A Quantitative Study of Persistence Factors for First-Year Students at Urban and Residential Universities

Abigail Parsons Shiban

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A QUANTITATIVE STUDY OF PERSISTENCE FACTORS FOR
FIRST-YEAR STUDENTS AT
URBAN AND RESIDENTIAL UNIVERSITIES

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LEADERSHIP AND LIFELONG LEARNING
at the
CLEVELAND STATE UNIVERSITY
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DEDICATION

I dedicate this dissertation to my daughter, Celia Elaine Shiban. May you accomplish more than I can accomplish. May you dream bigger than I can ever dream. May you live your life full of purpose and determination. May you appreciate your past and use it to guide your future. May you take the time to listen to others and understand their stories. May you take advantage of all of life's opportunities and travel to all parts of the world. May you take time to appreciate what others have sacrificed for you. May you continue to dance with all of the stars. Thank you for giving me the determination and motivation to finish this dissertation. Thank you for bringing me such joy along the way. I love you forever and ever.
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A QUANTITATIVE STUDY OF PERSISTENCE FACTORS FOR FIRST-YEAR
STUDENTS AT URBAN AND RESIDENTIAL UNIVERSITIES

ABSTRACT

Persistence from the first to second year of college can be challenging for students at urban institutions given that they face added pressures and unique situations preventing them from persisting beyond the first year of higher education. While first-year persistence in higher education has been investigated, very little formal research exists on persistence at urban institutions. To bridge this gap, a quantitative analysis of 395 students at two urban and two residential four-year public institutions in Ohio was conducted using the Social Integration and Persistence Intentions Scale (Pascarella & Terenzini, 1980) while exploring comprehensive factors such as students' pre-college and demographic characteristics, and institutional commitments through chi-square tests of independence and multiple regressions.

The research question for the study asks: What factors impact the persistence of first-year adult learners in higher education from their first year to their second year of education? The findings demonstrated that persistence has a statistically significant relationship with ethnicity and race, hours working, living on campus, parents' education, and relationships with faculty. Additionally, attending an urban or rural university also has a statistically significant relationship with persistence. The conclusions from this study include important implications for higher education, adult learning and education, and urban education from the perspective of urban institutions.
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CHAPTER 1
INTRODUCTION TO THE STUDY

Background

For first-year students taking their first steps at a college or university, the transition can be challenging when trying to integrate socially and academically into an institution. Tinto (1993) writes that the highest proportion of students who leave higher education depart before their second year of college. This makes the first year of college integral to the success and retention of both students and educational institutions. Urban institutions face an even greater pressure because many of these students attend part-time, commute, work and have other life responsibilities such as caring for children or elders. Speculative reasons why students leave urban institutions include a lack of preparation and/or lack of academic ability. However, students attending urban institutions often enter college with pre-college characteristics, such as high school grade point average and standardized testing scores, that are similar to those of students attending traditional residential institutions.

Even though there is no conclusive explanation for what effects persistence of first-year students nationally, increasing student persistence is viewed as one of the most
important issues for most colleges and universities. American College Testing (2002) reports that persistence is greatly influenced by the type of institution; if the institution is more selective, its persistence rates are also higher. The national first-year retention rate from 2008 to 2009 was 71.9%. In other words, only 71.9% of first-year students attending a university returned to the same institution for the following year (National Center for Education Statistics, 2012). Drop-out rates at institutions can drastically range from 8.8 percent at highly selective institutions to 46 percent at open admissions institutions. This focus on persistence has caused many institutions to become more intentional on who is selected to attend the institution. The more resources that an institution has to attract students, the more likely that a high caliber student will want to attend that particular institution. Unfortunately, many students do not have the option to attend a more selective institution. These same students can also have lower persistence rates because they are not able to complete their degree in a traditional amount of time. For example, these students often struggle academically, work while attending college, attend part-time, or could be less prepared for the demands of higher education.

In order to gain a greater understanding of why some first-year students persist and others do not, it is important to consider many factors which can impact a student both socially and academically during the first year of higher education. Additionally, some students enter higher education with stronger academic preparation and a greater commitment to one’s personal goals. However, it is important to consider more than just a student’s experiences before and during college. How the student interprets these experiences and what motivates the student to continue to pursue higher education at a particular institution are also important factors. By having a greater understanding of
these factors while students are currently enrolled in their first year of higher education, institutions can use this information to plan interventions and deploy resources designed to target students at specific times to improve their persistence rates.

Conceptual Underpinnings for the Study

The first set of factors that has the potential to impact a student’s persistence is his or her pre-college characteristics. Pre-college characteristics are factors related to a student’s background and/or high school characteristics. Pre-college characteristics can include, but are not limited to, the following factors: high school grade point average, SAT/ACT score, financial need, socio-economic status, parents’ level of education, gender, and racial/ethnic origin. While previous research states that pre-college characteristics can play a role in what type of institution a student will attend, it does not necessarily predict persistence at that institution (Johnson, 2008). For example, students with higher high school grades and SAT/ACT scores have a better likelihood of attending a more selective institution and/or receiving more financial scholarships and grants. At an urban institution, however, there is also the possibility that these high achieving students will transfer to a more traditional or selective institution after completing general requirements. Regardless of a student’s academic achievement, first-generation college students also face possible risks in not having the knowledge of the college environment passed down to them, or not having the support from parents and family members.

Both students’ perceptions of faculty and student interactions also have the potential to impact a student’s persistence from the first year to the second year of higher education. Astin’s theory of involvement demonstrates that a student’s involvement
while in college can positively impact his or her persistence at the institution (Astin, 1975). After conducting a national longitudinal study on student involvement, Astin (1996) showed that the most positive forms of involvement include interactions with faculty, peers and academics. The most negative impact on student persistence was determined to be noninvolvement with campus life. Kuh, Schuh and Whitt (1991) also found that if the institution promotes active involvement on campus, students are found to be more satisfied with their quality of education and more loyal to the institution. Examples of students’ perceptions of faculty interactions include items such as the following: whether a student feels that faculty members are interested in his/her success, whether non-classroom interactions with faculty impact a student’s goals and motivation, whether a student has developed a close relationship with a faculty member, whether a student feels that the faculty member genuinely cares about teaching and is considered an outstanding teacher, and whether a faculty member is willing to spend time out of class with a student. Students’ perceptions of interactions with other peers could include the following: whether students have developed close and personal relationships with peers, whether students feel that peers have the same values and attitudes, whether it has been easy for students to make friends, and whether students feel that their relationships with peers have had a positive impact on their personal growth and attitudes. At an urban institution, a majority of the students often commute to and from campus thus limiting the time spent on campus and possible interactions with both peers and faculty outside of the classroom. "Without strong social communities on commuter campuses, the academic realm of the institution holds primary status... The classroom serves as a site for
the intersection of both social and academic dimensions of the student experience” (Braxton & Hirschy, 2005, p. 78).

The third factor related to student persistence is students’ institutional commitment and goals, or students' satisfaction with the institution and a desire to persist until graduation. Previous research has demonstrated that a student’s level of commitment to the institution can be used to predict if a student will persist at the institution or leave the institution (Allen & Nelson, 1989). Institutional commitment has also been found to have a positive impact on academic success (Berger & Braxton, 1998). Additionally, positive campus involvement has been found to increase a student’s level of institutional commitment (Berger & Milem, 1999). If students believe that others will help them and feel they are part of a supportive environment, they are more likely to ask for assistance when needed and, thus, will make more connections to the institution both academically and socially. Therefore, the higher the level of institutional commitment, the more likely students will achieve social integration. Examples of a student’s institutional commitment and goals include: whether a student feels he/she made the correct decision in attending the institution, whether the student plans to graduate from the institution, whether the student plans to enroll in classes the next year, and whether the student feels that good grades are important. Also, expectations a student derives from the admissions process regarding the mission and goals of the institution greatly impact students' initial institutional commitments. Institutions can provide stability for students when students believe that their goals coincide with the actions of the institutions. The prior is especially true during times of transition for students (Braxton & Hirschy, 2005). Due to the nature of an urban institution, often the institution is not
the student’s first choice. Because it is often necessary for the student to live at home, or continue working at his/her place of employment, attending the institution is often a matter of financial need rather than of choice. Since many students select an urban institution by convenience, these students often enter the institution with plans of transferring after their first or second year.

In 1975, Vincent Tinto formulated the integration model, also known as the theory of institutional departure, which claims that whether a student persists or drops out is quite strongly predicted by his or her degree of academic integration and social integration. As integration evolves, the level of dropouts will depend on the commitment at the time of the decision (Tinto, 1975, 1993). While Tinto's model can be applied to primarily four-year and residential universities, the model overlooks the unique aspects of commuter students at both four-year and two-year institutions. "However, no formal economic, organizational, psychological, or sociological theory that accounts for student departure in commuter colleges and universities currently exists. Instead, scholars borrow constructs derived from these theoretical orientations to guide research on commuter colleges and universities" (Braxton, Hirschy & McClendon, 2004, p. 35). Braxton, Hirschy and McClendon (2004) found that the lower the costs of attending college, the greater the likelihood of persistence at four-year institutions for commuter students. Students receiving more financial aid or any financial aid have a greater probability of persisting compared to students who receive little or no financial aid. Additionally, costs associated with attending college such as housing, books and travel expenses can have a negative impact on a commuter student's persistence.
At commuter institutions, Braxton, Hirschy and McClendon (2004) found that the higher the level of parental education, the more likely the student will depart from the institution. Furthermore, "Students whose fathers have higher levels of education are more likely to depart a commuter college" (Braxton, Hirschy & McClendon, 2004, p. 40). Both parents' educational level can have the greatest impact on student departure during the first and second semesters of college attendance. However, support from a significant other, such as a parent, high school teacher or friend, can positively impact student persistence for commuter students, including both non-students of color and students of color. Students who participate in anticipatory pre-college socialization before entering college also have a greater probability of departing from a commuter institution. If commuter students, however, participate in a community of learning that unites both the academic and social realms of the institution, these programs will positively affect the persistence of commuter students.

It is important to note that students who attend commuter institutions comprise a wide range of students, from students who are eighteen years of age, live with their parents, and attend full-time, to students with families, who work full-time, and balance school life with family life. Since commuter students often juggle multiple life responsibilities, "departure from college may result for those students aware of the negative effects of their college attendance on such significant others. Put differently, students with the personality trait of empathy tend to be more likely to depart from commuter colleges and universities" (Braxton, Hirschy & McClendon, 2004, p. 44). As previously stated, students with support from their significant others are more likely to persist. Also, the more financial aid a student receives lessens the financial burden the
student places on his or her family and positively impacts a student's persistence in college.

Persistence at a commuter institution is also highly impacted by the personality traits of students. Because commuter students generally have more off-campus commitments compared to students living on-campus, commuter students must be highly motivated to attend college and persist while in college. Students must also have high levels of self-efficacy and believe that their degree and work in college will be beneficial. At a commuter institution, students may have difficulty dealing with confusion and chaos of a commuter institution while balancing their priorities. If students require a high level of order in their lives, they are more likely to depart from the institution. This is primarily because a commuter institution does not offer the same form of structure that students typically receive in secondary school and at traditional institutions. Also, if a student needs a high level of social affiliation, he or she is more likely to depart from a commuter institution where there is a lack of social communities or difficulty in becoming affiliated with a social community. Due to the lack of social communities, academic communities within a commuter institution have a greater impact on students. "Students' perceptions of their degree of integration into the academic spheres of a commuter college or university shape their level of subsequent commitment to their chosen institution. The greater the level of academic integration perceived by students, the greater their level of subsequent commitment to the institution" (Braxton, Hirschy, McClendon, 2004, p. 48). When faculty use active learning methods in their classrooms, students can often fulfill their need for social interaction, while creating social
connections with other students. Therefore, at a commuter institution, the faculty and academic units can play a positive role on the persistence of students.

Racial and ethnic minority students are subject to the same causes of student departure at commuter institutions, but often at a heightened level. "Racial or ethnic minority students often feel pressured to spend more time with family or to oversee family matters, which decreases the amount of time available to engage in the academic and social aspects of the institution" (Braxton, Hirschy & McClendon, 2004, p. 49). Because many minority students are often the first of their family and friends to attend college, they often lack the support and motivation from significant others to aid in their persistence. Minority students also rely heavily upon financial aid to pay for college. For students that are balancing multiple priorities and who are expected to contribute to the family's income, paying for college is a hardship in which students must rely upon financial aid, or depart from the institution. If minority students do not spend time on campus outside of their courses, they are also at a higher risk of not socially integrating into the institution. Furthermore, perceived campus racial discrimination and equal treatment of students can also impact the social integration of students (Braxton & Hirschy, 2005).

Based upon Tinto’s theory of institutional departure (Tinto, 1975, 1993), Pascarella and Terenzini (1980) explored factors related to student persistence during the first year of higher education at a traditional institution in central New York. The purpose of their study was to identify institutional resources that can be used to increase student retention through carefully planned and timely interventions. Developing their own “Social Integration and Persistence Intentions Scale”, Pascarella and Terenzini
(1980) used pre-college characteristics, faculty and student interactions, and institutional commitments to predict the persistence of first-year students from their first to second year of enrollment at the institution. By adapting the instrument used by Pascarella and Terenzini (1980), this research will explore how pre-college characteristics, student and faculty interactions, and institutional commitments can be used to predict the persistence of college students from their first year to their second year of higher education at a public, urban institution.

Statement of the Problem

Institutions across the country address students leaving before the second year through a variety of interventions and services. “Students are at their most vulnerable in the first year in terms of their likelihood of academic failure and they are most at risk with respect to a range of potential social, emotional, health and financial problems” (McInnis, 2001, p. 106). McInnis (2001) further states that student progress is essential when institutions are faced with financially tight budgets. As students leave institutions, institutions lose a great amount of income as they have spent significant funds transitioning students to the institution. “The major driving force now comes from the pressure of accountability and efficiency on institutions, academics and support staff to address the problems and pitfalls facing students in the initial days and weeks of their undergraduate courses” (McInnis, 2001, p. 105).

While evidence of factors contributing to first-year persistence has been investigated, minimal research has looked at first-year persistence at urban institutions. Furthermore, while much of the research only looks at individual factors related to a sample, research currently does not exist which addresses comprehensive factors related
to first-year persistence at urban institutions. As the economy shifts, in the effort to make higher education a necessity for many individuals, urban institutions are experiencing a great influx of students due to their location and affordability. As students often need a higher level of training and skills to enter the workforce, it is often the responsibility of the institution to prepare students for their career paths. Furthermore, as higher education institutions are experiencing a drastic change in their funding formulas resulting from financial cuts from both the state and national governments, it is often up to the institution to primarily rely upon student tuition dollars to operate at an affordable cost to students. Given that urban institutions experience a higher dropout and stop out rate compared to traditional institutions, it is a necessity for the institution to retain as many students as possible for its financial security. Additionally, by contributing to the growth of qualified and trained professionals, urban institutions play a role in creating a strong workforce for the community and its surrounding businesses.

The existing problem is that urban institutions often face more challenges and experience lower retention rates when compared to overall national results. Natalicio and Smith (2005) explain:

This dichotomy between types of higher education institutions is powerfully reinforced by such publications as *U.S. News and World Report*, whose use of traditional measures of academic success (average SAT scores of entering students, endowment size, and graduation rates, for example) leads to rankings that place traditional universities at the top and access-focused urban institutions at the bottom. (pp. 156-157) The President of St. John's University, Christopher Nelson (2002) writes, "The kinds of data used to represent schools in the *U.S. News and World Report* survey are not
indications of academic excellence... Even if the raters do single out a good school, they do not point out for whom that school is a good choice and why” (p. 56).

Institutions use two main metrics to nationally compare the persistence of students: the first-year retention rate (the percentage of first year students that continued to the second year of college) and the graduation rate (the percentage of first-year students who graduated within 150% of the expected time to graduate, or six years). The most recent national data for first-year retention is from 2008 to 2009, and the most recent national data for the six-year graduation rate is from 2002 to 2008. The national first-year retention rate from 2008 to 2009 was 71.9%. In other words, only 71.9% of first-year students attending a university returned to the same institution for the following year. The current national six-year graduation rate is 57%. In other words, only 57% of the students who started as a first-year college student in the country graduated from the same institution within six years. Of these students, the six-year graduation rate for African American students is 40.1% and 48.9% for Hispanic students. The national average for six-year graduation rates for public universities is 54.9% overall with even lower percentages for African American and Hispanic students at public universities (National Center for Education Statistics, 2012).

For urban institutions, both six-year graduation rates and first-year retention rates are often much lower than the national averages. As an example, Youngstown State University, an urban institution in Ohio had a 34% six-year graduation rate for the 2003 cohort of first-year students. The first-year retention rate for Youngstown’s first-year students from 2008 to 2009 was 70% for full-time students and 42% for part-time students. Cleveland State University, an urban public institution in Northeast Ohio, had
an even lower six-year graduation rate for the 2003 cohort of first-year students of 29%.
The first-year retention rate from 2008 to 2009 was 66% for full-time students, also lower
than Youngstown and the national averages (IPEDS Data Center, 2012). Furthermore,
*U.S. News and World Report* ranked Cleveland State University as the eighth lowest first-
year retention rate for national universities based upon the average proportion of first-
year students returning to the same institution the following year from 2006 to 2009
(“Freshman Retention Rate”, 2012). While the rates may or may not be an indicator of
academic excellence, it is apparent that urban institutions often face more challenges
related to enrollment and retention compared to traditional peer institutions.

Despite efforts to increase retention through providing a number of interventions
and services designed to help first-year students academically and socially, both
Cleveland State and Youngstown State still fall behind a majority of institutions in the
state as well as nationally. As the institutions’ budgets are being significantly reduced
because of receiving less support from the state government, it is even more important for
institutions to rely upon a healthy student enrollment to support them financially.
Unfortunately, there are only speculations regarding why these students are leaving the
institution. While some suggest that students are academically failing, many of the
students that leave fall within the A to B grade point average range. Some suggest it is
the lack of involvement on campus; however, the number of student organizations and
campus programs continues to increase each year. Some believe that students do not
receive enough financial assistance, yet Cleveland State has made great strides in
providing more merit scholarships each year in addition to Pell grants and other need-
based grants (Cleveland State University Admissions, 2012). Cleveland State also
provides state-of-the-art campus facilities as a result of a 500 million dollar master plan, including new residence halls, a new recreation center, new academic buildings, and a new student center. Thus, it remains clear that first-year students are leaving urban institutions at an overwhelming rate; however, no comprehensive evidence exists to explain this phenomenon.

Purpose of the Study

The purpose of this study is to explore factors relating to first-year persistence for both urban institutions and residential institutions in the state of Ohio. By exploring comprehensive factors relating to persistence, such as students’ pre-college characteristics, students’ perceptions of peer and faculty interactions, and students’ institutional commitments and goals, this proposed study seeks to provide a clearer picture on why first-year students are leaving institutions located in the urban context and to examine what factors may be unique to urban institutions. As most research explores demographic and pre-college characteristics of first-year students (i.e., standardized test scores, ethnicity, gender and parents’ educational attainment), this researcher will also investigate how experiences during the first-year of higher education might also play a significant role in retention and graduation (i.e., formal and informal relationships with peers and faculty, institutional commitment). Results from this proposed investigation have the potential to benefit both future researchers and administrators. While this study is quantitative in nature, the results can be used to support the need for future research, such as more in-depth qualitative research. For administrators at urban institutions, the research can impact strategies used to recruit students, as well as programs and services designed to retain students. Gaining a greater understanding of students’ perceptions and
commitments can also allow administrators to target key populations of students that might be "at risk" for leaving the institution. Throughout this study, the researcher will survey students on items related to first-year persistence in the first year of higher education to learn how students' attitudes and experiences change based upon whether a student attends an urban or residential institution. Because little formal research on first-year persistence at urban institutions exists, this research will add to the body of knowledge by showing first-year persistence from a new perspective that is different from most residential institutions.

Research Questions

The purpose of this study is to explore first-year students’ persistence at two public urban four-year higher education institutions in Ohio and two public traditional residential four-year higher education institutions in Ohio. This study will seek to explore five factors which influence the persistence of first-year adult learners in higher education. The five factors include: (1) peer-group interactions, (2) interactions with faculty, (3) faculty concern for student development and teaching, (4) academic and intellectual development, and (5) institutional and goal commitments (Pascarella & Terenzini, 1980). The focus of this study will be driven by the following four research questions:

(1) To what extent do the five factor groups explain persistence among first-year undergraduate students?

(2) To what extent do the personal independent variables influence persistence among first-year undergraduate students?
(3) To what extent do the contextual independent variables influence persistence among first-year undergraduate students?

(4) To what extent do the institutional independent variables influence persistence among first-year undergraduate students?

Significance of the Study

This research study will focus on examining factors that influence first-year persistence of adult learners in higher education. Findings of this study will contribute to the minimal literature currently available regarding persistence, first-year students and higher education in the urban context. The study further interrogates the relationship between persistence, first-year students, and institutional context. The results of this study can be used to determine factors related to persistence of students at both traditional institutions and urban institutions at certain points of time within the first-year of higher education. These results can be used by administrators, faculty and student support services in determining and providing services to encourage persistence of first-year students. Information related to persistence can be useful by the President and upper administration when making decisions based upon spending, financial aid and support services. The results can also be used by higher education and adult learning graduate students to enhance their learning of college student development theories and to equip them to be better informed as a practitioner in higher education. Faculty and staff within higher education can use the results to better understand the whole development of students as it relates to both academic and scholastic interests of students. Finally, the results can be shared with parents, guardians and influential others of first-year college
students to aid in better understanding and fostering the transition and challenges for students attending urban institutions.

Limitations, Assumptions and Design Controls

Currently, many limitations exist for this study. The first limitation is generalizability, making sure the responses are unique to the institutions in the survey. The next limitation is ensuring that the sample is representative of the population. By sampling students based upon certain courses, one risks the chance of not sampling students that may be unique to the population, such as nontraditional students. There is no control over who self selects to be in the survey. Another limitation is intervening factors such as any unique personal experiences of participants which cause them to end their participation in the study. Additionally, making sure that students answer the questions honestly and truthfully could be viewed as a limitation.

A theoretical limitation of the study is that a low persistence rate from the first year to the second year of higher education may be attributable to the student, rather than the institution. Despite efforts of the institution to promote high student outcomes and achievement, students may still not succeed if there are other reasons for non-success due to elements of a student's life plan from the first year to the second year of college. Far too often this occurs at urban institutions where students are balancing multiple life roles and commitments while still trying to earn a college degree.

Definitions of Key Terms

For the purpose of this study, the following operational definitions were used and considered germane in understanding this research. Because all institutions are required to submit data on enrollment, graduation and financial aid to the U.S. Department of
Education through the Integrated Postsecondary Education Data System (IPEDS) and then this data is compared and ranked based upon the common data definitions; it was appropriate to be consistent with the IPEDS data definitions and statistics throughout this document. Therefore, many of the definitions are directly from the IPEDS glossary for the sake of reliability.

**Adult learner:** Any adult seeking any type of advanced knowledge for personal or professional goals. In contrast to the traditional student, adult learners are diverse and heterogeneous in which a single definition may not apply; these students are typically characterized by "older age, commuter status, priorities outside the institution, and part-time attendance" (Copland, 1990).

**Adult learning:** The lived experiences of adults in both formal and informal academic settings. "Activities intentionally designed for the purpose of bringing about learning among those whose age, social roles, or self-perception define them as adults" (Merriam & Brockett, 2007, p. 7).

**Andragogy:** The study of adult learning; demonstrates how adults are autonomous and self-directed in their learning; "a way of thinking about working with adult learners" (Knowles, 1980; Merriam & Brockett, 2007; Sipe, 2001).

**Associate’s college:** A classification of institutions that offers associate degrees and certificates, but rarely awards any bachelor’s degrees (IPEDS Data Center, 2012).

**Associate’s degree:** “An award that normally requires at least 2 but less than 4 years of full-time equivalent college work” (IPEDS Data Center, 2012).
Bachelor's degree: "An award (baccalaureate or equivalent degree, as determined by the Secretary, U.S. Department of Education) that normally requires at least 4 but not more than 5 years of full-time equivalent college-level work" (IPEDS Data Center, 2012).

Black or African American: "A person having origins in any of the black racial groups of Africa" (IPEDS Data Center, 2012).

Cohort: "A specific group of students established for tracking purposes" (IPEDS Data Center, 2012).

Commuter institution: An institution in which the majority of students do not live in institution-owned housing.

Commuter student: “All students who do not live in institution-owned housing. Their numbers include full-time students of traditional age who live with their parents, part-time students who live in rental housing near the campus, and adults who have careers and children of their own” (Jacoby, 1989, p. 5).

Degree: "An award conferred by a college, university, or other postsecondary education institution as official recognition for the successful completion of a program of studies" (IPEDS Data Center, 2012).

Degree of urbanization: "A code representing the urbanicity (city/suburb/rural) by population size of the institution’s location. This urban-centric locale code was assigned through a methodology developed by the U.S. Census Bureau's Population Division in 2005" (IPEDS Data Center, 2012).

Drop out: A student who has left the institution and no longer returns to any form of higher
education.

Financial aid: "Federal Work Study, grants, loans to students (government and/or private), assistantships, scholarships, fellowships, tuition waivers, tuition discounts, employer aid (tuition reimbursement) and other monies (other than from relatives/friends) provided to students to meet expenses. This excludes loans to parents" (IPEDS Data Center, 2012).

First-generation students: "Those whose parents' highest level of education is a high school diploma or less" (Ishler, 2005).

First-time student (undergraduate): "A student who has no prior postsecondary experience (except as noted below) attending any institution for the first time at the undergraduate level. This includes students enrolled in academic or occupational programs. It also includes students enrolled in the fall term who attended college for the first time in the prior summer term, and students who entered with advanced standing (college credits earned before graduation from high school)" (IPEDS Data Center, 2012).

First-year student: "A student who has completed less than the equivalent of 1 full year of undergraduate work; that is, less than 30 semester hours (in a 120-hour degree program) or less than 900 contact hours" (IPEDS Data Center, 2012).

Freshman: A term commonly used in vernacular language to describe a ‘first-year student’ (see above definition). The more appropriate term used should be ‘freshperson’.
Graduation rate: The number of first-time, full-time degree-seeking students from a certain year that complete their degree within 150% of normal time to completion (i.e. typically six-years) (IPEDS Data Center, 2012).

Hispanic or Latino: "A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race" (IPEDS Data Center, 2012).

Institutional commitment: A student's commitment to the institution where he or she is enrolled (Tinto, 1993).

Institutional departure: Students that depart from an individual institution (Tinto, 1993).

Integrated Postsecondary Education Data System (IPEDS): "The Integrated Postsecondary Education Data System (IPEDS), conducted by the National Center for Education Statistics (NCES), began in 1986 and involves annual institution-level data collections. All postsecondary institutions that have a Program Participation Agreement with the Office of Postsecondary Education (OPE), U.S. Department of Education (throughout IPEDS referred to as “Title IV”) are required to report data using a web-based data collection system" (IPEDS Data Center, 2012).

Land grant institution: "A land-grant college or university is an institution that has been designated by its state legislature or Congress to receive the benefits of the Morrill Acts of 1862 and 1890. The original mission of these institutions, as set forth in the first Morrill Act, was to teach agriculture, military tactics, and the mechanic arts as well as classical studies so that members of the working classes could obtain a liberal, practical education" (IPEDS Data Center, 2012).
Nontraditional students: “Can be from any part of the country; from rural or urban settings; rich or poor; black, white, or Hispanic; 18 years old or older; not employed, working full or part-time, or retired; male or female; with or without dependents; married, single, or divorced; and enrolled for vocational or avocational reasons in a single course or in a degree or certificate program. Due to this heterogeneity it is very difficult to develop a profile of a typical nontraditional student” (Bean & Metzner, 1985, p. 488).

Pell Grant program: (Higher Education Act of 1965, Title IV, Part A, Subpart I, as amended.) Provides grant assistance to eligible undergraduate postsecondary students with demonstrated financial need to help meet education expenses (IPEDS Data Center, 2012).

Persistence: The continuation of post-secondary higher education from semester to semester. For institutions, this includes a minimally acceptable grade point average in order to earn a degree. For students, this also includes their desire, willingness and ability to remain enrolled at an institution. Most research measures persistence as the continuation from the first to second year of higher education at the same institution (Ishler & Upcraft, 2005).

Race/ethnicity: "Categories developed in 1997 by the Office of Management and Budget (OMB) that are used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. The designations are used to categorize U.S. citizens, resident aliens, and other eligible non-citizens." The categories include: Hispanic or Latino, American Indian or Alaska Native, Asian,
Black or African American, Native Hawaiian or Other Pacific Islander, and White (IPEDS Data Center, 2012).

**Residential institution:** A post-secondary higher education institution in which the majority of students live on campus, especially first-year students. Many residential institutions often require first-year students to live on-campus. Students who live off-campus typically live in surrounding neighborhoods.

**Retention rate:** "A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall" (IPEDS Data Center, 2012).

**Standardized admissions tests:** "Tests prepared and administered by an agency that is independent of any postsecondary education institution. Tests provide information about prospective students and their academic qualifications relative to a national sample. Examples are the SAT and the ACT" (IPEDS Data Center, 2012).

**Stop out:** "A student who left the institution and returned at a later date" (IPEDS Data Center, 2012).

**Student activities:** "Programs designed to support and complement the institution’s academic mission and enhance the educational experience of students, individually and through student groups. Includes exposure to and participation in
social, cultural, recreational, intellectual, and governance activities" (IPEDS Data Center, 2012).

**System departure:** Students that depart from the entire education system (Tinto, 1993).

Also referred to as drop-out previously listed.

**Transfer-in student:** “A student entering the reporting institution for the first time but known to have previously attended a postsecondary institution at the same level (e.g., undergraduate, graduate). The student may transfer with or without credit” (IPEDS Data Center, 2012).

**Transfer-out student:** "A student that leaves the reporting institution and enrolls at another institution" (IPEDS Data Center, 2012).

**Urban adult learner:** An adult learner participating in higher education at an institution in an urban context.

**Urban context:** "The social and environmental situations that inform the lived experiences of individuals, groups, and communities that reside in densely populated urban areas" (Martin, 2004, p. 3).

**Urban public institution:** An institution located in the urban context whose "primary mission... is to offer quality higher education programs to residents of a particular geographical region, for whom the institution may represent the only opportunity for professional and personal growth and development" (Natalicio & Smith, 2005, p. 156). These institutions are often characterized as "access driven" rather than a traditional or residential based institution.
CHAPTER 2
REVIEW OF RELATED LITERATURE

Introduction

At higher education institutions, retention is a significant issue causing institutions to invest time and resources in creating programs and conducting research to better understand why some students persist while others leave college campuses. The current national six-year graduation rate is 57% for first-year students who started college in 2002. In other words, only 57% of the students who started as a first-year college student in the country graduated from the same institution within six years (National Center for Education Statistics, 2012). Furthermore, “the likelihood of earning a college degree, especially a four-year degree, is more strongly associated with measures of individual ability than with socioeconomic status (Tinto, 1993, p. 30). When focusing on student departure during the first year, “the largest proportion of institutional leaving occurs in that year and prior to the beginning of the second year” (Tinto, 1993, p. 14). “Students fail to persist to their second year (and ultimately graduate) for a wide variety of reasons and at different rates for demographically different institutions” (Miller, Janz & Chen, 2007, p. 49). The significant number of students who leave institutions before
their second-year of higher education has made “first-to-second-year retention the most critical on the persistence continuum” (Miller, Janz & Chen, 2007, p. 48). “As higher education continues to be transformed by market pressures, changing levels of financial support, and the impact of technology, it is more important than ever before to understand and deliver the essential first-year experience for students” (Barefoot, 2005, p. 63).

The theoretical model used to show the importance of facilitating students’ college adjustment is Vincent Tinto’s integration model, also known as the theory of institutional departure. In 1975, Tinto formulated this model that claims whether a student persists or drops out is quite strongly predicted by their degree of academic integration and social integration. As the integration evolves, the level of dropouts will depend on the commitment at the time of the decision (Tinto, 1975, 1993). The following is Tinto’s (1993) explanation of his model:

Interactive experiences which further one’s social and intellectual integration are seen to enhance the likelihood that the individual will persist within the institution until degree completion, because of the impact integrative experiences have upon the continued reformulation of individual goals and commitments. Positive integration serves to raise one’s goals and strengthen one’s commitments both to those goals and to the institution within which they may be attained. (p. 116)

Tinto (1997) expanded his model stating the limitations of a two-dimensional graphical model of retention showing academic and social experiences as two separate boxes. “A more accurate representation would have academic and social systems appear as two nested spheres, where the academic occurs within the broader social system that pervades the campus” (Tinto, 1997, p. 619). This new view of persistence demonstrates how academic and social experiences are interwoven together, but also how social experiences can develop from academic experiences.
When looking at causes for students leaving college, Tinto believes that many reasons may arise from the failure to become integrated in either of the above mentioned dimensions. Tinto maintained that effective retention strategies help students evolve developmentally during this transitional period” (Miller, Janz & Chen, 2007, p. 50). “According to Tinto’s (1975, 1993) model, college student retention begins with the assimilation of students into the academic and social communities of an institution” (Lang, 2007, p. 11). Tinto (1997) writes, “Here is where we need to invest our time and energies in a fuller exploration of the complex ways in which the experience of the classroom comes to shape both student learning and persistence” (p. 619).

Adult Learning

The concept of adult learning was first introduced by Knowles in 1970, despite being viewed as a controversial theory for its time. Unlike the previous model of learning based upon adolescents known as pedagogy; 'andragogy', the study of adult learning, demonstrated how adults are autonomous and self-directed in their learning (Knowles, 1980; Sipe, 2001). Merriam and Brockett (2007) further defined andragogy as "a way of thinking about working with adult learners" (p. 135). Knowles' concept of adult learning progressed adults to 'increasing self-directedness' and to 'performance-centered' along their development. Tough (1971) expanded the theory of andragogy to include both formal and informal learning. Adults can learn in their everyday situations, especially when environment supports the well-being of learners. Mackeracher (2004) further explains that adult learning can take place either due to learning or due to aging and developmental processes. Adult education activities in today’s society are constantly changing and evolving. It is important to recognize adult learning as more than just a
cognitive process, but as a holistic and non-linear approach to learning. Today, the historical and sociocultural contexts play an important role within adult learning. Thus, it is necessary for adult educators to be in touch with today’s society as well as to think seriously, creatively, and holistically about their approach to adult learning and development.

Copland (1990) further explores the first-year adult learner. Copland (1990) views first-year adult learners as nontraditional students, in which a single definition cannot apply, because it is such a diverse and heterogeneous group of students. While the first-year adult learner can be characterized as "older age, commuter status, priorities outside the institution, and part-time attendance", first-year adult learners can have similarities with the traditional-aged first-year student. Both traditional and nontraditional adult learners still experience many of the same academic and developmental anxieties and pressures such as managing one's time, fear of one's academic ability, pressures of fitting in, and adjusting to a new and different environment.

Despite criticism over the outcomes of adult learning, there is something special about adult learning and development (Gravani & John, 2005). Although many researchers would argue that adult learners differ from young learners, consensus on this issue has yet to be reached (Kerka, 2002). Researchers have criticized andragogy for over-generalizing the adult population and placing adults into ‘groups’ or ‘categories’ based solely on preconceived notions instead of acknowledging that distinct differences amongst adults exist. Adults have been characterized by societal expectations, rather than as they really are (Sipe, 2001). Other researchers suggest that pedagogical practices
make the same assumptions except with a different population: children (Tice, 1997). Another criticism of adult learning is that some researchers describe adult learning as an extremely complex and difficult process (Merriam & Caffarella, 1999), whereas other researchers simplify the process (Haggis, 2002). The one thing that most adult educators have in common, regardless of the context or participant demographics, is that facilitating learning and development is the primary focus of adult education (Merriam, 2008).

The Role and History of Colleges and Universities and Adult Learners in the United States

Over the past three hundred years, the role of colleges and universities in the United States has continued to evolve with changing institutions and changing roles of the adult learner. Using English universities as a model, the original American institutions were elaborate centers of learning with not just beautiful facilities, but with a mission to develop character amongst students (Thelin, 2003). While this can still be true of institutions today, institutions continue to evolve to provide the best possible services and experiences to make higher education attainable and accessible. Regardless of the beauty or type of institution, the purpose of the institution remains the same, to provide student learning.

By the end of the Colonial Period in 1789, the United States boasted nine colleges that were modeled after European higher education institutions. The original college, Harvard College, served as a model for other institutions, while at the same time, each institution still remained unique and independent. Even though most students were affluent and could afford to travel to Europe for their education; the trip was extremely costly, dangerous and lengthy for the Colonial era (Cohen, 1998; Cohen & Kisker, 2010).
The primary adult students attending institutions in this era were caucasian boys, much younger than today's first-year students. Even if women could pass the admission entrance tests, they were not allowed to participate in higher education (Thelin, 2011). Further, colleges in this time period served as boarding schools, in which faculty and college Presidents were responsible for the growth and moral development of students as well as for discipline. Assaults, drunkenness and gambling were rampant on college campuses (Lucas, 2006). In many aspects, institutions served as apprenticeships for students in which students only attended for one or two years prior to entering the workforce (Thelin, 2003).

Many institutions prepared students to be public servants, dignified officials and teachers. During the colonial period, institutions saw it important to train individuals to be teachers in order to reform Native Americans in the new world. A second type of institution emerged that was aligned with the church preparing young men to work in the clergy (Cohen, 1998). Despite the type of institution, "The colleges provided an avenue of mobility for young men, prepared ministers, and assisted in the formation and maintenance of an elite group of public servants at a time when there was no specialized training for government, teaching, librarianship, or medical practice" (Cohen & Kisker, 2010, p. 55). Because colleges and universities were tied so closely to the church, institutions tried to assimilate Native Americans into the higher education system, with the goals of conversion to Christianity and the proper way of living. Unfortunately, exposure to the colonists and departure from tribal life quite often resulted in disease, death and alcoholism of Native Americans (Thelin, 2011).
From 1790 to 1869, the country became over-saturated with higher education institutions, growing in number from eleven to two hundred and forty. Much of the growth was a direct result of America's expansion due to the Louisiana Purchase, but sects of religious organizations were constantly creating small private institutions in the newly found western cities (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2003; Thelin, 2011). Whereas England had four institutions with a population of twenty-three million, the state of Ohio had thirty-seven institutions with only three-million people (Lucas, 2006). The definition of a college was now expanded to any type of school or training institution such as technical institutes, academies, seminaries and professional schools. Institutions also started emulating the German model of higher education by introducing the Ph.D. as the qualification for teaching. Funding for institutions was still scarce and institutions relied heavily upon donations and tuition to stay open. Most institutions were characterized by small numbers of enrollment, so institutions were constantly recruiting students and marketing themselves (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2003; Thelin, 2011).

With the formation of new states in the country, many states began chartering state colleges starting in the 1780s. Most of the states provided land for institutions, but funds were still scarce and states could not fully support these state colleges. The federal government also played a role in providing land to institutions. The first institution endowed by the federal government was Ohio University in 1789, after the sale of 750,000 acres from the Ohio Company. Ohio University was modeled after Yale, the alma mater of a principal in the Ohio Company (Cohen, 1998). The Morrill Act of 1862 also played a significant role in the development of colleges and universities. Through
federal money and private funds, states received acres of land for the creation of colleges. It was intended that these colleges focus on science and research, primarily related to agriculture and mechanic arts (Cohen, 1998; Thelin, 2003). "Thus, instead of preparing social revolutionaries, they trained young people to take their place within the established community, furthering the common welfare" (Cohen, 1998, p. 109). The new land grant institutions were not without skepticism, especially from the agriculture community in which a college degree was not necessary. "In an era when land was still abundant and crops could be raised without intensive cultivation, academic theory of any sort was highly suspect" (Lucas, 2006, p. 156).

Students during this time period also continued to evolve. Campuses were no longer solely composed of homogenous caucasian males, as during the colonial period. While many students could still not afford to attend college at all, many first-generation college students started attending the newly established schools. These students often had to work while attending college, but many students also benefited from scholarships. By the 1850s, women also entered higher education. Often, they were at all-female institutions, which were not degree-granting. Oberlin College in Ohio was the first institution to be coeducational by both gender and race. Additionally, African American colleges in the United States were founded during this time period. These schools were funded by a combination of federal and state money, donations from philanthropists, and money from African American churches. The Morrill Act was also extended to any African American institution providing education in agriculture and mechanical arts (Thelin, 2003; Thelin, 2011). While much of the literature overlooks Latino students during this time period, the Treaty of Guadalupe in 1848 allowed Latino students the
right to participate in higher education. Latino students were often the first students to enroll in the far west institutions such as Santa Clara and the University of California at Berkeley (Tudico, 2010). Finally, federal money was also allocated for Native Americans wishing to enter higher education, although this meant assimilating into few institutions welcoming Native American students (Thelin, 2003; Thelin, 2011).

Colleges and universities continued to grow and transform from 1870 to 1944. Not only did the country expand in terms of its size, it also transformed as a result of the Civil War, the Great Depression, World War I and World War II, providing access to many individuals who did not have access in the past due to socio-economic status, gender or ethnicity. During this time period, many new types of colleges evolved such as specialized colleges, normal schools, junior colleges and colleges for specific interests, gender and ethnicities. This period also marked the birth of urban universities, as institutions were built in cities to make higher education accessible to working adults. Many institutions, especially urban institutions, catered to working adults by offering part-time and summer enrollments (Cohen, 1998; Cohen & Kisker, 2010; Lucas, 2006; Thelin, 2011). Two of the earliest urban institutions, Cincinnati and Toledo (both in Ohio), provided a momentum for other municipal institutions (Lucas, 2006).

Because primary and secondary education was now compulsory in many states, many doors opened for students who previously did not have the opportunity to attend college (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2011). "But the most prominent element in the transformation was the emergence of the university - an institution complete with an undergraduate college, professional schools, graduate departments, and a wide range of service components" (Cohen, 1998, p. 103). While advanced degrees
were flourishing, it was now necessary to further one's education for the fields of business, journalism, engineering, education and law, rather than just seeking an apprenticeship as in the earlier periods (Cohen, 1998; Cohen & Kisker, 2010).

While access for women and minority students expanded during this period, they still did not have the same privileges as Caucasian men attending colleges and universities. Even though slaves living in the South were free as a result of the Civil War, Jim Crow laws still considered African Americans as separate but equal, especially as it related to education. In 1890, the second Morrill Act stipulated that appropriations would not go to states that denied admission on the basis of race, unless they also provided separate but equal facilities (Cohen, 1998; Cohen & Kisker, 2010). Even though women and minority students were entering the doors of higher education, it was not without discrimination both academically and within the campus life. Women who advanced through higher education were often steered towards programs such as home economics or faced further discrimination upon entering the workforce (Lucas, 2006; Thelin, 2003; Thelin, 2011).

African American students were not only discriminated against by selective admissions policies that denied their entrance to institutions, they were not allowed to participate in campus activities or live in campus housing, even at large state institutions such as the University of Michigan and Ohio State University (Lucas, 2006; Thelin, 2011). Even Jesse Owens, an Olympic gold medalist track star, who received only a small scholarship for track and field at Ohio State University, had to support himself by working at a dry cleaners because he was forced to live off-campus (Thelin, 2011). Asian Americans, often absent from the literature of higher education's history, also faced
discrimination during this time period. Because colleges often enrolled Asian international students, most institutions did not view Asian American students as a threat. However, many institutions still set quotas to limit the number of minority students enrolled on campuses, and many Asian Americans still faced anti-Asian sentiment at higher education institutions (Lee, 2010).

The period of time from 1945 to the 1970s was the largest boom in education, but was also burdened with student discontent. This time period saw the birth of state-wide systems of higher education, branch and regional campuses, community colleges, and distance learning. The benefit of these systems was that they provided access to students requiring developmental programs, prior to advancing to the four-year institution. The role of community colleges varied from technical or professional institutes to adult basic education and literacy programs to pre-baccalaureate programs. The Servicemen's Readjustment Act, also known as the G.I. Bill, allowed veterans from World War II to enter higher education, especially at the community college, to gain professional skills. The effects of this program caused a spike in enrollments and provided revenue to institutions from the federal government (Cohen, 1998; Cohen & Kisker, 2010; Lucas, 2006; Thelin, 2003; Thelin, 2011). In 1946, President Truman created the Commission on Higher Education that "marked the first a president of the United States deliberately extended federal inquiry into nationwide educational issues; the Tenth Amendment of the Unites States Constitution customarily reserved the topic for state and local government" (Thelin, 2011, p. 268). The door opened for the federal government's role in the administration and accountability of higher education.
During this era of higher education, the Civil Rights movement was at its height. In 1954, the Supreme Court ruled that separate educational facilities were unequal in *Brown v. Board of Education of the City of Topeka*. This ruling was extended to higher education in *Florida ex re. Hawkins v. Board of Control* in 1956. Furthermore, the Office of Civil Rights ensured that every institution had a proportionate number of minorities on its staff. Title IX of the Educational Amendments of 1972 extended rights to women by ensuring that females were proportionately represented and not biased based upon gender in any program or activity (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2011). Section 504 of the Vocational Rehabilitation Act of 1973 provided equal access for students with disabilities to all buildings and facilities (Thelin, 2003).

During the 1980s and 1990s, growth began to subside in comparison to previous eras. Growth did continue, however, because a college degree now became a necessity to enter the workforce (Cohen, 1998; Cohen & Kisker, 2010). One of the largest changes was the increasing role of state and federal governments in institutions. The federal government provided access to those who could not afford higher education by providing Pell Grants and other forms of financial aid for students. An important feature of the Pell Grant was that the aid was portable; the Pell Grant was attached to the student, rather than the institution. Additionally, institutions were now accountable to both state and federal governments to report student outcomes and achievement (Thelin, 2003; Thelin, 2011). “Because federal involvement in postsecondary education is primarily limited to direct student aid, research funding, and specific categoricals, state governments have inherited a leading role in educational reform through policies designed to improve institutional accountability and productivity” (Alexander, 2000, p. 419).
This time period was not without its own challenges. Institutions began increasing tuition and predicting financial decline. Many of the additional expenses resulted from an increase in services that had been added during previous decades, such as career services, residential services and student activities. Federal and state governments also had competing priorities, leaving little money for higher education (Thelin, 2003). Private colleges suffered greatly and relied heavily upon endowments and donations (Cohen, 1998; Cohen & Kisker, 2010). Enrollment in community colleges remained steady, as forty-five percent of students represented first-year students and over fifteen percent of students were age forty or older. The largest growth in higher education occurred in proprietary schools, or for-profit schools. While these schools existed in the early nineteenth century, often as business schools, it was not until the Higher Education Act of 1972 which allowed students attending proprietary schools to receive federal aid. This amendment caused proprietary schools to flourish in the 1980s (Cohen, 1998; Cohen & Kisker, 2010).

The 1990s and 2000s continued to see a growth in enrollment and institutions despite skyrocketing costs for education. "By 2000 certainty and coherence of the undergraduate campus experience had been diffused and diluted" (Thelin, 2003, p. 19). Institutions now service commuter students, and women are now the majority of students in higher education. Not only do women and minority students have access to higher education, but women and minority students now hold high leadership roles on campuses - within administration, student organizations, and student governance associations - and they increasingly work within faculty. The most prominent change on campuses in the twenty-first century has been the presence and utilization of the Internet. Not only do
students have resources and courses offered online, but virtual institutions are a strong competitor to traditional institutions. This development has opened the door for many adult and nontraditional students due to the flexibility and ease of obtaining a college degree without the confines of the traditional institution (Thelin, 2003; Thelin, 2011).

Adult Participation in Higher Education

During higher education’s history, the composition of adult participation has changed significantly. Only Caucasian affluent males attended institutions of higher learning during the 1700s, and they were typically only fourteen or fifteen years old (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2003; Thelin, 2011). "College life was designed as a system for controlling the often exuberant youth and for inculcating within them discipline, morals and character" (Cohen & Kisker, 2010, p. 27). In the 1800s, the average age increased to eighteen years old. Because many of the institutions still served as boarding schools, the concept of in loco parentis emerged, making institutions responsible for students’ behavior and discipline. As state colleges and Midwestern colleges opened, the population began to include less affluent and first-generation college students (Cohen, 1998; Cohen & Kisker, 2010; Lucas, 2006; Thelin, 2003; Thelin, 2011). By 1869, Oberlin College became the first institution in the country to admit African Americans and women (Cohen, 1998). Also, women's colleges were established during this time period, as a result of the high number of casualties from the Civil War, resulting in women entering the workforce and providing for themselves financially. Furthermore, the earliest of the Historically Black Colleges and Universities (HBCU's) can be dated back to this time period. While some HBCU's can be traced before the Civil War, the majority were established after the Civil War to provide education to former slaves with
the assistance of federal money, philanthropists and religious organizations (Hurtado, 2003).

As a result of an increasing pool of high school graduates and a greater need for professional training, student enrollment more than tripled from the late 1800s to 1945. "The belief that education could serve as a means of ascending from lower to middle class and from middle to upper class was growing steadily" (Cohen & Kisker, 2010, p. 123). Female enrollment increased from twenty percent to over thirty-three percent. "By the 1930's a student personnel point of view had been codified, that is, the belief that a college was responsible for all aspects of a young person's life, including emotional and psychological characteristics as well as learning and cognitive development" (Cohen & Kisker, 2010, p. 131).

The number of African American students enrolled in colleges also increased during this time period. In 1896, *Plessy v. Ferguson* ruled that facilities for African American and white students must be 'separate but equal'. This led to the creation of the Second Morrill Act of 1890, which provided land-grant assistance to both Historically Black Colleges and Universities (HBCU's) and Predominantly White Institutions (PWI's). The Second Morrill Act of 1890 and the creation of nineteen additional institutions for African American students increased the number of African Americans enrolled in colleges and universities, and made higher education more accessible for African American students by Congress (Hurtado, 2003).

From 1945 to 1975, the student body changed dramatically in size and in its make-up. Higher education enrollment reached eleven million by 1975, as one-third of students were of age twenty-five or older, and the number of females equaled the number
of males (Cohen, 1998; Cohen & Kisker, 2010). World War II and the G.I. Bill contributed to increased enrollment and the number of adults participants at community colleges and branch campuses soared. Financial aid also made higher education accessible to practically anyone with the desire to further their education (Cohen, 1998; Cohen & Kisker, 2010; Thelin, 2003). Most importantly, the role of minority students in education also continued to evolve during this time period. In 1954, *Brown v. Board of Education* overturned the 'separate but equal' ruling from *Plessy v. Ferguson* in 1896. The Supreme Court ruled that 'separate but equal' was unconstitutional and that public education from primary to higher education should be desegregated. The goal of the Supreme Court was to provide African Americans equal opportunity to education (Hurtado, 2003).

During the 1960s, student discontent was at an all time high. Due to the boom in enrollment, institutions began offering classes with more than one hundred students, and students did not have the individual attention or access to faculty as they had in the past. Additionally, the political and social events during the time created a culture on campuses of student activism. Students actively protested the Vietnam War, the draft, and limited access for women and minority students (Lucas, 2006; Thelin, 2003). "By 1970 the national media portrayed the American campus less as a sanctuary and more as a battleground in a protracted generational war between college students and established institutions associated with adult society" (Thelin, 2003, p. 16).

From 1975 to today, the number of students enrolled in higher education has continued to increase despite the negative forecast that the population of eighteen year-olds would drastically decrease following the Baby Boom Generation. Institutions were
also changing. *In loco parentis* was eliminated from institutions, and practically all institutions required multicultural courses as part of the curriculum (Cohen, 1998; Cohen & Kisker, 2010). The number of eighteen year-old students, part-time students, and older adults all continued to increase. While women outnumber men enrolled in higher education, women can have additional hurdles or disadvantages when compared to men. "There is some evidence of limited access for women students to opportunities for developing leadership skills. There is a need for continued awareness of issues of a potentially 'chilly climate' for women" (El-Khawas, 2003, p. 48). Additional research suggests that the same 'chilly climate' can apply to African American men, who often perceive the college climate to be hostile, resulting in lower enrollment and retention rates, when compared with African American women (El-Khawas, 2003). Because the number of students requiring remedial coursework continues to increase, "finding ways to improve the retention often becomes a key focus at less selective institutions because students enter with different levels of preparation, self-confidence, and aspirations" (Hurtado, 2003, pp. 37-38).

In today's higher education institutions, minority students often face lower college enrollment and completion rates compared to the general population. It is important for institutions not only to educate minority students, but to encourage programming which fosters mutual respect for minority students' cultural background and history. "Among minority groups, as well as women, educational participation and attainment are critical for survival in the larger society, but only within a framework that acknowledges the value of individual and cultural identity" (Moe, 1990, p. 37). "African American students at white institutions allegedly fared poorly in comparison with white students in terms of
persistence rates, academic achievement, and overall psychological and social
adjustment" (Lucas, 2006, p. 264). Changes in society as well as the economic sector
have made it even more imperative for an individual to receive a college education, thus
helping to stimulate the number of minority students enrolling in college within the past
decade. Colleges have attempted to respond to this issue by creating academic support
programs designed for minority students, connecting with students at the elementary and
secondary levels, and involving family members in the college process (Moe, 1990).
Moe (1990) writes, "Institutions of higher learning can alter their patterns of educational
delivery in order to reach segments of the population not adequately served" (p. 41).

Commuter students have become the majority of students enrolled in higher
education institutions. Jacoby (1989), one of the foremost experts on commuter students,
defines commuter students as “all students who do not live in institution-owned housing.
Their numbers include full-time students of traditional age who live with their parents,
part-time students who live in rental housing near the campus, and adults who have
careers and children of their own” (p. 5). Despite the fact that the population of
commuter students is very diverse, they often experience the same challenges related to
transportation, multiple life roles and becoming a member of the campus community.
Even at primarily commuter institutions, Jacoby (1989) argues that campuses reflect the
needs of traditional institutions, especially since many administrators and faculty are
products of traditional institutions. Jacoby (2000) states that the perception of commuter
students is that they do not want to get involved or do not have high educational
aspirations. The reality, however, is just the opposite. Evidence indicates that commuter
students are the majority of adult participants in higher education, and thus, institutions
must create ways to encourage both involvement and academic policies that support commuter students. “Rather than expecting commuter students to adjust their lifestyles and schedules, it is the responsibility of colleges and universities to design curricular and cocurricular mechanisms specifically, and intentionally to involve commuter students in learning” (Jacoby, 2000, p. 10).

Kuh, Gonyea and Palmer (2001) also asked the question of whether commuter students are less engaged in higher education than traditional students. Using the results from the National Survey of Student Engagement from 2000 and 2001, they were able to analyze the responses from over 100,000 first-year and senior students across the country. First, while the majority of students enrolled in higher education institutions are commuters, two-thirds of first-year students nationally live on campus. First-year commuter students are typically living with parents or returning adult students. Second, students who drive to campus are different from students who walk to campus. Students who drive to campus typically are first-generation students, minority students and nontraditional students who typically work more hours off-campus, care for dependents, and attend college on a part-time basis. The results showed that residential students were more likely to be engaged on campus. When comparing commuter students who drove to campus with commuter students who walked to campus, commuters who drove had fewer interactions with faculty and less co-curricular engagement. However, no difference existed between commuter and residential students in regards to the effort students put forth in the classroom. “Moreover, they are very similar to their peers who live on campus in terms of taking classes that require higher order intellectual skills and they report making as much progress in desired outcomes of college” (Kuh, Gonyea &
Palmer, 2001, p. 9). While residential students are most likely to be engaged, the results from this study show that commuter students take their coursework just as seriously as traditional students.

**Adult Learning in the Urban Context**

"The urban context represents the social and environmental situations that inform the lived experiences of individuals, groups, and communities that reside in densely populated urban areas" (Martin, 2004, p. 3). Within this densely populated area, businesses and corporations, the wealthy and low-income poor neighborhoods can exist, prosper and struggle side by side. In the 1850s, the notion of a city evolved with advances in communication and transportation. The growth of the manufacturing sector played a role in the creation of the working class and neighborhoods based upon one's societal status. In the late 1800s, municipal institutions gained in popularity by providing access to individuals living in cities since most institutions were commonly located in rural areas. The building of institutions in Toledo and Cincinnati (both located in Ohio) sparked a national trend of city-based institutions, especially located in large manufacturing areas such as Detroit, Rochester and Pittsburgh. These institutions recreated the higher education curriculum by focusing on skills needed for people working in business careers as well as industrial technical training. They were also the first urban institutions to structure themselves around the needs of students, such as providing evening courses for students working during the day and offering part-time programs (Lucas, 2006). Lucas (2006) writes:

Yet long before the term 'nontraditional' came to be applied to certain collegians, city colleges were organizing themselves to meet their special needs and demands,
including, for example, those who had resumed their studies after dropping out, mature students with spouses and families, and those seeking retraining for second careers. Many who lacked the financial means to attend a residential college full-time found enrollment at a municipal college catering expressly to commuting students a more viable alternative. (p. 160)

From 1890 to 1945, the visual image of the city evolved with elevators allowing buildings to expand vertically. African Americans moved to the North, in pursuit of better jobs in Northern cities and to escape prejudice in the South. As a result of federal changes in the G.I. Bill, the Federal Housing Administration and the tax system, many of those living in the inner city moved to the suburbs in what is known as urban sprawl. Many residents of the inner cities experienced joblessness from being excluded from the current job network system. "The inner-city communities of these cities are plagued by intergenerational poverty and the concomitant issues associated with lack of educational attainment and differential access to adult and continuing education programs" (Martin, 2004, pp. 8-9). Most recently, urban cities have seen an influx of low-income individuals from other countries such as Asia and Latin America who came to the United States in search of a better life. Similar to the early immigration patterns of the United States, these individuals seek cities based upon family and friends who have already settled, thus preventing them from learning the language and relying upon their friends to find work and share housing (Martin, 2004).

The urban setting provides many opportunities for learning and educational programs for those individuals with the resources and means necessary. For those individuals of middle to upper class status, there is a plethora of workshops, institutes and
events if one has the financial capability of paying the fees required for these services. Low-income individuals must rely upon educational services provided through federal or state grant money, churches, or philanthropic organizations. These services often focus on remedial skills and are short-lived based upon a limited amount of funding available. Furthermore, teachers of these programs are often underpaid and are in constant flux due to the nature of temporary employment within the short-lived status of these programs (Martin, 2004).

Urban adult education practitioners must also take into account their own situation prior to pursuing an educational program or service. As previously mentioned, a lack of financial means can exclude individuals from participating in an adult education program. Additionally, issues of child care, transportation and time are barriers from pursuing a course or a program. For those with limited financial means, the costs of child care, commuting or working less hours can negatively impact one's ability to participate in adult education. Urban adult education programs must be prepared to provide assistance for students to participate in the programs. For example, for many urban adults from diverse backgrounds who have a minimal or limited knowledge of the English language, urban programs need to assist individuals through literacy programs and workshops. Programs also need to be prepared to help individuals in need of mental, health and legal issues such as counseling for drug-abuse, disabilities and criminal behavior. Effective adult education for urban communities demands that one must take into consideration the needs and daily life experiences of the participants (Rogers & Hansman, 2004).
Urban institutions often face greater responsibilities than traditional institutions in the accountability of student success for all students, especially nontraditional, commuter, first-generation and minority students who are more prevalent at urban institutions.

“Urban universities are committed to research, teaching and service but also offer a wider range of pre-professional and professional degree programs than is typical on traditional campuses in the United States” (Evenbeck & Foster, 1996, p. 1). To help acclimate students to campuses, especially large urban campuses, it is important to consider the needs of many first-generation and nontraditional students. By reorganizing the campus and aligning faculty, advisors, mentors and student service personnel, urban institutions can create a sense of community and engagement for students who otherwise might be isolated (Evenbeck & Foster, 1996).

**Adult Learners and Learning Communities**

To ease the transition of students, many colleges and universities offer first-year experience programs, including learning communities, to assist students in navigating the institution as well as to teach skills necessary for students’ success. First-year experience programs can integrate the social and academic realms together to enhance the likelihood of student graduation from college. “First year experience (FYE) programs vary widely across institutions ranging from highly organized learning communities to basic courses introducing students to college life” (Jamelske, 2009, p. 374). “The first-year experience is the sum of many parts; it is more than a single seminar course, orientation program, or learning community. For some students, it represents total immersion… and for others, it involves a juggling act” (Barefoot, 2005, p. 62). “The modern first-year experience (FYE) movement began in the late 1970’s, gained momentum in the 1980’s, flourished in
the 1990’s, and continues today” (Hunter & Murray, 2007, p. 28). The purpose of first-year experience programs is to assist in the adjustment of first-year students to the college campus and to help students assimilate into campus life (Lang, 2007). Barefoot (2000) writes the following based upon her experience of working at the University of South Carolina’s National Resource Center for the First-Year Experience and Students in Transition:

Much of what constitutes the ‘first year experience’ in U.S. higher education are programs and activities that have the following overall research-based objectives: increasing student-to-student interaction; increasing faculty-to-staff interaction, especially out of class; increasing student involvement and time on campus; linking the curriculum and cocurriculum; increasing academic expectations and levels of academic engagement; and, assisting students who have insufficient academic preparation for college. (p. 14)

First-year experience programs vary from institution to institution, but common components of these programs include orientation, academic advising, first-year seminar programs, bridge programs, learning communities, service learning programs and first-year residential communities. “Creating structures wherein upper-level students mentor and support new students is especially important for students who are in one or more at-risk categories” (Barefoot, 2000, p. 15). Because of the many benefits of first-year experience programs to helping students academically and socially succeed, many institutions rely heavily upon first-year programs as a tool to increase retention of first-year students to their second year of college. Donahue (2004) states, “As we continue to create and refine opportunities for first-year students to make these connections, we cannot give up our quest to understand the students we serve” (p. 79). While each institution varies in the types of programs offered, it is therefore important for each
institution to create and offer programs based upon its population that will directly benefit the students it serves.

For institutions today, first-year experience programs have also become an important means for colleges and universities to facilitate the successful transition of students into the institution. The first step often begins with orientation as students take their first steps on a college campus and learn about the culture of the institution. “New student orientation, whatever its precise form and structure, offers campuses a unique opportunity to change student attitudes and expectations by including academic programs and activities during the time period when new students form initial impressions of what college is going to be about” (Barefoot, 2000, p. 17). The next step is often first-year seminar programs which assist students throughout the academic year, or semester, as well as throughout their transition to adjusting to life as a college student. “As first-year seminars are becoming a pervasive curricular tool, it is important to continually broaden the scope of research on the topic and to understand the effects of first-year seminars on student outcomes across institutions nationwide” (Keup & Barefoot, 2005, p. 15). For students that commute or attend college part-time, unfortunately the first-year experience is limited to the time that students spend in the classroom such as the first-year seminar (Barefoot, 2000). Distance learning and online components allow first-year experience programs to provide educational resources and interaction amongst students for those students who are either distance learners, or have limited time available to be on campus.

Furthermore, first-year seminar courses serve as a prime component of first-year experience programs because they integrate the social and academic components of the institution, but the classroom component allows commuters and part-time students the
opportunity to interact with other students on campus. Moreover, first-year seminar courses allow first-year students to take classes with other peers in a safe and welcoming environment to ease the transition of students. “First-year seminars facilitate learning: learning about a subject or combination of topics, learning about the institution, learning about the diversity within campus communities, but most important, learning about oneself and one’s abilities” (Hunter & Linder, 2005, p. 276).

First-year seminars vary greatly from campus to campus. Some programs can occur throughout the entire first year, while some occur during just a portion of the first semester. Some courses are required, while some students must opt to enroll in courses. Some courses are offered for credit with multiple class meetings during the week while some are non-credit courses. Additionally, the first-year seminar instructor also varies greatly from campus to campus. The instructor could be a faculty member, staff member, graduate student, undergraduate peer leader, or represent a varied combination characterizing all types of instructors. Also, it is important to note that the content of seminars varies greatly. Some institutions focus on the co-curricular aspect of the institution, while other institutions might focus on the intellectual development of students. First-year seminar courses can often be placed into one or a combination of the following categories: “extended orientation seminars, academic seminars with generally uniform content across sections, academic seminars on various topics, professional of discipline-linked seminars, or basic study skills seminars” (Hunter & Linder, 2005, p. 279). The goal of first-year seminars is to “promote student success in college and to ease students’ adjustment to the collegiate environment” (Strayhorn, 2009, p. 12). Hunter and Linder (2005) found the following:
The popularity of first-year seminars as a programmatic and curricular approach to address student transition and retention issues is based on the fact that an academic course offers a time-honored structure through which orientation efforts can be continued beyond the first week and student development and retention theories can be put into practice. (p. 276)

“First-year seminars that bring students in contact with advisors frequently are believed to be most effective in terms of promoting student success” (Strayhorn, 2009, p. 12). Overall, first-year seminars serve as, an integral piece, in helping students succeed and transition during their first year of higher education and can directly impact retention.

Staff and faculty members working with first-year experience programs play a crucial role in delivering the messages of the institution and serving as a primary resource for students. These individuals not only need to provide quality programming and timely communication with students, but they are challenged to create relationships with students in and out of the classroom, as well as make connections with their students.

“What matters more to success in the first year is what students actually do, not what institutions have in terms of resources, such as facilities and faculty credentials” (Hayek & Kuh, 2004, p. 11). Faculty and staff working at urban institutions often face more hurdles when working with first-year experience programs since many urban institution students are frequently living off-campus, nontraditional in age, working off-campus, or facing additional personal challenges. For these reasons, it is even more imperative that urban institutions have well staffed, coordinated and integrated first-year experience programs to best assist students during their first year and beyond. Natalicio and Smith (2005) describe urban institutions as the following:

Here begins the process of transforming the individual lives of often highly vulnerable students and promoting the socioeconomic development of the region. A commitment to access is meaningless if students are not provided institutional support to ensure that they have every opportunity to succeed, and such support
must be strongest and most visible during the first year of enrollment. (p. 157)

Thus, it is especially important that staff at urban institutions be prepared and trained to assist a diverse population of students through a myriad of programs and services, especially during the first year of higher education.

An example of a successful first-year experience at an urban institution is the first-year experience program at the University of Pittsburgh. While ninety-five percent of the first year students live on campus, retention from the first year to the second year increased from eighty-nine percent to almost ninety-three percent in just two years after creating the first-year experience program in 2007. Elements of the first-year experience program consisted of restructuring the orientation program to occur one-week prior to the start of classes, calling all new first-year students, creating virtual residence hall communities, providing first-year t-shirts and creating a First Year Trophy for the winning group during orientation. Additionally, Pittsburgh created an "Outside the Classroom Curriculum" (OCC) designed to provide holistic development for a student that complements the academic curriculum, and begins during the first year and continues until graduation. The OCC brings together the campus community to support and empower students (Brooks, 2010). Thus, the first-year experience program at the University of Pittsburgh serves as an outstanding program at an urban institution that assists a diverse population of students from the first year of higher education and beyond.

Despite the popularity and success of first-year experience programs, many programs at colleges and universities suffer from a lack of resources, staffing and support from higher education institutions. "Most U.S. campuses now have a plethora of
programs. These programs, however, are rarely well coordinated or integrated into a coherent, intentional, institution-wide strategy. The primary manifestation of this point at many institutions is a lack of focused responsibility and leadership for the first year” (Alexander & Gardner, 2009, p. 20). “Even those first-year initiatives that are highly popular among students or, those that are correlated with improved student retention and academic achievement sometimes vanish almost overnight, falling victim to a change in administration, shifting institutional priorities, or budget cuts” (Barefoot, 2000, p. 17). In addition, Barefoot encourages first-year experience programs to partner with high schools and middle schools to further prepare students for the college experience and, to ease the transition from high school to college.

Barefoot (2000) also challenges colleges and universities to rethink the first-year experience of college students. “Although retaining students is important to institutions and to students themselves, the primary objective of the college experience is, after all, learning – both in and out of the classroom” (Barefoot, 2000, p. 18). “Investigating an institution’s achievement of excellence in the first year requires institutions to go beyond a focus on programs (such as a first-year seminar or learning community) to consider all components of the first year and the way those components interact, for better or worse, to affect the learning and retention of beginning college students” (Alexander & Gardner, 2009, p. 20). In the future, higher education institutions should pay special importance to not only the diverse and unique needs of incoming students, but how to create programs and structures designed to support students and increase their opportunities for success. “With all that we don’t know about what the new century will bring, we can be sure of
one thing: there will continue to be first-year college students seeking higher education for upward social mobility and for the intrinsic joy of learning” (Barefoot, 2000, p. 18).

Dependent Dimensions of Influence

**Peer-Group Interactions**

Berger and Milem (1999) were influenced by Tinto in their study on the role of student involvement and perceptions of integration on student persistence. While at a small private institution in 1999, they examined the influences of both peer and faculty support as a form of involvement in both the fall and spring semesters. Early involvement in the fall semester showed a positive relationship with institutional commitment and persistence. Students who do not get involved at the beginning of a semester tend not to get involved throughout the year; thus, they experience lower levels of institutional commitment and do not persist at a high rate. An interesting result of this study was that African Americans enter the university with high levels of institutional commitment, but they are less likely to perceive the institution as being supportive and less likely to persist (Berger & Milem, 1999).

In a qualitative study at a large public university, Tinto and Goodsell (1993) studied first-year students enrolled in first-year interest groups, also known as learning communities. The results of their study demonstrated that students enrolled in first-year interest groups created stronger social networks with their peers that enhanced their academic achievement. Even students living on campus expressed a need to meet friends. Comments from students stated that they felt alienated prior to joining the interest groups, but the groups helped them to fit in and develop strong relationships with
peers.

*Interactions with Faculty*

One of the earliest studies looking at student to faculty interaction was conducted by Pascarella, Terenzini and Hibel (1978) in which they surveyed over 1,000 students at Syracuse University during 1975-1976. They found that faculty members’ informal relationships with students positively influenced students’ grade point averages after the first year. Also, students who had informal conversations with faculty regarding career aspirations were more likely to perform better than predicted based upon pre-enrollment characteristics. The results showed that the initial conversations with faculty were the most influential of the conversations over time. Students with informal relationships with faculty will tend to follow the advice of the faculty over their peers whose advice can sometimes be more detrimental than helpful. Additionally, informal academic settings can positively impact students’ behaviors, beliefs and values during college (Pascarella, Terenzini & Hibel, 1978).

With faculty to student interactions being highly valued and successful, one study examined the academic outcomes of students belonging to a 'faculty to student' mentoring program. In this program, students and mentors were matched based upon gender, ethnicity and characteristics such as academic discipline. Overall, students who belonged to the mentoring program took more credit hours per semester, had higher grade point averages and were less likely to drop out when compared to students who did not belong to the mentoring program. The results did not show any relationship between gender and ethnicity to student academic performance (Campbell & Campbell, 1997).
Kuh and Hu (2001) used national results from the College Student Experiences Questionnaire to analyze student to faculty interaction of over 5,000 students at over 400 different institutions. The overall results from the study supported previous research regarding interactions between students and faculty. First, contact between students and faculty members increased over time. This is expected as students progress through their academic programs and begin taking more courses in their major. While student to faculty interaction did not significantly predict the effort students spent towards academics, it did affect the amount of time students spent on educationally purposeful activities. The type of institution, however, only had a small effect on students’ satisfaction and relationships with faculty. Finally, students with higher academic performance had greater interactions with faculty compared to students who had lower academic performance scores. This could be attributed to the fact that higher performing students are more likely to contact faculty for further opportunities, or faculty are more likely to seek out high performing students to assist on research projects and activities. While limited social actions (i.e. going to lunch or coffee) had small effects on student satisfaction and performance, “faculty members should, when possible, steer out-of-class conversations toward substantive matters, including discussions about how the students can use what they are learning in their lives outside the classroom and beyond the campus” (Kuh & Hu, 2001, p. 328).

**Faculty Concern for Student Development and Teaching**

Faculty members can play a critical role in the success and achievement of students, both academically and developmentally. "Faculty members deliver the institution's product, education. Faculty members can reinforce or challenge a student's
self-image as a person or a major outside of class as well" (Bean, 2005, p. 225). Faculty members and even academic advisors can strongly impact a student's self-efficacy and his or her connection with the institution through advising, selecting a major, and career planning. Academic integration into the institution includes the background of the student, interaction with the institution and faculty, and a belief in one's academic ability. "When students' academic integration improves, so do their academic performance and their grades" (Bean, 2005, p. 226). At commuter institutions, "Considering the classroom as a community facilitates meaningful connections between students and faculty among peers. Faculty who intentionally involve class members in the learning process and engage critical thinking about course materials contribute to student persistence" (Braxton & Hirschy, 2005, p. 78).

In order to save money and offer short-term contracts for faculty, many universities rely on adjunct professors to teach many general education courses, especially for introductory and remedial courses. As institution budgets become tighter, the use of adjuncts is one way for academic departments to save costs. Unfortunately, "our basic results suggest that students who have more adjunct instructors during their first semester are less likely to persist into their second year" (Bettinger and Long, 2006, p. 53). While adjunct professors may have a strong understanding of the subject matter and professional field, their time on campus may be limited for weekly office hours and there is discontinuity of their employment from one semester to the next. These are all reasons that can lead to the lack of integration of students into the university community.

While the student body and campus culture has changed greatly from the time when most professors were students, institutions must find ways to meet the needs of
today’s students. Overall, students today prefer active and collaborative learning rather than lectures and memorization. Students also want a personalized experience including interaction with faculty members such as receiving ongoing feedback from faculty. To meet the needs of new students, faculty should review curriculum and teaching styles to find ways to promote the intellectual and academic ability of students (Schroeder, 1993). Further research also supports active learning’s potential to increase student persistence. Braxton, Milem and Sullivan (2000) revised Tinto’s theory of institutional departure to demonstrate how active learning within the academic experience can impact experience. The results showed that students who participated in classes where faculty demonstrated active learning techniques were more likely to have stronger institutional commitment, social integration and student persistence. The only factor in which active learning did not influence the commitment, integration and persistence of students was the use of group work as active learning in the classroom (Braxton, Milem & Sullivan, 2000).

**Academic and Intellectual Development**

Since Tinto’s research in 1975, student persistence has further developed in the literature. In 1999, David Allen examined the relationship between motivation and persistence to finish college. He said that both background variables and motivation had an impact on academic performance, and all three constructs had an impact on persistence. His findings stated that three of his seven background variables played a major role in academic performance and persistence: financial aid, parents’ education, and pre-college academic ability. Also, his findings stated that motivation accounted for almost twice as much of the persistence in minorities than non-minorities. In 2004, Titus then posed the questions of what characteristics and experiences of individuals at four-
year institutions would impact persistence, and what institutional characteristics would impact persistence. The results of this study supported the claims that student persistence is positively influenced by academic background, academic performance, involvement, and institutional commitment. This study also finds that selectivity (average student academic ability) has a contextual effect on college student persistence. This could also be linked to an aspect of peer climate and its positive effect on student persistence.

Bauer and Liang (2003) conducted a study of how personality and precollege characteristics such as gender impact students’ academic performance and involvement. After surveying over two hundred first-year science and engineering students using three different personality measurements, the results of the study found that, “personality and precollege characteristics do influence students’ quality of effort, critical thinking, and first-year academic performance” (Bauer & Liang, 2003, p. 287). Furthermore, the results showed that thoughtful and caring students were more likely to attend class and put forth more effort towards course work. High neuroticism scores did not have a relationship with either academic effort or earning high grade point averages; however, it is possible that these students spent more time focusing on emotional and interrelation concerns. Finally, the amount of time that students spent in academic related activities was positively related to first semester grade point average supporting the work of Tinto’s institutional departure theory (Bauer & Liang, 2003).

*Institutional and Goal Commitments*

Bean (2005) writes that "two sets of attitudes are important for retention: attitudes about attachment to the institution, and attitudes about being a student. Institutional fit is a sense of fitting in with others at a college, and institutional commitment is a
commitment to a specific institution as opposed to higher education in general" (p. 219). Institutional fit, or fitting in, is a student's ability to relate and connect with other students on a social level. Many students feel they fit in if they share the same values as other students. Students who feel they are part of a minority group are at a strong risk of not fitting in at an institution. This could include students’ racial/ethnic background, socio-economic status or even unshared interests with other students. Institutional commitment, however, is how connected a student feels to the actual institution. Institutional commitment is often viewed as one's loyalty to a school which is often determined by a student's psychological disposition rather than a social variable. "While not subject to direct intervention, those interested in affecting retention rates need to be profoundly aware that they are not just in the business of delivering services, but in delivering services in such a way that students develop a positive attitude toward school and toward their continued enrollment in school" (Bean, 2005, p. 220).

In 2004, Strauss and Volkwein asked what factors influence student commitment and what are the similarities and differences at two-year and four-year institutions. Their study consisted of over 8,000 responses from first-year students at 23 four-year and 28 two-year institutions. The results demonstrated that multiple student-level variables influenced institutional commitment; however, the most important influences were the measures of academic integration and growth, followed by the measures of social integration and growth. Specifically, classroom experiences and social activities were especially strong predictors of institutional commitment. Other influences on institutional commitment included financial aid variables and pre-college characteristics of age, ethnicity and marital status. When looking at characteristics of the organization itself, the
only factor that was slightly significant was the mission of the organization (i.e. either a two-year or four-year school). Contrary to the expectations of the researchers, students at two-year institutions had a slightly higher level of institutional commitment than students at four-year institutions (Strauss & Volkwein, 2004). This research then raises the question of institutional commitment of an urban four-year institution. While still being a four-year institution, students at urban institutions often portray many of the same characteristics as students at two-year institutions and nontraditional students.

Hausmann, Ye, Schofield and Woods (2009) studied the effect of students’ sense of belonging on their intentions to persist. Students were divided into three different groups. One group received direct communication from the institution stating their importance to the university while also receiving gifts (i.e. t-shirts) from the institution with the institution’s logo. One control group received gifts without the institution’s logo. The second control group did not receive any communications or gifts from the institution. Students were equally divided into groups based upon race. Hausmann et al. (2009) found that the intervention increased the sense of belonging for Caucasian students, but not for African American students. This sense of belonging had a direct effect on institutional commitment, but an indirect effect on intentions to persist for both Caucasian and African American students.

Personal Dimensions of Influence

*Ethnicity and Race*

A longitudinal study conducted at the University of South Florida looked at the relationship between high school grade point average, SAT/ ACT scores and ethnicity to enrollment and graduation rates of first-year students. The results demonstrated that
SAT/ ACT scores are unrelated to persistence, but high school grade point average is strongly related to persistence. When controlling for grade point average, there was little difference between the ethnicity of students and their persistence. Of students with low high school grade point averages, African American students persisted at a lower rate in comparison to other ethnic groups of students. Of students with high grade point averages from high school, African American students persisted at a higher rate in comparison to other ethnic groups of students (Waugh, Micceri & Takalkar, 1994).

Another study at a Southwestern public university assessed ethnic minority students to create a model of barriers applicable to minority student success in college. Overall, the researchers found four barriers impacting student success. The first barrier is discontinuity barriers, or anything that might interrupt the smooth transition from high school to college. The second barrier is lack-of-nurturing barriers, or the lack of supportive faculty, staff and resources on the college campus to help students be successful. Lack-of-presence barriers included the lack of minorities in staff, faculty and students as well as lack of a minority presence in the curriculum and academic programs. The final barrier is resource barriers, or the financial need of students often supplemented through financial aid programs (Padilla, Trevino, Gonzalez & Trevino, 1997). "Although they confronted some of the same campus challenges that majority students face, ethnic minority students felt that they had been provided by the institution with fewer supports needed for successful integration into college" (Padilla et al., 1997, p. 133). This demonstrates the important need for higher education administrators to not only provide services and programs to assist minority students, but to also create a presence of minorities on campus and to find ways to assist students with the financial aid process.
Hu and St. John (2001) analyzed the impact of financial aid on minority students in the state of Indiana during the 1990s. While comparing African American, Hispanic and Caucasian students, they found that the overall persistence for each of the group of students decreased during the decade, especially for African American and Hispanic males and older adults. The results also showed that African American and Hispanic students had lower family income than Caucasian students thus qualifying for more federal and state support in grants and loans. For each group of students, students who received aid had higher persistence rates than students who did not receive any aid. This demonstrates that financial aid can make a significant difference on student persistence and can also help to level the playing field for minority students. While there is concern regarding the escalating tuition costs on students not receiving any aid, it does provide a solid argument for adequate federal and state aid to positively impact persistence for minority students (Hu & St. John, 2011).

**Gender**

While women are now the majority of students on college campuses, women still face more challenges and obstacles compared to men on campus. Many studies have referred to the college campus as a 'chilly climate' (El-Khawas, 2003). In a longitudinal analysis of over 1,500 female student at over twenty different institutions, the researchers studied the impact of the chilly climate on women's cognitive development during the first year of higher education. The results showed that there was a not statistically significant relationship between the perceived chilly climate and students' cognitive development. However, when institutions were divided between two-year and four-year institutions, the chilly climate had a slightly negative effect on the cognitive development.
of students at two-year institutions, but no effect on four-year institutions. "At the very least there is a need for faculty, administrators, and other policy-makers to better understand the climate for women on their own campuses, and to be sensitive to the possibility that issues of gender equity, both inside and outside the classroom, may have implications for women's educational growth as early as the first year of college" (Pascarella et al., 1997, p. 123).

Age

The population of nontraditional aged students has increased dramatically since the 1950s. The G.I. Bill played a large role in this increase, but both the need for a college degree to enter the workforce plus institutions becoming more accessible have aided in the increase of these numbers. While age is only one component of nontraditional status, Bean and Metzner (1985) created a model of nontraditional student attrition because all of the other models and research focused primarily on traditional students. Their research demonstrated that age was not a major factor in predicting student persistence; however, many of the characteristics associated with age such as hours working and family responsibilities were factors negatively related to persistence (Bean & Metzner, 1985).

A study of community college students throughout the state of Texas analyzed the engagement patterns of traditional and nontraditional first-year students over a three-year period. For the purpose of the study, nontraditional was defined by the state education system as any student over the age of twenty-four. The results of the study showed that nontraditional students were significantly more academically engaged than traditional students. While most of the literature points to the fact that nontraditional students are less engaged than traditional students, the results of this study can be attributed to the
priority that nontraditional students place on their education and their willingness to become involved in academic related activities to further their persistence (Gibson & Slate, 2010).

Socio-Economic Status

Since the 1970s, the federal government has aspired to provide greater access to higher education by offering financial aid in the form of both loans and grants. The Pell Grant is the most popular form of need-based financial aid provided to students who are able to demonstrate a financial need. Despite multiple changes in the financial aid system, little research exists on the effectiveness of the financial aid program beyond a single institution. Stampen and Cabrera (1988) conducted a study of over 10,000 need-based financial aid recipients nationally. The results of the study demonstrated that the financial aid policies were aligned with social policy goals and provided benefits to the students. Additionally, students that were receiving the most amount of aid were also the students requiring the most need. Most importantly, the results of this study showed that students receiving need-based aid had the same levels of persistence as affluent students not receiving any aid (Stampen & Cabrera, 1988). This is significant because affluent students have access to more social capital than need-based students, yet financial aid appeared to offset these differences and created a level playing field in regards to student persistence.

Financial need and assistance is also an important factor to consider when focusing on student persistence. In 2003, King asked how the financing patterns of low-income first-year students differ from other students, and what impact does students’ financing decisions have on their academic success. The five choices that affected
students’ success were the institution attended, attendance status, housing arrangement, student loans and employment. The results of the study showed that when students chose traditional options such as living on-campus and studying full-time, they persisted at a higher rate. However, students that decided to attend the institution part-time due to financial constraints had a higher drop-out rate. Often, these students started out as full-time students and decided to attend part-time in order to save more money, pay off debt, work more hours, or take care of family responsibilities (King, 2003). In 2006, Nora, Barlow and Crisp also examined the impact of financial assistance on a student’s persistence. Their research examined the impact of financial aid on the college a student chooses to attend, a student’s decision to remain enrolled, and the student’s academic performance. From their research, students that were awarded merit-based financial aid were more likely to persist (Nora, Barlow, & Crisp, 2006).

Parents' Highest Level of Education

First-generation students, students whose parents or guardians have not received more than a high school diploma, face more challenges related to persistence because they often do not have the same social capital as students who have been raised with parents who are familiar with higher education. York-Anderson and Bowman (1991) studied the differences between what first-generation and second-generation (student whose parents were first-generation students) know about the college process. Second-generation students reported receiving more support about attending college compared to first-generation students. The results also showed that second-generation students had more factual information regarding the college process. There was no difference, however, in the commitment level of first-generation and second-generation students.
(York-Anderson & Bowman, 1991). Thus, the results demonstrate the need for higher education administrators to provide a resource role for many first-generation students to not only impact the matriculation of students, but also persistence.

Lohfink and Paulsen (2005) used the Beginning Postsecondary Students Longitudinal Survey to analyze data from over 5,000 students nationally. Their aim was to compare persistence factors for first-generation and continuing-generation (students who parents or guardians earned above a high school diploma) students primarily looking at low-income, minority and female students because they are the majority of first-generation students. Not surprising, first-generation students who were low-income, minority or female had lower persistence rates than first-generation students who did not fall into these categories. Institution type was also a significant predictor of persistence for first-generation students. Private institutions were negatively related to persistence while institutional size was positively related to persistence for first-generation students. The author attributes this to the fact that tuition at private schools is more than public institutions causing students to leave the institution. Also, first-generation students may find it more difficult to feel a sense of belonging at private institutions as most students are continuing-generation or more affluent students. Belonging to student organizations was a predictor of student persistence for continuing-generation students, but not for first-generation students. While this does not mean that first-generation students should not join student organizations, it simply means that the benefits from the organizations might not play as much of a role in their persistence with respect to their multiple life roles and college adjustment. Finally, grant aid was a significant predictor of persistence for first-
generation students but not for continuing-generation students demonstrating the importance of need-based aid such as the Pell Grant (Lohfink & Paulsen, 2005).

According to the National Center for Education Statistics (“Trends in Attainment”, 2011), the number of first-generation college students has decreased since 1989. In 1989, 42.6% of first-time college students were first-generation status compared with 35.8% of students in 2003. This is not surprising due to the boom of higher education during the 1960s and 1970s making higher education more accessible to students. In looking at the 5-year persistence rates of first-generation students, the persistence rates have been declining. The overall attainment of a certificate, associate or bachelor’s degree within a five year period are the following: 1990 cohort of students, 45.6% attainment; 1996 cohort, 41.4% attainment; and, 2004 cohort, 34.5% attainment. For first-generation students earning a bachelor’s degree within a five year period, the numbers decline even further: 1990 cohort of students, 16% bachelor’s degree; 1996 cohort of students, 12.8% bachelor’s degree; and, 2004 cohort of students, 10.6% bachelor’s degree (“Trends in Attainment”, 2011). Overall, persistence of first-generation students is a grave concern but further research is necessary to determine reasons why persistence is declining over time.

Community of Origin

Guiffrida (2008) analyzed academic articles regarding the persistence and success of rural, urban and suburban high school students attending college. Overall, the results were inconclusive regarding the persistence of students based upon their community of origin. While rural students are less likely to attend college compared to students from urban communities, the persistence rates appear to be the same. However, urban students
are more likely to attend higher ranking institutions compared to rural students. Rural students face more challenges when attending large, public institutions compared to suburban and urban students. Rural students tend to struggle more to develop peer networks and they are less likely to take advantage of services such as counseling when compared to urban and suburban students. When attending large, public institutions, rural students are more likely to drop-out compared to urban and suburban students. The implications of this research is important for both high school counselors and college staff and faculty. High school counselors need to be cognizant of the challenges for rural students when selecting higher education institutions and need to make sure that the institution is a good fit. On the other hand, institutions must also play a role in the transition of students. While urban and suburban students are more likely to be engaged and take advantage of services, rural students need additional support to impact their success, especially when moving from a small town to a large public institution (Guiffrida, 2008).

Contextual Dimensions of Influence

High School Grade Point Average, ACT Score and College First Semester Grade Point Average

High school grade point average (GPA), ACT and SAT scores, and the first semester grade point average (GPA) in college are all highly correlated variables used to predict students’ success in college. A quantitative study at Iona College in New York looked at demographic characteristics, financial factors and academic factors including high school GPA, SAT scores, and first semester GPA. While not surprising, students who were retained after their first year had a higher high school GPA, SAT score and
first semester GPA. Additionally, these students had less financial burdens due to either being from high socio-economic backgrounds, or receiving financial aid to cover their expenses. The first semester GPA in college, however, did have the strongest relationship with student persistence (McGrath & Braunstein, 1997).

In another study predicting academic success of first-year students at a large public Midwestern institution; demographic, background, psychological and environmental variables were all used to predict academic success. The results found that high school GPA, high school rank, and ACT scores predicted over 40% of the variance in second semester grades. Women and Caucasian students resulted in higher grade point averages. Interestingly, students with parents who were separated or divorced resulted in lower grade point averages. Other predictors of academic success included students with high self-perceived abilities, high drive for success and a willingness to change majors or careers. The authors attributed the willingness to change career plans as "the importance of a willingness to change to be successful" (Zheng, Saunders, Shelley & Whalen, 2002, p. 279). Belonging to a learning community, a voluntary option for students, also strongly predicted students' academic success (Zheng et al., 2002). While high school performance and ACT scores do play a significant role in college persistence, background and psychological variables can also impact students' performance.

*Hours Working*

A second study using the results of the National Survey of Student Engagement (NSSE) examined the relationship between first year students' employment, engagement and academic achievement. Pike, Kuh and Massa-McKinley (2008) used the 2004 NSSE results from over 560,000 students at 473 four-year colleges and universities. They
found that there was a relationship between students’ employment and academic achievement. While there was not a difference between students that worked less than twenty hours per week and students who did not work at all, students who worked more than twenty hours per week had significantly lower grades. Also, lower ability students are more likely to work more than twenty hours per week. At the end of the first year, both men and lower ability students were more likely to have lower grades. Students who worked more than twenty hours per week were more likely to perceive the college environment as being unsupportive. Finally, a relationship, while small, existed between engagement and academic grades. The implications from this study stress that college administrators should actively help students find meaningful work experiences. Pike, Kuh and Massa-McKinley (2008) state, “Helping first-year students become engaged in activities that encourage active and collaborative learning and foster positive interactions between students and faculty members can be very beneficial to students’ academic success” (p. 578).

Lives On or Off Campus

Knowing that students living in residence halls have higher persistence rates than commuter students, Inman and Pascarella (1998) studied the impact of students' residence on critical thinking skills of first-year students. Their study of over five hundred students from six institutions showed that precollege factors were the strongest indicators of college performance. The results also showed that residence did not impact the critical thinking scores of first-year students at the end of their first year of higher education. Because commuter students in this study attended primarily commuter institutions, "these institutions are more likely to design their institutional academic and social support
programs to the demographics of their particular population" (Inman & Pascarella, 1998, p. 565). This research shows that commuter students may not always be at a disadvantage compared to residence hall student as often perceived. Additionally, when institutions structure programs and services around the needs of commuter students, commuter students can have an equal opportunity for academic success as students living in residence halls.

Turley and Wodtke (2010) argued that most of the data regarding persistence for students living on-campus comes from large, public institutions and does not accurately portray higher education institutions today. Using data from the 1990-2000 National Postsecondary Student Aid Study, they analyzed the persistence and engagement patterns of over 2,000 students nationally based upon the type of institution (i.e. size of institution, public or private, highest degrees awarded, and if the school is a research institution). Overall, they found that the type of residence does not make a significant difference regarding first-year academic performance of students. African American students who live on campus had higher first year grade point averages than African American students living off campus with their families at the same types of institutions. Thus, it is important to make sure that African American students living off campus receive the same amount of support as students living on campus, but also that their multiple life responsibilities do not hinder their chances for success. Also, students living on campus at liberal arts institutions had higher grade point averages than students living off campus with their families at liberal arts institutions. This study is significant because it is the first study to analyze persistence of residence hall students by institutions on such a large scale. Additionally, contrary to popular belief, the findings of this study are important
because commuter students and students living on campus both performed equally during their first year of higher education.

**Campus Involvement**

Hinkle (2006) conducted a qualitative study of first-year students at Indiana University, a traditional public institution. Of the twelve students in this study, Hinkle found that students’ views of involvement on campus were different from much of the previous literature supporting the involvement as a means to increase retention. One of her findings concluded that students were afraid to get involved because they felt that their academics would suffer. The findings also demonstrated that students were more likely to get involved if it was connected to their academic interests due to a lack of time. Finally, students were more likely to get involved if the involvement was a short-term commitment rather than a long-term commitment.

Krause (2007) conducted a qualitative study of 46 first-year commuter students at a 4-year institution in Australia. In conducting focus groups of students, the researcher found that involvement was a significant predictor of retention. Additionally, the researcher found that small group interactions and face to face discussions positively impacted students’ involvement. Also, the study showed that electronic discussion boards were viewed positively by students as a means for communicating with peers and instructors. However, students used online discussions as a substitute for actually attending classes on campus which negatively impacted students’ connections with other peers and the institution. Finally, Krause (2007) found that many students used e-mail as a means to communicate with faculty that intimidated them rather than meeting face to face which could develop their relationships with faculty on campus.
Tieu and Pancer (2009) examined student involvement of first-year students at a Canadian institution. Through assessing cocurricular involvement of first-year students, they examined the relationship between quality and quantity of first-year students’ involvement and how this impacted their adjustment to the institution. In a quantitative study of 191 first-year students, the quality of the involvement was found to have a significant impact on students’ adjustment to college. The three factors of involvement that had the most profound impact on the adjustment of college were self-esteem, perceived stress and social support.

In a study using the data from eighteen schools participating in the National Survey of Student Engagement (NSSE), Kuh, Cruce, Shoup, Kinzie and Gonyea (2008) examined the relationships between student behaviors and institutional practices that foster student success. Engagement is comprised of educationally purposeful activities such as first-year seminar courses, learning communities and service-learning courses. The results of this study showed that student engagement positively affected student grades during the first and last semesters of college. Student engagement also positively impacted persistence from the first to second year at the same institution. Pre-college characteristics such as ACT and SAT scores positively impacted first year grades and persistence; however, the effects diminished after taking into consideration students’ experiences while in college such as living on campus, working and enrollment status. The benefits of engagement on grades and persistence were also true for students of different racial and ethnic backgrounds. Furthermore, students of color and lower ability students benefited even greater from their involvement in educationally purposeful activities. Based upon these findings, “Institutions should seek ways to channel student
energy toward educationally effective activities, especially for those who start college with two or more ‘risk’ factors – being academically underprepared or first in their families to go to college or from low income backgrounds” (Kuh et al., 2008, p. 555).

Institutional Dimensions of Influence

Urban institutions play a large role in providing education at all levels to students. Students attending urban institutions often face multiple life roles and challenges compared to students at traditional institutions. To impact the academic success and college readiness of students attending four-year institutions, the city of Los Angeles created the Transfer and Retention of Urban Community College Students (TRUCCS) project analyzing student performance outcomes and surveying students’ attitudes of over 5,000 students attending Los Angeles community colleges. Students in this program were more likely to receive additional benefits and supports through both federal and state sponsored programs. The results demonstrated that the course load, retention and transfer readiness of students was not statistically significant in regards to ethnicity of students. When the researcher asked staff and administrators to explain the performance levels of students, the staff attributed the success to numerous federal and state grants providing services such as bilingual staff, learning communities for students of color, college readiness programs for students of color while in high school, and additional advising for students of color. The ongoing concern is that both federal and state funds are being cut which either reduce or eliminate many of these programs (Hagedorn, 2004). Urban institutions do have the potential to improve both student persistence and success, but urban institutions must have the appropriate financial support to provide students with the tools necessary to succeed.
In the past ten years, urban institutions are rapidly building campus residence halls to appeal to a more residential population of students. Additionally, urban institutions are actively providing scholarships to first-generation and low-income students to live on campus in an effort to increase their persistence rates. Many first-generation students living in an urban environment while attending an urban institution face additional challenges living off campus, such as increased levels of crime and violence. The University of Cincinnati in Ohio created "Gen-1", a residence hall only for Pell Grant recipients and first-generation students. Beyond providing scholarships for students to live in the hall, Gen-1 offers intense student support services, and has stricter rules compared to other halls on campus. Overall, urban institutions are finding higher graduation rates of students living on campus. The important feature common in these institutions is that they are proactively providing the necessary services and support for urban students living on campus to succeed (Oguntoyinbo, 2011).
Summary

Throughout history, higher education institutions have struggled to define themselves and create equitable access for students. While minority students and women have made great strides in representation within higher education in the past two hundred years, these students still face lower persistence rates in higher education or reduced opportunities in the workforce compared to traditional counterparts. As institutions and adult education expanded, higher education opened its doors to students with multiple life roles who might not have previously attended higher education. Many urban institutions created in the late 1800s were the first institutions to service nontraditional students, such as providing evening and part-time programs. Despite all of these efforts to help students succeed, there is significant concern regarding the levels of preparedness and academic persistence of college students. While first-year persistence is a concern nationally, urban institutions face even lower retention rates for students from the first to second year of education.

While much of the literature focuses on pre-college characteristics, such as standardized test scores and high school performance, the literature fails to neglect how support services during the first year of college can affect first-year persistence. While much of the previous research explores the persistence of traditional first-year students; students who attend urban institutions often portray more nontraditional characteristics, such as being more likely to change from full-time to part-time enrollment, living off-campus, working more than twenty hours per week, and receiving considerable aid or loans. Multiple life roles of students can negatively impact students' performance. As the majority of these first-year students enter the university with high expectations,
something happens throughout the first year that lowers these expectations. Therefore, this study will extend beyond previous research to explore how pre-college characteristics, faculty and student interactions, and institutional commitments can potentially predict persistence of first-year college students from the first to second year of higher education at an urban institution.
CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

The purpose of this chapter is to briefly describe the research design of the dissertation and the methodological questions. The purpose of this study is to explore first-year students’ persistence at two public urban four-year higher education institutions in Ohio and two public traditional residential four-year higher education institutions in Ohio. This study sought to explore five factors which influence the persistence of first-year adult learners in higher education. The five factors include: (1) peer-group interactions, (2) interactions with faculty, (3) faculty concern for student development and teaching, (4) academic and intellectual development, and (5) institutional and goal commitments (Pascarella & Terenzini, 1980). The focus of this study was driven by the following four research questions:

(1) To what extent do the five factor groups explain persistence among first-year undergraduate students?

(2) To what extent do the personal independent variables influence persistence among first-year undergraduate students?
(3) To what extent do the contextual independent variables influence persistence among first-year undergraduate students?

(4) To what extent do the institutional independent variables influence persistence among first-year undergraduate students?

Conceptual Framework

Because both the six-year graduation rates and first-year persistence rates for urban institutions are much lower than the national average and other institutions in the state, it is important to have a better understanding of persistence in urban institutions in order to best meet the needs of students and to encourage success and graduation of students. While most of the prior research has focused on background characteristics such as ACT scores, high school GPAs, age and race as predictors of persistence, this study will add to the body of knowledge by exploring factors that impact first-year students once they have started their journey in higher education. Additionally, while most of the prior research focuses on residential institutions, this study compared both urban and residential institutions in order to explore what might be unique about the experiences of students during their academic career at an urban institution causing the persistence and retention scores to be consistently lower than at residential institutions. The following model was created to describe the relationship of factors impacting the persistence of students:
Dependent Dimensions of Influence

Peer-group interactions
Interactions with faculty
Faculty concern for student development and teaching
Academic and intellectual development
Institutional and goal commitments

Personal Dimensions of Influence:
Ethnicity/race, gender, age, socio-economic status, parents' highest level of education, community of origin (i.e. suburban, urban)

Contextual Dimensions of Influence:
HS GPA, ACT, college first semester GPA, hours working, lives on/off campus, campus involvement

Institutional Dimensions of Influence:
Urban University
Residential University

Persistence of First-Year Undergraduate Students

Dependent Dimensions of Influence

Peer-Group Interactions

Berger and Milem (1999) researched the impact of involvement on student persistence. Students who got involved earlier were more likely to have higher levels of institutional commitment. From the results of the 2004 National Survey of Student Engagement (NSSE), Pike, Kuh and Massa-McKinley (2008) found that active and collaborative learning activities and positive interactions between students and faculty members can positively impact the academic success of students. Tinto and Goodsell (1993) found that first-year students enrolled in first-year interest groups were more likely to report strong social networks with their peers.

Interactions with Faculty
Pascarella, Terenzini and Hibel (1978) found that faculty members' informal relationships with students influenced students' grade point averages after the first year of college. Initial conversations and conversations related to career aspirations were the most influential for students. Campbell and Campbell (1997) found that students belonging to 'student to faculty' mentoring programs had higher persistence rates and grade point averages compared to students who did not belong to the mentoring program. Kuh and Hu (2001) found that faculty interaction with students increased over time; however, faculty were more likely to have conversations with higher performing students.

Faculty Concern for Student Development and Teaching

Faculty members can impact students' self-efficacy, career planning and the connection to the institution for students (Bean, 2005). While many adjunct professors are experts in their fields, they are not able to provide the developmental and career support for students throughout the college experience as full-time professors are able to provide (Bettinger and Long, 2006). Schroeder (1993) writes that faculty need to continually review curriculum and teaching styles to meet the needs to today's students. Braxton, Milem and Sullivan (2000) found that students who participated in classes where faculty used active learning techniques were more likely to have stronger institutional commitment, social integration and persistence.

Academic and Intellectual Development

Tinto (1975) is one of the foremost pioneers in student persistence. His research demonstrated that students' relationships with both faculty and peers, both formally and informally, impacted student persistence. Allen (1999) supported Tinto's theory by
concluding that institutional commitment and peer climate can have a positive effect on student persistence. Bauer and Liang (2003) found that both personality and pre-college characteristics can influence students' academic development. Not only were thoughtful and caring students found to perform academically better, but the amount of time spent on academic work was related to first semester grade point average.

Institutional and Goal Commitments

Bean (2005) writes of the importance of faculty members and academic advisors for student's successful academic integration into an institution and their positive impact on persistence. This does not just include students' interaction with faculty, but the faculty member's belief in the student. This is also an argument for tenure and tenure-track faculty since many adjunct professors have limited, if any, office hours and often discontinuity working between semesters. Strauss and Volkwein (2004) demonstrated that academic integration followed by social integration had the greatest influence on students' institutional commitment. Finally, Hausmann, Ye, Schofield and Woods (2009) found that students felt a stronger commitment to the institution when the institution purposely reached out to the students through both direct communications and gifts with the institution's logo.

Personal Dimensions of Influence

Ethnicity and Race

Despite all of the advances in higher education for minority students, ethnic minority students still face many barriers impacting their education, such as a lack of presence of minorities in both the classroom and curriculum, lack of nurturing support systems, and financial need (Padilla, Trevino, Gonzalez & Trevino, 1997). In support of
need-based aid, Hu and St. John (2001) found that African American and Hispanic students who received aid persisted at higher rates than students who did not receive any aid. While standardized test scores are not accurate predictors of college success for minority students, the high school grade point average (GPA) was found to be an accurate predictor of persistence. African American students with lower high school GPAs had lower persistence rates compared to other minority groups. However, African American students with higher high school GPAs performed better than other minority students at college (Waugh, Micceri & Takalkar, 1994).

Gender

Despite years of advancement for women in higher education, women still face many challenges in both education and the workforce. While women are now the majority of students attending higher education, women are still less likely to enter fields such as science and engineering, and women still report earning less than men in the workforce. El-Khawas (2003) studied the 'chilly climate' for women in higher education and found the 'chilly climate' had a negative effect on the cognitive development of students at two-year institutions.

Age

The G. I. Bill provided access and means for many nontraditional aged students to enroll in college. Because most nontraditional aged students have multiple life roles, many perceive these students as not performing as well as traditional aged students, or not placing a priority on education. However, Bean and Metzner (1985) found that age was not a factor in predicting student persistence, even though multiple life responsibilities were negatively related to persistence. Gibson and Slate (2010) also
found that nontraditional students were more academically engaged than traditional aged students.

Socio-Economic Status

To help low socio-economic students attend college, the federal government created need-based aid and grants such as the Pell Grant for students who are able to demonstrate a financial need. Stampen and Cabrera (1988) found that students receiving need-based aid had the same levels of persistence as students not receiving any aid, thus demonstrating the importance of need-based aid for low-income students. Allen's (1999) research showed that financial aid, parents' education, and pre-college academic ability all had an impact on academic performance and persistence. King (2003) demonstrated that students who had to attend an institution part-time, work while attending college, or live off-campus all due to financial constraints were more likely to drop out of the institution.

Parents' Highest Level of Education

First-generation college students often face lower persistence rates for college because they do not have the same social capital as students whose parents attended college. York-Anderson and Bowman (1991) found that first-generation students received less support and factual information about the college process, even though their commitment levels were the same as students whose parents attended college. Lohfink and Paulsen (2005) found that first-generation students who were also low-income, minority or female had lower persistence rates than other first-generation students. Braxton, Hirschy and McClendon (2004) also found that parents' level of education was highly correlated with students' persistence in higher education. Braxton, Hirschy and
McClendon argued that minority students are at a higher risk to drop-out because they often have multiple life responsibilities, as well as often being the first in their family to attend college.

Community of Origin

Community of origin makes a difference depending on the type of institution a student attends. A student from a rural community faces lower persistence rates at a large public institution than a student from an urban community who may be used to the larger scale of campus. Students from urban communities might also face challenges at a smaller private institution, especially if a low-income student is trying to fit in with more affluent students who can afford private education (Guiffrida, 2008).

Contextual Dimensions of Influence

High School Grade Point Average and ACT/ SAT Score

At many institutions, high school GPAs and ACT scores are used as sole indicators of student persistence by determining whether or not a student should even be admitted into the institution. In addition to financial aid and parents' highest level of education, Allen (1999) also found that pre-college academic ability played a major role in academic performance and persistence. Titus (2004) also found that academic background, academic performance and involvement all positively influenced student persistence. McGrath and Braunstein (1997) found that students who were retained after their first year had higher high school GPAs, ACT scores and first-semester GPAs. Zheng, Saunders, Shelley and Whalen (2002) found psychological and emotional variables to also influence the persistence of students in addition to standardized test scores and GPAs.
Hours Working

Pike, Kuh and Massa-McKinley (2008) found that students who worked less than twenty hours per week had higher persistence scores than students who worked more than twenty hours per week. Students who worked more than twenty hours per week reported the institution as unsupportive and were more likely to be lower ability students. No difference in persistence was found for students who worked less than twenty hours per week and students who did not work at all while attending college.

Living On or Off Campus

King (2003) found that living on-campus and studying full-time allowed students to persist at a higher rate. However, these factors were largely determined by students' financial means. Inman and Pascarella (1998) found that critical thinking skills were the same for students living on or off campus. Turley and Wodtke (2010) found that living on or off campus did not make a difference in persistence based upon the type of institution. However, African American students living on campus had higher first year GPAs than African American students living off campus at the same types of institutions.

Campus Involvement

Astin (1975) is viewed as one of the foremost pioneers in the importance of campus involvement. His work led to the finding that campus involvement is a significant predictor of retention and persistence. Hinkle (2006) found that first-year students were afraid to get involved because their academics would suffer, but first-year students were more likely to get involved if it was an academic related activity. Krause (2007) conducted a study of first-year commuter students and determined that involvement was a significant predictor of retention. Tieu and Prancer (2009) studied
first-year students and found that the quality of the involvement had a significant impact on students' adjustment to college. This included an impact on students' self-esteem, perceived stress and social support. Through the National Survey of Student Engagement, Kuh, Cruce, Shoup, Kinzie and Gonyea (2008) found that student engagement positively impacted student grades during the first and last semester of college. They also found that pre-college characteristics such as ACT and SAT scores positively impacted persistence, but the results diminished after taking into consideration students' experiences while in college.

*Institutional Dimensions of Influence*

Urban institutions often face more challenges relating to college persistence than residential institutions because many urban institution students have more life responsibilities. Hagedorn (2004) found that urban community colleges can improve persistence of students by providing programs targeted specifically for minority and ethnic groups, low-income students and first-generation students. Many urban institutions are also providing low-income students and first-generation students scholarships to live in the residence halls. By providing students resources and services necessary to succeed, many students struggling to succeed now have a safe environment promoting their academic engagement (Ogumtoyinbo, 2011).

With respect to this study, students will be surveyed at both public urban institutions and public traditional residential institutions. The primary purpose of this study is to investigate persistence rates at urban institutions, since urban institutions are more likely to face lower retention and graduation rates. Also, much of the literature on persistence focuses solely on traditional institutions. It is necessary, however, to compare
the persistence rates of urban institutions with residential institutions to determine, if there is a statistically significant difference among persistence based upon the criteria of residential and urban institutions. Two institutions of each type were selected in order to have a representative sample of students. In doing so, the two urban public institutions that were selected are Cleveland State University and Youngstown State University. These institutions face many of the same challenges in that they are located in an urban environment, the student population is largely nontraditional and commuters, and both institutions face low retention and graduation rates. The two residential traditional institutions selected are Miami University and Ohio University. These institutions were selected because they are historically traditional institutions, located in a small campus-town location, and students are traditionally aged and more likely to be full-time college students. Both Miami University and Ohio University are also well respected institutions for having high retention and graduation rates, while being selective in their admission to the institution.

Cleveland State University

Cleveland State University is a four-year public institution in Northeast Ohio, specifically in downtown Cleveland, Ohio. Founded in 1964, Cleveland State offers more than two hundred different academic programs for over 16,000 undergraduate, graduate, doctoral and law students. Cleveland State is known as an urban institution catering to evening, part-time and commuter students. Cleveland State is considered to have moderately selective admissions standards in that students must meet minimal academic standards to be admitted, but that anyone who meets these requirements will be admitted. Approximately 1,200 students are defined as first-time college attending
students. The majority of these students are from the same county as the institution; however, fewer than 10% of these students come from states outside of Ohio. Interestingly, just under half of the first-year cohort lives on-campus each year. While the majority of students are traditional by age, many do meet other definitions of being a nontraditional student: living off-campus, working twenty or more hours per week, and having a child or children. Furthermore, over half of the first-year students are enrolled in developmental English or math courses and almost all of the students receive some type of financial aid or assistance (Cleveland State University Admissions website, 2012).

Cleveland State has faced much criticism regarding its low graduation and retention rates. In 2003, Cleveland State began to implement admissions standards for the first-time. While the institution is still considered to be only slightly selective, anecdotally there is a difference in the first-year cohort. While the average ACT score of the first-year class has slightly increased in the past five years, it is still too early to measure the impact of the admissions standards on graduation and retention. Nonetheless, the six-year graduation rate for the 2003 cohort of students according to IPEDS (2012) was a staggering 29%, the lowest in the state of Ohio at the time. In other words, only 29% of the first-year cohort in 2003 graduated from Cleveland State within six or less years. The number was even lower for minority students including a 9% six-year graduation rate for African American students and a 13% six-year graduation rate for Hispanic students. Only 7% of the 2003 first-year cohort completed their degree from Cleveland State within four years. The first-year retention rate for students from 2008 to 2009 is 66% for full-time students and 68% for part-time students. Or, only 66% of full-
time first-year students in 2008 returned to Cleveland State in 2009 (IPEDS Data Center, 2012). Not only does Cleveland State rank as one of the lowest in the state of Ohio for graduation and retention, it also ranks as one of the lowest in the nation. 

Youngstown State University

Youngstown State University (YSU), founded in 1908, is a comprehensive urban research university located in downtown Youngstown, Ohio. Approximately 16,000 students attend YSU including associate degree, undergraduate, graduate and doctoral students. Of those students, approximately 1,000 live on campus. YSU boasts one of the most affordable tuitions for four-year schools in the state of Ohio with eighty-three percent of students receiving financial aid. The average age of the YSU student is 25.1. YSU typically enrolls over 2,200 first-year students each year (Youngstown State University Fast Facts website, 2012).

Much like Cleveland State, Youngstown struggles with its first-year retention and graduation rates. For 2009, 2,861 first-year students enrolled at Youngstown. The six-year graduation rate for the 2003 cohort of first-year students is 34%. The graduation rate for African American students is 14% and for Hispanic students is 32%. The first-year retention rate for students from 2008 to 2009 is 70% for full-time students and 42% for part-time students (IPEDS Data Center, 2012). Therefore, both the graduation and retention rates for Youngstown State University are below the national averages for four-year public institutions.

Ohio University

Ohio University (OU), located in Athens, Ohio, a small, rural town in Southeast Ohio, is the oldest public institution in the state of Ohio and the first public institution of
higher learning in the Northwest Territory. In 1786, Congress purchased one and a half million acres of land west of the Ohio River through the Ohio Company of Associates. The revenue from the two townships in the Ohio Company was used towards the establishment of the institution as one of the original land grant institutions. The institution opened in 1804 with only three students enrolled. Since its beginnings, OU is a highly selective institution and is ranked as one of the top sixty institutions in the country according to *U.S. News and World Report*. Over 81% of the students attending Ohio University receive financial aid. Practically all of the first-year students live on campus due to the isolation of the campus and because most of the first-year students are not from the Athens area (Ohio University President History website, 2012).

Approximately 23,000 students attend the main campus of Ohio University in Athens, Ohio. Over 35,000 students compose the enrollment at both the main and regional campuses. Of the main campus students, approximately 4,000 are new first-year students each fall. The six-year graduation rate for the 2003 cohort of first-year students is 69%. The graduation rate for African American students is 57% and for Hispanic students is 56%. The first-year retention rate for students from 2008 to 2009 is 82% for full-time students and 40% for part-time students (IPEDS Data Center, 2012). Therefore, both the graduation and retention rates for Ohio University are above the national averages for four-year public institutions.

Miami University

Miami University is a public university in Southwest Ohio located just north of Cincinnati. Established in 1809 and opening its doors for students in 1823, it is one of the oldest institutions in Ohio and named after the Miami Indian Tribe that inhabited the
region. Miami University quickly gained the reputation of ‘The Yale of the West’ and even author Robert Frost said it was the most beautiful campus. Miami now offers programs for undergraduate, graduate and doctoral students at its main location in Oxford, Ohio and two other regional campuses. Miami University prides itself on its high academic standards and national rankings. In 2012, *US News and World Report* ranked Miami third in its commitment to undergraduate teaching among the nation’s universities. With its high admissions requirements, Miami University is considered to be a selective institution. Located within a college-town, the majority of students live on campus or in the surrounding neighborhood (Miami University About Miami website, 2012).

Approximately 17,000 students attend the main campus of Miami University in Oxford, Ohio. Of the degree seeking students, 3,236 students were first-time students in 2009. All of the first-time students attended full-time except for one student. The six-year graduation rate for the 2003 cohort of first-year students is 83%. The graduation rate for African American students is 69% and for Hispanic students is 78%. The first-year retention rate for students from 2008 to 2009 is 89% for full-time students and 33% for part-time students (IPEDS Data Center, 2012). Therefore, both the graduation and retention rates for Miami University are well above the national averages for four-year public institutions.

Instrumentation

The Social Integration and Persistence Intentions Scale is a 30-item measure designed to help predict first-year college persistence and voluntary drop-out decisions. This test uses a five-point Likert-type scale in which participants indicate the degree to
which they agree with the statements. The test is divided into five scales: peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional and goal commitments (Pascarella & Terenzini, 1980).

Students were also provided with a demographic questionnaire including the following independent variables: ethnicity/race, gender, age, socio-economic status, parents' highest level of education, community of origin (i.e. suburban/urban geographic location prior to college), high school grade point average, ACT score, if students are living on or off campus, number of hours working on or off campus, and involvement in student activities and organizations. Students were also asked if they were planning to remain enrolled at the institution for the future. If students do not plan to remain enrolled, students were asked to provide a brief explanation, such as financial, academic, personal or social reasons.

Sample

For this research study, the population included students from two urban institutions and two traditional residential institutions in the state of Ohio. The urban institutions included Youngstown State University in Youngstown, Ohio and Cleveland State University in Cleveland, Ohio. These institutions were selected because they are urban institutions with a large commuter population. The two traditional residential institutions included Ohio University in Athens, Ohio and Miami University in Oxford, Ohio. These universities were selected because they are very traditional in nature including requirements for first-year students to live on campus.
This research study targeted 400 student participants to assure a large enough sample size for the study. Based upon the 30 question survey, 150 participants would be sufficient. However, in order to properly compare the urban and residential institutions, this study sought to survey at least 150 participants from each of the two types of institutions for a total of 300 participants. A total of 395 students participated in the study. 180 participants were from an urban institution, and 215 participants were from a traditional residential institution. After collecting the data, Table I provides a summary of the number of participants by institution.

Table I

Summary of Participants by Institution

<table>
<thead>
<tr>
<th>University</th>
<th>N</th>
<th>% by Type of University</th>
<th>% of All Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>180</td>
<td>100.0%</td>
<td>45.6%</td>
</tr>
<tr>
<td>Cleveland State University</td>
<td>86</td>
<td>47.8%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Youngstown State University</td>
<td>94</td>
<td>52.2%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Traditional-Residential</td>
<td>215</td>
<td>100.0%</td>
<td>54.4%</td>
</tr>
<tr>
<td>Miami University</td>
<td>119</td>
<td>55.3%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Ohio University</td>
<td>96</td>
<td>44.7%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>100.0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Demographic Information

After collecting the data, the following tables summarize the demographic information of the participants. The majority of the participants identified as Caucasian/White (86.3%, N=341). The lowest number of participants identified themselves as Native Hawaiian/Other Pacific Islander (0.3%, N=1). Table II represents the race/ethnicity identified by the participants.
Table II

Race/ Ethnicity

<table>
<thead>
<tr>
<th>Race/ Ethnicity</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>American Indian/ Alaska Native</td>
<td>1</td>
<td>.5%</td>
<td>1</td>
<td>.6%</td>
</tr>
<tr>
<td>Black/ African American</td>
<td>4</td>
<td>1.9%</td>
<td>14</td>
<td>7.8%</td>
</tr>
<tr>
<td>Caucasian/ White</td>
<td>199</td>
<td>92.6%</td>
<td>142</td>
<td>78.9%</td>
</tr>
<tr>
<td>Hispanic/ Latino</td>
<td>2</td>
<td>.9%</td>
<td>10</td>
<td>5.6%</td>
</tr>
<tr>
<td>Native Hawaiian/ Other Pacific Islander</td>
<td>1</td>
<td>.5%</td>
<td>0</td>
<td>.0%</td>
</tr>
<tr>
<td>Combination</td>
<td>6</td>
<td>2.8%</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>.9%</td>
<td>9</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Females represented the highest percentage of participants in this study (57.5%, N=227) with males representing just under half of the participants (42.5%, N=168).

Table III represents the gender of the participants indicated during the study.

Table III

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>118</td>
<td>54.9%</td>
<td>109</td>
<td>60.6%</td>
</tr>
<tr>
<td>Male</td>
<td>97</td>
<td>45.1%</td>
<td>71</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

The majority of the participants were considered traditional age of first-year college students, or 18-19 years old (96.2%, N=380). Table IV represents the breakdown of ages as reported by the participants.
Table IV

<table>
<thead>
<tr>
<th>Age</th>
<th>Residential</th>
<th></th>
<th></th>
<th>Urban</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td></td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>151</td>
<td>70.2%</td>
<td></td>
<td>128</td>
<td>71.1%</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>64</td>
<td>29.8%</td>
<td></td>
<td>37</td>
<td>20.6%</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>0</td>
<td>0.0%</td>
<td></td>
<td>6</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>25-29</td>
<td>0</td>
<td>0.0%</td>
<td></td>
<td>5</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td>0</td>
<td>0.0%</td>
<td></td>
<td>2</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>35 and older</td>
<td>0</td>
<td>0.0%</td>
<td></td>
<td>2</td>
<td>1.1%</td>
<td></td>
</tr>
</tbody>
</table>

The majority of the participants responded that at least one of their parents had earned a Bachelor's Degree or higher (60.8%, N=240). 28.4% (N=112) reported that the highest level of either parents' education was a high school diploma; however, a higher percentage of students reported themselves as being of first-generation status (30.6%, N=121). Additionally, the majority of the participants responded that they did have a significant relationship (i.e. sibling, aunt/uncle, cousin, close friend) that attended college (87.6%, N=346). Table V represents the students' self-reported highest level of education by a family member.
Table V

*Parents' Highest Level of Education (self-reported)*

<table>
<thead>
<tr>
<th>Parents' Education Level</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest level of either parents' education</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>High school diploma</td>
<td>29</td>
<td>13.5%</td>
<td>83</td>
<td>46.1%</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>19</td>
<td>8.8%</td>
<td>22</td>
<td>12.2%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>94</td>
<td>43.7%</td>
<td>44</td>
<td>24.4%</td>
</tr>
<tr>
<td>Master's degree</td>
<td>54</td>
<td>25.1%</td>
<td>20</td>
<td>11.1%</td>
</tr>
<tr>
<td>Doctoral or Law degree</td>
<td>19</td>
<td>8.8%</td>
<td>9</td>
<td>5.0%</td>
</tr>
<tr>
<td>No response</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>First-generation college student</td>
<td>33</td>
<td>15.3%</td>
<td>88</td>
<td>48.9%</td>
</tr>
<tr>
<td>Significant relationship attended college</td>
<td>192</td>
<td>89.3%</td>
<td>154</td>
<td>85.6%</td>
</tr>
</tbody>
</table>

The majority of the participants indicated that the community where they grew up was a suburban community (n = 263, 66.6%) with the smallest percentage of students growing up in an urban community (n = 61, 15.4%). Table VI demonstrates the community of origin of the participants.

Table VI

*Community of Origin*

<table>
<thead>
<tr>
<th>Type of Community</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Rural</td>
<td>30</td>
<td>14.0%</td>
<td>35</td>
<td>19.4%</td>
</tr>
<tr>
<td>Suburban</td>
<td>162</td>
<td>75.3%</td>
<td>101</td>
<td>56.1%</td>
</tr>
<tr>
<td>Urban</td>
<td>20</td>
<td>9.3%</td>
<td>41</td>
<td>22.8%</td>
</tr>
<tr>
<td>Combination</td>
<td>2</td>
<td>0.9%</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.5%</td>
<td>1</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
The majority of the participants indicated their Socio-Economic Status (or family income level) to be of a middle income level (70.9%, N=280). Additional questions helped to identify the Socio-Economic Status of the participants. Only 49.6% (N=196) of the participants provided their actual family income level. Of those that responded, the mean family income for students at the residential institutions was $131,552. Of the students at the urban institutions, the mean family income was reported as $74,470. Additionally, just over one-half of the participants responded receiving any type of aid from the institution (52.4%, N=207), and 31.4% (N=124) reported receiving the Pell Grant, one of the financial aid packages from the Federal governments for students with the most need. Table VII demonstrates the socio-economic status of the participants.

Table VII

*Socio-Economic Status (self-reported)*

<table>
<thead>
<tr>
<th>Socio-Economic Status</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Low SES</td>
<td>13</td>
<td>6.0%</td>
<td>29</td>
<td>16.1%</td>
</tr>
<tr>
<td>Middle SES</td>
<td>147</td>
<td>68.4%</td>
<td>133</td>
<td>73.9%</td>
</tr>
<tr>
<td>High SES</td>
<td>53</td>
<td>24.7%</td>
<td>13</td>
<td>7.2%</td>
</tr>
<tr>
<td>Eligible for financial aid</td>
<td>93</td>
<td>43.3%</td>
<td>114</td>
<td>63.3%</td>
</tr>
<tr>
<td>assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualified for federal Pell</td>
<td>45</td>
<td>20.9%</td>
<td>79</td>
<td>43.9%</td>
</tr>
<tr>
<td>Grant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average high school grade point average of all of the participants was 3.43. All of the grade point averages were converted to a 4 point score. The average ACT score for all of the participants was 24.10. All of the SAT scores were converted to the corresponding ACT scores. Table VIII indicates the average pre-college grades and testing scores of the participants.
Table VIII

*Pre-College Grades and Test Scores (self-reported)*

<table>
<thead>
<tr>
<th>High School GPA and Test Scores</th>
<th>Residential Mean</th>
<th>Residential SD</th>
<th>Urban Mean</th>
<th>Urban SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School GPA (4.0 scale)</td>
<td>3.46  .39</td>
<td>3.40  .49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT Score</td>
<td>24.54  3.75</td>
<td>23.53  3.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The majority of the participants responded that they live on campus (n = 265, 67.1%). Additionally, 141 (35.7%) of the participants indicated that they work while either on or off campus while attending college. 26.8% (n = 106) of these students work off campus compared to 8.1% (n = 32) that work on campus. Just over half of the participants (n = 227, 57.5%) responded being involved in at least one student organization or activity. Table IX further describes the campus involvement of the participants.
Table IX

*Campus Involvement*

<table>
<thead>
<tr>
<th>Types of Involvement</th>
<th>Residential</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives On Campus</td>
<td>212</td>
<td>98.6%</td>
<td>53</td>
<td>29.4%</td>
</tr>
<tr>
<td>Live Off Campus with family</td>
<td>2</td>
<td>0.9%</td>
<td>110</td>
<td>61.1%</td>
</tr>
<tr>
<td>Lives Off Campus not with family</td>
<td>1</td>
<td>0.5%</td>
<td>17</td>
<td>9.4%</td>
</tr>
<tr>
<td>Works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works On Campus</td>
<td>25</td>
<td>11.6%</td>
<td>7</td>
<td>3.9%</td>
</tr>
<tr>
<td>Work Off Campus</td>
<td>8</td>
<td>3.7%</td>
<td>98</td>
<td>54.4%</td>
</tr>
<tr>
<td>Works On and Off Campus</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>0.6%</td>
</tr>
<tr>
<td>Does not work</td>
<td>182</td>
<td>84.7%</td>
<td>74</td>
<td>41.1%</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involved in 1 student organization or activity</td>
<td>62</td>
<td>29.1%</td>
<td>51</td>
<td>28.3%</td>
</tr>
<tr>
<td>Involved in &gt;1 student organization or activity</td>
<td>89</td>
<td>41.8%</td>
<td>25</td>
<td>13.9%</td>
</tr>
<tr>
<td>Not involved in student organization or activity</td>
<td>62</td>
<td>29.1%</td>
<td>104</td>
<td>57.8%</td>
</tr>
<tr>
<td>Holds a leadership position on campus</td>
<td>22</td>
<td>10.2%</td>
<td>12</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

Table X summarizes how many hours per week students at each of the types of institutions spends in the classroom, working and involved in a student organization or activity.
Table X

*Hours Spent Per Week*

<table>
<thead>
<tr>
<th>Hours Per Week</th>
<th>Residential Mean</th>
<th>Residential SD</th>
<th>Urban Mean</th>
<th>Urban SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled number of credit hours</td>
<td>15.31</td>
<td>1.43</td>
<td>14.57</td>
<td>2.37</td>
</tr>
<tr>
<td>Hours working per week</td>
<td>1.41</td>
<td>3.77</td>
<td>12.66</td>
<td>12.52</td>
</tr>
<tr>
<td>Hours involved in a student organization/</td>
<td>4.74</td>
<td>6.88</td>
<td>2.31</td>
<td>4.30</td>
</tr>
<tr>
<td>activity per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Data Collection**

A quantitative approach was used to determine the persistence of first-year students at two urban institutions in Ohio and two traditional residential institutions in Ohio. The researcher obtained the Institutional Review Board's approval from the researcher's home institution first, then approval from the Institutional Review Board at each of the schools to be surveyed. Stratified sampling occurred by sampling students based upon courses which enroll high percentages of first-year students, such as English 101 courses, Orientation/ First-Year courses and some Psychology 101 courses. Students were only included in the study if they met the qualifications of a “first-year student” (i.e. not having earned degree-seeking credits from a previous institution).

At each institution, the instructor approved distributing the surveys during one of the class periods. Students were asked to complete the permission form, demographic form and the Social Integrations and Persistence Intentions Scale through a pencil and paper format. All students were provided with a consent form outlining the potential risks of the study. Individual results were not shared with the instructors so the study did
not have any potential of impacting students' grades for the courses. All participants had the option to opt-out of the study at any time. Surveys of students not eighteen years of age or older, not completing a permission form or not in the first year of higher education were excluded in the analysis.

Students were surveyed at only one point during their first year of college. The data collection occurred during the second half of the first semester. This was administered in person via paper and pencil. Students were not compensated for their participation. The data collection was confidential. Students were coded in order to protect their privacy.

Data Preparation

All of the results were collected and entered into the Statistical Package for Social Sciences (SPSS) version 17 with a unique code to protect the anonymity of the participants. Because the data collection occurred via pen and paper, the participants' responses were entered directly into SPSS by the researcher. The raw survey data was stored in a locked container and only accessed by the researcher and the methodologist.

Data Analysis

The purpose of this study was to explore first-year students’ persistence at two public urban four-year higher education institutions in Ohio and two public traditional residential four-year higher education institutions in Ohio. This study sought to explore five factors which influenced the persistence of first-year adult learners in higher education. The five factors include: (1) peer-group interactions, (2) interactions with faculty, (3) faculty concern for student development and teaching, (4) academic and intellectual development, and (5) institutional and goal commitments (Pascarella &
The focus of this study will be driven by the following four research questions:

1. To what extent do the five factor groups explain persistence among first-year undergraduate students?
2. To what extent do the personal independent variables influence persistence among first-year undergraduate students?
3. To what extent do the contextual independent variables influence persistence among first-year undergraduate students?
4. To what extent do the institutional independent variables influence persistence among first-year undergraduate students?

Q1: Does peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and/or institutional and goal commitments statistically significantly predict persistence?

The first research question, “To what extent do the five factor groups explain persistence among first-year undergraduate students?”, was answered through the use of a Chi-square test for independence. A Chi-square test for independence was employed to determine if each of the five factor groups, (1) peer-group interactions, (2) interactions with faculty, (3) faculty concern for student development and teaching, (4) academic and intellectual development, and (5) institutional and goal commitments, statistically significantly predicted the persistence of first-year undergraduate students. See Appendix B.

Q2: Does ethnicity/race, gender, age, socio-economic status, parents’ highest level of education, and/or community of origin statistically significantly predict persistence?
The second research question, “To what extent do the personal independent variables influence persistence among first-year undergraduate students?” was answered through the combination of the Chi-square test for independence and a logistic regression. These were employed to determine if each of the personal independent variables, (1) ethnicity/race, (2) gender, (3) age, (4) socio-economic status, (5) parents' highest level of education, and (6) community or origin (i.e. suburban, urban), statistically significantly predicted the persistence of first-year undergraduate students. See Appendix B.

Q3: Does high school GPA, ACT score, hours working, lives on/off campus, and/or campus involvement statistically significantly predict persistence?

The third research question, “To what extent do the contextual independent variables influence persistence among first-year undergraduate students?” was answered through the combination of the Chi-square test for independence and a logistic regression. These were employed to determine if each of the personal independent variables, (1) high school GPA, (2) ACT score, (3) hours working, (4) lives on/off campus, and (5) campus involvement, statistically significantly predicted the persistence of first-year undergraduate students. See Appendix B.

Q4: Does attendance at an urban university or residential university statistically significantly predict persistence?

The fourth research question, “To what extent do the institutional independent variables influence persistence among first-year undergraduate students?” was answered through the use of a Chi-square test for independence. A Chi-square test for independence was employed to determine if the institutional independent variables, (1)
urban university and, (2) residential university, statistically significantly predicted persistence of first-year undergraduate students. See Appendix B.

All of the results were collected and entered into SPSS with a unique code to protect the confidentiality of the participants. To assure reliability and validity, post hoc testing, power analysis, G-Power analysis and Cronbach's Alpha test of reliability were employed.

Construct Reliability

The dependent variables for this research study are the persistence factors from the Social Integration and Persistence Intentions scale: (1) peer-group interactions, (2) interactions with faculty, (3) faculty concern for student development and teaching, (4) academic and intellectual development, and (5) institutional and goal commitments. Based upon the work of Pascarella and Terenzini (1980), the alpha reliabilities for each of these constructs ranged from .71 to .84 and "were judged adequate for using the scales in further analyses" (p. 67). The simple and partial correlations of the scales were significant at $p < .01$. For this study, the rates of reliability for the five constructs will be retested to compare the alpha reliabilities found by Pascarella and Terenzini with the reliability rates for this particular sample.

Statistical Measures for the Study

The independent variables for this research study were grouped into the following three sub-groups: (1) personal independent variables, (2) contextual independent variables, and (3) institutional independent variables. Personal independent variables included constructs that are unique to each student and cannot be altered. For this study, the personal independent variables included: ethnicity/race, gender, age, social-
economic status, parents' highest level of education, and community of origin (i.e. geographic setting prior to college - suburban, urban). The contextual independent variables are variables that each of the participants can have some form of control over. These included: ACT or SAT composite score, high school GPA, number of hours working on or off campus, whether a student lives on or off campus, and whether a student is involved in any type of student activity or organization. Because most students in the Midwest take the ACT over the SAT, the ACT score was used as the standard score. SAT scores were converted into ACT scores as needed. Both the ACT score and high school GPA were self-reported by the participants. The final independent variable for this study is the institutional independent variable. The institutional independent variable was the type of the institution, i.e. urban or residential, as pre-determined by the researcher.

Significance

This research study focused on examining factors that influence first-year persistence of adult learners in higher education. Findings of this study contributed to the minimal literature currently available regarding persistence, first-year students and higher education in the urban context. The study further interrogates the relationship between persistence, first-year students, and institutional context. The results of this study can be used to determine factors related to persistence of students at both traditional institutions and urban institutions at certain points of time within the first-year of higher education. These results can be used by administrators, faculty and student support services in determining and providing services to encourage persistence of first-year students. Information related to persistence can be useful by the President and upper administration
when making decisions based upon spending, financial aid and support services. The results can also be used by higher education and adult learning graduate students to enhance their learning of college student development theories and to prepare them to be a practitioner in higher education. Faculty and staff within higher education can use the results to better understand the whole development of students as it relates to both academic and scholastic interests of students. Finally, the results can be shared with parents, guardians and significant others of first-year college students to better understand the transition and challenges for students attending urban institutions.
CHAPTER 4

RESULTS

This quantitative study explored factors that influenced the persistence of first-year adult learners in higher education at two public urban four-year higher education institutions in Ohio and two public traditional residential four-year higher education institutions in Ohio. The purpose of this study was to explore facts that impact first-year students once they have started their journey in higher education. Additionally, the purpose was to explore what might be unique about the experiences of students at urban institutions causing typically lower persistence and retention rates than students at residential institutions.

The instrument used for this study was The Social Integration and Persistence Intentions Scale. This scale is a 30-item measure designed to help predict first-year college persistence and voluntary drop-out decisions. This test uses a five-point Likert-type scale in which participants indicate the degree to which they agree with the statements. The test is divided into five scales: peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional and goal commitments (Pascarella & Terenzini, 1980).
Each of the participants was also asked to complete a demographic questionnaire. This questionnaire included the following independent variables: ethnicity/race, gender, age, socio-economic status, parents' highest level of education, community of origin (i.e. suburban/urban geographic location prior to college), high school grade point average, ACT score, current residence (i.e. living on or off campus), number of hours working on or off campus, and if students are involved in student activities or organizations. Finally, participants were asked to indicated whether or not they would be returning to this institution and/or planning to graduate from this institution. If students were not planning to return, they were asked to indicate the reason(s) why: financial, academic, personal or social reasons.

This chapter will include the following: 1) research questions; 2) presentation of research questions and analysis; and, 3) summary of results.

Research Questions

The research questions that drove this study were the following four questions:

(1) To what extent do the five factor groups explain persistence among first-year undergraduate students?

To better understand this question with respect to the variables, this question could potentially be described as, "Does peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and/or institutional and goal commitments statistically significant predict persistence?"

(2) To what extent do the personal independent variables influence persistence among first-year undergraduate students?
To better understand this question with respect to the variables, this question could potentially be described as, "Does ethnicity/race, gender, age, socio-economic status, parents' highest level of education, and/or community of origin statistically significantly predict persistence?"

(3) To what extent do the contextual independent variables influence persistence among first-year undergraduate students?

To better understand this question with respect to the variables, this question could potentially be described as, "Does high school GPA, ACT score, hours working, lives on/off campus, and/or campus involvement statistically significantly predict persistence?"

(4) To what extent do the institutional independent variables influence persistence among first-year undergraduate students?

To better understand this question with respect to the variables, this question could potentially be described as, "Does attendance at an urban university or a residential university statistically significantly predict persistence?"

Presentation of Research Questions and Analysis

Q1: Does peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and/or institutional and goal commitments statistically significant predict persistence?

Peer Group Interactions

Peer-group interactions was measured by questions 1 to 7 from The Social Integration and Persistence Intentions Scale: (a) since coming to this university I have developed close personal relationships with other students;( b) the student friendships
that I have developed at this university have been personally satisfying; (c) my interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values; (d) my interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas; (e) it has been difficult for me to meet and make friends with other students; (f) few of the students I know would be willing to listen to me and help me if I had a personal problem; and, (g) most students at this university have values and attitudes different from mine (Pascarella & Terenzini, 1980).

(a) Since coming to this university I have developed close personal relationships with other students. The majority of the participants (72.3%) agreed or strongly agreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "Since coming to this university I have developed close personal relationships with other students" and persistence, $\chi^2 (4, n = 395) = 44.24$, $p < .01$, phi = .34. See table XI.
The student friendships I have developed at this university have been personally satisfying. The majority of the participants (76.2%) agreed or strongly agreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "The student friendships I have developed at this university have been personally satisfying" and persistence, $\chi^2 (4, n = 395) = 40.35, p < .01$, phi = .30. See table XII.

Table XI

*Crosstabulation of persistence and "I have developed close personal relationships with other students"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(3.7)</td>
<td>(4.1)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>20</td>
<td>49</td>
</tr>
</tbody>
</table>

Note: ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(b) The student friendships I have developed at this university have been personally satisfying. The majority of the participants (76.2%) agreed or strongly agreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "The student friendships I have developed at this university have been personally satisfying" and persistence, $\chi^2 (4, n = 395) = 40.35, p < .01$, phi = .30. See table XII.
Table XII

*Crosstabulation of persistence and "The student friendships that I have developed at this university have been personally satisfying"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(.8)</td>
<td>(5.2)</td>
<td>(2.4)</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>13</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>(-.8)</td>
<td>(-5.2)</td>
<td>(-2.4)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(c) *My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values.* While the majority (73.7%) agreed or strongly agreed, almost one-fifth (19.0%) of the participants responded to this question as 'neutral'. A Chi-square test for independence indicated a statistically significant relationship between "My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values" and persistence, $\chi^2(4, n = 395) = 36.04, p < .01, \phi = .30$. See table XIII.
Table XIII

Crosstabulation of persistence and "My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>10</td>
<td>16</td>
<td>15</td>
<td>6</td>
<td>36.04**</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.2)</td>
<td>(4.9)</td>
<td>(2.7)</td>
<td>(-2.1)</td>
<td>(-2.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>12</td>
<td>59</td>
<td>164</td>
<td>106</td>
<td>(2)</td>
<td>(2.6)</td>
<td>(.9)</td>
</tr>
<tr>
<td></td>
<td>(-.2)</td>
<td>(-4.9)</td>
<td>(-2.7)</td>
<td>(2.1)</td>
<td>(2.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(d) My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas. While the majority of participants (68.1%) agreed or strongly agreed with this statement, 24.3% of the participants responded 'neutral' to this statement. A Chi-square test for independence indicated a statistically significant relationship between "My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas" and persistence, $\chi^2 (4, n = 395) = 36.26, p < .01, \phi = .30$. See table XIV.
Table XIV

*Crosstabulation of persistence and "My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas"*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td>χ²</td>
<td>Φ</td>
</tr>
<tr>
<td>No</td>
<td>3 (2.0)</td>
<td>7 (3.1)</td>
<td>23 (4.1)</td>
<td>11 (-3.2)</td>
<td>4 (-2.7)</td>
<td>36.26**</td>
<td>.30</td>
</tr>
<tr>
<td>Yes</td>
<td>6 (-2.0)</td>
<td>14 (-3.1)</td>
<td>73 (-4.1)</td>
<td>165 (3.2)</td>
<td>89 (2.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** *p < .01. Adjusted standard residuals appear in parentheses below group frequencies.

(e) *It has been difficult for me to meet and make friends with other students.* While 60.5% of the participants disagreed or strongly disagreed to this statement, 20.0% responded 'neutral' to this statement. Of the students that agreed or strongly agreed to this statement, the percentage of those that persisted was approximately the same as those students who did not intend to persist. A Chi-square test for independence indicated no statistically significant relationship between "It has been difficult for me to meet and make friends with other students" and persistence, $\chi^2 (4, n = 395) = 9.27, p = .06, \phi = .15$. See table XV.
Table XV

*Crosstabulation of persistence and "It has been difficult for me to meet and make friends with other students"

<table>
<thead>
<tr>
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<th></th>
<th></th>
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<td>SA</td>
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<td>$\Phi$</td>
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<td>7</td>
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<td>5</td>
<td>9.27</td>
<td>.15</td>
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<tr>
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<td>(1.2)</td>
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<td>20</td>
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<tr>
<td></td>
<td>(1.8)</td>
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<td>(-2.5)</td>
<td>(.1)</td>
<td>(-1.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $p = \text{NS}$. Adjusted standard residuals appear in parentheses below group frequencies.

(f) Few of the students I know would be willing to listen to me and help me if I had a personal problem. The percentage of students who agreed or strongly agreed (38.7%) to this statement was slightly less compared to the percentage of students who disagreed or strongly disagreed (46.6%) to this statement. A Chi-square test for independence indicated no statistically significant relationship between "Few of the students I know would be willing to listen to me and help me if I had a personal problem" and persistence, $\chi^2 (4, n = 395) = 9.18$, $p = .06$, $\phi = .15$. See table XVI.
Table XVI

*Crosstabulation of persistence and "Few of the students I know would be willing to listen to me and help me if I had a personal problem"

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<tr>
<th>Likert Scale Rating</th>
<th>Persistence</th>
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<tr>
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<td>60</td>
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<td>(1.6)</td>
</tr>
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</table>

Note.  \(p = \text{NS}\). Adjusted standard residuals appear in parentheses below group frequencies.

(g) Most students at this university have values and attitudes different from my own. Almost half of the participants (41.3%) responded 'neutral' to this statement, 33.2% agreed or strongly agreed to this statement, and 25.6% disagreed or strongly disagreed to this statement. A Chi-square test for independence indicated a statistically significant relationship between "Most students at this university have values and attitudes different from my own" and persistence, \(\chi^2 (4, n = 395) = 11.69, p < .05, \phi = .17\). See table XVII.
### Table XVII

*Crosstabulation of persistence and "Most students at this university have values and attitudes different from my own"

<table>
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<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
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<th>( \Phi )</th>
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<tr>
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<td>0</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>(-1.4)</td>
<td>(-1.4)</td>
<td>(-.9)</td>
</tr>
<tr>
<td>Yes</td>
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<td>81</td>
<td>146</td>
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<tr>
<td></td>
<td>(1.4)</td>
<td>(1.4)</td>
<td>(.9)</td>
</tr>
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</table>

Note. ** \( p < .05 \). Adjusted standard residuals appear in parentheses below group frequencies.

Interactions with Faculty

Interactions with faculty was measured by questions 8 to 12 from The Social Integration and Persistence Intentions Scale: (a) my nonclassroom interactions with faculty have had a positive influence on my personal growth, attitudes and values; (b) my nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas; (c) my nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations; (d) since coming to this university I have developed a close, personal relationships with at least one faculty member; and, (e) I am satisfied with opportunities to meet and interact informally with faculty members (Pascarella & Terenzini, 1980).
(a) *My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes.* While the majority of the participants (61.3%) agreed or strongly agreed to this statement, almost one-third (32.2%) of the participants respond 'neutral' to this statement. A Chi-square test for independence indicated a statistically significant relationship between "My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes" and persistence, $\chi^2 (4, n = 395) = 15.94, p < .01, \phi = .20$. See table XVIII.

Table XVIII
*Crosstabulation of persistence and "My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes"*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>(-.6)</td>
<td>(3.4)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>15</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>(.6)</td>
<td>(-3.4)</td>
<td>(-1.2)</td>
</tr>
</tbody>
</table>

Note. **$p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(b) *My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.* While almost half of the participants (49.9%) agreed to this statement, 33.9% of the participants responded 'neutral' to this statement. A Chi-square test for independence indicated a statistically significant relationship between "My nonclassroom interactions with faculty have had a positive
influence on my intellectual growth and interest in ideas" and persistence, $\chi^2 (4, n = 395) = 22.33, p < .01, \phi = .24$. See table XIX.

Table XIX

*Crosstabulation of persistence and "My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
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<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>(-.6)</td>
<td>(4.3)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>10</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>(.6)</td>
<td>(-4.3)</td>
<td>(-1.2)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(c) *My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations.* While 61.7% of the participants agreed or strongly agreed to this statement, 33.4% of the participants responded 'neutral' to this statement. A Chi-square test for independence indicated a statistically significant relationship between "My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations" and persistence, $\chi^2 (4, n = 395) = 23.42, p < .01, \phi = .24$. See table XX.
Table XX

*Crosstabulation of persistence and "My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations"

<table>
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<th>Persistence</th>
<th>Likert Scale Rating</th>
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<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td>$\chi^2$</td>
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<td>9</td>
<td>19</td>
<td>17</td>
<td>4</td>
<td>23.42**</td>
<td>.24</td>
</tr>
<tr>
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<td>(-.5)</td>
<td>(4.5)</td>
<td>(1.0)</td>
<td>(-1.7)</td>
<td>(-1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>9</td>
<td>113</td>
<td>168</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.5)</td>
<td>(-4.5)</td>
<td>(-1.0)</td>
<td>(1.7)</td>
<td>(1.4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$.  Adjusted standard residuals appear in parentheses below group frequencies.

(d) *Since coming to this university I have developed a close, personal relationship with at least one faculty member.* For this statement, there was not a response common to a majority of the participants: 42.5% strongly disagreed or disagreed with the statement, 27.1% strongly agreed or agreed with this statement, and 30.4% rated 'neutral' to this student. A Chi-square test for independence indicated no statistically significant relationship between "Since coming to this university I have developed a close, personal relationship with at least one faculty member" and persistence, $\chi^2 (4, n = 395) = 6.41, p = .17, \phi = .13$. See table XXI.
Table XXI

*Crosstabulation of persistence and "Since coming to this university I have developed a close, personal relationship with at least one faculty member"

<table>
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<th>Persistence</th>
<th>Likert Scale Rating</th>
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<th>( \Phi )</th>
</tr>
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<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(.4)</td>
<td>(2.2)</td>
<td>(-1.5)</td>
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<td>Yes</td>
<td>24</td>
<td>116</td>
<td>110</td>
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<td></td>
<td>(-.4)</td>
<td>(-2.2)</td>
<td>(1.5)</td>
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</table>

Note. \( p = \text{NS} \). Adjusted standard residuals appear in parentheses below group frequencies.

(e) I am satisfied with the opportunities to meet and interact informally with faculty members. While the majority of the participants (58.2%) agreed or strongly agreed to this statement, 32.2% did respond 'neutral' to this statement. A Chi-square test for independence indicated no statistically significant relationship between "I am satisfied with the opportunities to meet and interact informally with faculty members" and persistence, \( \chi^2 (4, n = 395) = 9.39, p = .052, \phi = .15 \). See table XXII.
Table XXII

*Crosstabulation of persistence and "I am satisfied with the opportunities to meet and interact informally with faculty members"

<table>
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<th>Likert Scale Rating</th>
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<td></td>
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<tr>
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<td>2</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(1.9)</td>
<td>(2.2)</td>
<td>(-.5)</td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>25</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>(-1.9)</td>
<td>(-2.2)</td>
<td>(.5)</td>
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</tbody>
</table>

Note. $p = NS$. Adjusted standard residuals appear in parentheses below group frequencies.

Faculty Concern for Student Development and Teaching

Faculty concern for student development and teaching was measured by questions 13 to 17 from The Social Integration and Persistence Intentions Scale: (a) few of the faculty members I have had contact with are generally interested in students; (b) few of the faculty members I have had contact with are generally outstanding or superior teachers; (c) few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students; (d) most of the faculty I have had contact with are interested in helping students grow in more than just academic areas; and, (e) most faculty members I have had contact with are genuinely interested in teaching (Pascarella & Terenzini, 1980).

(a) *Few of the faculty members that I have had contact with are generally interested in students.* There was no single response in which a majority of the
participants responded: 33.7% disagreed or strongly disagreed, 43.1% agreed or strongly agreed, and 23.3% responded 'neutral'. A Chi-square test for independence indicated a statistically significant relationship between "Few of the faculty members that I have had contact with are generally interested in students" and persistence, $\chi^2 (4, n = 395) = 11.51$, $p < .05$, phi = .17. See table XXIII.

Table XXIII
_Crosstabulation of persistence and "Few of the faculty members that I have had contact with are generally interested in students"

<table>
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<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
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<th>$\Phi$</th>
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<td>11.51**</td>
<td>.17</td>
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<td></td>
<td>(-1.9) (-2.2) (.3) (2.7) (.0)</td>
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<tr>
<td>Yes</td>
<td>24 102 80 112 29</td>
<td>(1.9) (2.2) (-.3) (-2.7) (.0)</td>
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</table>

Note. ** $p < .05$. Adjusted standard residuals appear in parentheses below group frequencies.

(b) _Few of the faculty members that I have had contact with are generally outstanding or superior teachers._ There was not one response in which a majority of the participants responded; 25.3% of the participants strongly disagreed or disagreed, 44.1% strongly agreed or agreed, and 30.4% responded 'neutral'. A Chi-square test for independence indicated no statistically significant relationship between "Few of the faculty members that I have had contact with are generally outstanding or superior teachers" and persistence, $\chi^2 (4, n = 395) = 3.90$, $p = .42$, phi = .10. See table XXIV.
Table XXIV  
*Crosstabulation of persistence and "Few of the faculty members that I have had contact with are generally outstanding or superior teachers"

<table>
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<th>Persistence</th>
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<th>( \Phi )</th>
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<td>16</td>
</tr>
<tr>
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<td>(-.7)</td>
<td>(.5)</td>
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<td>74</td>
<td>104</td>
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<td>(1.7)</td>
<td>(.7)</td>
<td>(-.5)</td>
</tr>
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</table>

Note. \( p = NS \). Adjusted standard residuals appear in parentheses below group frequencies.

(c) *Few of the faculty members that I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students.* There was not one response in which a majority of the participants responded; 37.4% of the participants strongly disagreed or disagreed, 40.3% strongly agreed or agreed, and 22.5% responded 'neutral'. A Chi-square test for independence indicated no statistically significant relationship between "Few of the faculty members that I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students" and persistence, \( \chi^2 (4, n = 395) = 3.97, p = .41, \phi = .10 \). See table XXV.
Table XXV

*Crosstabulation of persistence and "Few of the faculty members that I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students"

<table>
<thead>
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<th>Persistence</th>
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<td>13</td>
<td>14</td>
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<td>(-1.7)</td>
<td>(-.2)</td>
<td>(1.2)</td>
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<td>75</td>
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<td>(1.7)</td>
<td>(.2)</td>
<td>(-1.2)</td>
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</table>

Note. $p = NS$. Adjusted standard residuals appear in parentheses below group frequencies.

(d) Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas. The majority of the participants (75.2%) agreed or strongly agreed to the statement. Almost one-fifth (19.7%) of the participants responded 'neutral' to the statement. A Chi-square test for independence indicated a statistically significant relationship between "Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas" and persistence, $\chi^2 (4, n = 395) = 19.75, p < .01, \phi = .22$. See table XXVI.
### Table XXVI

*Crosstabulation of persistence and "Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas"

<table>
<thead>
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<th>Persistence</th>
<th>Likert Scale Rating</th>
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<th>Φ</th>
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</thead>
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<td>4</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(3.3)</td>
<td>(.5)</td>
<td>(2.1)</td>
</tr>
<tr>
<td>Yes</td>
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<tr>
<td></td>
<td>(-3.3)</td>
<td>(-.5)</td>
<td>(-2.1)</td>
</tr>
</tbody>
</table>

Note. ** p < .01. Adjusted standard residuals appear in parentheses below group frequencies.

(e) *Most faculty members I have had contact with are genuinely interested in teaching*. The majority of the participants (88.1%) agreed or strongly agreed to the statement. A Chi-square test for independence indicated a statistically significant relationship between "Most faculty members I have had contact with are genuinely interested in teaching" and persistence, χ² (4, n = 395) = 27.12, p < .01, phi = .26. See table XXVII.
Crosstabulation of persistence and "Most faculty members I have had contact with are genuinely interested in teaching"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
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<tbody>
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<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(2.7)</td>
<td>(1.1)</td>
<td>(3.8)</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(-2.7)</td>
<td>(-1.1)</td>
<td>(-3.8)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

Academic and Intellectual Development

Academic and intellectual development was measured by questions 18 to 24 from The Social Integration and Persistence Intentions Scale: (a) I am satisfied with the extent of my intellectual development since enrolling in this university; (b) my academic experience has had a positive influence on my intellectual growth and interest in ideas; (c) I am satisfied with my academic experience at this university; (d) few of my courses this year have been intellectually stimulating; (e) my interest in ideas and intellectual matters has increased since coming to this university; (f) I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university; and, (g) I have performed academically as well as I anticipated I would (Pascarella & Terenzini, 1980).

(a) I am satisfied with the extent of my intellectual development since enrolling
in this university. While a majority of the participants (80.6%) agreed or strongly agreed with this statement, 22.9% of the participants who indicated they would not persist disagreed or strongly disagreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "I am satisfied with the extent of my intellectual development since enrolling in this university" and persistence, $\chi^2 (4, n = 395) = 50.08, p < .01, \phi = .36$. See table XXVIII.

Table XXVIII

*Crosstabulation of persistence and "I am satisfied with the extent of my intellectual development since enrolling in this university"*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
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<td>D</td>
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<td>15</td>
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<td>(2.9)</td>
<td>(4.6)</td>
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<td>1</td>
<td>11</td>
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<tr>
<td></td>
<td>(-2.9)</td>
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</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(b) *My academic experience has had a positive influence on my intellectual growth and interest in ideas.* The majority of the participants (82.8%) agreed or strongly agreed to the statement. 12.7% of the participants responded 'neutral' to this statement. A Chi-square test for independence indicated a statistically significant relationship between "My academic experience has had a positive influence on my intellectual growth
and interest in ideas" and persistence, $\chi^2 (4, n = 395) = 53.16, p < .01, \phi = .37$. See table XXIX.

Table XXIX

*Crosstabulation of persistence and "My academic experience has had a positive influence on my intellectual growth and interest in ideas"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(-.4)</td>
<td>(5.3)</td>
<td>(4.1)</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>(.4)</td>
<td>(-5.3)</td>
<td>(-4.1)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(c) *I am satisfied with my academic experience at this university*. The majority of the participants (80.5%) agreed or strongly agreed with the statement. 13.7% of the participants responded 'neutral' to the statement. A Chi-square test for independence indicated a statistically significant relationship between "I am satisfied with my academic experience at this university" and persistence, $\chi^2 (4, n = 395) = 67.05, p < .01, \phi = .41$. See table XXX.
Table XXX

Crosstabulation of persistence and "I am satisfied with my academic experience at this university"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>( \chi^2 )</th>
<th>( \Phi )</th>
</tr>
</thead>
<tbody>
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<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(4.7)</td>
<td>(5.8)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>8</td>
<td>43</td>
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<tr>
<td></td>
<td>(-4.7)</td>
<td>(-5.8)</td>
<td>(-2.0)</td>
</tr>
</tbody>
</table>

Note. ** \( p < .01 \). Adjusted standard residuals appear in parentheses below group frequencies.

(d) Few of my courses this year have been intellectually stimulating. There was not one common response in which a majority of the participants responded. 32.4% of the participants disagreed or strongly disagreed, 42.8% of the participants agreed or strongly agreed, and 24.8% of the participants responded 'neutral'. A Chi-square test for independence indicated no statistically significant relationship between "Few of my courses this year have been intellectually stimulating" and persistence, \( \chi^2 (4, n = 395) = 4.60, p = .33, \phi = .11 \). See table XXXI.
### Table XXXI

*Crosstabulation of persistence and "Few of my courses this year have been intellectually stimulating"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>( \chi^2 )</th>
<th>( \Phi )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(-1.7)</td>
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<td>(.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>94</td>
<td>86</td>
</tr>
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</table>

Note. \( p = \text{NS} \). Adjusted standard residuals appear in parentheses below group frequencies.

(e) *My interest in ideas and intellectual matters has increased since coming to this university.* The majority of the participants (72.9%) agreed or strongly agreed with this statement. Almost one-fourth of the participants (23.0%) responded as 'neutral'. A Chi-square test for independence indicated a statistically significant relationship between "My interest in ideas and intellectual matters has increased since coming to this university" and persistence, \( \chi^2 (4, n = 395) = 47.95, p < .01, \phi = .35 \). See table XXXII.
Table XXXII

*Crosstabulation of persistence and "My interest in ideas and intellectual matters has increased since coming to this university"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td>1</td>
<td>9</td>
<td>16</td>
<td>18</td>
<td>4</td>
<td>47.95**</td>
<td>.35</td>
</tr>
<tr>
<td></td>
<td>(2.7)</td>
<td>(5.8)</td>
<td>(1.8)</td>
<td>(-2.4)</td>
<td>(-2.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0</td>
<td>6</td>
<td>75</td>
<td>194</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.7)</td>
<td>(-5.8)</td>
<td>(-1.8)</td>
<td>(2.4)</td>
<td>(2.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(f) *I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university.* While almost half of the participants (47.8%) agreed or strongly agreed with this statement, 30.1% disagreed or strongly agreed and 31.1% responded 'neutral' to this statement. 51.3% of the participants who responded they would persist agreed or strongly agreed with this statement, while only 22.9% of the participants who said they would not persist agreed or strongly agreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university" and persistence, $\chi^2 (4, n = 395) = 21.81, p < .01, \phi = .24$. See table XXXIII.
Table XXXIII

*Crosstabulation of persistence and "I am more likely to attend a cultural event now than I was before coming to this university"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td>$\chi^2$</td>
<td>$\Phi$</td>
<td></td>
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<tr>
<td>No</td>
<td>4</td>
<td>17</td>
<td>16</td>
<td>10</td>
<td>1</td>
<td>21.81**</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.3)</td>
<td>(3.8)</td>
<td>(.4)</td>
<td>(-2.2)</td>
<td>(-2.4)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>14</td>
<td>48</td>
<td>107</td>
<td>128</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.3)</td>
<td>(-3.8)</td>
<td>(-.4)</td>
<td>(2.2)</td>
<td>(2.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(g) *I have performed academically as well as I anticipated I would.* Over half of the participants (54.7%) agreed or strongly agreed with this statement. 27.3% of the participants responded 'neutral' to this statement. There was no differentiation between students who said they were going to persist versus students who were not going to persist. A Chi-square test for independence indicated a statistically significant relationship between "I have performed academically as well as I anticipated I would" and persistence, $\chi^2 (4, n = 395) = 15.84, p < .01, \phi = .20$. See table XXXIV
Table XXXIV

*Crosstabulation of persistence and "I have performed academically as well as I anticipated I would"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td>( \chi^2 )</td>
<td>( \Phi )</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>12</td>
<td>9</td>
<td>18</td>
<td>4</td>
<td>15.84**</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.2)</td>
<td>(2.1)</td>
<td>(-1.4)</td>
<td>(-.9)</td>
<td>(-.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>47</td>
<td>99</td>
<td>153</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.2)</td>
<td>(-2.1)</td>
<td>(1.4)</td>
<td>(.9)</td>
<td>(.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** \( p < .01 \). Adjusted standard residuals appear in parentheses below group frequencies.

Institutional and Goal Commitments

Institutional and goal commitments was measured by questions 25 to 30 from The Social Integration and Persistence Intentions Scale: (a) it is important for me to graduate from college; (b) I am confident that I made the right decision in choosing to attend this university; (c) it is likely that I will register at this university next fall; (d) it is not important to me to graduate from this university; (e) I have no idea at all what I want to major in; and, (f) getting good grades is not important to me (Pascarella & Terenzini, 1980).

(a) *It is important for me to graduate from college.* The majority of the participants (81.0%) strongly agreed with this statement and 15.7% of the participants agreed with this statement. A Chi-square test for independence indicated a statistically
significant relationship between "It is important for me to graduate from college" and persistence, $\chi^2 (4, n = 395) = 13.18, p < .01, \phi = .18$. See table XXXV.

Table XXXV

*Crosstabulation of persistence and "It is important for me to graduate from college"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>36</td>
<td>13.18**</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.7)</td>
<td>(1.6)</td>
<td>(1.7)</td>
<td>(-.2)</td>
<td>(-1.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>55</td>
<td>284</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.7)</td>
<td>(-1.6)</td>
<td>(-1.7)</td>
<td>(.2)</td>
<td>(1.1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(b) *I am confident that I made the right decision in choosing to attend this university.* While 85.3% of the participants who indicated they would persist at this institution agreed or strongly agreed with this statement, only 27.1% of the participants who indicated they would not persist at the institution agreed or strongly agreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "I am confident that I made the right decision in choosing to attend this university" and persistence, $\chi^2 (4, n = 395) = 149.10, p < .01, \phi = .61$. See table XXXVI.
Table XXXVI
*Crosstabulation of persistence and "I am confident that I made the right decision in choosing to attend this university"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>(\chi^2)</th>
<th></th>
</tr>
</thead>
<tbody>
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<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
<td></td>
<td>(\Phi)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>14</td>
<td>11</td>
<td>11</td>
<td>2</td>
<td>149.10**</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7.7)</td>
<td>(8.4)</td>
<td>(1.9)</td>
<td>(-1.9)</td>
<td>(-5.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>5</td>
<td>44</td>
<td>127</td>
<td>169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-7.7)</td>
<td>(-8.4)</td>
<td>(-1.9)</td>
<td>(1.9)</td>
<td>(5.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** \(p < .01\). Adjusted standard residuals appear in parentheses below group frequencies.

(c) *It is likely that I will register at this university next fall.* While 96.3% of the participants who indicated they would persist at the institution agreed or strongly agreed with this statement, 25.0% of the participants who indicated they would not be persisting did agree or strongly with this statement. A Chi-square test for independence indicated a statistically significant relationship between "It is likely that I will register at this university next fall" and persistence, \(\chi^2 (4, n = 395) = 219.72, p < .01, \text{phi} = .75\). See table XXXVII.
Table XXXVII

*Crosstabulation of persistence and "It is likely that I will register at this university next fall"*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(8.6)</td>
<td>(8.6)</td>
<td>(7.2)</td>
</tr>
<tr>
<td>Yes</td>
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</tr>
<tr>
<td></td>
<td>(-8.6)</td>
<td>(-8.6)</td>
<td>(-7.2)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(d) *It is not important for me to graduate from this university.* While 77.5% of the participants who indicated they would persist at the institution disagreed or strongly disagreed with this statement, only 22.9% of the participants who indicated they not persist disagreed or strongly disagreed with this statement. A Chi-square test for independence indicated a statistically significant relationship between "It is not important for me to graduate from this university" and persistence, $\chi^2 (4, n = 395) = 79.58, p < .01, \phi = .45$. See table XXXVIII.
Table XXXVIII

*Crosstabulation of persistence and "It is not important for me to graduate from this university"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
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<th>$\Phi$</th>
</tr>
</thead>
<tbody>
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<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(-6.6)</td>
<td>(-6)</td>
<td>(2.8)</td>
</tr>
<tr>
<td>Yes</td>
<td>206</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>(6.6)</td>
<td>(.6)</td>
<td>(-2.8)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

(e) *I have no idea at all what I want to major in.* While 72.0% of the participants that indicated they would persist at the institution disagreed or strongly disagreed with this statement, 60.4% of the participants that indicated they would not persist disagreed or strongly disagreed with this statement. A Chi-square test for independence indicated no statistically significant relationship between "I have no idea at all what I want to major in" and persistence, $\chi^2 (4, n = 395) = 4.86, p = .30, \phi = .11$. See table XXXIX.
Table XXXIX

_Crosstabulation of persistence and "I have no idea at all what I want to major in"

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Likert Scale Rating</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>D</td>
<td>N</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(.7)</td>
<td>(-.8)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>120</td>
<td>130</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>(.7)</td>
<td>(.8)</td>
<td>(-2.0)</td>
</tr>
</tbody>
</table>

Note. $p = NS$. Adjusted standard residuals appear in parentheses below group frequencies.

(f) **Getting good grades is not important to me.** While 6.0% of the participants that indicated they would be persisting at the institution agreed or strongly agreed with this statement, 12.5% of the participants that indicated they would not be persisting at the institution agreed or strongly agreed with this statement. A Chi-square test for independence indicated no statistically significant relationship between "Getting good grades is not important to me" and persistence, $\chi^2 (4, n = 395) = 8.02, p = .09, \phi = .14$. See table XL.
Table XL

*Crosstabulation of persistence and "Getting good grades is not important to me"*

<table>
<thead>
<tr>
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<th>SD (4)</th>
<th>D (5)</th>
<th>N (3)</th>
<th>A (4)</th>
<th>SA (2)</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>34</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>8.02</td>
<td>.14</td>
</tr>
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<td></td>
<td>(-1.1)</td>
<td>(-.6)</td>
<td>(1.6)</td>
<td>(2.3)</td>
<td>(.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>271</td>
<td>47</td>
<td>8</td>
<td>8</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.1)</td>
<td>(.6)</td>
<td>(-1.6)</td>
<td>(-2.3)</td>
<td>(-.1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $p = NS$. Adjusted standard residuals appear in parentheses below group frequencies.

**Q2:** Does *ethnicity/race, gender, age, socio-economic status, parents' highest level of education, and/or community of origin* statistically significantly predict persistence?

**Ethnicity/ Race**

Ethnicity/ race was measured in two ways: 1) including all ethnicity/ race categories into the measurement, and 2) comparing Caucasian versus non-Caucasian students. The majority of the participants (86.3%) selected Caucasian as their ethnicity/ race, with the next highest ethnicity/race response of Black (4.6%). A Chi-square test for independence indicated a statistically significant relationship between ethnicity/race and persistence when including all ethnicity/race categories, $\chi^2 (6, n = 395) = 14.15, p < .05$, phi = .19. See table XLI.
When looking at Caucasian participants versus non-Caucasian participants, 89.7% of the Caucasian participants indicated they would persist versus 75.9% of the Non-Caucasian participants that indicated they would persist. A Chi-square test for independence (with Yates Continuity Correction) indicated a statistically significant relationship between ethnicity/race and persistence for Caucasian versus non-Caucasian participants, $\chi^2(1, n = 395) = 7.085, p < .01$, phi = -.15. See table XLII.
Table XLII

*Cross-tabulation for ethnicity/race and persistence for Caucasian versus non-Caucasian*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Ethnicity/ Race</th>
<th>Ethnicity/ Race</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Caucasian</td>
<td>Non-Caucasian</td>
<td></td>
<td></td>
</tr>
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<td>No</td>
<td>35</td>
<td>13</td>
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<td>-.15</td>
</tr>
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<td>(-2.9)</td>
<td>(2.9)</td>
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<td></td>
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<tr>
<td>Yes</td>
<td>306</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.9)</td>
<td>(-2.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

Gender

The gender responses of the participants was similar, 57.5% of the participants were female and 42.5% of the participants were male. 88.5% of the females indicated they would persist versus 86.9% of the males that indicated they would persist. A Chi-square test for independence (with Yates Continuity Correction) indicated no statistically significant relationship between gender and persistence, $\chi^2 (1, n = 395) = .114, p = .74$, phi = -.03. See table XLIII.
Table XLIII

*Crossstabulation for gender and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>$\chi^2$</td>
<td>$\Phi$</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>22</td>
<td>.114</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-.5)</td>
<td>(.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>201</td>
<td>146</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.5)</td>
<td>(-.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $p = \text{NS}$. Adjusted standard residuals appear in parentheses below group frequencies.

Age

Direct logistic regression was performed to assess the impact of age on the likelihood that participants would report persisting at the institution. The model was not statistically significant, $\chi^2 (1, N = 395) = .02, p = .89$, indicating that the model was not able to distinguish between participants that persisted and did not persist based upon age. The model explained 0.0% (Cox and Snell R square and Nagelkerke R squared) of the variance in persistence, and correctly classified 87.8% of cases. As shown in Table XLIV, age has an odds ratio of 1.01. This indicated that participants who persisted were not more or less likely to be older, controlling for other factors in the model.
Table XLIV

*Logistic Regression Predicting Likelihood of Age's Impact on Persistence*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.011</td>
<td>.083</td>
<td>.018</td>
<td>1</td>
<td>.894</td>
<td>1.011</td>
<td>.859 - 1.190</td>
</tr>
<tr>
<td>Constant</td>
<td>1.773</td>
<td>1.548</td>
<td>1.311</td>
<td>1</td>
<td>.252</td>
<td>5.886</td>
<td></td>
</tr>
</tbody>
</table>

Socio-Economic Status

The majority of the participants (72.2%) self-reported that they were of middle socio-economic status. The same percentages of students who responded that they would persist and those that responded that they would not persist were in each of the socio-economic status categories. A Chi-square test for independence indicated no statistically significant relationship between socio-economic status and persistence, $\chi^2(2, n = 388) = .017, p = .99, \phi = .01$. Seven participants did not respond to this question so were removed from the analysis. See table XLV.

Table XLV

*Crosstabulation for socio-economic status and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Socio-Economic Status</th>
<th>$\chi^2$</th>
<th>$\phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Middle</td>
<td>High</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>35</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(.0)</td>
<td>(.1)</td>
<td>(.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>245</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>(.1)</td>
<td>(-.1)</td>
<td>(.1)</td>
</tr>
</tbody>
</table>

Note. $p = NS$. Adjusted standard residuals appear in parentheses below group frequencies.
Parents' Highest Level of Education

While the majority of the participants (60.8%) responded that at least one of their parents had earned at least a four-year college degree, 54.2% of the participants that responded they were not going to resist were considered first-general students, or neither of their parents earned a four-year college degree. Parents' highest level of education was categorized between two different groups: 1) parent who earned a four-year Bachelor's college degree or higher, and 2) parent who did not earn a four-year Bachelor's college degree. The question asked for the highest degree earned of either parent. A Chi-square test for independence (with Yates Continuity Correction) indicated a statistically significant relationship between parents' highest level of education and persistence, $\chi^2 (1, n = 395) = 4.42, p < .05, \phi = -.11$. See table XLVI.

Table XLVI

*Crosstabulation for parents' highest level of education and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Parents' Highest Level of Education</th>
<th>$\chi^2$</th>
<th>$\phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With 4 year degree</td>
<td>Without 4 year degree</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>26</td>
<td>4.42</td>
</tr>
<tr>
<td></td>
<td>(-2.3)</td>
<td>(2.3)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>218</td>
<td>129</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.3)</td>
<td>(-2.3)</td>
<td></td>
</tr>
</tbody>
</table>

Note. $p < .05$. Adjusted standard residuals appear in parentheses below group frequencies.
Community of Origin

The majority of the participants (66.8%) responded that they were from a suburban community of origin. There were no distinct differences between students who reported persisting versus those that did not intent to persist. Community of origin was measured in two ways: 1) rural, suburban and urban communities, and 2) suburban versus non-suburban communities. A Chi-square test for independence indicated no statistically significant relationship between community of origin and persistence when including all community categories, \( \chi^2 (3, n = 395) = 1.807, p = .61, \phi = .07 \). See table XLVII.

Table XLVII

*Cross-tabulation for community of origin (all communities) and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Community of Origin</th>
<th>( \chi^2 )</th>
<th>( \Phi )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Suburban</td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(-.7)</td>
<td>(-.4)</td>
<td>(1.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>234</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>(.7)</td>
<td>(.4)</td>
<td>(-1.0)</td>
</tr>
</tbody>
</table>

Note. \( p = \text{NS} \). Adjusted standard residuals appear in parentheses below group frequencies.

A Chi-square test for independence (with Yates Continuity Correction) indicated no statistically significant relationship between community of origin for suburban versus non-suburban categories and persistence, \( \chi^2 (1, n = 395) = 0.27, p = .61, \phi = .03 \). See table XLVIII.
Q3: Does high school GPA, ACT score, hours working, lives on/off campus, and/or campus involvement statistically significantly predict persistence?

High School GPA

Direct logistic regression was performed to assess the impact of high school GPA on the likelihood that participants would report persisting at the institution. The model was not statistically significant, $\chi^2 (1, N = 395) = .26, p = .605$, indicating that the model was not able to distinguish between participants that persisted and did not persist based upon high school GPA. The model explained 0.01% (Cox and Snell R square and Nagelkerke R squared) of the variance in persistence, and correctly classified 87.9% of cases. As shown in Table XLIX, high school GPA has an odds ratio of 1.198. This indicated that participants who persisted were not more or less likely to have higher high school GPAs, controlling for other factors in the model.
Table XLIX

Logistic Regression Predicting Likelihood of High School GPA's Impact on Persistence

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School GPA</td>
<td>.181</td>
<td>.350</td>
<td>.267</td>
<td>1</td>
<td>.605</td>
<td>1.198</td>
<td>.603 to 2.379</td>
</tr>
<tr>
<td>Constant</td>
<td>1.370</td>
<td>1.201</td>
<td>1.300</td>
<td>1</td>
<td>.254</td>
<td>3.935</td>
<td></td>
</tr>
</tbody>
</table>

ACT Score

Direct logistic regression was performed to assess the impact of ACT scores on the likelihood that participants would report persisting at the institution. The model was not statistically significant, $\chi^2 (1, N = 395) = .16, p = .690$, indicating that the model was not able to distinguish between participants that persisted and did not persist based upon ACT scores. The model explained 0.01% (Cox and Snell R square and Nagelkerke R squared) of the variance in persistence, and correctly classified 88.6% of cases. As shown in Table L, ACT scores has an odds ratio of 1.017. This indicated that participants who persisted were not more or less likely to have higher ACT scores, controlling for other factors in the model.

Table L

Logistic Regression Predicting Likelihood of ACT Scores' Impact on Persistence

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>p</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Score</td>
<td>.017</td>
<td>.043</td>
<td>.159</td>
<td>1</td>
<td>.690</td>
<td>1.017</td>
<td>.934 to 1.108</td>
</tr>
<tr>
<td>Constant</td>
<td>1.634</td>
<td>1.050</td>
<td>2.420</td>
<td>1</td>
<td>.120</td>
<td>5.125</td>
<td></td>
</tr>
</tbody>
</table>
Hours Working per Week

Direct logistic regression was performed to assess the impact of hours working on the likelihood that participants would report persisting at the institution. The model was statistically significant, $\chi^2 (1, N = 395) = 4.284$, $p < .05$, indicating that the model was able to distinguish between participants that persisted and did not persist based upon the number of hours working per week. The model explained 1.1% to 2.1% (Cox and Snell $R$ square and Nagelkerke $R$ squared) of the variance in persistence, and correctly classified 87.8% of cases. As shown in Table LI, hours working per week has an odds ratio of .973. This indicated that participants who persisted were slightly more likely to work less hours per week, controlling for other factors in the model.

Table LI

_Logistic Regression Predicting Likelihood of Hours Working per Week's Impact on Persistence_

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>$p$</th>
<th>Odds Ratio</th>
<th>95.0% C.I. for Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Working</td>
<td>-.028</td>
<td>.013</td>
<td>4.588</td>
<td>1</td>
<td>.032</td>
<td>.973</td>
<td>.948 to .998</td>
</tr>
<tr>
<td>Constant</td>
<td>2.193</td>
<td>.194</td>
<td>127.772</td>
<td>1</td>
<td>.001</td>
<td>8.965</td>
<td></td>
</tr>
</tbody>
</table>

Lives On/Off Campus

The majority of the participants (67.1%) responded that they live on campus at the institution. Furthermore, 69.7% of the students that indicated they would persist lived on campus compared to 47.9% of the students that indicated they would not persist. In addition, 91.3% of the students that lived on campus indicated they would persist compared to 80.8% of the students that lived off-campus that indicated they would
Persist. A Chi-square test for independence (with Yates Continuity Correction) indicated a statistically significant relationship between living on or off campus and persistence, $\chi^2 (1, n = 395) = 8.13, p < .01, \phi = .15$. See table LII.

Table LII

*Crosstabulation for residence (lives on or off campus) and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Residence</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lives On Campus</td>
<td>Lives Off Campus</td>
<td>$\chi^2$</td>
<td>$\Phi$</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>25</td>
<td>8.13**</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.0)</td>
<td>(3.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>242</td>
<td>105</td>
<td>(3.0)</td>
<td>(-3.0)</td>
<td></td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

Involved On Campus

Over half of the participants (58.0%) responded that they were involved in at least one organization or group on campus. While 60.8% of the participants that responded persisting at the institution were involved on campus, only 37.5% of the participants that responded not persisting at the institution were involved on campus. A Chi-square test for independence (with Yates Continuity Correction) indicated a statistically significant relationship between involved on campus and persistence, $\chi^2 (1, n = 395) = 8.47, p < .01, \phi = -.15$. See table LIII.
Table LIII

*Crosstabulation for campus involvement and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>Campus Involved</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Involved On Campus</td>
<td>Not Involved On Campus</td>
<td>$\chi^2$</td>
<td>$\Phi$</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>30</td>
<td>8.47**</td>
<td>-0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.1)</td>
<td>(3.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>211</td>
<td>136</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.1)</td>
<td>(-3.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **$p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

**Q4: Does attendance at an urban university or a residential university statistically significantly predict persistence?**

The majority of the participants (92.6%) attending a residential university indicated that they would persist at the institution. 82.2% of the participants attending an urban institution reported that they would persist at the institution. A Chi-square test for independence (with Yates Continuity Correction) indicated a statistically significant relationship between attending an urban or residential university and persistence, $\chi^2 (1, n = 395) = 8.86, p < .01, \phi = -.16$. See table LIV.
Table LIV

*Crosstabulation for attending an urban or residential university and persistence*

<table>
<thead>
<tr>
<th>Persistence</th>
<th>University</th>
<th>$\chi^2$</th>
<th>$\Phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Residential</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>32</td>
<td>8.86**</td>
</tr>
<tr>
<td></td>
<td>(-3.1)</td>
<td>(3.1)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>199</td>
<td>148</td>
<td>(3.1)</td>
</tr>
</tbody>
</table>

Note. ** $p < .01$. Adjusted standard residuals appear in parentheses below group frequencies.

Summary of the Results

In summary, the following measures from The Social Integration and Persistence Intentions Scale, or the Dependent Dimensions of Influence, had a statistically significant relationship with persistence.

Peer-Group Interactions:

- Since coming to this university, I have developed close personal relationships with other students.
- The student friendships I have developed at this university have been personally satisfying.
- My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values.
• My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.

• Most students at this university have values and attitudes different from my own.

Interactions with Faculty:

• My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes.

• My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.

• My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations.

Faculty Concern for Student Development and Teaching:

• Few of the faculty members that I have had contact with are generally interested in students.

• Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas.

• Most faculty members I have had contact with are genuinely interested in teaching.

Academic and Intellectual Development:

• I am satisfied with the extent of my intellectual development since enrolling in this university.

• My academic experience has had a positive influence on my intellectual growth and interest in ideas.

• I am satisfied with my academic experience at this university.
• My interest in ideas and intellectual matters has increased since coming to this university.

• I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university.

• I have performed academically as well as I anticipated I would.

Institutional and Goal Commitments:

• It is important to me to graduate from college.

• I am confident that I made the right decision in choosing to attend this university.

• It is likely that I will register at this university next fall.

• It is not important for me to graduate from this university.

In summary, the following Personal Dimensions of Influence had a statistically significant relationship with persistence.

• Ethnicity/ Race

• Parents' Highest Level of Education

In summary, the following Contextual Dimensions of Influence had a statistically significant relationship with persistence.

• Hours Working per Week

• Lives On/ Off Campus

• Campus Involvement

In summary, the following Institutional Dimension of Influence had a statistically significant relationship with persistence.

• Attending an Urban versus Rural Institution
CHAPTER 5
DISCUSSION AND CONCLUSIONS

Chapter 5 will present the research results from chapter 4 and conclusions based upon the results. Chapter 5 will also provide future research suggestions, limitations of the study and final conclusions. It is important to note that the conclusions are based upon the persistence research questions in this study, and does not attempt to answer or explain all the issues involving persistence and retention. However, the conclusions based upon this study can be implied to other populations as a way to improve the persistence of first-year adult learners in higher education from their first year to second year of education.

Tinto (1993) writes that the highest proportion of students who leave higher education depart before their second year of college. Furthermore, students are at the highest level of risk of not returning during their first year of higher education due to social, emotional, health and financial issues (McInnis, 2001). Students at urban institutions of higher education face an even greater challenge of persisting at the institution. While the research in persistence at urban higher education institutions is limited, one can speculate that adult learners attending urban institutions during their first year work more hours per week, commute rather than living on campus, and are less
likely to get involved or feel a sense of community on campus compared to adult learners attending a traditional residential institution. The theory of institutional departure examines the dropout of students based upon the students' degree of academic integration and social integration, and the commitment at the time of the decision (Tinto, 1975, 1993). By using the Social Integration and Persistence Intentions Scale (Pascarella & Terenzini, 1980), this study explored how pre-college characteristics, student and faculty interactions, and institutional commitments predicted the persistence of college students from their first year to their second year of higher education at a public, urban institution versus a traditional residential institution.

Dependent Dimensions of Influence

Peer-Group Interactions

Research has shown that student involvement has had a positive impact on student persistence (Berger & Milem, 1999), and that peer groups can play a positive role on student success while creating strong social networks (Pike, Kuh & Massa-McKinley, 2005; Tinto & Goodsell, 1993). The results of this study show that there was a statistically significant relationship between persistence and satisfying relationships with other students, but these relationships have a positive impact on their growth both personally and intellectually. Interesting, the statement "Most students have values and attitudes different from my own" had a statistically significant relationship with persistence. This demonstrates that students are not making friends with students who could be considered like them, but that students who are more likely to persist are taking advantage of the opportunity to meet new people with different values and attitudes and growing from these relationships.
Interactions with Faculty

Not only is it important for students to meet and know their faculty, informal and out of classroom interactions with faculty can lead to higher persistence rates and academic success over time (Kuh & Hu, 2001; Campbell & Campbell, 1997; Pascarella, Terenzini, & Hibel, 1978). The results of this study show that there was a statistically significant relationship between persistence and nonclassroom interactions with faculty having a positive influence on personal growth, intellectual growth and career goals. Without defining these interactions, one could speculate that meeting and learning from faculty in events such as orientation, beginning of the semester welcome events and even student organizations could make a positive difference in the overall higher education experience of students. It is often challenging that first-year students have few opportunities to meet faculty in their first year of higher education because they are often taking general education coursework. Thus, it is important for administrators to purposefully seek ways to connect faculty with first-year adult learners in higher education once they students arrive on campus.

The two statements which did not have a statistically significant relationship with persistence were "Since coming to this university I have developed a close, personal relationship with at least one faculty member" and "I am satisfied with opportunities to meet and interact informally with faculty members." As was previously stated, it is often difficult for students in their first-year of higher education to create relationships with faculty members during their first year, especially faculty within their academic majors. While there was not a relationship with persistence on these statements, these statements could potentially play a larger impact on students during their second and third years of
higher education. For the perspective of an administrator, these responses negate the concepts of faculty mentoring first-year programs during the first year of higher education, but encourages one to find ways for faculty to interact with students out of the classroom on a larger scale.

Faculty Concern for Student Development and Teaching

Faculty members can often play one of the most influential roles on student persistence. Faculty members can provide developmental and career support for students throughout their college experience (Bettinger & Longer, 2006; Bean, 2005). Faculty members who use active learning techniques in their classroom were more likely to have students with stronger institutional commitment, social integration and persistence (Braxton, Milem & Sullivan, 2000). In this dimensions, the statements that had a statistically significant relationship with persistence were that the faculty members were interested in students, interested in helping students grow beyond academic areas, and interested in teaching. Having outstanding or superior teachers did not have a statistically significant relationship with persistence. What this demonstrates is that students who persist have faculty members that care about them and care about the teaching profession. While it might be impressive to the university or academic department on the academic excellence of the professors, to increase persistence an institution must have faculty that are willing to put forth the energy to be dynamic teachers but also care about the students and help them succeed.

Academic and Intellectual Development

The core of higher education is the academic experience and students' intellectual growth as adult learners during higher education. Tinto (1975) argues that both the
formal and informal academic experience have an equal impact on student persistence. As a result of this study, persistence had a statistically significant relationship with students' satisfaction of their intellectual development and academic experience, the academic experience having a positive influence on intellectual growth, interest in ideas and intellectual matters increasing, and being more likely to attend a cultural event. This demonstrates that students who are more likely to persist are more likely to expand their current knowledge and take advantage of opportunities to increase their intellectual growth. Additionally, persistence had a statistically significant relationship with students responding that they performed academically as well as they anticipated. This also demonstrates that students should set academic goals for themselves and work hard to meet these goals for the best chance of persisting at the institutions.

Institutional and Goal Commitments

Institutional and goal commitments can often play one of the most important roles on student persistence. Faculty members and academic advisors play an important role on the student's integration into the university (Bean, 2005). Strauss and Volkwein (2004) further state that academic integration followed by social integration has the greatest influence on students' institutional commitment. When most students begin their academic career at an institution, they already know if they will graduate from that institution or if they plan to transfer to another institution. Additionally, by the mid-point of the first semester, most students have confirmed their decision to stay at the institution or to drop out or stop out. The results of this study conclude that persistence has a statistically significant relationship with "it is important for me to graduate from college", "I am confident that I made the right decision in choosing to attend this university", "it is
likely that I will register at this university next fall", and "it is not important for me to graduate from this university". All of these statements reflect that persistence has a relationship with the student's decision to attend the university. While one's parents and high school administrators play an important role in helping the student with the college search process, determining what college to attend is probably one of the most significant decisions that a student has made up to this point. Students who have actively decided that they will graduate from college and that they made the right decision in attending the specific university are more likely to persist at the institution based upon their institutional commitments and goals.

What is more interesting is that the statements that did not have a statistically significant relationship with persistence were "I have no idea at all what I want to major in" and "getting good grades is not important to me". Students who have decided on an academic major and know the importance of good grades are more likely to persist at the institution. Students who begin their college career connected to an academic major are also more likely to be connected to faculty members and to be interested in their coursework and assignments. Students who declare an academic major from the beginning of their college experience also have the extra sense of belonging from the academic department with resources such as academic advisors, scholarships, student organizations and events all within the specific academic department. Additionally, students who understand the importance of good grades are more likely to spend the appropriate amount of time studying, going to class and making sacrifices in order to ensure they achieve a strong grade point average.

Personal Dimensions of Influence
Ethnicity and Race

Despite resources designed specifically for minority students in higher education, ethnic minority students still face barriers impacting their education, such as a lack of presence of minorities in the classroom and curriculum, lack of nurturing support systems, and financial need (Padilla, Trevino, Gonzalez & Trevino, 1997). The results of this study supported the literature that there is a statistically significant relationship between ethnicity and race and persistence. While universities have worked hard to provide more resources for minority students, clearly there is more work and research necessary in order to improve the persistence rates for minority students. Depending upon the background of the students, scholarships and resources to allow students to live on campus and decrease the number of hours working off-campus can make a difference. Additionally, peer and faculty mentoring programs for minority students can also make a positive impact on students by creating nurturing support systems and creating relationships with faculty members outside of the classroom.

Gender

While women are now the majority of students enrolled in higher education institutions, there is still a disparity in gender of women in fields of math, science and engineering. The results of this study, however, showed that gender did not have a statistically significant relationship with persistence. Nonetheless, institutions should still foster opportunities for women to enter the fields of science and technology.

Age

While students attending higher education institutions today are more diverse in age than in the past, many students nontraditional in age persist at rates the same or
higher than traditional aged students. Nontraditional aged students have multiple life roles which can often complicate their academic experience, however they are often more academically engaged and focused than traditional aged students (Gibson & Slate, 2010). In congruence with Bean and Metzner's (1985) findings that age was not a predictor in student persistence, the results of this study also found that age did not have a statistically significant relationship with persistence. One could speculate that nontraditional aged students are more mature and thus are more committed to doing well academically, have better time management skills than traditional aged students, understand the cost and debt involved with attending higher education institutions, and have a better appreciation of the academic experience having waited to attend college.

Socio-Economic Status

Financial programs for low socio-economic students such as need-based aid and grants like the Pell Grant have made higher education a possibility for many students in true financial need. Through scholarships, grants and work-study programs, students can also attend higher education institutions full-time without the stress of working off-campus jobs while attending college. The results of this study demonstrate that socio-economic status does not have a statistically significant relationship with persistence. Thus, a higher education degree should be attainable and realistic for any student despite their socio-economic status.

Parents' Highest Level of Education

First-generation college students often face lower persistence rates in higher education than students whose parents have attended college. Not only do first-generation students not have the same social capital and receive less support about the
college process, but they are more likely to be low-income, minority and female students (Lohfink & Paulsen, 2005; Braxton, Hirsch & McClendon, 2004; York-Anderson and Bowman, 1991). They are often at a higher drop-out risk because first-generation students tend to have multiple life responsibilities as compared to non first-generation students. The results of this study supported the previous research because there was a statistically significant relationship with persistence and parents' highest level of education. Not only does this impact students' support through the college search process, but often the family does not understand the time or work necessary in order to perform well academically despite their desire for their student to succeed. Administrators must take the time to work individually with these families throughout the entire college search process, especially financial aid. Additionally, it is also important for these parents and family members to attend orientation programs in order to better understand the college process and expectations of the students. Providing opportunities for first-generation students such as living on campus, getting involved, scholarships and mentoring programs are all ways for the students to feel connected to the institution, better understand the college process and feel supported by others who are currently in the same situation.

Community of Origin

A student's community of origin can impact the persistence of students based upon the type of institution a student attends, especially when the community of origin is different from the type of institution (for example, a student from a rural community attending an urban institution (Guiffrida, 2008). The results of this study, however, found that there was not a statistically significant relationship between community of
origin and persistence. So regardless of where someone is from, it should not have a negative impact on their rates of persistence at the institution.

Contextual Dimensions of Influence

High School Grade Point Average and ACT Score

High school GPAs and ACT scores are used to determine whether or not students should be admitted into certain higher education institutions as well as the amount of financial support in the form of scholarships that students receive. High school GPAs and ACT scores have been found to impact persistence and academic performance after a student has been enrolled at a college or university (Titus, 2004; Allen, 1999; McGrath & Braunstein, 1997). Contrary to this research, the results of this study found that high school GPA and ACT scores did not have a statistically significant relationship with persistence. While high school GPA and ACT scores may define how well academically a student performs in higher education, they do not determine whether or not a student will persist at the institution. Thus, colleges and universities should use caution when making decisions based solely upon high school GPAs and ACT scores, especially during the Admissions process or deciding on how to award resources to students.

Hours Working

The number of hours that a student works on a weekly basis can impact the student's persistence at the university. Students working less than twenty hours per week reported higher persistence rates than students working more than twenty hours per week (Pike, Kuh & Massa-McKinley, 2008). The results of this study also found that the hours that a student works each week could statistically significantly predict persistence. The implications for higher education administrators include finding ways to support students
financially as they are enrolled in college to decrease the need to work in order to pay for tuition. Some potential examples include but are not limited to finding ways to increase student employee positions on campus, assisting students with the financial aid process in order to increase their aid packages and helping to convert students to work study positions if they qualify. Additionally, it is important for administrators and faculty members to emphasize the importance of enrolling full-time for the maximum number of credit hours in order to graduate in a timely manner. Each semester that a student must continue to take classes not only costs that student the amount paid in tuition, but each semester is delaying that the student from receiving a paycheck from a full-time position that is a result of being a college graduate. Additionally, when students are spending more of their time working part-time jobs compared to spending their time in classes and studying, students do not have the time to participate in professional development, career preparation and extracurricular activities which can have a positive impact on students' persistence.

Living On or Off Campus

Students living on campus have been found to persist at higher rates than students not living on campus, but also have been found to have higher grade point averages than students living off campus (Turley & Wodtke, 2010; King, 2003). The results of this study also demonstrated that students' residence on or off campus had a significant association with persistence. While there is no definitive reason on why students living on campus have higher persistence rates, potential reasons could include that students living on campus are surrounded by peers with the same academic responsibilities and expectations, have greater financial means to pay for the cost of room and board, have
less responsibilities for home and family members, and have resources in the residence halls such as resident assistants, computer labs, study lounges and more.

Campus Involvement

For nearly forty years, educators have researched campus involvement's impact on persistence (Astin, 1975). Researchers have found that being involved in a campus organization or activity can lead to higher persistence rates, greater satisfaction with the institution, easier transition to the institution and higher grades (Tieu & Prancer, 2009; Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008; Krause, 2007; Hinkle, 2006). The results of this study also showed that there is a statistically significant association between being involved on campus and persistence. While there is a plethora of ways for students to become involved in campus organizations and activities, students who become involved in campus activities have opportunities to develop leadership skills, to develop time management skills, network with alumni and other students, create and implement programs and events, and other skills and opportunities which can help provide students with real-life experiences and prepare them for their future careers and pathways. Not only should administrators and faculty promote campus involvement, but administrators, faculty members, alumni and even career professionals should find ways for themselves to be involved in campus activities to connect students out of the classroom experiences with ways for students to succeed both during and after college.

Institutional Dimensions of Influence

Urban and Traditional Residential Institutions

A majority of the research in persistence in higher education is focused on traditional residential colleges and universities. Unfortunately, both at the state-level and
nationally, the persistence rates at public urban universities always suffer compared to traditional residential universities. Urban colleges have found success in improving persistence rates by targeting programs for minority and ethnic groups, low-income students and first-generation students (Hagedorn, 2004). Additionally, some urban institutions have tried to increase persistence of low-income students by providing them with scholarships to live on campus (Ogumtoinbo, 2011). The results of this research found a statistically significant association between attending an urban or residential university and persistence. These results are significant because it shows that there is a difference between traditional and residential universities, and thus both students and the institutions face different challenges preventing students from persisting.

For policy makers and administration at public urban institutions, it is important that urban institutions are treated differently than residential universities. Knowing that much of the research in higher education related to persistence is based upon traditional residential universities, this research cannot be duplicated at urban universities and be expected to have the same results. Additionally, students at urban universities cannot be treated similar to students at traditional residential universities. Based upon the participants of this study, the percentages of students at urban universities was higher than the percentages of students at residential universities when looking at minority status, non-traditional age, first-generation status, low socio-economic status, lower high school GPA's and ACT scores, and a non-suburban community of origin. Policy makers need to be aware of admissions policies and how students may or may not be excluded. Also, policy makers need to be aware of scholarship timelines. Often, the students who need the most assistance have the least amount of financial resources and get the least
amount of aid due to not submitting their financial aid paperwork nearly seven months before the academic year begins in order to be in the priority pool of financial aid applicants. Additionally, policy makers and administrators need to be strategic in terms of how funds are designated on campuses. Too often, when budgets are tight, student employee positions are cut or eliminated due to lack of funds and new ways to innovate processes due to technology. Additionally, administrators at urban institutions need to provide a greater emphasis on support services such as tutoring, mentoring, counseling, math centers, writing centers and advising. Many universities are creating positions such as retention specialists and success coaches targeted towards populations of students that are at a higher risk of drop-out and stop-out. While many urban universities are also creating more on-campus living options for students to have a traditional experience, nontraditional students and/or students with a family are often excluded from this experience due to the traditional nature of residence halls.

At the state and federal level, funding for institutions cannot be determined by persistence rates when comparing traditional residential and urban universities in the same category. Under this model, it is a revolving cycle of students that are statistically at a greater chance to persist going to the same traditional universities and those traditional universities receiving funds and acknowledgement based upon their persistence rates. At the same time, the state and federal governments need to examine the distribution of financial aid. Does the process truly help those students in the most need? Because the parents' tax returns are required to apply for federal aid, many students are often at a loss or in a quandary when they do not have access to their parents' tax returns such as students whose parents moved them to the country illegally, students
who have moved out of their residence and/or have estranged relationships with one or both of their parents, and students whose parents simply evade paying their taxes. While this is not at the fault of the students and in certain instances students can request special circumstances through the financial aid process, it is nonetheless a cumbersome and lengthy process in which students often experience frustration and defeat.

For those individuals who work face to face with students at urban institutions on a daily basis such as a faculty member, an admissions counselor, an advisor, or a staff member, it is important to remember that every student has a different "backpack". What baggage that one student brings with him or her to campus is different than another's student. At an urban institution, not only does a student have a different past experience, but each day to day experience may be different as always. While it is easy for those working at an institution to tell a student not to work so many hours at a part-time job, it is not always an easy situation for the student to remedy. In many instances, students are working part-time jobs to pay for family expenses, using financial aid return money to pay for family's expenses, studying less and getting appropriate resources such as tutoring due to working too many hours, and not becoming engaged on campus due to the lack of time. With this revolving cycle, students often do not qualify for scholarships and grants which could be a means to further their career both academically and financially. While students should still be held to high expectations and receive a quality academic experience, it is important for staff members, faculty and administrators to be able to take the time to find out what is in the student's backpack, but to also have referral and emergency fund programs in place to help students with resources to provide outreach and assistance when a student truly needs help.
Nationally, institutions are investing significant time and resources focused on student persistence to help students graduate in a timely manner. "Students are at their most vulnerable in the first year in terms of their likelihood of academic failure and they are most at risk with respect to a range of potential social, emotional, health and financial problems" (McInnis, 2001, p. 106). As the economy shifts, it is becoming necessary for a larger percentage of the workforce to have a higher level of training and skills to enter the workforce, including a four-year higher education degree. While many urban institutions such as Cleveland State University and Youngstown State University are transforming their campuses to become state-of-the-art institutions with nationally ranked and accredited academic programs, the persistence rates of urban institutions still trails behind traditional residential institutions. The results of this study demonstrate that there is a statistically significant correlation between the type of institution (i.e. urban versus traditional) and persistence. Further comprehensive evidence needs to occur to explain this phenomenon. It is essential for urban institutions to not replicate a traditional residential institution, but to take the lead in finding ways to empower students at urban institutions to become leaders both academically and for the future.

Future Research and Limitations

Future research and limitations of this study can go hand in hand. The first limitation is that the study only looks at students during their first semester of college and their intentions on whether or not to persist at that same institution. Future research could be longitudinal tracking students throughout their entire first year of college and beyond. Future research could also look at students who decide to transfer to another institution and their performance at the new institution. For example, many students attend urban
institutions during their first year with intentional plans to transfer to a more residential university. Institutions are judged by the federal and state governments based upon their students who begin as first-year students and who graduate from the same university which ignores the students who transfer to another institution and still graduate. Furthermore, this research only looks at four-year institutions. Future research could study community college students in an urban setting to determine what characteristics and behaviors lead to persistence for urban students at community colleges.

Additionally, with much of this research self-reported, further studies could include longitudinal data documenting students' grade point averages throughout their college career. Future research could also include the content items in this study that had a statistically significant relationship with persistence and explore these items at a deeper level to gain a better understanding of how these items are related to persistence. For example, if the hours that a student works impacts persistence, what is the threshold of hours that a student should be working? Does it matter what type of position that a student works?

Future research should also include qualitative research methods to further learn why students decide to persist at an institution or leave an institution. A limitation of this study is that the quantitative nature of the research does not answer the 'why' or the 'how'. By being able to explore certain issues more in depth, the findings could further explain the results. Examples include an investigation of the following: the types of jobs students work that might be more suitable in helping to retain students; the types of classes students take their first year which might help students persist; the types of organizations that students participate which promote persistence; and addressing how
students spend their free time, and analyzing students' perceptions on the campus environment and atmosphere. Students at urban institutions often comment that they do not feel like they fit in or they feel a residential campus would be more suitable for them. Without the qualitative methods, it is difficult to ascertain what students mean by these phrases and how an urban institution can assist these students to more likely persist and graduate.

Once further research regarding urban institutions is collected, it is important that these findings be shared with policy makers, administrators, faculty members and staff members at urban institutions. Unfortunately, there is often little training for administrators, staff and faculty on what it means to work at an urban institution. Many individuals in these roles base their functions off of their own experiences as a college student which often occurred at a traditional residential institution. Knowing the significant differences between students attending urban institutions versus residential institutions, those working with these populations need to be sensitive to these students' needs, as well as aware that students' persistence at urban institutions is not related to students' lack of academic ability. In many situations, students' persistence at urban institutions has a significant correlation with their life experiences and responsibilities.

Implications

Adult Education

For adult educators, the following recommendations can improve the experience for students attending adult education institutions whether at a university or other adult education institution. First, know your student. Every student enters an educational experience with his or her “backpack of life's experiences”. While it may be time
consuming, one must find out where these students came from, where they want to go, and what obstacles are in the way of their goals. At a macro level, survey results from students and institutional data can provide the framework necessary to administrators to make decisions based upon the needs and aspirations of students. At a micro level, this can occur in the classroom, advising appointments and even extracurricular activities. For example, while a student may appear to look like a traditional age college student, this student may be responsible for taking care of a family elder or may have children of his or her own. In these situations, working with these students to create an individualized pathway for program or degree completion can provide the student with a foundation to succeed at incremental levels. Pushing students into a traditional pathway leads to frustration and disappointment which often leads to dropping out or stopping out of college or programs. When a student can see how he or she can work around his or her life experiences and still be successful at his or her education, this can lead to a stronger self-worth and satisfaction which leads to persistence.

Additionally, faculty, staff and administrators in adult education programs need to be willing to be flexible, to make exceptions and to provide alternatives. While students ultimately still have to complete the requirements for program completion, being cognizant of the student's “backpack” and life experiences should allow faculty and staff to work with students to achieve their goals rather than punishing them. For example, requiring all students in a class to attend a lecture outside of class on a single day or time may be unrealistic for the student who needs take care of siblings because his or her parents work a night shift. Administrators and faculty also need to be able to make exceptions when acceptable. While academic standards still need to be met,
administrators and faculty need to be flexible with students when a life event happens, preventing a student from earning a certain grade, turning in an assignment or being able to meet with other students for a group project. While at a traditional residential higher education institution, the student most likely lives on campus and academics are his or her first priority. For students participating in adult education programs, especially in an urban context, the student is more likely to balance commuting, working and family responsibilities, not to mention the challenge associated with that of being a first-generation scholar as well as that of a returning adult student.

Higher Education

For higher education administrators, the following recommendations can improve the experience for students attending urban institutions of higher education. First, administrators at urban institutions must provide the resources to reduce the hours necessary for a student to work off-campus. Many students intentionally attend urban institutions to work at a part-time job outside of their career path in order to earn money and pay for school. By working more than fifteen to twenty hours per week, a student's priorities shift from academics to work. Additionally, by working off-campus, this decreases the student's ability to participate in student organizations, to seek out of the classroom assistance such as tutoring, and attendance in both academic and social events on campus. Administrators need to identify resources to keep students on campus. This can include, but is not limited to, increasing the number of student jobs on campus, increasing scholarships for students that are not A students, and working with students individually to review their financial aid award letter. In many situations, taking out loans or receiving grants can allow students to focus on their major and graduate earlier.
and have the opportunity to earn better grades than they would have earned working. Additionally, by graduating within four years, students can begin earning a salary earlier much more rapidly, as compared to graduating within five to six years which requires additional funds for tuition expenses. This is more often than not a challenge for administrators due to reduced budgets and reduced financial support from state and federal governments. However, if nothing is done to support students to graduate in a timely manner and increase the dismal graduation and retention rates at urban institutions, the disparity of individuals in the workforce with a college degree and without a college degree is only going to grow causing longer term economic issues.

For administrators and faculty, attention needs to be made to the urban student when developing curriculum and degree requirements. An example includes credit for life experience. While many urban students bring a diverse background of life experiences to the classroom, credit for life experiences are often only offered for a very limited number of courses in a certain major or academic program if it is even offered at the institution at all. Credit for life experiences needs to be more prevalent throughout the institution with opportunities that can benefit any student regardless of major. Students who are currently working in their professional field should also be given the opportunity to test out of courses if they can prove they know the subject matter. While this typically occurs in mathematics, English and foreign languages, it is less frequent in other subject areas.

Additionally, institutions need to focus on internships and career experience at a much earlier point in students' academic careers. While students traditionally complete internships or cooperative education (e.g., co-ops) towards the end of their academic
experience, being involved at a earlier phase in one's undergraduate experience is a good way to better connect the student to the urban institution by finding something that will keep the student in the geographic area, to allow the student to earn money in a field that will benefit the student professionally to pay for college costs, and to better connect the student to his or her academic interests. For programs where a co-op or internship can earn academic credit, job enrichment options should be available. Rather than working a job in addition to one's current employment just to fulfill a requirement, job enrichment could be an additional assignment or project at one's current place of enrollment which can count towards the internship or co-op experience. This is also a good way for students who are working in a position they do not intend to stay at once earning a degree to strengthen their resumes and build their career experience.

Academic courses, programs and resources need to provide a way that urban education students can best access them. Are courses that are required for degree completion only offered one semester per year or once every few years? Can students complete their courses in evenings or two days a week to allow them to work while they are not in class? Can resources be accessed during evenings, lunch hours, early mornings and weekends when students are not in class or not working? Not only should courses and resources be accessible through online technology, but many students still value the face to face connection. Finding ways for students to feel like they are getting the full college experience while still meeting their non-academic responsibilities can increase a student's confidence in themselves as well as their institutional commitment.

Knowing that the reality of urban institutions is that students will continue to be commuter students and working while attending classes, the focus on retention must
begin in the classroom. During the first year, a first year experience course for credit with trained instructors should be required for all students new to the institution. The purpose of this course needs to focus on the resources and skills necessary for a student to succeed at the time it is needed. While many institutions provide extensive overviews of services during a summer orientation program, this information is not relevant until students are sitting in a classroom struggling with a course, figuring out how to pay for financial aid, or dealing with stress or anxiety from non-academic situations. Additionally, programs such as learning communities and cohorts are especially beneficial during the first year. When students come to college often knowing nobody else in their classes, these connected academic courses allow students to create communities and friendships with each other while providing opportunities to connect academic requirements amongst different courses. Supplemental instruction programs are also extremely beneficial during the first year. By embedding a tutor in the course who then has study sessions built in to the course time, students might not typically be available to go to a tutoring session out of class can then have a resource to help them succeed. By having the tutor attend each of the classes allows the tutor to understand the course material from the instructor's perspective rather than a general tutor who might just read the homework assignment when helping the student learn the material.

Faculty in a student's major or program must have a connection with students during their first semester. At many institutions, students do not take coursework from their program or major until further along in their career path. The majority of their coursework the first semester consists of general education requirements such as English and mathematics. Additionally, many first year courses are often large lectures taught by
either a non-tenure track faculty member or a graduate student. Many students do not feel connected to their career pathway since they have little exposure to their academic program. If students are taking a course instructed by a member of their academic program, this often rests upon a staff member teaching an orientation course to their profession. Administrators must find ways to connect faculty with students in their majors and programs as early as the first semester. Even more essential is finding informal ways for faculty to be connected with students in their academic majors such as hosting events for students from a certain major, advising student organizations, or offering study groups for students. Being connected to faculty informally as early as the first semester allows the student to further explore his or her career pathway, and better understand the expectations, networking and support available within that academic discipline.

Finally, and most importantly, administrators, faculty and staff in higher education need to be cognizant that retention cannot be changed in a year. Retention happens over a long period of time with incremental changes. However, those working in higher education need to be continually focused on retention at every level of the institution. Because committees are often in flux or do not have the appropriate authority to make certain decisions, retention needs to be incorporated into job descriptions of those who can monitor, implement and evaluate the university's overall retention and graduation rates.

Urban Education

For urban education administrators, the following recommendations can improve the experience for students at urban institutions. First, do not replicate programs and
policies at traditional institutions expecting the same outcomes. However, programs and policies need to be designed with the urban institution and urban student in mind. For example, it is common for academic advising offices to place holds on students' accounts during their first year preventing them from registering for courses until they have met with an academic advisor or submitted progress reports from instructors. While the intention is to make sure students are communicating with an advisor, the risk is that students may be delayed from registering for classes which can result in closed sections or courses. Knowing students may find difficulties in meeting with an advisor or submitting the necessary paperwork due to life's responsibilities, flexibility and oversight needs to be provided to guarantee that a student's academic coursework succession is not at risk. One also must be cognizant of the number of holds placed on a student's account. By placing too many restrictions and requirements upon a student, a student may be more likely to be frustrated and give up with the process.

Second, take advantage of the positive aspects of the urban environment and incorporate them into classrooms, programs and events through off-campus assignments, bringing guest lecturers into the classroom, and holding class at off-campus businesses or venues. This could include cultural events, service learning programs, and career expertise and preparation as a few examples. Next, individuals being hired, either faculty or staff, should have a background and/or appreciation for the urban context. It is also important that the urban context is included in the training for new staff and faculty. Finally, believe that the urban student can finish his or her education at the institution in question. This includes a serious effort to make sure that the student is confident of his or her choice at the institution. Students often attend an urban institution because of
location rather than the quality or reputation of the institution in order to commute and
save money by living off-campus and continuing working at a previous job. While some
students will continue to stay at the urban institution, many students will leave after one
or two years in order to follow their dream of attending a more residential institution.
There is a small window of time during the student's first semester that the student will
determine if he or she is enjoying the experience and whether or not he or she plans to
persist. It is the responsibility of the institution to provide an environment and
atmosphere in which the urban student can be proud of his or her institution and can feel
like he or she is getting the best experience as possible, or at least better than what he or
she can perceive getting at a more residential institution.

Conclusion

In conclusion, there is not a clear formula to solve the issue of persistence and
retention on today's colleges and universities, especially with respect to the urban
institution. Based upon the findings from this research, however, one can begin to
develop a context in which a student attending an urban institution would be most likely
to persist. Providing opportunities for students to live on campus and participate in
student organizations, while decreasing the amount of time that a student works off-
campus has the potential to positively impact the persistence of students. Also,
developing ways to increase the satisfaction of students in the first semester can have a
positive impact on persistence. Students select a college or university to attend for a
myriad of reasons. Whether or not the institution was a student's first choice, the
institution is provided with the opportunity of having that student on campus either
physically or virtually every day. The staff, faculty, administrators, policies, programs,
courses and events all have the opportunity to solidify the satisfaction of the students and increase the student's institutional commitment. Finally, the academic experience can make a positive impact on students beyond many extracurricular programs or events at the urban institution. Because students attending an urban institution may be less likely to attend an extracurricular activity if it is not required, the faculty play one of the most important roles in the persistence of students. Faculty in a student's career path should be connected to students from the very beginning of one's academic career, especially informally, leading to positive satisfaction from the student and confidence in one's career path and decision. While students enter urban higher education institutions for a variety of reasons and persist for a variety of reasons, it is essential to invest the time in understanding students' “backpacks” of life experiences and find ways to support and challenge urban adult learners both academically and non-academically in order for students to not just persist and graduate, but to be prepared to enter their career path and achieve their goals after graduation.
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APPENDICES

Appendix A. The Social Integration and Persistence Intentions Scale (Pascarella & Terenzini, 1980)

Items scored 5 = strongly agree to 1 = strongly disagree.

Scale I: Peer-Group Interactions

1. Since coming to this university I have developed close personal relationships with other students.
2. The student friendships that I have developed at this university have been personally satisfying.
3. My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values.
4. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.
5. It has been difficult for me to meet and make friends with other students.
6. Few of the students I know would be willing to listen to me and help me if I had a personal problem.
7. Most students at this university have values and attitudes different from my own.

Scale II: Interactions with Faculty

1. My nonclassroom interactions with faculty have had a positive influence on my personal growth, attitudes, and values.
2. My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.

3. My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations.

4. Since coming to this university I have developed a close, personal relationship with at least one faculty member.

5. I am satisfied with opportunities to meet and interact informally with faculty members.

Scale III: Faculty Concern for Student Development and Teaching

1. Few of the faculty members I have had contact with are generally interested in students.

2. Few of the faculty members I have had contact with are generally outstanding or superior teachers.

3. Few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students.

4. Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas.

5. Most faculty members I have had contact with are genuinely interested in teaching.

Scale IV: Academic and Intellectual Development

1. I am satisfied with the extent of my intellectual development since enrolling in this university.
2. My academic experience has had a positive influence on my intellectual growth and interest in ideas.

3. I am satisfied with my academic experience at this university.

4. Few of my courses this year have been intellectually stimulating.

5. My interest in ideas and intellectual matters has increased since coming to this university.

6. I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university.

7. I have performed academically as well as I anticipated I would.

Scale V: Institutional and Goal Commitments

1. It is important for me to graduate from college.

2. I am confident that I made the right decision in choosing to attend this university.

3. It is likely that I will register at this university next fall.

4. It is not important to me to graduate from this university.

5. I have no idea at all what I want to major in.

6. Getting good grades is not important to me.
Appendix B. Figures for Research Questions

Question 1:

**Dependent Dimensions of Influence:**
- Peer-group interactions
- Interactions with faculty
- Faculty concern for student development and teaching
- Academic and intellectual development
- Institutional and goal commitments

**PERSISTENCE OF FIRST-YEAR UNDERGRADUATE STUDENTS**

Question 2:

**Personal Dimensions of Influence:**
- Ethnicity/race
- Gender
- Age
- Socio-economic status
- Parents' highest level of education
- Community of origin (i.e. suburban, urban)

**PERSISTENCE OF FIRST-YEAR UNDERGRADUATE STUDENTS**
Question 3:

Contextual Dimensions of Influence:
- High school GPA
- ACT score
- College first semester GPA
- Hours working
- Lives on/off campus
- Campus involvement

PERSISTENCE OF FIRST-YEAR UNDERGRADUATE STUDENTS

Question 4:

Institutional Dimensions of Influence:
- Urban University
- Residential University

PERSISTENCE OF FIRST-YEAR UNDERGRADUATE STUDENTS

Question 5:

Personal Dimensions of Influence (Q2):
- Peer-group interactions
- Interactions with faculty
- Faculty concern for student development and teaching
- Academic and intellectual development
- Institutional and goal commitments
Appendix C. Permission to Use the Social Integration and Persistence Intentions Scale

To: "Pascarella, Ernest T" <ernest-pascarella@uiowa.edu>, "Abbey P Shiban" <a.shiban@csuohio.edu>
From: "Pat Terenzini" <terenzini@psu.edu>
Date: 04/04/2012 03:21PM
Subject: RE: Survey Permission Request

Thanks, Ern’, and good luck with your research, Abbey.

Pat Terenzini

From: Pascarella, Ernest T [mailto:ernest-pascarella@uiowa.edu]
Sent: Wednesday, April 04, 2012 1:25 PM
To: Abbey P Shiban; Terenzini@psu.edu
Cc: Elice E Rogers; Jonathan E Messemer
Subject: RE: Survey Permission Request

Abby: You certainly have my permission, although we never copyrighted the instrument and left it in the public domain. Just cite the JHE paper, and best of luck with your work. Ernie

From: Abbey P Shiban [mailto:a.shiban@csuohio.edu]
Sent: Wednesday, April 04, 2012 7:42 AM
To: Pascarella, Ernest T; Terenzini@psu.edu
Cc: Elice E Rogers; Jonathan E Messemer
Subject: Survey Permission Request

Dear Dr. Pascarella and Dr. Terenzini,

I am writing to request your permission to use the survey from your article, “Predicting Freshman Persistence and Voluntary Dropout Decisions from a Theoretical Model” in The Journal of Higher Education from 1980. I am a doctoral student pursuing a Ph.D. in Urban Education at Cleveland State University in Cleveland, Ohio. My dissertation is titled, “Persistence Factors for First-Year Students in Urban and Residential Universities”. I am hoping to apply the same factors used in the survey as well as other independent variables to first-year students attending urban and residential universities in the state of Ohio.

If you have any questions regarding my work, please feel free to contact me directly at a.shiban@csuohio.edu, 216.687.4798 (work), or 216.849.2127 (home). Additionally, you are welcome to contact my dissertation chair, Dr. Elice Rogers, Associate Professor, Counseling, Administration, Supervision & Adult Learning – e.e.rogers@csuohio.edu; or my dissertation methodologist, Dr. Jonathan Messemer, Assistant Professor, Counseling, Administration, Supervision & Adult Learning – j.messemer@csuohio.edu.

Thank you very much for your consideration.
Sincerely,
Abbey Shiban
Urban Education Doctoral Student, Leadership & Lifelong Learning Specialty
Cleveland State University

ATTACHMENTS:
Formal request letter
Original article

Abbey Shiban
Research Analyst
Institutional Research
Cleveland State University
216.687.4798
Appendix D. Institutional Review Board Approval - Cleveland State University

Cleveland State University

Memorandum
Institutional Review Board

To: Eloisa Rogers
CASAL

From: Barbara Bryant
IRB Recording Secretary

Date: September 25, 2012

Re: Results of IRB Review of your project number: #201007-ROG-1 IG
Co-investigator: Abbey Shiban
Entitled: Persistence factors for first-year students at Urban and Residential Institutions

The IRB has reviewed and approved your application for the above-named project, under the category noted below. Approval for use of human subjects in this research is for one year from today. If your study extends beyond this approval period, you must contact this office to initiate an annual review of this research.

By accepting this decision, you agree to notify the IRB of: (1) any additions to or changes in procedures for your study that modify the subjects' risk in any way; and (2) any events that affect the safety or wellbeing of subjects. Notify the IRB of any revisions to the protocol, including the addition of researchers, prior to implementation.

Thank you for your efforts to maintain compliance with the federal regulations for the protection of human subjects.

Approval Category: X Exempt Review: Category 1(2)

cc: Project file

Date: September 21, 2012
Appendix E. Institutional Review Board Approval - Miami University

Date: 31-Oct-12

To: Elice Rogers and Abbey Shiban

From: Dr. Neal H. Sullivan
Director of Research Compliance

RE: Acceptance of external IRB oversight

It is the policy of Miami University that all human subjects research conducted on a Miami University Campus undergo Human subjects protections review or exempt determination. However, if there are no Miami University personnel acting in the role of a researcher with access to identifiable data, we may accept the review and determination process of external IRB’s.

In the case of the project you submitted to the Research Compliance Office:

# 29587-ROG-HS: Persistence Factors for First-Year Students at Urban and Residential Institutions with Elice Rogers as the principal investigator,

We accept the determination and approval of The Cleveland State University Institutional Review Board and research may proceed.

Please note: we accept that the procedures are consistent with those that would be approved by the Miami IRB, however, neither the Compliance Office nor IRB grant permission to conduct research on university property or anywhere. An appropriate authority must grant permission (e.g. Dean of Students, Institutional Research Office). You may forward this message in support of your request to that appropriate authority.
Appendix F. Institutional Review Board Approval - Ohio University

From: Research Compliance [mailto:compliance@ohio.edu]
Sent: Monday, October 08, 2012 9:27 AM
To: Shiban, Abbey P
Subject: RE: IRB Request

If you have IRB approval at your own institution, Ohio University does NOT require that you also go through our IRB.

Mrs. Robin Stack, CIP
Human Subjects Research Coordinator
Office of Research Compliance
Ohio University
117 RTEC
Athens, OH 45701
Phone: 740.597.1289
Fax: 740.593.9838

From: Shiban, Abbey P [mailto:ashiban@uakron.edu]
Sent: Sunday, October 07, 2012 10:09 PM
To: Research Compliance
Subject: IRB Request

Hello,

My name is Abbey Shiban and I am a doctoral candidate at Cleveland State University. My dissertation topic is on persistence of first-year college students at both urban and residential universities in the state of Ohio. I am hoping to survey approx. 100 students at Ohio University this Fall. I've already been communicating with some staff regarding this process.

I reviewed your website, but I couldn't find anything specific related to external review approval. I am attaching both my IRB application and approval from Cleveland State University. I would like to conduct the research later this month, and thus am hoping for an expedited review process from your institution.

If there is anything else that I can provide or any other questions that I can answer, please let me know. You can reach me via email at ashiban@uakron.edu or by cell phone at 216.849.2127.

I greatly appreciate your assistance.

Sincerely,

Abbey Shiban
Appendix G. Institutional Review Board Approval - Youngstown State University

From: Cathy Bieber Parrott [mailto:cbieberparrott@ysu.edu]
Sent: Tuesday, October 09, 2012 1:39 PM
To: 'Edward Orona'; Shiban, Abbey P
Cc: ckcoy@ysu.edu
Subject: RE: IRB Question (Cleveland State)

Ms. Shiban,

I have read the documents you have provided and agree that the CSU IRB should be the IRB of authority for your project. You do not need to submit any further information to the YSU IRB and may proceed with the methods approved by the CSU IRB.

Cathy Bieber Parrott
Chair, YSU IRB

From: Edward Orona [mailto:eorona@ysu.edu]
Sent: Monday, October 08, 2012 1:14 PM
To: cbieberparrott@ysu.edu
Cc: ckcoy@ysu.edu
Subject: Fwd: IRB Question (Cleveland State)

Abbey -
thank you for the email. The two attachments that you provide appear adequate to meet any concerns of our IRB. However, I am forwarding you email to our IRB Chair, Dr. Bieber Parrott. She will provide a more definitive formal response to you questions. 
- EO

-------- Original Message --------

Subject: IRB Question
Date: Sun, 07 Oct 2012 22:01:56 -0400
From: Shiban, Abbey P <ashiban@uakron.edu>
To: eorona@ysu.edu <eorona@ysu.edu>

Dear Dr. Orona,

My name is Abbey Shiban and I am a doctoral candidate at Cleveland State University. My dissertation topic is on persistence of first-year college students at urban and residential universities in the state of Ohio. I am hoping to collect data this month, and would like to survey approx. 100 students at Youngstown State University. I've already been communicating with staff at Youngstown, but I wasn't sure if you would require approval through your office first.

I reviewed your website, and the Institutional Review Board handbook, but couldn't find anything about external researchers. I am attaching both my IRB approval and application from Cleveland State University. Please let me know if there's anything else that I can provide.

Sincerely,
Abbey Shiban