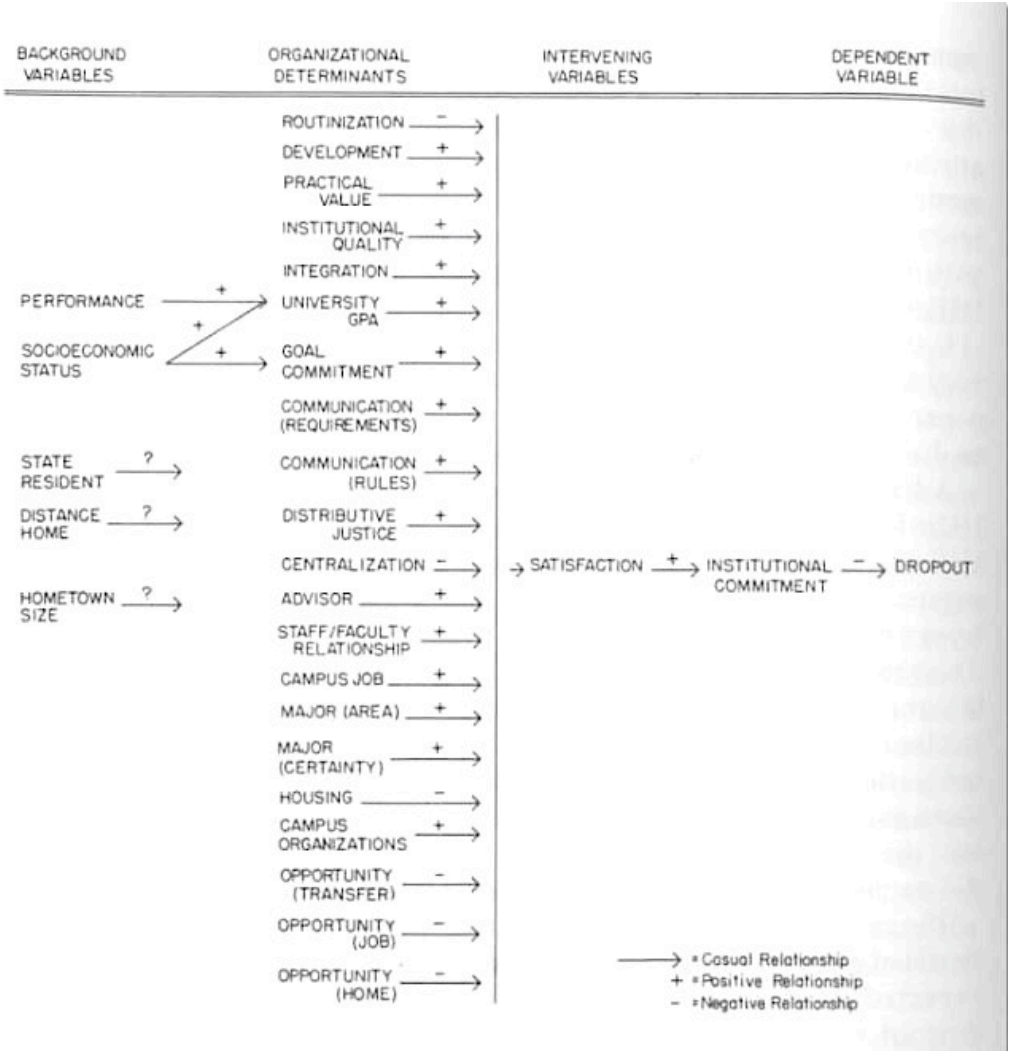

Figure 1. A causal model of student attrition. Reprinted from "Dropouts and turnover: The synthesis and test of a causal model of student attrition" in *Research in Higher Education 12*(2) (p.158), by J.P. Bean, 1980, New York, NY: Agathon Press, Inc. Copyright 1980 by Agathon Press.

Bean then concluded his study by calling for further research that tests larger samples, different demographics of students in varying types of IHEs, and further develop his model, which he later and simplified himself based his prior work (1982) along with that of Spady (1970), Tinto (1975), Pascarella (1980), and Fishbein and Azjen (1975). The updated model is shown in Figure 2.

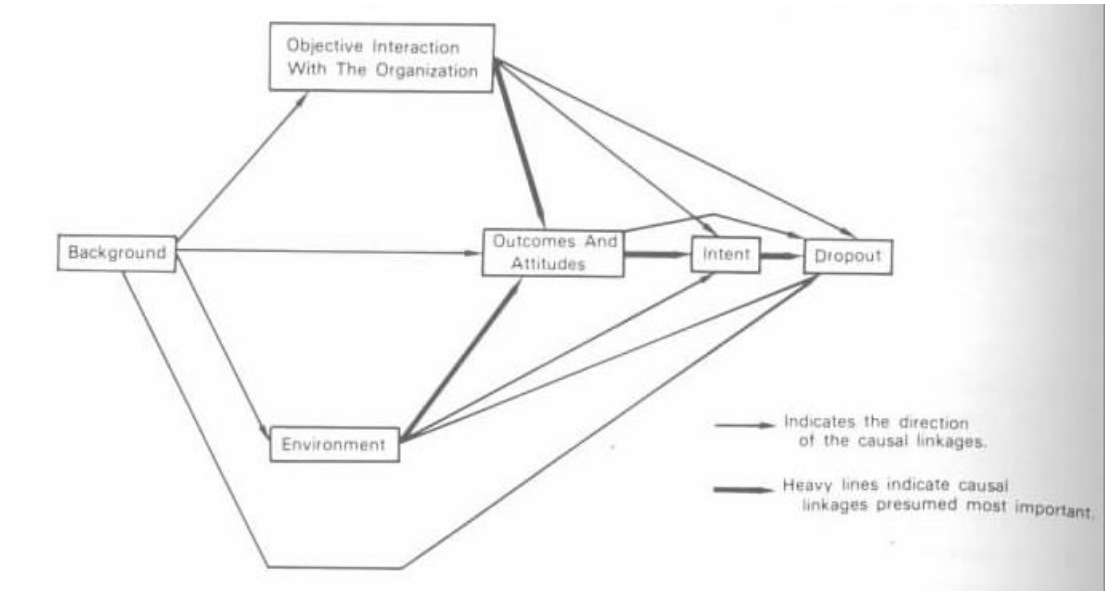

Figure 2. A synthetic causal model of student attrition. Reprinted from "Conceptual models of student attrition: How theory can help the institutional researcher" in *New Directions for Educational Research: Studying Student Attrition 36* (p.26), by J.P. Bean, 1982, San Francisco: Jossey-Bass. Copyright 1982 by Jossey-Bass Inc.

In this updated and adapted model, Bean notes that the model's purpose is to provide information about that student that could indicate the student's probability of dropping out and some reasons for their attrition rather than attempting to fully explain the dropout process across institutions at a national level (1982). To this end, the synthetic model identifies four classes of variables—background, organizational, environmental, and attitudinal or outcome variables—that all have direct or indirect effects on a student's intent to leave, which is a precursor to dropping out. The model allows researchers to identify classes of variables related in a causal sequence and to add or delete variables from the model in order to suit the particular needs of each institution (Bean, 1982). However, by anticipating variables in future models might be reduced, Bean noted that this newer model still required increased research (1982).

Bean noted, "Student attrition is an extremely complex process. Some of the causes may be identified and better understood, but there is no panacea" (1982, p. 32). As

referenced, the notion of conceptualizing and assessing student persistence has remained a difficult task for higher education scholars, many of whom have mainly researched these aims in traditional university settings. While some of this research has brought forth findings that might be transferable and applicable to technical education populations, this has not been the main focus of persistence research. As such, new scholarship, as well as transferable definitions and links between these traditional institutions have been applied in this study to provide a well-rounded understanding as it relates to the topic of student persistence in technical schools.

Student Persistence's Relationship to Student Engagement and Student Success

Regarding theories of persistence, Astin's Theory of Involvement (1975) and Tinto's Theory of Student Departure (1993) are considered seminal works, and have influenced much of the research conducted on the subject in higher education. Pascarella and Terenzini (1991) examined these two models, and noted that Tinto's model is "quite similar to Astin's in its dynamics" (p. 51). Because of this, Milem and Berger (1997) conducted a longitudinal study of first-year student persistence, whereby, they adapted Tinto's theory to incorporate elements from Astin's body of research, then collected and merged data from three separate surveys and ultimately suggested that early involvement with faculty tends to have a positive role in their adapted model. These findings aligned with Tinto's original conclusion on the subject as he stated, "There appears to be an important link between learning and persistence that arises from the interplay of involvement and the quality of student effort. Involvement with one's peers and with the faculty, both inside and outside the classroom, is itself positively related to the quality of student effort and in turn to both learning and persistence" (1993, p. 71). Similarly,

Chickering and Gamson (1987) and Glennen, Farren, and Vowell (1996) expressed that contact with faculty and students outside of class is a crucial factor in a students' decision to remain in college, and that regular faculty-student contact is one of the most important factors in student involvement and motivation (Chickering & Gamson, 1987; Heisserer & Parette, 2002). During a Henry Lecture at the University of Illinois at Urbana-Champaign, Astin (1995) reinforced this idea as he stated that the lowest levels of student community can be found at institutions where the faculty "(a) has a low opinion of the students' academic competence, (b) is not committed to teaching and student development, and (c) has poor relationships with the administration" (p. 196). He further elaborated to explain that student community is also lowest among institutions that do not prioritize developing a sense of community among students and faculty (Tinto, 1995).

These statements continue to align with Tinto's prior research, and were upheld further in 2012 as he reported findings that "The more students are academically and socially engaged with other people on campus, especially with faculty and student peers, the more likely (other things being equal) they will stay and graduate from college" (p. 64). Kuh, whose leadership with the National Survey of Student Engagement (NSSE) has led him to advocate for student engagement as a key component of student success by connecting the extent to which students are engaged in activities as contributors to their persistence and success (Kuh, 2001, 2003), also upholds Tinto's findings. Thus, while there appears to be an identified and commonly acknowledged connection with involvement and persistence in traditional first-year students, it cannot be automatically assumed that this link transfers to that of students engaging in technical education programs.

For example, since few of Tinto's original involvement theory propositions were strongly supported when tested in commuter colleges and universities (Braxton, Shaw Sullivan, & Johnson, 1997), Braxton, Hirschy, and McClendon adopted the theory construction to better fit these environments since commuter students typically hold primary social memberships off campus (Braxton & Hischy, 2005). This new model is presented in Figure 3.

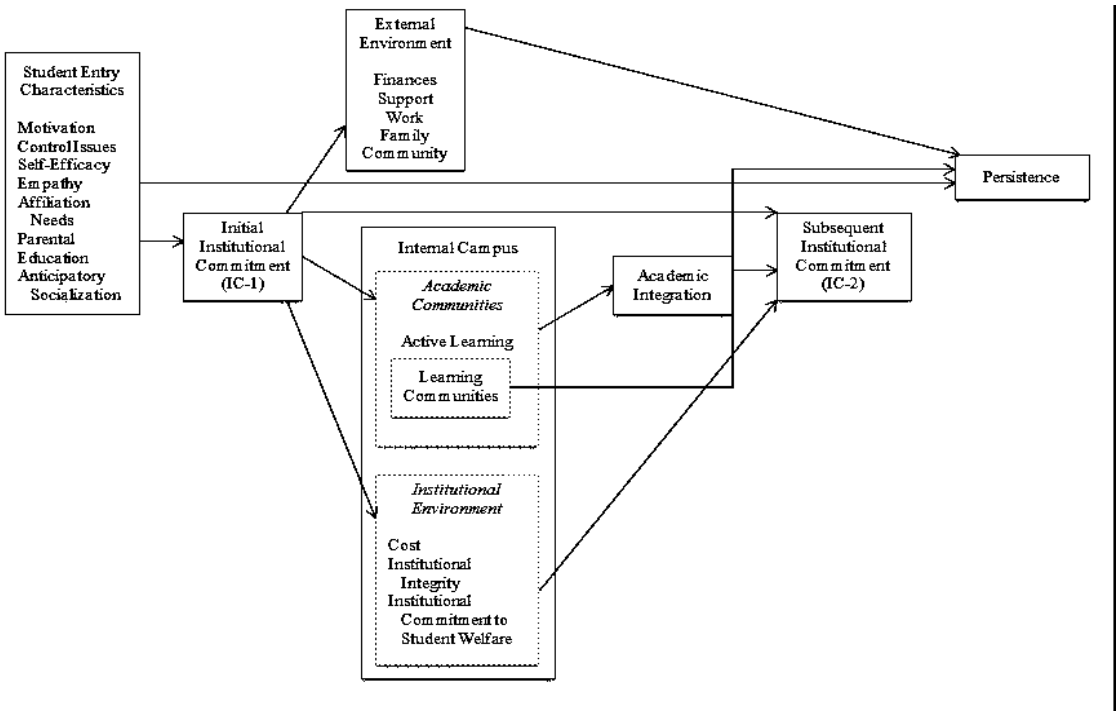

Figure 3. Theory of student departure in commuter colleges and universities. Reprinted from "Theoretical developments in the study of college student departure" in *College student retention: Formula for student success* (p.75), by J. M. Baxton and A. M. Hirschy, 2005. Westport, CT: Praeger Publishers. Copyright 2005 by American Council on Education and Praeger Publishers.

As shown, the basic elements of this theory of student departure from colleges and universities include adaptations Tinto's student entry characteristics (i.e. family background, academic ability and preparation, gender, etc.), internal (i.e. social involvement, attending class, etc.) and external (i.e. family commitments, support from

friends and family, etc.) environments in relation to campus, and the student's academic integration to campus. Each of these elements influences a student's subsequent institutional commitment (IC-2) or a student's decision to persist in his or her program of study. In relation to student entry characteristics and institutional fit, Astin noted, "After examining the fit between student and institution, it appears that, in general, persistence is enhanced if the student attends and institution in which the social backgrounds of other students resemble his or her own social background. Such interactions are most apparent with the town size, religion, and race of the student" (1975, p. 144).

However, institutional fit is not the only way to help ensure student retention and persistence. Regarding their adaptations of Tinto's model, Braxton and Hirschy (2005) recommend that faculty and administrators at commuter institutions:

1. Know the characteristics such as parental education level, martial status, number of dependent children, and work status of the students enrolled at their college or university and assess these characteristics prior to student matriculation in order to identify students who might be at risk for departure and in turn develop policies and programs to reduce the likelihood at at-risk student departure;
2. Use active learning in classrooms in order to involve students in the thinking about the subject matter and create communities of learning; and
3. Assess institutional policies and procedures in order to identify and alter, or eliminate, elements that might hinder the academic progress of students who work, have spouses or life partners, and/or dependent children.

Tinto also conveyed the benefits of this second recommendation in his own research and advocated the persistence benefits of using classrooms as learning

communities. He wrote, “Student social involvement in the educational life of the college, in this instance through the educational activity structure of the curriculum and classroom, provides a mechanism through with both academic and social involvement arises and student effort is engaged” (1997, p. 615). Later, he relayed that for many students, “if involvement does not occur in the classroom, it is unlikely to occur at all. Furthermore, if involvement in the classroom is interpreted as uninvolving, unsupportive, or uncaring, it is unlikely that students will want to expend the effort needed to succeed” (Tinto, 2012, p. 67). Tinto, Goodsell and Russo (1993), noted that shared learning experiences between students linked them with their peers as learners, and that students were more likely to become involved with their own leaning and invest the time and energy needed to learn as a result. This interaction with peers has also been found effective when transitioned out of the classroom in the form of study groups (Schmidt & Abell, 2003). Further, Astin’s (1993) findings regarding traditional students aligns with these determinations as he reported that the strongest environmental factor on student satisfaction, by far, is their orientation with faculty, including faculty who are interested in students’ academic and personal problems, committed to the institution, sensitive to minority issues, are easy to see outside of office hours, and provide frequent opportunities for student-faculty interaction. Thus, regardless of persistence formulas and retention programs instituted by technical schools, the classroom itself is considered an important aspect of the student engagement and persistence process.

Student Persistence and Engagement’s Connection to Student Success

Kuh, Kinzie, Schuh, Whitt, and Associates (2006) defined student success as “academic achievement, engagement in educationally purposeful activities, satisfaction,

acquisition of desire knowledge, skills and competencies, persistence, attainment of educational objectives, and postcollege performance" (p. 7). Based on this definition, it can be surmised that student persistence and engagement are intertwined with student success to the extent that success can't be achieved without a combination of factors working together to these ends. Regarding an institution's efforts to positively affect this intertwined nature, King and Fox (2007) note, "Once an institution understands its students' characteristics, needs, and expectations, it may find it necessary to alter student services in a way that will put students first and engage students more in their learning" (p. 394). This statement aligns with previous findings in this section which relay that faculty and classroom interactions place an important piece in this process since many technical education students do not have access to or time to take part in traditional extracurricular activities that enable these feelings of involvement and engagement among traditional colleges students. Technical institutions must continue to create programs, initiatives, and student incentives to encourage engagement and persistence among their students.

In this study, the term incentive has been defined as a motivational tool, including programs that provide financial, educational, or emotional support, applied to encourage persistence and retention. Incentives affect what Countryman (2006) termed as academic needs, or variables, which are areas that impact learning such as developmental courses, class offerings, tutoring, remediation, and access to faculty. In conjunction, the term student incentive has been applied to encompass student support services that positively affect student engagement and student success. Such services, termed environmental needs or variables by Countryman (2006) refer to the external learning atmosphere of an

institution and include financial aid and student health services, job placement and career development, library services, location of the college and transportation, as well as accommodations for physical impairments or handicaps. Thus, such services encompass classroom, curriculum, or equipment modifications, supportive personnel, instructional aids and devices (Carl D. Perkins Career and Technical Education Act of 2006, p. S250), as well as individual institutional programs that provide free childcare, gas money, or textbook rental to qualifying students. These incentives provide support to nontraditional students, of which many are considered more likely to have children or dependents than traditional college students.

However, if not properly defined and articulated, the term incentive might be considered another way of providing extrinsic motivation, or carrots of sorts, in an effort to encourage students to stay enrolled. What differs between student incentives and extrinsic motivation is that students do not earn these support services in any way—they are available to all students in need of them. Therefore, the motivation theory most closely aligned with these programs is an adapted form of Contingency Theory, which postulates that incentives work when they fit well with the basic strategies and characteristics of the larger organization (Odden & Kelley, 2002). Further expanding this theory is Cumming (1994), who stated that the organization must support the processing being emphasized by the incentive plan; an example of this in a technical education institution that was previously mentioned could be providing free childcare for students with dependents in order to help them attend classes without the added burden of arranging for family or baby-sitter assistance several times per week.

To this end, upper administrations' attempts to meet the needs of their student populations through encouraging persistence and engagement can be postulated to lead to student success when applied in meaningful ways within technical education institutions. Nevertheless, when considering which programs and initiatives might be the best fit for an institution, it might be helpful to consider past scholarship on retention. For instance, Tinto's (1993) principles of effective retention, which include an enduring commitment to student welfare, a broader commitment to the education, not mere retention, of all students, and an emphasis on the importance of fostering supportive and inclusive communities for social and intellectual student education. In order to achieve these aims, Tinto (1993) recommends that institutions:

1. Provide resources for program development and incentives for program participation that reach out to faculty and staff alike;
2. Should commit themselves to a long-term process of program development;
3. Place ownership on institutional change in the hands of those across campus who have to implement that change;
4. Be coordinated in a collaborative fashion to insure a systematic, campus wide approach to student retention;
5. Act to insure that faculty an staff possess the skills needed to assist and educate their students;
6. Frontload their efforts on behalf of student retention;
7. Continually assess their actions with an eye toward improvement. (p. 149)

In brief, Astin (1985) made an institutional overall recommendation for achieving educational excellence (which includes student persistence and retention), which was to

initiate a campus-wide discussion of institutional values. Thus, in an effort to determine which of Tinto's (1993) suggestions might best fit individual institutions, questions such as the following could be posed:

1. What are the implicit values underlying our current fund-raising activities, faculty hiring and promotion practices, methods of selecting trustees and administrators, student testing and assessment procedures, and student personnel practices?
2. To what extent do our various activities reflect a commitment to promoting student involvement and developing talent?
3. To what extent are they motivated by no more than a desire to acquire more resources and to enhance institutional reputation? (p. 227).

Kuh, Schuh, Whitt, Andreas, Lyons, Strange, Krehbiel, and MacKay (1991) referred to efforts such as these a unifying focus, and noted that as a result of these discussions "This knowledge—who we are, whom we serve—guides the development of policy and practice consistent with the institution's mission and educational purposes" (p. 68). In 2005, the stance of he and his fellow book contributors remained consistence as he stated that educationally effective institutions are those that align practice and policy around student engagement, and that these institutions are more likely to realize higher levels of student success (2005). Further, Pascarella and Terenzini (2005) reaffirmed that the impact of college is primarily determined by student effort and involvement in the curricular and co-curricular offerings at an institution as they stated, "But if, as it appears, individual effort or engagement is the critical determinant of the impact of college, then it is important to focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602). In

addition, Wortman and Napoli (1996) found that academic integration and social integration played a significant role in persistence among community college students, which upholds Tinto's (1993) model for two year institutions that often do not offer residence halls or the large extent of traditional models and offerings. or student involvement and interaction similar to technical education institutions.

Nevertheless, due to a concern that many colleges and universities have little experience intentionally creating conditions that promote student success and possess few effective mechanisms for linking information about student experiences to improve academic programs and student services, regardless of ample research demonstrating the importance of student engagement and effective educational practice, a study known as the DEEP (Documenting Effective Educational Practices) project was conducted by Manning, Kinzie, and Schuh (2006) in an effort to provide positive examples of these results at work through student affairs programs in four-year colleges and universities nationwide. Overall, this project led to the promotion of several different models that might be fit in certain institutional climates such as out-of-the classroom-centered, administrative-centered, learning-centered, student-centered, and academic and collaboration innovation models (Manning, et al., 2006). And, while these models are focused on research in four-year colleges and universities, many of the core ideas behind the creation of these models exemplify the notions behind student incentives and initiatives focused on student success in technical schools, such promoting the importance of faculty and student interaction found in the learning-centered models (Manning, et al., 2006).

Further, Astin (1993) relayed that highly-rated support services among four-year college and university students included receiving vocational and career counseling, tutoring in courses, and spending time with faculty outside of class, among others. He surmised that students who availed themselves to individual services ere more likely to report being satisfied with those services, whereas students who did not seek out such services perceived them as inadequate. In relation to technical education institutions, these findings continue to uphold the importance of time with faculty, as well as support services such as tutoring and career counseling, and suggest that the positive promotion and staff knowledge of support services are important factors in increasing both use and esteem of support services and incentive programs.

Summary

These sections highlighted historical aspects of the development of the technical college system in the United States through important legislative acts, with special emphasis given to the state of Georgia, where this study was conducted. Further, they provided detailed aspects of student persistence, engagement and incentives as the best related to increasing student persistence in technical education settings. As demonstrated, recommendations exist that provide a framework that could be implemented at technical education institutions interested in increasing student persistence and retention efforts, and through findings by those theorists in four-year and two-year research who uphold the work of Tinto, it is a special focus on Tinto's (1993) first recommendation of providing resources for program development and incentives for program participation that reach out to faculty and staff alike that is the at the core of this study's persistence research.

While student development theorists have researched student persistence and retention, engagement, and student success extensively, little research has been conducted to examine these variables in traditional four-year and community college education compared to that of technical schools. This need for research has not gone unnoticed even by those preeminent in four-year institution research. Tinto (2012) noted,

> As a practical matter, colleges must determine how they can involve their students in ways that promote retention and how to do so in settings such as urban two and four-year institutions that serve large numbers of students who hold jobs, attend part-time, and have substantial obligations beyond the campus (e.g. work, family). For these students the more traditional practices that institutions have used to engage their students, such as extracurricular activities, residential programming, and clubs, yield relatively little relative benefit, if only because few students have the luxury of being able to spend time on campus beyond the classroom. (p. 67)

While there is a current lack of research relating to student persistence in technical and vocational education institutions, there is also a need to further explore relationships between student engagement in institutional incentives and persistence prior to program completion.

CHAPTER 3

METHODS

Introduction

The purpose of this study was to examine connections between student engagement in institutional incentives and student persistence until graduation or program completion. Students ranked their ascribed levels of importance regarding institutional incentives and their satisfaction with the current implementation of those efforts at a technical college in Georgia.

This chapter describes the study's research questions, methods, sample population, the instrumentation used, the data collection and analysis procedures, and concludes with a summary of these sections.

Research Questions

The following research questions were designed to assess the levels of importance regarding institutional incentives and the level of student satisfaction with these efforts at a southeastern technical college. These questions aided in determining identifiable patterns in this study.

This study investigated the following research questions:

1. What was the relationship between student satisfaction with academic advising effectiveness and persistence?

2. What was the relationship between student satisfaction with academic services and persistence?
3. What was the relationship between student satisfaction with admissions and financial aid and persistence?
4. What was the relationship between student satisfaction with campus climate and persistence?
5. What was the relationship between student satisfaction with instructional effectiveness and persistence?
6. What was the relationship between satisfaction with registration effectiveness and persistence?
7. What was the relationship between satisfaction with safety and security and persistence?
8. What was the relationship between satisfaction with service excellence and persistence?

Instrument

This study was conducted through use of the Noel-Levitz Adult Student Priorities Survey (ASPS, see Appendix E). This survey has been available since 2000, was modeled after the Noel-Levitz Student Satisfaction Inventory (SSI), and has been administered by nearly 400 institutions and completed by almost 312,000 students (The Adult Student Priorities Survey Interpretive Guide, 2013). The ASPS is designed to collect self-reported rankings of importance in factors ranging from the participant's level of satisfaction and perceived importance of varying institutional services, as well as demographic data, from surveyed adult learners 25 years of age and older in evening,

weekend, and continuing education programs, credit and non-credit courses, and graduate and undergraduate programs (Noel-Levitz Higher Education Consultants, 2012). There are 50 standard questions on the ASPS that are divided into the following scales: Academic Advising Effectiveness, Academic Services, Admissions and Financial Aid, Campus Climate, Instructional Effectiveness, Registration Effectiveness, Safety and Security, and Service Excellence (The Adult Student Priorities Survey Interpretive Guide, 2013). These scales assess the following:

- Academic Advising Effectiveness: the competence of an institution's academic advising program in that academic advisors and counselors are evaluated on the basis of their knowledge, competence, personal concern for student success, and approachability;
- Academic Services: student services such as libraries, computer labs, tutoring, and study areas that can be utilized by students to achieve their academic goals;
- Admissions and Financial Aid Effectiveness: an institution's ability to enroll students in an effective manner by covering issues such as competence and knowledge of admissions counselors, as well as the effectiveness and availability of financial aid programs;
- Campus Climate: the extent to which an institution provides experiences that promote a sense of campus pride and feelings of belonging, as well as the effectiveness of an institution's channels of communication for students;
- Instructional Effectiveness: students' academic experience, the curriculum, and the campus' commitment to academic excellence, which includes areas such as

the effectiveness of faculty in and out of the classroom and the effectiveness of part-time faculty;

- Registration Effectiveness: issues associated with registration and billing, as well as an institution's commitment to making this process smooth and effective;
- Safety and Security: an institution's responsiveness to students' personal safety and security on campus, as well as the effectiveness of both security personnel and campus facilities;
- Service Excellence: the perceived attitude of institutional staff, especially front-line staff, toward students, including areas where an institution's quality service and personal concern for students are rated most and least favorably (The Adult Student Priorities Survey Interpretive Guide, 2013).

Along with these 50 standard items, this survey also included nine items that assess pre-enrollment factors such as cost, academic reputation, and financial aid or scholarship opportunities, as well as 13 standard demographic items, without including a space to rank students' levels of importance and satisfaction with these factors (The Adult Student Priorities Survey Interpretive Guide, 2013).

These rankings are categorized into a seven-point scale of importance as follows:

1. Not important at all
2. Not very important
3. Somewhat unimportant
4. Neutral
5. Somewhat important
6. Important

7. Very important.

Similarly, the participants' level of satisfaction is categorized as:

1. Not satisfied at all
2. Dissatisfied
3. Somewhat satisfied
4. Neutral
5. Somewhat satisfied
6. Satisfied
7. Very satisfied (Adult Students Priorities Survey, 2013).

Regarding reliability of the survey, the ASPS's is high, with a Cronbach's coefficient alpha for the importance scores of α=.93 and satisfaction items of α=.90. Further, the test-retest reliability estimate of mean importance scores was .82 and .81 for the mean satisfaction scores (The Adult Student Priorities Survey Interpretive Guide, 2013). Further, the reliability of the survey results are high, with a Cronbach's coefficient alpha for the importance scores of α=.968, and satisfaction items of α=.971.

The ASPS's validity was assessed both quantitatively and qualitatively. Quantitatively, the mean importance and satisfaction scores on the instrument were correlated with the mean importance and satisfaction scores on the SSI. The Pearson correlation between the ASPS and SSI was .74 for importance and .67 for satisfaction ($p < .0001$), which suggests that the two instruments have commonalities as well as individually distinct features (The Adult Student Priorities Survey Interpretive Guide, 2013). Qualitatively, respondents' scores on the ASPS were correlated with their interview responses, which were conducted six weeks prior to their taking the written

survey, on a qualitative protocol reflecting the content of the survey. The mean cross-method validity coefficients for importance scores were .66 and .62 for satisfaction, and the individual scale correlations between the interview responses and the survey responses ranged from importance scales of .91 to .53 and satisfaction scales of .82 to .47. All scale correlations were significant at a .05 level (The Adult Student Priorities Survey Interpretive Guide, 2013).

Sample

In this study, a student who has completed more than three semesters of coursework is defined as a persister. A convenience sample of 150 degree-seeking student persisters, who were currently enrolled in their fourth semester of classes or higher at a southern technical college, self-selected to participate in this study. Of these 150 persisters who chose to participate in the study, 135 completed and submitted all sections of the survey during a two-day period of the fall 2013 semester. All of the students surveyed were at least 18 years of age or older.

The results were coded and analyzed using SPSS. The data indicate how student persistence (independent variable) is related to the students' rankings of the levels of importance and satisfaction regarding institutional incentives (dependent variable).

Data Collection

Following approval from the institution (see Appendix A), and approval from Auburn University's Institutional Review Board (see Appendix B), paper copy versions of the Noel-Levitz Adult Student Priorities Survey (ASPS) were delivered to institutional staff and student volunteers at the institution. These individuals distributed surveys during select class sessions over a two-day period during the fall 2013 semester

to degree-seeking students enrolled in their fourth semester or higher of coursework in Criminal Justice, Business Management, Culinary Arts, Environmental Horticulture, Design and Media Production/Web Design, Pharmacy Technology, Air Conditioning Management, Radiologic Technology, Paramedic Technology, and Early Childhood Education degree programs. Diploma or certificate-seeking students in these same programs were not surveyed since their time to completion is much quicker, such as only two semester, only degree-seeking persister students were surveyed in this study. The aforementioned degree programs represent approximately 22% of the student population (J. Cash, personal communication, December 12, 2013). Individual classes from these programs were selected based on their placement as fourth semester or higher courses in the institution's program plans of study, their class meeting times, and the willingness of the class' professor to allow students to participate. Persister students self-selected to participate in the survey within each of these classes.

Participants were notified of the study's purpose, goals, and their role in collecting this research in the letter of consent (see Appendix C) and information letter to survey distributors (see Appendix D) which was read by a staff member or student volunteer to each class in which the survey was distributed in order to avoid undue pressure that taking the survey might be mandatory or in any way related to a grade or expectation by their professor. Further, individuals were given the opportunity to ask questions before deciding whether or not to participant in the survey.

Participants were given the survey in the quiet, safe, and secure environment of their respective classrooms. The identity of the participants remained anonymous to the researcher throughout the data collection process as the staff identified the persisters and

the particular classes where these students were enrolled, as well as distributed each survey, answered questions, and retrieved surveys. The researcher was on campus during the entire data collection process, and at its conclusion packaged and mailed surveys to Noel-Levitz for initial review. Following the initial review of the data, the researcher arranged, entered, and analyzed survey data responses in SPSS and Microsoft Excel.

Data Analysis

The collected paper survey data were loaded into SPSS and Microsoft Excel, and analyzed by using descriptive statistics, correlations, and a two-tailed t-test. The data indicate how student persistence (independent variable) is related to the students' rankings of the levels of importance and satisfaction regarding institutional incentives (dependent variable). As such, the methods used in this study were designed to specifically address the research questions previously listed in this chapter.

Summary

This chapter addressed the purpose of the study, in addition to identifying the research questions, methods and sample, as well as instrumentation, and data collection and analysis procedures. Data were collected in accordance with the research guidelines set forth by the Auburn University Institutional Review Board and analyzed through SPSS and Microsoft Excel.

This study was conducted by selecting the appropriate number of participants from higher-level classes in their respective programs at their institution during the fall 2013 semester. Each student participant was administered the Noel Levitz Adults Students Priorities Survey (ASPS). Since not all surveys were filled out completely by participants during the survey process, a total of 135 out of the original 150 respondents

were used for the study. The collected data were analyzed using descriptive statistics, correlations, and a two-tailed t-test.

Investigating such relationships yields information that would be beneficial to administrators and executive leaderships, as well as state representatives, by providing information related to ways in which technical college student persistence might be increased through institutional incentives and student services that best meet the needs of their institutional population.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to examine connections between student engagement in institutional incentives and student persistence until graduation or program completion. Students ranked their ascribed levels of importance regarding institutional incentives and their satisfaction with the current implementation of those efforts at a technical college in Georgia. Chapter 3 described the method for the study, which included details on the population and sample, research design, instrumentation, and data analysis. Chapter 4 presents an analysis of this data. This chapter begins with the research questions applied in this study, followed by internal consistency reliabilities and validities for the instrument used in the study, and sections outlining the organization of the data analysis, presenting demographic and data analysis findings, and a summary of the chapter.

Research Questions

The following research questions were designed to assess the levels of importance regarding institutional incentives and the level of student satisfaction with these efforts at a southeastern technical college. These questions aided in determining identifiable patterns in this study.

This study investigated the following research questions:

1. What was the relationship between student satisfaction with academic advising effectiveness and persistence?
2. What was the relationship between student satisfaction with academic services and persistence?
3. What was the relationship between student satisfaction with admissions and financial aid and persistence?
4. What was the relationship between student satisfaction with campus climate and persistence?
5. What was the relationship between student satisfaction with instructional effectiveness and persistence?
6. What was the relationship between satisfaction with registration effectiveness and persistence?
7. What was the relationship between satisfaction with safety and security and persistence?
8. What was the relationship between satisfaction with service excellence and persistence?

Demographic Results

The sample for this study consisted of 135 technical college students enrolled in their fourth semester or higher of coursework.

Gender

The participants in this study were predominantly female, as 108 (81.20% of the study's population) were female. 25 males comprised 19.80% of the total study's population of 135. Two participants elected to not list their gender.

Table 1

Gender of Participants

Gender	N	%
Female	108	81.20%
Male	25	18.80%

N = 133

Ethnicity/Race

Of the study's population, 76 (57.58%) identified as Caucasian/White, while 30 students (22.73%) identified themselves as African-American, 11 (8.33%) identified themselves as the Other race option on the survey, six (4.55%) preferred not to respond, five (3.79%) listed themselves as Hispanic, and four (3.03%) selected Asian or Pacific Islander as their ethnicity/race. Three chose to not respond to this question.

Table 2

Ethnicity/Race of Participants

Ethnicity/Race	N	%
African-American	30	22.73%
American Indian or Alaskan Native	0	0.00%
Asian or Pacific Islander	4	3.03%
Caucasian/White	76	57.58%
Hispanic	5	3.79%
Other race	11	8.33%
Race - Prefer not to respond	6	4.55%

N = 132

Institution Choice

Of the 135 participants, 78 (58.21%) listed their current institution as their first choice institution to attend for their particular program, while 37 (27.61%) listed it as their second choice and 19 (14.18%) listed it as their third. One participant elected not to respond to this question.

Table 3

Participants' Rankings of Their Preference to Attend this Institution

Institution Was My	**N**	**%**
1st choice	78	58.21%
2nd choice	37	27.61%
3rd choice or lower	19	14.18%

N = 134

Educational Goal

Regarding their individual educational goals as related to their current enrollment, 75 (55.56%) of participants selected that earning a associate degree was their highest educational goal, while 15 (11.11%) intended to ultimately earn a bachelor's degree, nine (6.67%) intended to earn or renewal a professional certificate, nine (6.67%) planned to achieve some other educational goal, eight (5.93%) intended to graduate from a vocational or technical program, six (4.44%) planned to earn a master's degree, and six (4.44%) planned to earn a doctoral or professional degree. Additionally, four (2.96%) planned to transfer to another institution and three (2.22%) were ultimately enrolled in their program of study for self-improvement or pleasure

Table 4

Educational Goal of Participants

Educational Goal	N	%
Associate degree	75	55.56%
Vocational/technical program	8	5.93%
Transfer to another institution	4	2.96%
Bachelor's degree	15	11.11%
Master's degree	6	4.44%
Doctorate or professional degree	6	4.44%
Certification (initial/renewal)	9	6.67%
Self-improvement/pleasure	3	2.22%
Job-related training	0	0.00%
Other educational goal	9	6.67%

N = 135

Age

The majority of survey participants (68, or 50.37%) selected that they were 24 years of age or younger, while 29 participants (21.48%) were between the ages of 25 and 34, 25 (18.52%) were between the ages of 35 and 44, and 13 (9.63%) selected that they were 45 years of age or older.

Table 5

Age of Participants

Age	N	%
24 and under	68	50.37%
25 to 34	29	21.48%
35 to 44	25	18.52%
45 and over	13	9.63%

N = 135

Current Enrollment Status

Regarding enrollment, 102 (77.27%) participants stated that they were day students, which means that they attended courses during the daytime hours. 27

participants (20.45%) listed themselves as evening students who only took evening classes, and three (2.27%) listed themselves as weekend students. Three participants did not respond to this question.

Table 6

Current Enrollment Status of Participants

Current Enrollment Status	**N**	**%**
Day	102	77.27%
Evening	27	20.45%
Weekend	3	2.27%

N = 132

Current Class Load

Of the 135 participants, 113 (84.33%) considered themselves full-time students, while 21 (15.67%) listed themselves as part-time. One participant did not respond to this question. To be eligible for full-time status, a student must be enrolled in at least 12 or more credit hours a semester; therefore, a part-time student is anyone enrolled in less than 12 credit hours a semester (Southern Crescent Technical College 2013-2014 Student Handbook/Course Catalog, 2013, 13).

Table 7

Current Class Load of Participants

Current Class Load	**N**	**%**
Full-time	113	84.33%
Part-time	21	15.67%

N = 134

Current GPA

When recording their current GPA ranges, 57 (43.18%) participants selected that their current GPA ranged between a 3.0 and 3.49 on a 4.0 scale, followed by 45 (34.09%)

who stated that their GPA status was at a 3.5 or above, and 20 (12.15%) who were in the 2.5 to 2.99 range. Two participants (1.52%) stated that their GPA was a 1.99 or below, one (0.76%) selected that they had not earned any credits, and three did not respond to the question.

Table 8

Current GPA of Participants

Current GPA	**N**	**%**
No credits earned	1	0.76%
1.99 or below	2	1.52%
2.0 - 2.49	7	5.30%
2.5 - 2.99	20	15.15%
3.0 - 3.49	57	43.18%
3.5 or above	45	34.09%

N = 132

Employment

Regarding personal employment statuses, 46 (34.33%) of participants noted that they were employed part-time, or less than 20 hours a week, on campus, and another 46 (34.33%) stated that they neither employed on nor off campus. 36 (23.87%) stated that they worked off campus full-time, four (2.99%) worked on campus part-time, and two (1.49%) worked on campus full-time.

Table 9

Employment of Participants

Employment	**N**	**%**
Full-time off campus	36	26.87%
Part-time off campus	46	34.33%
Full-time on campus	2	1.49%
Part-time on campus	4	2.99%
Not employed	46	34.33%

N = 134

Current Residence

When asked about their current residences, 48 (35.56%) of participants selected that they own their house, and 41 (30.37%) stated that they lived in a relative's home. 40 (29.63%) noted that they rented either a room, apartment, or house, and 6 (4.44%) stated that they live in some other sort of residence.

Table 10

Current Residence of Participants

Current Residence	**N**	**%**
Own house	48	35.56%
Rent room / apartment / house	40	29.63%
Relative's home	41	30.37%
Other residence	6	4.44%

N = 135

Residence Classification

In terms of residence classification, 134 (99.26%) of participants selected that they were in-state students, and one (0.74%) stated that they lived out of the state of Georgia. No participants were international/non U.S. citizen students.

Table 11

Residence Classification of Participants

Residence Classification	**N**	**%**
In-state	134	99.26%
Out-of-state	1	0.74%
International (not U.S. citizen)	0	0.00%

N = 135

Marital Status

When questioned about their marital status, 74 (54.81%) participants noted that they were single. 26 (19.26%) participants were married with children and 21 (15.56%) were single with children. 10 (7.41%) selected that they were married, and four (2.96%) noted that they preferred to not respond to the question.

Table 12

Martial Status of Participants

Marital Status	**N**	**%**
Single	74	54.81%
Single with children	21	15.56%
Married	10	7.41%
Married with children	26	19.26%
Marital - Prefer not to respond	4	2.96%

N = 135

Data Analysis

In this section, the results of the analysis of data are presented in relation to the research questions presented. The study's sample population of 135 was compared against the national group means is based on the 89,125 records of the adult students surveyed by Noel-Levitz for the national population sample. Regarding analysis, the formula applied for the mean difference statistical significance testing is as follows:

```
|  ((samp_size-1)*samp_std^2) + ((norm_size-1)*norm_std^2) |
x= |  ------------------------------------------------------  |
|              (samp_size + norm_size - 2)                |
```

```
y = abs((samp_mean - norm_mean) / sqtr(x * ((1/samp_size) + (1/norm_size))))
```

(J. Bryant, personal communication, January 15, 2014).

Y is a number representing how likely it is that the difference reflects an actual, measurable difference rather than just random sampling error. The significance is a two-tailed t-test, assuming very large degrees of freedom because of the size of the norm groups. There are four thresholds:

- 0 - 1.959 "No" significance
- 1.960 - 2.575 95% likely the difference is significant
- 2.576 - 3.290 99% likely the difference is significant
- 3.291 and above 99.9% likely the difference is significant (J. Bryant, personal communication, January 15, 2014).

When reviewing the charts presented in this section, statistically significant data is notated in the following ways:

- No asterisks: No significant difference;
- One asterisk: Difference statistically significant at the .05 level;
- Two asterisks: Difference statistically significant at the .01 level; and
- Three asterisks: Difference statistically significant at the .001 level.

Further, along with statistically significance findings, effect size is also presented in order to provide practical significance by displaying the relative positions of the study's findings to those from the national comparison group. As such, it should be noted that:

- A small effect size ranges from 0.0 to .20
- A medium effect size ranges from .20 to .50
- A large effect size is any value above .50 (Cohen, 1988).

The displayed levels of importance and satisfaction reflect the averages calculated from the Likert scale of answer options that structured each individual question. These rankings are categorized into a seven-point scale of importance as follows:

1. Not important at all
2. Not very important
3. Somewhat unimportant
4. Neutral
5. Somewhat important
6. Important
7. Very important.

Similarly, the participants' level of satisfaction is categorized as:

1. Not satisfied at all
2. Dissatisfied
3. Somewhat satisfied
4. Neutral
5. Somewhat satisfied
6. Satisfied
7. Very satisfied (Adult Students Priorities Survey, 2013).

The means for importance and satisfaction for individual items were calculated by summing the participants' ratings and dividing by the number of participants. Each scale mean is calculated by summing each respondent's item ratings to get a scale score, dividing by the number of participants, adding all participants' scale scores, and dividing the sum of the scale scores by the number of participants. The scale score is not the

average of the averages; students respond to each item on a 1 to 7 Likert scale, with 7 being high. Averages for importance are typically in the range of 5 to 6 and average satisfaction scores are typically in the range of 4 to 5 (Satisfaction-Priorities Surveys Interpretive Guide, 2013).

The performance gap is calculated by subtracting the satisfaction score from the importance score. When a larger performance gap is shown, then there was a greater discrepancy between what students expect and their level of satisfaction with the current situation regarding that particular question. The smaller the performance gap, the better the institution is doing at meeting student expectations (Satisfaction-Priorities Surveys Interpretive Guide, 2013).

The standard deviation (SD) appears in the satisfaction score columns. This represents the variability in the satisfaction scores. When a larger standard deviation is shown, then the variability is greater in the responses (with some students being very satisfied and some students being very dissatisfied). Adversely, when a standard deviation is smaller, then there was less variability in the responses (Satisfaction-Priorities Surveys Interpretive Guide, 2013).

Research Question 1 – What is the relationship between student satisfaction with academic advising effectiveness and persistence?

As seen below in Table 13, the overall results for academic advising effectiveness indicated that there was not a significant relationship in scores due to a p value of >.05. The Cohen's D effect size was also small at 0.079. Therefore, there is not a significant relationship between persister student satisfaction and overall academic advising effectiveness (M=5.56, SD=1.30) compared with student satisfaction with overall

academic advising effectiveness among the national adult students group (M=5.66, SD=1.23). However, a statistically significant relationship ($p < .05$) and medium effect size (0.187) was found in question 50, which states, “My advisor helps me apply my academic major to specific career goals” between persisters (M=5.53, SD=1.65) and the national adult students group (M=5.21, SD=1.76).

Table 13

Academic Advising Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
ACADEMIC ADVISING	6.52	5.56 / 1.30	0.96	6.47	5.66 / 1.23	0.81	0.0790
8. My academic advisor is available at times that are convenient for me.	6.33	5.42 / 1.78	0.91	6.32	5.56 / 1.59	0.76	0.0829
11. My academic advisor is concerned about my success as an individual.	6.4	5.26 / 1.82	1.14	6.41	5.52 / 1.65	0.89	0.149
19. My academic advisor is knowledgeable about requirements in my major.	6.68	5.83 / 1.54	0.85	6.58	5.83 / 1.48	0.75	0
28. My academic advisor is accessible by telephone and e-mail.	6.54	5.63 / 1.71	0.91	6.47	5.88 / 1.47	0.59	0.156
41. Major requirements are clear and reasonable.	6.61	5.71 / 1.46	0.9	6.63	5.83 / 1.35	0.8	0.0853
44. When students enroll at this institution, they develop a plan to complete their degree.	6.5	5.51 / 1.54	0.99	6.49	5.72 / 1.47	0.77	0.139
50. My advisor helps me apply my academic major to specific career goals.	6.56	5.53 / 1.65	1.03	6.37	5.21 / 1.76	1.16	0.187*

Research Question 2 – What is the relationship between student satisfaction with academic services and persistence?

As seen below in Table 14, the overall results for academic services indicated that there was not a significant relationship in scores due to a p value of >.05. The Cohen's D effect size was also small at 0.0165. Therefore, there is not a significant relationship between persister student satisfaction and overall academic services (M=5.43, SD=1.24) compared with student satisfaction with overall academic services among the national adult students group (M=5.45, SD=1.18). However, a statistically significant relationship ($p < .01$) and medium effect size (0.225) was found in question 30, which states, "Academic support services adequately meet the needs of adult students" between student persisters (M=5.26, SD=1.50) and the national adult students group (M=5.59, SD=1.43).

Table 14

Academic Services Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction /SD**	**Performance Gap**	**Importance**	**Satisfaction /SD**	**Performance Gap**	
ACADEMIC SERVICES	6.38	5.43 / 1.24	0.95	6.2	5.45 / 1.18	0.75	0.0165
12. Computer labs are adequate and accessible for adult students.	6.32	5.73 / 1.52	0.59	6.07	5.56 / 1.56	0.51	0.110
15. Library resources and services are adequate for adults.	6.37	5.63 / 1.47	0.74	6.32	5.62 / 1.47	0.7	0.0680
30. Academic support services adequately meet the needs of adult students.	6.47	5.26 / 1.50	1.21	6.36	5.59 / 1.43	0.77	0.225**
38. Career services are adequate and accessible for adult students.	6.33	5.18 / 1.56	1.15	6.19	5.23 / 1.57	0.96	0.0319
47. Bookstore hours are convenient for adult students.	6.39	5.35 / 1.75	1.04	6	5.16 / 1.69	0.84	0.110

Research Question 3 – What is the relationship between student satisfaction with admissions and financial aid and persistence?

As seen below in Table 15, the overall results for academic services indicated that there was a significant relationship in scores due to a p value of <.01. The Cohen's D effect size was also medium at 0.261. Therefore, there is a significant relationship between persister student satisfaction and overall admissions and financial aid effectiveness (M=5.14, SD=1.27) compared with student satisfaction with overall admissions and financial aid effectiveness among the national adult students group (M=5.47, SD=1.25). Further, a statistically significant relationship ($p < .001$) and medium effect size (0.331) was found in question 10, which states, "Admissions representatives are knowledgeable" between student persisters (M=5.22, SD=1.55) and the national adult students group (M=5.71, SD=1.40). Also, a statistically significant relationship ($p < .001$) and medium effect size (0.329) was found in question 25, which states, "Admissions representatives respond to adult students' unique needs" between student persisters (M=5.16, SD=1.52) and the national adult students group (M=5.64, SD=1.39).

Table 15

Admissions and Financial Aid Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
ADMISSIONS AND FINANCIAL AID	6.45	5.14 / 1.27	1.31	6.37	5.47 / 1.25	0.9	0.261**
6. Financial aid counselors are helpful to adult students.	6.38	5.17 / 1.62	1.21	6.3	5.40 / 1.61	0.9	0.142
10. Admissions representatives are knowledgeable.	6.44	5.22 / 1.55	1.22	6.33	5.71 / 1.40	0.62	0.331***
23. Adequate financial aid is available for most adult students.	6.57	5.16 / 1.80	1.41	6.51	5.32 / 1.69	1.19	0.0916
25. Admissions representatives respond to adult students' unique needs.	6.45	5.16 / 1.52	1.29	6.3	5.64 / 1.39	0.66	0.329***
34. I receive complete information on the availability of financial aid.	6.43	4.99 / 1.77	1.44	6.4	5.25 / 1.71	1.15	0.149

Research Question 4 – What is the relationship between student satisfaction with campus climate and persistence?

As seen below in Table 16, the overall results for academic services indicated that there was not a significant relationship in scores due to a p value of >.05. The Cohen's D effect size was also small at 0.116. Therefore, there is not a significant relationship between persister student satisfaction and overall campus climate (M=5.50, SD=1.15) compared with student satisfaction with overall campus climate among the national adult students group (M=5.63, SD=1.08). However, a statistically significant relationship ($p < .05$) and medium effect size (0.178) was found in question 5, which states, "Classroom locations are safe and secure for all students" between student persisters (M=6.07, SD=1.31) and the national adult students group (M=6.28, SD=1.03). Also, a statistically significant relationship ($p < .001$) and medium effect size (0.312) was found in question 7, which states, "The staff at this institution are caring and helpful" between student persisters (M=5.39, SD=1.43) and the national adult students group (M=5.82, SD=1.32).

Further, a statistically significant relationship ($p < .05$) and medium effect size (0.208) was found in question 21, which states, "Tuition payment is a worthwhile investment" between student persisters (M=5.65, SD=1.46) and the national adult students group (M=5.33, SD=1.60). And, a statistically significant relationship ($p < .05$) and medium effect size (0.210) was found in question 2, which states, "There is a commitment to academic excellence at this institution" between student persisters (M=5.53, SD=1.39) and the national adult students group (M=5.82, SD=1.37). Also, a statistically significant relationship ($p < .05$) and medium effect size (0.204) was found in question 27, which states, "This institution has a good reputation within the community"

between persister students (M=5.41, SD=1.62) and the national adult students group (M=5.72, SD=1.41).

Furthermore, a statistically significant relationship ($p < .001$) and medium effect size (0.284) was found in question 27, which states, “I seldom get the “run-around” when seeking information at this institution” between student persisters (M=4.86, SD=1.74) and the national adult students group (M=5.35, SD=1.71). And, a statistically significant relationship ($p < .05$) and small effect size (0.187) was found in question 50, which states, “My advisor helps me apply my academic major to specific career goals” between persister students (M=5.53, SD=1.65) and the national adult students group (M=5.21, SD=1.76).

Table 16

Campus Climate Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
CAMPUS CLIMATE	6.45	5.50 / 1.15	0.95	6.43	5.63 / 1.08	0.8	0.116
1. Adult students are made to feel welcome at this institution.	6.29	5.92 / 1.38	0.37	6.27	5.97 / 1.25	0.3	0.0379
2. Faculty care about me as an individual.	6.3	5.61 / 1.42	0.69	6.42	5.72 / 1.36	0.7	0.0791
5. Classroom locations are safe and secure for all students.	6.59	6.07 / 1.31	0.52	6.41	6.28 / 1.03	0.13	0.178*
7. The staff at this institution are caring and helpful.	6.37	5.39 / 1.43	0.98	6.49	5.82 / 1.32	0.67	0.312***
21. Tuition paid is a worthwhile investment.	6.57	5.65 / 1.46	0.92	6.66	5.33 / 1.60	1.33	0.208*
24. There is a commitment to academic excellence at this institution.	6.6	5.53 / 1.39	1.07	6.66	5.82 / 1.37	0.84	0.210*
27. This institution has a good reputation within the community.	6.48	5.41 / 1.62	1.07	6.42	5.72 / 1.41	0.7	0.204*
29. I seldom get the "run-around" when seeking information at this institution.	6.4	4.86 / 1.74	1.54	6.47	5.35 / 1.71	1.12	0.284***
33. Channels are readily available for adult students to express complaints.	6.33	4.97 / 1.68	1.36	6.13	4.99 / 1.74	1.14	0.0116
50. My advisor helps me apply my academic major to specific career goals.	6.56	5.53 / 1.65	1.03	6.37	5.21 / 1.76	1.16	0.187*

Research Question 5 – What is the relationship between student satisfaction with instructional effectiveness and persistence?

As seen below in Table 17, the overall results for instructional effectiveness indicated that there was not a significant relationship in scores due to a p value of >.05. The Cohen's D effect size was also small at 0.111. Therefore, there is not a significant relationship between persister student satisfaction and overall instructional effectiveness (M=5.64, SD=1.14) compared with student satisfaction with overall instructional effectiveness among the national adult students group (M=5.76, SD=1.01). However, a statistically significant relationship ($p < .01$) and medium effect size (0.284) was found in question 4, which states, "The content of the courses within my major is valuable" between student persisters (M=6.21, SD=1.03) and the national adult students group (M=5.89, SD=1.22). Also, a statistically significant relationship ($p < .001$) and medium effect size (0.342) was found in question 14, which states, "Faculty are fair and unbiased in their treatment of individual students" between persister students (M=5.24, SD=1.69) and the national adult students group (M=5.77, SD=1.39).

Further, a statistically significant relationship ($p < .05$) and medium effect size (0.210) was found in question 24, which states, "There is a commitment to academic excellence at this institution" between student persisters (M=5.53, SD=1.39) and the national adult students group (M=5.82, SD=1.37). And, a statistically significant relationship ($p < .01$) and medium effect size (0.211) was found in question 26, which states, "Faculty provide timely feedback about my progress" between persister students (M=5.20, SD=1.66) and the national adult students group (M=5.53, SD=1.46). Also, a statistically significant relationship ($p < .001$) and medium effect size (0.314) was found

in question 32, which states, “My classes provide opportunities to improve my technology skills” between student persisters (M=5.96, SD=1.31) and the national adult students group (M=5.53, SD=1.42).

Furthermore, a statistically significant relationship ($p < .001$) and medium effect size (0.284) was found in question 37, which states, “Part-time faculty are competent as classroom instructors” between persister students (M=5.19, SD=1.63) and the national adult students group (M=5.70, SD=1.39). And, a statistically significant relationship ($p < .01$) and medium effect size (0.336) was found in question 40, which states, “Faculty are usually available for adult students outside the classroom by phone, by email or in-person” between student persisters (M=5.65, SD=1.47) and the national adult students group (M=5.97, SD=1.27). Finally, a statistically significant relationship ($p < .01$) and medium effect size (0.205) was found in question 42, which states, “Nearly all faculty are knowledgeable in their field” between persister students (M=5.82, SD=1.44) and the national adult students group (M=6.09, SD=1.18).

Table 17

Instructional Effectiveness Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
INSTRUCTIONAL EFFECTIVENESS	6.53	5.64 / 1.14	0.89	6.52	5.76 / 1.01	0.76	0.111
2. Faculty care about me as an individual.	6.3	5.61 / 1.42	0.69	6.42	5.72 / 1.36	0.7	0.0791
4. The content of the courses within my major is valuable.	6.65	6.21 / 1.03	0.44	6.7	5.89 / 1.22	0.81	0.284**
14. Faculty are fair and unbiased in their treatment of individual students.	6.5	5.24 / 1.69	1.26	6.56	5.77 / 1.39	0.79	0.342***
24. There is a commitment to academic excellence at this institution.	6.6	5.53 / 1.39	1.07	6.66	5.82 / 1.37	0.84	0.210*
26. Faculty provide timely feedback about my progress.	6.51	5.20 / 1.66	1.31	6.52	5.53 / 1.46	0.99	0.211**
32. My classes provide opportunities to improve my technology skills.	6.55	5.96 / 1.31	0.59	5.93	5.53 / 1.42	0.4	0.314***
35. The quality of instruction I receive in my program is excellent.	6.66	5.85 / 1.48	0.81	6.7	5.78 / 1.36	0.92	0.0492
37. Part-time faculty are competent as classroom instructors.	6.34	5.19 / 1.63	1.15	6.48	5.70 / 1.39	0.78	0.336***
40. Faculty are usually available for adult students outside the classroom by phone, by e-mail or in-person.	6.48	5.65 / 1.47	0.83	6.5	5.97 / 1.27	0.53	0.232**
41. Major requirements are clear and reasonable	6.61	5.71 / 1.46	0.90	6.63	5.83 / 1.35	0.80	0.0853
42. Nearly all faculty are knowledgeable in their field.	6.61	5.82 / 1.44	0.79	6.7	6.09 / 1.18	0.61	0.205**
49. There are sufficient options within my program of study.	6.54	5.63 / 1.49	0.91	6.46	5.44 / 1.50	1.02	0.127

Research Question 6 – What is the relationship between satisfaction with registration effectiveness and persistence?

As seen below in Table 18, the overall results for registration effectiveness indicated that there was a significant relationship in scores due to a p value of < .01. The Cohen's D effect size was also medium at 0.260. Therefore, there is a significant relationship between persister student satisfaction and overall registration effectiveness (M=5.43, SD=1.13) compared with student satisfaction with overall registration effectiveness among the national adult students group (M=5.71, SD=1.02). Also, a statistically significant relationship (p < .001) and medium effect size (0.310) was found in question 9, which states, "Billing policies are reasonable for adult students" between student persisters (M=4.85, SD=1.69) and the national adult students group (M=5.35, SD=1.53). And, a statistically significant relationship (p < .01) and medium effect size (0.239) was found in question 16, which states, "I am able to register for classes I need with few conflicts" between persister students (M=5.27, SD=1.72) and the national adult students group (M=5.66, SD=1.53).

Further, a statistically significant relationship (p < .05) and small effect size (0.161) was found in question 17, which states, "Business office hours are convenient for adult students" between student persisters (M=5.29, SD=1.66) and the national adult students group (M=5.54, SD=1.42). And, a statistically significant relationship (p < .05) and small effect size (0.170) was found in question 20, which states, "Registration processes are reasonable and convenient for adults" between persister students (M=5.63, SD=1.46) and the national adult students group (M=5.87, SD=1.35). Also, a statistically significant relationship (p < .05) and small effect size (0.199) was found in question 43,

which states, “This institution offers a variety of payment plans for adult students” between student persisters (M=5.93, SD=1.32) and the national adult students group (M=6.09, SD=1.22).

Table 18

Registration Effectiveness Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
REGISTRATION EFFECTIVENESS	6.52	5.43 / 1.13	1.09	6.42	5.71 / 1.02	0.71	0.260**
3. Classes are scheduled at times that are convenient for me.	6.63	5.58 / 1.53	1.05	6.58	5.70 / 1.46	0.88	0.0802
9. Billing policies are reasonable for adult students.	6.35	4.85 / 1.69	1.5	6.31	5.35 / 1.53	0.96	0.310***
16. I am able to register for classes I need with few conflicts.	6.71	5.27 / 1.72	1.44	6.58	5.66 / 1.53	0.92	0.239**
17. Business office hours are convenient for adult students.	6.43	5.29 / 1.66	1.14	6.21	5.54 / 1.42	0.67	0.161*
20. Registration processes are reasonable and convenient for adults.	6.58	5.63 / 1.46	0.95	6.49	5.87 / 1.35	0.62	0.170*
31. I am able to register for classes by personal computer, fax, or telephone.	6.42	5.80 / 1.40	0.62	6.4	6.01 / 1.36	0.39	0.152
43. This institution offers a variety of payment plans for adult students.	6.45	5.07 / 1.76	1.38	6.29	5.40 / 1.54	0.89	0.199*
45. I am able to complete most of my enrollment tasks in one location.	6.59	5.93 / 1.32	0.66	6.47	6.09 / 1.22	0.38	0.125

Research Question 7 –What is the relationship between satisfaction with safety and security and persistence?

As seen below in Table 19, the overall results for safety and security indicated that there was a significant relationship in scores due to a p value of < .001. The Cohen's D effect size was also large at 0.621. Therefore, there is a significant relationship between persister student satisfaction and overall safety and security (M=4.86, SD=1.28) compared with student satisfaction with overall safety and security among the national adult students group (M=5.61, SD=1.13).

Also, a statistically significant relationship ($p < .05$) and small effect size (0.178) was found in question 5, which states, "Classroom locations are safe and secure for all students" between student persisters (M=6.07, SD=1.31) and the national adult students group (M=6.28, SD=1.03). And, a statistically significant relationship ($p < .001$) and large effect size (0.754) was found in question 13, which states, "The amount of student parking is adequate" between persister students (M=3.58, SD=2.10) and the national adult students group (M=5.08, SD=1.87). Further, a statistically significant relationship ($p < .001$) and large effect size (0.524) was found in question 18, which states, "Parking lots are well-lighted and secure" between student persisters (M=4.66, SD=2.00) and the national adult students group (M=5.58, SD=1.47).

Table 19

Safety and Security Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
SAFETY AND SECURITY	6.55	4.86 / 1.28	1.69	6.24	5.61 / 1.13	0.63	0.6212***
5. Classroom locations are safe and secure for all students.	6.59	6.07 / 1.31	0.52	6.41	6.28 / 1.03	0.13	0.178*
13. The amount of student parking is adequate.	6.54	3.58 / 2.10	2.96	6.03	5.08 / 1.87	0.95	0.754***
18. Parking lots are well-lighted and secure.	6.53	4.66 / 2.00	1.87	6.2	5.58 / 1.47	0.62	0.524***
22. Security staff respond quickly in emergencies.	6.54	5.16 / 1.54	1.38	6.29	5.32 / 1.45	0.97	0.106

Research Question 8 – What is the relationship between satisfaction with service excellence and persistence?

As seen below in Table 20, the overall results for service excellence indicated that there was a significant relationship in scores due to a p value of < .05. The Cohen's D effect size was also small at 0.175. Therefore, there is a significant relationship between persister student satisfaction and overall service excellence (M=5.18, SD=1.32) compared with student satisfaction with overall service excellence among the national adult students group (M=5.41, SD=1.30).

Further, a statistically significant relationship (p < .001) and medium effect size (0.312) was found in question 7, which states, "The staff at this institution are caring and helpful" between student persisters (M=5.39, SD=1.43) and the national adult students group (M=5.82, SD=1.32). Also, a statistically significant relationship (p < .001) and

medium effect size (0.284) was found in question 29, which states, “I seldom get the “run-around when seeking information at this institution” between student persisters (M=4.86, SD=1.74) and the national adult students group (M=5.35, SD=1.71). And, a statistically significant relationship ($p < .01$) and medium effect size (0.278) was found in question 39, which states, “This institution responds quickly to my requests for information” between persister students (M=5.16, SD=1.54) and the national adult students group (M=5.58, SD=1.48).

Table 20

Service Excellence Scale Findings with Effect Size

	Auburn University - ASPS			National Adult Students			Effect Size
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
SERVICE EXCELLENCE	6.4	5.18 / 1.32	1.22	6.37	5.41 / 1.30	0.96	0.175*
7. The staff at this institution are caring and helpful.	6.37	5.39 / 1.43	0.98	6.49	5.82 / 1.32	0.67	0.312***
29. I seldom get the "run-around" when seeking information at this institution.	6.4	4.86 / 1.74	1.54	6.47	5.35 / 1.71	1.12	0.284***
33. Channels are readily available for adult students to express complaints.	6.33	4.97 / 1.68	1.36	6.13	4.99 / 1.74	1.14	0.0116
39. This institution responds quickly to my requests for information.	6.41	5.16 / 1.54	1.25	6.45	5.58 / 1.48	0.87	0.278**
46. This institution provides timely responses to student complaints.	6.35	5.17 / 1.65	1.18	6.31	5.14 / 1.69	1.17	0.0179
48. I am aware of whom to contact for questions about programs and services.	6.53	5.50 / 1.66	1.03	6.37	5.45 / 1.59	0.92	0.0307

Summary

The results from these data show that, in overall sections, there are not many areas that are statistically significant between adult student persisters at the technical college surveyed and the national adult student group surveyed. However, significance was found

in three overall survey sections (Admissions and Financial Aid, Registration Effectiveness, and Safety and Security), and in individual questions found in all eight sections. The following chapter will present a summary of this research study, as well as conclusions, implications, and recommendations for future research.

CHAPTER 5

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This study examined connections between student engagement in institutional incentives and student persistence until graduation or program completion. Students ranked their ascribed levels of importance regarding institutional incentives and their satisfaction with the current implementation of those efforts at a technical college in Georgia. Chapter 1 introduced the study. Chapter 2 reviewed the literature related to the history of technical education, as well as studies related to student persistence, engagement, and student persistence and engagement's connection to student success. Chapter 3 presented the method for the study, and the results were presented in Chapter 4. This chapter will offer a summary of the study and offer major conclusions surmised during the data analysis process. Finally, some recommendations for practice and implementation by technical education institutions and future research will be presented.

Research Questions

The following research questions were used in this study:

1. What was the relationship between student satisfaction with academic advising effectiveness and persistence?
2. What was the relationship between student satisfaction with academic services and persistence?

3. What was the relationship between student satisfaction with admissions and financial aid and persistence?
4. What was the relationship between student satisfaction with campus climate and persistence?
5. What was the relationship between student satisfaction with instructional effectiveness and persistence?
6. What was the relationship between satisfaction with registration effectiveness and persistence?
7. What was the relationship between satisfaction with safety and security and persistence?
8. What was the relationship between satisfaction with service excellence and persistence?

Summary

Following the data collection and analysis phases of this study, the results revealed that, overall, every objective stated within questions 1-50 was considered important to the student persisters who took the survey (see Appendix F). The three highest-ranked items considered importance (I) within questions 1-50 were:

16. I am able to register for classes I need with few conflicts (I=6.71).

19. My academic advisor is knowledgeable about requirements in my major (I=6.68).

33. The quality of instruction I receive in my program is excellent (I=6.66).

The lowest-ranked items in terms of importance are:

36. Vending or snack bar food options are readily available (I=5.83). (This is the only item not located within one of the eight scales found in Chapter 4.)

1. Adult students are made to feel welcome at this institution (I=6.29).

2. Faculty care about me as an individual (I=6.30).

Thus, with the highest-ranked item of importance rated at a 6.71 on a 7.0 scale, and the lowest item was a 5.83, persister students displayed that they found each of the objectives important. This is interesting because it contradicts findings within Chapter 2 regarding Milem and Berger's (1997) longitudinal study of first-year student persistence whereby they suggested that early involvement with faculty tends to have a positive role in student persistence. However, these findings did align with Tinto's (1993) original conclusion on the subject as he stated, "There appears to be an important link between learning and persistence that arises from the interplay of involvement and the quality of student effort. Involvement with one's peers and with the faculty, both inside and outside the classroom, is itself positively related to the quality of student effort and in turn to both learning and persistence" (71).

Regarding satisfaction, the results showed that, overall, persisters were satisfied with the objectives stated within questions 1-50 of the survey. Regardless of the individual satisfaction rankings made by the student persisters, only three items with the 50 questions were significantly positive when compared with the national adult students group. These questions were:

4. The content of courses within my major is valuable ($p < .01$, MD=0.32).

21. Tuition paid is a worthwhile investment ($p < .05$, MD=0.32).

50. My advisor helps me apply my academic major to specific career goals ($p < .05$, MD=0.32).

These findings align with Bean (1980), who, in making recommendations for reducing student attrition suggested that "The staff and faculty of an IHE should realize the perceived quality of the education the student is receiving is one of the most important variables for both men and women in influencing institutional commitment" (184-185). Also, these statements continue to align with Tinto's prior research, and were upheld further in 2012 as he reported findings that "The more students are academically and socially engaged with other people on campus, especially with faculty and student peers, the more likely (other things being equal) they will stay and graduate from college" (64).

The top three significantly lowest items found in the data analysis were:

13. The amount of student parking is adequate ($p < .001$, MD=-1.50).

18. Parking lots are well-lighted and secure ($p < .001$, MD=-0.92).

14. Faculty are fair and unbiased in their treatment of individual students ($p < .001$, MD=-0.53).

Thus, regardless of the low level of importance that persister students assigned to whether or not faculty care of them as individuals, their satisfaction with their treatment by these faculty is so low that it is one of the top three significantly lowest items found in this study. Thus, while the level of importance that they assign to faculty care contradicts Milem and Berger (1997) and Tinto (1993), these results create a further contradiction by showing that, even when these relationships are not positive overall, these students have still persisted in their programs.

One possible reason for the persistence of these students might be their strongly identified educational goals. This study found that 75 (55.56%) participants selected that earning a associate degree was their highest educational goal, 15 (11.11%) intended to ultimately earn a bachelor's degree, nine (6.67%) intended to earn or renewal a professional certificate, nine (6.67%) planned to achieve some other educational goal, eight (5.93%) intended to graduate from a vocational or technical program, six (4.44%) planned to earn a master's degree, and six (4.44%) planned to earn a doctoral or professional degree. Additionally, four (2.96%) planned to transfer to another institution and three (2.22%) were ultimately enrolled in their program of study for self-improvement or pleasure. These findings align with Goel's (2002) research, which found that how much a student's lack of an educational goal could affect their persistence in a program and retention status, as well as Tinto (1993) and Napoli and Wortman's (1998) suppositions regarding reasons why students might persist.

Further, when compared with findings from the Educational Testing Service (Coley, 2000), additional demographic data collected through this study showed that, of the seven demographics factors that put students at risk of not attaining a degree of finishing a program, including delayed entry, part-time enrollment, full-time work, financial independence, dependents, single parenthood, and community college attendance without a high school diploma, did not heavily affect this group of persisters. For example, 84.33% were registered as full-time students and 34.33% were enrolled part time off campus or not employment; and, however, while 19.26% were married with children, 15.56% were single with children, these students had still reached persister status enough to qualify for participation in this study.

Conclusions

Overall, the results from this study showed that student persisters at this institution were significantly less satisfied with safety and security, registration effectiveness, admissions and financial aid, and service excellence at their institution than the group of national adult students surveyed through Noel-Levitz. Specific instances of negative or positive significance will be discussed individually as they correspond to the following research questions (see Appendix F).

Question 1: What is the relationship between student satisfaction with academic advising effectiveness and persistence?

As Table 21 displays, the only significant finding ($p < .05$) in this section related to question 50, "My advisor helps me apply my academic major to specific career goals," has a positive mean difference (MD) of 0.32, which shows that student persisters at this institution are significantly more satisfied with the help that their advisor provides in relation to applying their academic major to specific career goals on their campus than students in the national adult students comparison group.

Question 2: What is the relationship between student satisfaction with academic services and persistence?

Table 22 displays that the only significant finding ($p < .01$) in this section related to question 30, "Academic support services adequately meet the needs of adult students," has a negative mean difference (MD) of -0.33, which shows that these student persisters are significantly less satisfied with the help that they receive from academic support services on their campus then adult students in the national comparison group.

Question 3: What is the relationship between student satisfaction with admissions and financial aid and persistence?

There were two significant ($p < .001$) findings in this section, shown in Table 23, and both were negative. With a mean difference (MD) of -0.49, persister students relayed that they were significantly less satisfied in question 10, which states that admissions representatives were less knowledgeable at their institution than the national student comparison group. Also, a MD of -0.48 relayed in question 25 that these student persisters believe that admissions representatives respond less to adult students' unique needs at their institution than the national adult students comparison group.

Question 4: What is the relationship between student satisfaction with campus climate and persistence?

There were seven significant findings in this section, shown in Table 24. To begin, question 5's results show that students are significantly less satisfied with the safety and security of their classroom locations than the national adult students group surveyed through Noel-Levitz ($p < .05$, MD=-0.21). Also, these persister students relayed that they are significantly less satisfied with the caring and helpfulness of their institution's staff than the national adults students comparison group ($p < .001$, MD=-0.43). Further, persisters are significantly more satisfied with the notion that paying their tuition is a worthwhile investment than the national adult students comparison group ($p < .05$, MD=0.32).

However, these persisters are significantly less satisfied with the commitment to academic excellence at their institution ($p < .05$, MD=-0.29), and the notion that their institution has a good reputation within the community ($p < .05$, MD=-0.31). Also,

students were significantly less satisfied with feelings of often getting the "run-around" when seeking information at their institution ($p < .001$, MD=-0.49). Yet, students were significantly more satisfied with their advisor's helpfulness in applying their academic majors to their specific career goals than students in the national adult students comparison group
($p < .05$, MD=0.32).

Question 5: What is the relationship between student satisfaction with instructional effectiveness and persistence?

There were eight significant findings in this section, shown in Table 25. To begin, participants were significantly more satisfied with the notion that the content of the courses within their majors was valuable ($p < .01$, MD=0.32) than students in the national adult students comparison group. However, students were significantly less satisfied with the fairness and unbiased treatment of individual students by faculty ($p < .001$, MD=-0.53), the notion that there is a commitment to academic excellence at their institution ($p < .05$, MD=-0.29), and the timely feedback that faculty provide about their individual progress ($p < .01$, MD=-0.33). Still, these student persisters were significantly more satisfied with the opportunities that they were given to improve their technology skills in their classes ($p < .001$, MD=0.43).

Further, students were significantly less satisfied with the notion that their part time faculty were competent as classroom instructors ($p < .001$, MD=-0.51), the availability of faculty for adult students outside of the classroom by phone, email, or in person ($p < .01$, MD=-0.32), and the statement that nearly all faculty are knowledgeable

in their field ($p < .001$, MD=-0.27) than students in the national adult students comparison group.

Question 6: What is the relationship between satisfaction with registration effectiveness and persistence?

There are five significant findings in this section, displayed in Table 26, and all of them are negative. To begin, these student persister participants were significantly less satisfied with the statement that billing policies are reasonable for adult students ($p < .001$, MD=-.50), their ability to register for classes with few conflicts ($p < .001$, MD =-0.39), and the notion that business office hours are convenient for adult students ($p < .05$, MD=-0.25). Further, participants were significantly less satisfied with the reasonableness and convenience of registration processes for adult students ($p < .05$, MD=-0.24), as well as the statement that their institution offers a variety of payment plans for adult students ($p < .05$, MD=-0.33) than students in the national adult students comparison group.

Question 7: What is the relationship between satisfaction with safety and security and persistence?

Table 27 displays that there are three significant findings in the section, and all of them are negative. These participants were significantly less satisfied with the safety and security of classroom locations for all students ($p < .05$, MD=-0.21), the notion that the amount of parking is adequate ($p < .001$, MD=-1.50), and the statement that parking lots were well-lighted and secure ($p < .001$, MD=-0.92).

Question 8: What is the relationship between satisfaction with service excellence and persistence?

There are three significant findings in this section, shown in Table 28, and all of them are negative. These student persisters are significantly less satisfied with the caring and helpfulness of staff at their institution ($p < .0001$, MD=-0.43), students were significantly less satisfied with feelings of often getting the "run-around" when seeking information at their institution ($p < .001$, MD=-0.49), and the statement that the institution quickly responded to requests for information ($p < .01$, MD=-0.42) than students in the national adult students comparison group.

As the findings from these eight research questions display, while there are areas of improvement at this institution, the students that have persisted until this point have been able to do so regardless of the negative findings uncovered in this study due to many factors addressed both in Chapter 2 and further highlighted in the prior Summary section.

Implications

Even though the students' surveyed during this study have persisted in their programs despite their dissatisfaction with many current factors regarding their technical college experience, their feedback is useful to administrators when considering what obstacles might have led to the attrition of past, or future, students who enroll at their institution. Thus, based on this study's findings, it would be beneficial for administrators at this institution to work to improve parking options and security in parking lots, as well as consider ways in which faculty, admissions representatives, and staff might benefit from professional development opportunities regarding interpersonal student interactions. Further, the institution might benefit from implementing further training programs with

their admissions representatives and other staff who devote time to assisting with individual student needs, as well as additional training and support for part-time faculty members. Also, since the study's participants reported that their classes provide opportunities to improve their technology skills, it might be beneficial to include this positive in future marketing campaigns so that others interested in improving these skills might be further encouraged to enroll in a program that interests them. Finally, findings from this study suggest that billing policies should be revaluated in order to be more reasonable for adult students.

Recommendations for Future Research

Regarding recommendations for future research, it would be beneficial for other researchers to find ways to create strong incentives for participation so that study participants will take the time to truly read and consider the survey's questions, as well as create incentives for institutional administrators to encourage faculty buy-in and support. For example, in order to encourage students to take the survey more seriously, it might be a good idea to add a section to a script which should be read to each group that, in non-academic terms, discusses the impact that this survey might have on shaping the rest of their experience in their programs, as well as bettering the institution's policies and services for future students. Further, to further participant motivation, it might be beneficial to find a way for more promotion of the study within the institution through administrator help to garner faculty support, as well as offering incentives such as gas station gift cards to qualifying students who participate.

In addition, it would be beneficial to recruit a larger sample size of participants at different institutions would add to future findings regarding this subject, as well as collect

both quantitative and qualitative findings in order to gain more perspective and insight regarding students' qualitative responses. Also, it would be beneficial to create a longitudinal study in which the same students retook the survey at the beginning of each semester or academic year over a three-year academic period or longer, depending on the length of their programs, and record each student's responses after each surveying period. These data could help future researchers determine not only what factors remain important to student persisters, but through this longitudinal process determine which factors actually lead to student persistence by reviewing which students continue to enroll, and how their importance and satisfaction rankings change throughout their time in their academic programs.

Above all, future research should strive to examine connections between the arenas of traditional four-year and community college education with that of technical and vocational schools. This need for research has not gone unnoticed, as Tinto (2012) noted,

> As a practical matter, colleges must determine how they can involve their students in ways that promote retention and how to do so in settings such as urban two and four-year institutions that serve large numbers of students who hold jobs, attend part-time, and have substantial obligations beyond the campus (e.g. work, family). For these students the more traditional practices that institutions have used to engage their students, such as extracurricular activities, residential programming, and clubs, yield relatively little relative benefit, if only because few students have the luxury of being able to spend time on campus beyond the classroom (67).

Thus, while this research adds to the body of knowledge regarding student persistence in technical and vocational education institutions, there is also a need to further explore relationships between student engagement in institutional incentives and persistence prior to program completion in order to assist legislators, as well as institutional administrators, faculty, and staff as they work to increase student persistence and retention until graduation in their programs for both funding purposes and their desires to help their students successfully attain degrees.

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APPENDICIES

APPENDIX A
INSTITUTIONAL PERMISSION LETTER

SOUTHERN CRESCENT
TECHNICAL COLLEGE

OFFICE OF THE PRESIDENT

June 26 2013

Emily Cosgrove
Auburn University College of Education
4036 Haley Center
Auburn, Alabama 36849-5221

Reference: Your letter dated May 24 2013 requesting permission to conduct research at Southern Crescent Technical College

Dear Emily: I am pleased to provide you with this letter, constituting permission to conduct research at Southern Crescent Technical College, Griffin, Georgia, for the purposes of completing your doctoral program at Auburn University, in accordance with your request referenced above.

Please coordinate your scheduling with Dr Dawn Hodges, Vice President of Academic Affairs (dhodges@sctech.edu, (770-229-3293)) and she will provide you with the appropriate class room schedules or whatever access you may need during your research period.

I am granting this permission based upon the assumption that the IRB process at Auburn University is being followed, and that your research is conducted under their purview.

If you have any questions or issues that arise, please do not hesitate to contact my office directly.

Sincerely,

Randall L. Peters, Ed. D.
President

cf: Dr Hodges

Butts County Center
1578 Highway 16 West
Jackson, Georgia 30233
770.504.7590

Flint River Campus
1533 Highway 19 South
Thomaston, Georgia 30286
706.646.6148
800.752.9681

Griffin Campus
501 Varsity Road
Griffin, Georgia 30223
770.228.7348
877.897.0006

Jasper County Center
112 Industrial Park Drive
Monticello, Georgia 31064
706.468.9930

Taylor County Center
196 East Main Street
Butler, Georgia 31006
478-862-2323

www.sctech.edu

APPENDIX B
INSTITUTIONAL REVIEW BOARD

November 4, 2013

Dear Ms. Cosgrove,

Your protocol entitled " An Investigation in the Relationship Between Institutional Incentives and Student Persistence at a Southeastern Technical College " has been approved by the IRB as "Exempt" under federal regulation 45 CFR 46.101(b)(2).

Official notice:

This e-mail serves as official notice that your protocol has been approved. A formal approval letter will not be sent unless you notify us that you need one. By accepting this approval, you also accept your responsibilities associated with this approval. Details of your responsibilities are attached. Please print and retain.

Consent document:

Your approved, stamped consent document will soon be sent. Please make copies as needed.

Please note that *you may not begin your research that involves human subjects unless you use the new document* with an IRB approval stamp applied. You must use copies of that document when you consent participants, and provide a copy (signed or unsigned) for them to keep.

Expiration – Approval for three year period:
*****Note that the new policy for Exempt approvals is a *three year approval*.** Therefore, your protocol **will expire on November 2, 2016.** Put that date on your calendar now. About three weeks before that time you will need to submit a renewal request.

When you have completed all research activities, have no plans to collect additional data and have destroyed all identifiable information as approved by the IRB, please notify this office via e-mail. A final report is no longer required.

If you have any questions, please let us know.

Best wishes for success with your research!

IRB Administration
Office of Research Compliance
115 Ramsay Hall (basement)
Auburn University, AL 36849
(334) 844-5966
IRBadmin@auburn.edu *(for general queries)*
IRBsubmit@auburn.edu *(for protocol submissions)*

APPENDIX C
LETTER OF CONSENT

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

(NOTE: DO NOT SIGN THIS DOCUMENT UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

INFORMED CONSENT
for a Research Study entitled
"An Investigation in the Relationship between Institutional Incentives and Student Persistence at a Southeastern Technical College"

You are invited to participate in a research study to examine connections between student engagement and participation in institutional incentives and student persistence until graduation or program completion The study is being conducted by Emily Cosgrove, a Ph.D. student at Auburn University, under the direction of Dr. James Witte, Professor of Adult Education, in the Auburn University Department of Educational Foundations, Leadership, and Technology. You were selected as a possible participant because you have completed at least three semesters of course work at Southern Crescent Technical College and are age 18 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to fill out this survey. Your total time commitment will be approximately 10-15 minutes.

Are there any risks or discomforts? There are no risks associated with participating in this study.

Are there any benefits to yourself or others? If you participate in this study, your anonymous feedback will be shared with Southern Crescent Technical College administration, who may work to better the services that you mark as high in importance but low in your satisfaction with these services. However, I cannot promise you that you will receive this benefit as described.

If you change your mind about participating, you can withdraw at any time during the taking of this survey. Your participation is completely voluntary. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Southern Crescent Technical College, Auburn University, or the Department of Educational Leadership and Technology at Auburn University.

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

Your privacy will be protected. Any information obtained in connection with this study will remain anonymous. Information obtained through your participation may be used to fill an educational requirement, published in a professional journal, or presented at a professional meeting or conference.

If you have questions about this study, please ask them now or contact Dr. James Witte at Auburn University at witteje@auburn.edu

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. BY SUBMITTING A COMPLETED SURVEY YOU ARE INDICATING THAT YOU WISH TO PARTICIPATE.

_____

Investigator obtaining consent Date

_____

Printed Name

The Auburn University Institutional Review Board has approved this document for use from 11/2/13 to 11/2/14 Protocol # 13-348 EX 1311

APPENDIX D
INFORMATION LETTER TO SURVEY DISTRIBUTORS

Script for Distributing and Collecting Dissertation Surveys
Southern Crescent Technical College, Griffin campus
November 19 and 20, 2013

For the survey administrator:

- Each packet contains the corresponding number of surveys, letters of consent, and pencils for each class that will be surveyed. Please let me know immediately if you need more for some reason during your class visit at (334) 750-8237.

- What to say:

"Southern Crescent is partnering with Auburn University on a dissertation study about what helps students stay in their technical college programs through graduation. Your class has been selected to participate in taking the survey for this study because all of you are in your fourth semester or higher of your coursework here at SCTC, which means that you have shown a great deal of perseverance and persistence in your program. If you are willing, we would like for you to complete the survey that will be handed out in a moment. Pencils will be provided as well, which you may keep along with a copy of the official letter of consent from Auburn University, which tells you a little more about the study.

All of your responses will be completely anonymous, so to help with this effort please do not write your name on this survey or fill out the Social Security Number section on the last page.

Your participation is optional, but very much appreciated. While completing the survey, please do not separate the pages of the survey, make marks with anything other than the #2 pencil provided, or mark outside of your selected responses—doing so will make the survey invalid and unable to be recorded. Please make sure to answer each question. For questions 1-79, please rank **both** the importance to you (left side of the page) and your level of satisfaction (right side of the page). For questions 80-98, please mark a single response for each question.

Thank you!"

- Please carefully put all of the surveys back into the manila envelope before leaving the classroom—these surveys are invalid for scanning if they are damaged in any way.
- Thank you for your assistance in this process—I couldn't do it without you!

Emily Cosgrove, Principle Investigator
Auburn University

APPENDIX E
INSTRUMENT

Noel-Levitz®

ADULT STUDENT PRIORITIES SURVEY™

Dear Student,

Your institution is interested in systematically listening to its students. Therefore, your thoughtful and candid responses to this survey are very important.

You are part of a sample of students carefully selected to share feedback about your experiences with this institution thus far. Your responses will give your campus leadership insights about the aspects of college that are important to you as well as how satisfied you are with them.

Thank you for your participation.

Instructions:

- Use a No. 2 pencil only. Please do not use ink or ballpoint pen.
- For each response, darken completely the corresponding oval.
- Erase completely any change in your answer.
- Do not make stray marks.

CENTER PERF

Each item below describes an expectation about your experiences with this institution. On the **left,** tell us how important it is for your institution to meet this expectation. On the **right,** tell us how satisfied you are that your institution has met this expectation.

Importance to me . . .

1 - not important at all
2 - not very important
3 - somewhat unimportant
4 - neutral
5 - somewhat important
6 - important
7 - very important
does not apply

. . . My level of satisfaction

not available/not used
very satisfied - 7
satisfied - 6
somewhat satisfied - 5
neutral - 4
somewhat dissatisfied - 3
dissatisfied - 2
not satisfied at all - 1

1. Adult students are made to feel welcome at this institution.
2. Faculty care about me as an individual.
3. Classes are scheduled at times that are convenient for me.
4. The content of the courses within my major is valuable.

5. Classroom locations are safe and secure for all students.
6. Financial aid counselors are helpful to adult students.
7. The staff at this institution are caring and helpful.
8. My academic advisor is available at times that are convenient for me.

9. Billing policies are reasonable for adult students.
10. Admissions representatives are knowledgeable.
11. My academic advisor is concerned about my success as an individual.
12. Computer labs are adequate and accessible for adult students.

PLEASE DO NOT WRITE IN THIS AREA

SERIAL #

Importance to me . . .

1 - not important at all
2 - not very important
3 - somewhat unimportant
4 - neutral
5 - somewhat important
6 - important
7 - very important
does not apply

. . .My level of satisfaction

not available/not used
very satisfied - 7
satisfied - 6
somewhat satisfied - 5
neutral - 4
somewhat dissatisfied - 3
dissatisfied - 2
not satisfied at all - 1

13. The amount of student parking is adequate.
14. Faculty are fair and unbiased in their treatment of individual students.
15. Library resources and services are adequate for adults.
16. I am able to register for classes I need with few conflicts.

17. Business office hours are convenient for adult students.
18. Parking lots are well-lighted and secure.
19. My academic advisor is knowledgeable about requirements in my major.
20. Registration processes are reasonable and convenient for adults.

21. Tuition paid is a worthwhile investment.
22. Security staff respond quickly in emergencies.
23. Adequate financial aid is available for most adult students.
24. There is a commitment to academic excellence at this institution.

25. Admissions representatives respond to adult students' unique needs.
26. Faculty provide timely feedback about my progress.
27. This institution has a good reputation within the community.
28. My academic advisor is accessible by telephone and e-mail.

29. I seldom get the "run-around" when seeking information at this institution.
30. Academic support services adequately meet the needs of adult students.
31. I am able to register by personal computer, fax, or telephone.
32. My program provides opportunities to improve my technology skills.

33. Channels are readily available for adult students to express complaints.
34. I receive complete information on the availability of financial aid.
35. The quality of instruction I receive in my program is excellent.
36. Vending or other food options are readily available.

37. Part-time faculty are competent as instructors.
38. Career services are adequate and accessible for adult students.
39. This institution responds quickly to my requests for information.
40. Faculty are usually available for adult students by phone, by e-mail, or in person.

41. Major requirements are clear and reasonable.
42. Nearly all faculty are knowledgeable in their field.
43. This institution offers a variety of payment plans for adult students.
44. When students enroll at this institution, they develop a plan to complete their degree.

45. I am able to complete most of my enrollment tasks in one location.
46. This institution provides timely responses to student complaints.
47. Bookstore hours are convenient for adult students.
48. I am aware of whom to contact for questions about programs and services.

49. There are sufficient options within my program of study.
50. My advisor helps me apply my academic major to specific career goals.

Your institution may choose to provide you with additional questions on a separate sheet. This section below numbered 51-70 is provided as a response area for those additional questions. Continue on to item 71 when you have completed this section.

Importance to me . . .

1 - not important at all
2 - not very important
3 - somewhat unimportant
4 - neutral
5 - somewhat important
6 - important
7 - very important
does not apply

. . . My level of satisfaction

not available/not used
very satisfied - 7
satisfied - 6
somewhat satisfied - 5
neutral - 4
somewhat dissatisfied - 3
dissatisfied - 2
not satisfied at all- 1

(If items 51-70 not available, skip to item 71)

51. 52. 53. 54. 55.

56. 57. 58. 59. 60.

61. 62. 63. 64. 65.

66. 67. 68. 69. 70.

How important were the following factors in your decision to enroll here?

71. Cost
72. Financial aid/scholarship opportunities
73. Academic reputation
74. Size of institution
75. Future employment opportunities
76. Recommendations from family/friends/employer
77. Campus location (close to home/work)
78. Availability of evening/weekend courses
79. Personalized attention prior to enrollment

Choose the **one** response that best applies to you and darken the corresponding oval for each of the questions below.

80. So far, how has your college experience met your expectations?

① Much worse than I expected
② Quite a bit worse than I expected
③ Worse than I expected
④ About what I expected
⑤ Better than I expected
⑥ Quite a bit better than I expected
⑦ Much better than I expected

81. Rate your overall satisfaction with your experience here thus far.

① Not satisfied at all
② Not very satisfied
③ Somewhat dissatisfied
④ Neutral
⑤ Somewhat satisfied
⑥ Satisfied
⑦ Very satisfied

82. All in all, if you had it to do over, would you enroll here?

① Definitely not
② Probably not
③ Maybe not
④ I don't know
⑤ Maybe yes
⑥ Probably yes
⑦ Definitely yes

CONTINUE TO THE NEXT PAGE

Choose the **one** response that best describes you and darken the corresponding oval for each of the items below:

83. Gender:
① Female
② Male

84. Age:
① 24 and under
② 25 to 34
③ 35 to 44
④ 45 and over

85. Ethnicity/Race:
① African-American
② American Indian or Alaskan Native
③ Asian or Pacific Islander
④ Caucasian/White
⑤ Hispanic
⑥ Other
⑦ Prefer not to respond

86. Current Enrollment Status:
① Day
② Evening
③ Weekend

87. Current Class Load:
① Full-time
② Part-time

88. Class Level:
① First year
② Second year
③ Third year
④ Fourth year
⑤ Special student
⑥ Graduate/professional
⑦ Other

89. Current GPA:
① No credits earned/not applicable
② 1.99 or below
③ 2.0 - 2.49
④ 2.5 - 2.99
⑤ 3.0 - 3.49
⑥ 3.5 or above

90. Educational Goal:
① Associate degree
② Vocational/technical program
③ Transfer to another institution
④ Bachelor's degree
⑤ Master's degree
⑥ Doctorate or professional degree
⑦ Certification (initial or renewal)
⑧ Self-improvement/pleasure
⑨ Job-related training
⑩ Other

91. Employment:
① Full-time off campus
② Part-time off campus
③ Full-time on campus
④ Part-time on campus
⑤ Not employed

92. Current Residence:
① Own house
② Rent room/apartment/house
③ Relative's home
④ Other

93. Residence Classification:
① In-state
② Out-of-state
③ International (not U.S. citizen)

94. Marital Status:
① Single
② Single with children
③ Married
④ Married with children
⑤ Prefer not to respond

95. When I entered this institution, it was my:
① 1st choice
② 2nd choice
③ 3rd or lower

96. Campus Defined Item:
①
②
③
④
⑤
⑥

97. Campus Defined Item:
①
②
③
④
⑤
⑥

98. Major/Program:
Fill in major/program code from list provided by your institution:

Your numeric identifier may be requested for research purposes. Your response is voluntary.

Numeric identifier, if requested by your institution:
Write the requested number in the spaces of the box provided. Completely darken the corresponding oval.

Thank you for taking the time to complete this survey.

Please do not fold.

PLEASE DO NOT MARK IN THIS AREA

SERIAL #

APPENDIX F
ASPS Institutional Summary with Mean Difference Results

Table 21

Academic Advising Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
ACADEMIC ADVISING	6.52	5.56 / 1.30	0.96	6.47	5.66 / 1.23	0.81	-0.10
8. My academic advisor is available at times that are convenient for me.	6.33	5.42 / 1.78	0.91	6.32	5.56 / 1.59	0.76	-0.14
11. My academic advisor is concerned about my success as an individual.	6.4	5.26 / 1.82	1.14	6.41	5.52 / 1.65	0.89	-0.26
19. My academic advisor is knowledgeable about requirements in my major.	6.68	5.83 / 1.54	0.85	6.58	5.83 / 1.48	0.75	0.00
28. My academic advisor is accessible by telephone and e-mail.	6.54	5.63 / 1.71	0.91	6.47	5.88 / 1.47	0.59	-0.25
41. Major requirements are clear and reasonable.	6.61	5.71 / 1.46	0.9	6.63	5.83 / 1.35	0.8	-0.12
44. When students enroll at this institution, they develop a plan to complete their degree.	6.5	5.51 / 1.54	0.99	6.49	5.72 / 1.47	0.77	-0.21
50. My advisor helps me apply my academic major to specific career goals.	6.56	5.53 / 1.65	1.03	6.37	5.21 / 1.76	1.16	0.32*

Table 22

Academic Services Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
ACADEMIC SERVICES	6.38	5.43 / 1.24	0.95	6.2	5.45 / 1.18	0.75	-0.02
12. Computer labs are adequate and accessible for adult students.	6.32	5.73 / 1.52	0.59	6.07	5.56 / 1.56	0.51	0.17
15. Library resources and services are adequate for adults.	6.37	5.63 / 1.47	0.74	6.32	5.62 / 1.47	0.7	0.01
30. Academic support services adequately meet the needs of adult students.	6.47	5.26 / 1.50	1.21	6.36	5.59 / 1.43	0.77	-0.33**
38. Career services are adequate and accessible for adult students.	6.33	5.18 / 1.56	1.15	6.19	5.23 / 1.57	0.96	-0.05
47. Bookstore hours are convenient for adult students.	6.39	5.35 / 1.75	1.04	6	5.16 / 1.69	0.84	0.19

Table 23

Admissions and Financial Aid Scale Finings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
ADMISSIONS AND FINANCIAL AID	6.45	5.14 / 1.27	1.31	6.37	5.47 / 1.25	0.9	-0.33**
6. Financial aid counselors are helpful to adult students.	6.38	5.17 / 1.62	1.21	6.3	5.40 / 1.61	0.9	-0.23
10. Admissions representatives are knowledgeable.	6.44	5.22 / 1.55	1.22	6.33	5.71 / 1.40	0.62	-0.49***
23. Adequate financial aid is available for most adult students.	6.57	5.16 / 1.80	1.41	6.51	5.32 / 1.69	1.19	-0.16
25. Admissions representatives respond to adult students' unique needs.	6.45	5.16 / 1.52	1.29	6.3	5.64 / 1.39	0.66	-0.48***
34. I receive complete information on the availability of financial aid.	6.43	4.99 / 1.77	1.44	6.4	5.25 / 1.71	1.15	-0.26

Table 24

Campus Climate Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
CAMPUS CLIMATE	6.45	5.50 / 1.15	0.95	6.43	5.63 / 1.08	0.8	-0.13
1. Adult students are made to feel welcome at this institution.	6.29	5.92 / 1.38	0.37	6.27	5.97 / 1.25	0.3	-0.05
2. Faculty care about me as an individual.	6.3	5.61 / 1.42	0.69	6.42	5.72 / 1.36	0.7	-0.11
5. Classroom locations are safe and secure for all students.	6.59	6.07 / 1.31	0.52	6.41	6.28 / 1.03	0.13	-0.21 *
7. The staff at this institution are caring and helpful.	6.37	5.39 / 1.43	0.98	6.49	5.82 / 1.32	0.67	-0.43 ***
21. Tuition paid is a worthwhile investment.	6.57	5.65 / 1.46	0.92	6.66	5.33 / 1.60	1.33	0.32 *
24. There is a commitment to academic excellence at this institution.	6.6	5.53 / 1.39	1.07	6.66	5.82 / 1.37	0.84	-0.29 *
27. This institution has a good reputation within the community.	6.48	5.41 / 1.62	1.07	6.42	5.72 / 1.41	0.7	-0.31 *
29. I seldom get the "run-around" when seeking information at this institution.	6.4	4.86 / 1.74	1.54	6.47	5.35 / 1.71	1.12	-0.49 ***
33. Channels are readily available for adult student to express complaints.	6.33	4.97 / 1.68	1.36	6.13	4.99 / 1.74	1.14	-0.02
50. My advisor helps me apply my academic major to specific career goals.	6.56	5.53 / 1.65	1.03	6.37	5.21 / 1.76	1.16	0.32 *

Table 25

Instructional Effectiveness Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
INSTRUCTIONAL EFFECTIVENESS	6.53	5.64 / 1.14	0.89	6.52	5.76 / 1.01	0.76	-0.12
2. Faculty care about me as an individual.	6.3	5.61 / 1.42	0.69	6.42	5.72 / 1.36	0.7	-0.11
4. The content of the courses within my major is valuable.	6.65	6.21 / 1.03	0.44	6.7	5.89 / 1.22	0.81	0.32**
14. Faculty are fair and unbiased in their treatment of individual students.	6.5	5.24 / 1.69	1.26	6.56	5.77 / 1.39	0.79	-0.53***
24. There is a commitment to academic excellence at this institution.	6.6	5.53 / 1.39	1.07	6.66	5.82 / 1.37	0.84	-0.29*
26. Faculty provide timely feedback about my progress.	6.51	5.20 / 1.66	1.31	6.52	5.53 / 1.46	0.99	-0.33**
32. My classes provide opportunities to improve my technology skills.	6.55	5.96 / 1.31	0.59	5.93	5.53 / 1.42	0.4	0.43***
35. The quality of instruction I receive in my program is excellent.	6.66	5.85 / 1.48	0.81	6.7	5.78 / 1.36	0.92	0.07
37. Part-time faculty are competent as classroom instructors.	6.34	5.19 / 1.63	1.15	6.48	5.70 / 1.39	0.78	-0.51***
40. Faculty are usually available for adult students outside the classroom by phone, by e-mail or in-person.	6.48	5.65 / 1.47	0.83	6.5	5.97 / 1.27	0.53	-0.32**
41. Major requirements are clear and reasonable	6.61	5.71 / 1.46	0.90	6.63	5.83 / 1.35	0.80	-0.12
42. Nearly all faculty are knowledgeable in their field.	6.61	5.82 / 1.44	0.79	6.7	6.09 / 1.18	0.61	-0.27**
49. There are sufficient options within my program of study.	6.54	5.63 / 1.49	0.91	6.46	5.44 / 1.50	1.02	0.19

Table 26

Registration Effectiveness Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
REGISTRATION EFFECTIVENESS	6.52	5.43 / 1.13	1.09	6.42	5.71 / 1.02	0.71	-0.28**
3. Classes are scheduled at times that are convenient for me.	6.63	5.58 / 1.53	1.05	6.58	5.70 / 1.46	0.88	-0.12
9. Billing policies are reasonable for adult students.	6.35	4.85 / 1.69	1.5	6.31	5.35 / 1.53	0.96	-0.50***
16. I am able to register for classes I need with few conflicts.	6.71	5.27 / 1.72	1.44	6.58	5.66 / 1.53	0.92	-0.39**
17. Business office hours are convenient for adult students.	6.43	5.29 / 1.66	1.14	6.21	5.54 / 1.42	0.67	-0.25*
20. Registration processes are reasonable and convenient for adults.	6.58	5.63 / 1.46	0.95	6.49	5.87 / 1.35	0.62	-0.24*
31. I am able to register for classes by personal computer, fax, or telephone.	6.42	5.80 / 1.40	0.62	6.4	6.01 / 1.36	0.39	-0.21
43. This institution offers a variety of payment plans for adult students.	6.45	5.07 / 1.76	1.38	6.29	5.40 / 1.54	0.89	-0.33*
45. I am able to complete most of my enrollment tasks in one location.	6.59	5.93 / 1.32	0.66	6.47	6.09 / 1.22	0.38	-0.16

Table 27

Safety and Security Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
SAFETY AND SECURITY	6.55	4.86 / 1.28	1.69	6.24	5.61 / 1.13	0.63	-0.75***
5. Classroom locations are safe and secure for all students.	6.59	6.07 / 1.31	0.52	6.41	6.28 / 1.03	0.13	-0.21*
13. The amount of student parking is adequate.	6.54	3.58 / 2.10	2.96	6.03	5.08 / 1.87	0.95	-1.50***
18. Parking lots are well-lighted and secure.	6.53	4.66 / 2.00	1.87	6.2	5.58 / 1.47	0.62	-0.92***
22. Security staff respond quickly in emergencies.	6.54	5.16 / 1.54	1.38	6.29	5.32 / 1.45	0.97	-0.16

Table 28

Service Excellence Scale Findings with Mean Difference

	Auburn University - ASPS			National Adult Students			Mean Diff.
Scale/Item	**Importance**	**Satisfaction / SD**	**Performance Gap**	**Importance**	**Satisfaction / SD**	**Performance Gap**	
SERVICE EXCELLENCE	6.4	5.18 / 1.32	1.22	6.37	5.41 / 1.30	0.96	-0.23*
7. The staff at this institution are caring and helpful.	6.37	5.39 / 1.43	0.98	6.49	5.82 / 1.32	0.67	-0.43***
29. I seldom get the "run-around" when seeking information at this institution.	6.4	4.86 / 1.74	1.54	6.47	5.35 / 1.71	1.12	-0.49***
33. Channels are readily available for adult students to express complaints.	6.33	4.97 / 1.68	1.36	6.13	4.99 / 1.74	1.14	-0.02
39. This institution responds quickly to my requests for information.	6.41	5.16 / 1.54	1.25	6.45	5.58 / 1.48	0.87	-0.42**
46. This institution provides timely responses to student complaints.	6.35	5.17 / 1.65	1.18	6.31	5.14 / 1.69	1.17	0.03
48. I am aware of whom to contact for questions about programs and services.	6.53	5.50 / 1.66	1.03	6.37	5.45 / 1.59	0.92	0.05