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Alia M. Pustorino

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DIFFERENCES IN PERCEPTIONS OF STUDENT EXPERIENCES BETWEEN
RESIDENTIAL AND COMMUTER SUB-POPULATIONS IN HIGHER EDUCATION

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Education

By

Alia M. Pustorino

August 2014

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Alia M. Pustorino

2014

**DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION
Department of Instruction and Leadership**

Dissertation

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education (Ed.D.)

Instructional Leadership: Excellence at Duquesne

Presented by:

Alia M. Pustorino

Bachelor of Arts, English and History, Villanova University, 1999

Bachelors of Arts, Honors Program, Villanova University, 1999

Masters of Arts, English, Carnegie Mellon University, 2000

Masters of Arts, Art History and Architecture Theory, University of Pittsburgh, 2002

June 26, 2014

TITLE: DIFFERENCES IN PERCEPTIONS OF STUDENT EXPERIENCES
BETWEEN RESIDENTIAL AND COMMUTER SUB-POPULATIONS IN
HIGHER EDUCATION

Approved by:

Chair

David D. Carbonara, Ed.D., Assistant Professor
School of Education, Department of Educational Foundations and Leadership
Duquesne University

_____, Committee Member

Gibbs Y. Kanyongo, Ph.D., Associate Professor of Educational Statistics
School of Education, Department of Educational Foundations and Leadership
Duquesne University

_____, Committee Member

Matthew J. Bundick, Ph.D., Assistant Professor
School of Education, Department of Counseling, Psychology and Special Education
Duquesne University

ABSTRACT

DIFFERENCES IN PERCEPTIONS OF STUDENT EXPERIENCES BETWEEN RESIDENTIAL AND COMMUTER SUB-POPULATIONS IN HIGHER EDUCATION

By

Alia M. Pustorino

June 2014

Dissertation supervised by Dr. David Carbonara

The landscape of higher education has been altered considerably over the past forty years as institutions have been asked to demonstrate that education programs offer sound opportunities for student growth and development. In addition, tumultuous economic conditions have reshaped American higher education as they relate to changing student demographics. A rise in minority, non-traditionally aged, and returning adult learners are coming to college with differing needs and backgrounds than the 18 to 22 year old collegians of the past. In 2010, the National Center for Educational Statistics identified the average of an American undergraduate to be 25 years of age, but this statistic pales in comparison to the fact that currently, over 85% of all enrolled collegians nationally, do not reside on campus during their tenure.

In an effort to better understand some of the contemporary student experiences and their perceptions, this study utilized NASPA Assessment and Knowledge Consortium instruments to determine whether student involvement in campus activities, career development and aspirations, issues of mental health, and perceptions of diversity and campus safety differ between resident students and commuter peers who either reside with roommates, family, or spouses, partners, and children differ at a Northeast private, urban, religiously-affiliated university.

Findings of the study demonstrate that while generally these populations do not typically have overwhelmingly different perceptions or levels of engagement, there are specific areas of campus life that are significant and worthy of note for divisions of Student Life and university administrations to consider as they work with resident and commuter students.

DEDICATION

This dissertation is dedicated to my parents for always believing in me.

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LIST OF ABBREVIATIONS

American College Personnel Association	ACPA
Association of College and University Housing Officers International	ACUHO-I
Association of College Unions International	ACUI
Association of Fraternity/Sorority Advisors	AFA
One-Way Analysis of Variance	ANOVA
Association for Student Conduct Administration	ASCA
Campus Labs Baseline (formerly Collegiate Link)	
Council for the Advancement of Standards	CAS
Center for Collegiate Mental Health	CCMH
Cooperative Institutional Research Program	CIRP
EVERFI (formerly Outside the Classroom)	EVERFI
Grade Point Average	GPA
Integrated Post-Secondary Education Data System	IPEDS
National Association for Campus Activities	NACA
Student Affairs Administrators in Higher Education	NASPA
National Clearinghouse for Commuter Programs	NCCP
National Center for Educational Statistics	NCES
National Intramural-Recreational Sports Association	NIRSA
National Survey of Student Engagement	NSSE
National Orientation Directors Association	NODA
Statistical Package for the Social Sciences	SPSS
Student Life Assessment Team	SLAT

CHAPTER 1: INTRODUCTION

“The image of traditional ivy-covered college campuses with bell-towers dominant at their centers has given way to a contemporary image that includes campuses built in the centers of the nation’s metropolitan and suburban areas. No longer do all university students walk idyllically from brick classroom buildings past fountains to quaint residence halls. University students now are equally likely to drive from their home to massive parking lots, attend two classes, and drive back home” (Switzer, 1988, p.3).

In the past forty years, major changes have occurred in American higher education in a variety of ways. Institutions have been influenced by stakeholders to demonstrate that education programs offer sound opportunities for student growth and development (Kuh, 2001; Kuh, Jankowski, Ikenberry, & Kinzie, 2014).

Assessment has become a standard, albeit continually evolving process to gauge student perceptions, learning outcomes, and campus trends (Banta, 2001, 2002, 2004, 2006, 2007; Banta, Jones, & Black, 2009; Bresciani, 2006, 2011; Hutchings & Marchese, 1990; Maki, 2004; Middaugh, 2010; Schuh & Gansemer-Topf, 2010; Shutt, Garret, Lynch, & Dean, 2012; Suskie, 2009; Wehlburg, 2008). Globalization has made institutions of higher education hypersensitive to preparing students who are capable and competent to enter the 21st century workforce (American Council on Education, 2012). Government funding has provided underrepresented or marginalized populations access to higher education which has increased enrollments on campuses nationally (American Council on Education, 2012; Gumport, 2001; Levine, 2001; Woodard & Komvies, 2003).

All of these variables as well as tumultuous economic conditions have also reshaped the landscape of American higher education in relation to changing student demographics (American Council on Education, 2012). According to the National Center for Education Statistics (NCES), no longer is the ‘normal’ age of a collegian the 18 to 22 year old student of the past as changing trends in the American workforce are changing the average age of a collegian (Kirk & Lewis;

2013; National Center for Educational Statistics, 2014; Ortman, 1995). In the most recent Integrated Post-Secondary Education Data System (IPEDS) statistics, NCES identified the national average of an American collegian to be 25 years of age (Kirk & Lewis, 2013; National Center for Educational Statistics, 2014). These students are coming to college, more often than not, with life or work experiences which bring differing needs and backgrounds to their campuses (American Council on Education, 2012; Ortman, 1995). Furthermore, the average American college student attends two or even three institutions of higher education before completing a bachelor's degree (American Council on Education, 2012; Kuh et al., 2014).

A final, and particularly gripping statistic is one that relates to where the average American college student chooses to reside during their college tenure. For over 85% of the college enrolled students over the past decade, that is not in on-campus housing (Kirk & Lewis, 2013; Dugan, Garland, Jacoby, & Gasiorski, 2008; Horn, Neville, & Griffith, 2006). This statistic, while certainly unexpected for primarily residential campuses, does, nonetheless show a significant change in the higher education experience from collegians of the past who largely lived on campus (Hintz, 2011; Jacoby, 1989; Ortman, 1995). It is also a trend that has been evidenced since the 1980s and continues to presently increase in 2014, as college tuition and other miscellaneous costs increase (Jacoby 1989; Kirk & Lewis, 2013; National Center for Educational Statistics, 2014; Ortman, 1995).

What, specifically, constitutes a student being a commuter in American higher education? The National Clearinghouse for Commuter Programs (NCCP) as well as the Council for the Advancement of Standards in Higher Education (CAS) simply identify commuters as those students who do not live in institution-owned housing on campus (Jacoby & Garland, 2004). They do not, in their definitions, find it necessary to demarcate the classification any further,

despite it being practical to do so for campuses to understand how these students likely differ (Hintz, 2011).

Most common sub-populations of commuters are broken into three distinct categories in higher education today. The first includes those commuter students who reside with roommates and are typically within walking distance or close driving distance to their campuses. Another commuter population comprises those that reside with their parents and siblings. A final commuter population includes those students who themselves may live with spouses, partners, and children. These three sub-populations commonly have vastly differing needs which ultimately affect their experiences, academic performance, and perceptions during college (Jacoby & Garland, 2004). A simplification of such differences can commonly be found in the age of the collegian, enrollment status, and commuting distance to campus (Jacoby & Garland, 2004).

When looking at reasons for why students might commute, the answer is frequently tied to economics. These costs, when looking over the lifetime of a college graduate can be all but prohibitive for school attendance (College Board, 2014). The average current private college or university tuition for the 2013-2014 academic year is \$30,094, public in state tuition is about \$8,893, and public out of state tuition is about \$22,203 (College Board, 2014). Average room and board fees for the 2013-2014 academic year range nationally between \$9,498 and \$10,823 (College Board, 2014).

Commuters, on the other hand, have their own costs that vary from their residential peers. Students who reside with friends or peers often have monthly rent, utilities, and transportation costs plus food, books, and other incidentals. The same holds true with commuters who are married, in relationships, and have children as those individuals might also bear the burden of

childcare or some form of support for aging family members. For commuters who reside with their families, they most commonly have costs associated with food, transportation, books, and other incidentals.

Regardless, for the majority of these commuting students, transportation costs alone can be significant, particularly when looking at whether there is consistent access to public transportation, vehicle maintenance and upkeep, vehicle registration and insurance, campus parking costs, and fuel (Jacoby, 1989; 2000a, 2000b; Jacoby & Garland, 2004). All of those costs, despite being potentially lower than peers on campus who are paying for room and board, still add up quickly, particularly in light of the fact that many of these costs cannot be financed through student loans or 529 savings plans.

Scholars have demonstrated that commuters have the largest potential to suffer from higher rates of college attrition or non-completion than residential peers, and for this reason, the majority of the literature surrounding commuters has been focused on retention (Jacoby, 1989; Tinto, 1975, 1993). In the 21st century, as students continue to evolve and reshape the landscape of higher education, it is time to look beyond the population in just that capacity (Keup, 2008).

A significant impediment to doing so has been that the majority of student development based research and literature has focused on residential populations (Ortman, 1995). When literature evaluates commuters, it often fails to explore the population as being far more complex than just that of 18 to 22 year old students (Ortman, 1995). The same can be said about professional training for Student Affairs staff, as much of its foundation is specifically tied to residential students (Jacoby, 1989; Ortman, 1995).

Even the most commonly used instruments including the National Survey of Student Engagement (NSSE) and the Cooperative Institutional Research Program (CIRP) focus largely

on experiences that are gained by residential experiences during college (Kuh, 1995, 2001; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Kuh, Gonyea, & Palmer, 2001). It is not a surprise then, when reviewing data on these national benchmarks that there is a glaring difference in residential student engagement versus those of their commuting peers (Astin, 1975, 1977, 1993; Kuh et al., 2001; Kuh et al., 2008).

The majority of the NSSE and CIRP data suggests that at the very least, commuters have less contact with faculty and are less engaged with co-curricular activities, study abroad, and internship opportunities (Kuh et al., 2001; Kuh et al., 2008). Students who reside on campus, in comparison, tended to have higher levels of involvement as well as self-identified interpersonal skills (Kuh et al., 2001).

A potential campus divide between commuters and residential student populations is also affected by the fact that the majority of university personnel, researchers, and administration were likely themselves residential students who presume that experience is ‘normal’ for most collegians (Jacoby, 1989). As an unintentional consequence, the majority of campus programs and services tend to favor residential populations versus those of commuters. This becomes obvious when looking at the hours of operations for campus administrative offices, dining facilities, libraries, recreation centers, student programs, and faculty office hours. Nearly all of the administrative functions take place during business hours during this week while programming, leadership, and student activities take place in the evening. How do these sorts of schedules impede the involvement of commuter students who might have classes when offices are open, or be on campus for weekend courses?

It is essential to recognize that the different ways that commuter and residential students interact with their campus affects their development, attainment of educational outcomes, and

holistic growth. Part of this process is very much dependent upon how, in totality, the student has opportunities to engage in meaningful and enriching academic and co-curricular experiences while in school (Astin, 1987, 1993b; Feldman & Newcomb, 1969; Kuh, 1995, 2009; Kuh et al., 2001). Student success is linked to the extent that students have the opportunity to relate to both their peers and also faculty so the more engagement with both of these populations, the more likely a collegian is to be successful while in school (Astin, 1993a, 1993b).

When commuting students and their unique needs are not taken into account, it oftentimes results in disconnects that can ultimately contribute to the failure of the student to complete a degree, make a meaningful connection to their alma mater, or development of personal growth (Jacoby, 1989, 2000a, 2000b; Jacoby & Garland, 2004; Tinto, 1975, Tinto, 1993).

Commuters, particularly if they are in urban environments, may also demonstrate higher levels of isolation on campus if they do not establish peer networks (Roe Clark, 2006). These same students, as a consequence, build their lives and experiences around their family unit which ultimately gives parents of young commuter students a more prominent role in college than may be beneficial for their children (Roe Clark, 2006). This is particularly problematic for first-generation collegians whose families do not understand the rigors of college, or do not provide environments that enable them to be academically proficient (Roe Clark, 2006). In the same capacity, theories of transition to college are different for commuter students since they are still often toggling between two worlds, on one hand a collegian building relationships on a campus, and on the other hand, as part of a family and pre-existing social structure that exists where they reside (Jacoby, 1989). “First-time, full-time commuter students may feel that going to college while continuing to work at the job they had in high school, eating dinner and attending social

activities with their family, living in the same house, and hanging out with their high-school friends is not much of a transition” (Jacoby & Garland, 2004, p. 69).

These same students are also likely to have different perceptions of whether they matter on a campus or might remain silent when they are faced with problems during their tenure in school (Jacoby, 1989; Roe Clark, 2006). Commuter students are less likely, particularly in urban environments, to question if issues arise that might result in them having to confront challenges or obstacles in school (Roe Clark, 2006). As a result, the commuter student can, in these instances, choose silence as opposed to self-advocacy and may suffer as a consequence (Roe Clark, 2006).

Similarly, a phenomenon often experienced by commuter students, if they have not built strong campus networks, can be that they feel they start over each semester as they navigate new friendships and faculty members (Roe Clark, 2006). On campuses where there is inadequate space available for commuter students, this is a common issue.

Even human development theory, campus ecology, and Maslow’s hierarchy of needs, all foundational in the field of student development, needs a differing framework as it relates to commuters (Jacoby, 1989). Further attention must be paid when looking at non-traditional aged collegians as their transition to college is altogether more difficult oftentimes as the result of academic, social, and cultural issues (Knowles, 1970, 1973; Roe Clark, 2005).

In much the same way, residential student populations are also oftentimes generalized in their levels of campus involvement and are frequently utilized as convenience samples in campus specific and national benchmark studies. Numerous studies have shown that on-campus residential students have higher level engagement than their commuting peers as well as higher self-reported persistence and learning gains (Chickering, 1974; Kuh, 1995, 2001, 2009; Kuh et

al., 2008; Kuh et al., 2001; Pike & Kuh, 2005; Terenzini, Pascarella, & Blimling, 1999).

Because much attention is paid to this captive student audience, they are constantly provided with the opportunity for the “strong, inclusive educational and social community on campus,” that is imperative for retention (Tinto, 1993, p.2).

Statement of the Problem

Commuter student populations are often found to be at greater potential for non-degree completion, and also, as noted in other literature, negative self-effects on emotional health as the result of increased stress (Astin & Lee, 2003; Jacoby & Garland, 2004; Tinto, 1975, 1993).

Data collected through benchmarks like the National Survey of Student Engagement (NSSE) and the Cooperative Institutional Research Program (CIRP) have noted the need for increased attention on commuting students, however, many institutions still struggle with ways to effectively address these unique students particularly as the population continues to grow and change often (Astin, 1977, 1993b; Jacoby & Garland, 2004; Kuh et al., 2001).

Another variable which affects commuting students is that perspectives about them are often simply erroneous or outdated. “Apathetic” and “uninterested” are common terms used to describe these students when data reveals them to be less engaged than residential peers, but administrators often do not seek to determine why this might be the case (Jacoby & Garland, 2004; Kuh et al., 2001). Instead, campuses continue to operate with program and service models that support residential students and unwittingly continue to impact the engagement of their commuter populations.

Campuses need to look at potential inhibitors to their commuter students’ levels of engagement (Kuh et al., 2001). Are activities taking place at times when students are not on campus such as evenings or weekends? Might commuter students with families be

uncomfortable bringing spouses, partners, or children to events? Could other obligations, such as work schedules also be affecting these students? In many instances, the answers to the aforementioned questions are yes, and there are national data to support these claims.

The problem becomes more complex as 21st century collegians themselves are different from students in the past (American Council on Education, 2012). Students are burdened with more debt and less prospect of successful job acquisition than students of just twenty years ago. Furthermore, these populations of both commuting and residential students are being given over to a more complex global society (American Council on Education, 2012).

All of these issues have affected students and they have affected learning and the campus experience in its totality. Certainly, the diversity of students in age, gender, race, economic status, and life experiences are shaping some of this experience (American Council on Education, 2012; Greater Expectations, 2002; Keup, 2008; Learning Reconsidered, 2004; Maki, 2004). It is more important to consider however, how the following issues have inhibited these collegians and their pursuits of their degrees:

- The ‘democratization’ of higher education, and the effects and implications of nearly universal access (nearly every high school graduate who wishes to continue in, or return for, post-secondary education can find and be admitted to a college; whether every potential applicant can pay for college is a larger question, addressed below).
- Shifting expectations about the locus of responsibility for paying the costs of college education; the idea that one generation is responsible for educating the next is yielding to an assumption that students themselves must earn or locate the resources to pay for higher education.

- Diminishing financial support for college students and for institutions; the opening of access to higher education has not included a similar broadening of available financial aid resources to pay for the costs of college. Too many students who are eligible for admissions cannot matriculate—or must leave school—because of financial limitations.
- The complex and unstable effects of both temporary and long term economic trends and responses to them in public policy—an uncertain job market, the establishment of state lotteries and funded scholarships, restructuring of federal student aid, changes in financial aid policy that favor students whose family own their own homes at the expense of students who must rent housing, cycles of limitations in state budgets, the performance of college endowments, and demands for the imposition of governmental controls on the rate or level of increases in college tuition and fees.
- The diversification of students (in demographic categories, socioeconomic status, degree of preparation for college work, needs for support services while in school, and motives for post-secondary education); note for example, rapid changes in the racial and ethnic identities of students, especially in states with large Hispanic and Asian populations.
- A growing emphasis on the unique needs of returning adult learners and of graduate and professional students.
- The development of new kinds of post-secondary institutions and of novel programs and formats of study—for-profit universities, distance learning programs, and executive education, as examples—and the inevitability of competition among providers of knowledge.
- Changing expectations about the outcomes of college education (from students, parents, trustees, legislators, employers, and others); progressively increasing expectations for

accountability in the assessment of college outcomes by students and their families, for institutional accreditation, and in public funding.

- The increasing influence of governing boards and legislatures in the priorities and operations of institutions.
- A return to greater degrees of involvement by parents in their sons' and daughters' college experience, often coupled with more robust expectations for institutional flexibility, on one hand, and enhanced services, on the other.
- The continuing evolution of information technologies and their broad and increasing application in campus administration, teaching, research, and student services; students' growing use of multiple digital technologies for communications, entertainment, and socialization, as well as for academic work.
- The implications of learning research (especially psychological and neurobiological studies) and of emerging empirical and theoretical conceptualization of learning at various stages of the life cycle; more generally, trends in the place, role, and priority of conventional classroom learning—and the institution of new learning models in college courses (such as experimental education, service learning, and student research).
- The development of global economics, corporations, and citizenships, and, in parallel, the general recognition in society of the need for global and cultural competencies in college graduates.
- Changing patterns in the commitments of faculty—especially in the disaggregation of faculty responsibilities (especially, the separation of teaching from research in research universities), greater use of part-time and adjunct professors, and the interest of many

faculty in educational reforms, such as improving teaching and classroom processes, fostering civic engagement, and exploring interactive, and pedagogies.

- Administrative and divisional restructuring within and between colleges and universities, including realignments, reorganizations, and mergers (Learning Reconsidered, 2004, pp. 4-6).

How might these barriers for 21st century collegians, further inhibit commuters in particular, who already encounter the aforementioned unique obstacles to their education (Keup, 2008)? How can a college or university recognize these potential inhibitors to student success and take a candid look at how their collegians perceive the campus and its programs? This perspective, while certainly driven from an academic vantage point, might most effectively inform how a Division of Student Affairs designs its programs and services.

Furthermore, by attempting to do so, it is imperative for all Student Affairs professionals to understand the common collective of commuter student needs, which presently include transportation, multiple life roles, integrating support networks, and a sense of belonging (Jacoby & Garland, 2004). While these issues certainly also, to some degree, influence the experience of residential populations, they challenge commuters to a far more substantial degree.

In an effort to better understand differences between a campus' commuter and residential population, it will not only be necessary to do so by using a theoretical framework of student development theory, it is also necessary to explore retention and integration, human development theory, psychosocial theory, cognitive development, person-environment, Maslow's hierarchy of needs, mattering, and student involvement (Astin, 1977, 1985, 1993b; Banning, 1980; Bowen, 1978; Chickering, 1969; Erikson, 1963; Holland, 1973; Kuh, 1995; Kulm & Cramer, 2006; Maslow, 1982; Pascarella & Terenzini, 1991; Schudde, 2011; Tinto, 1993).

By focusing on these theoretical frameworks, it is possible to better understand the differences in the perceptions that exist between the sub-populations of commuter students and their residential peers in relation to their campus community in an effort to improve their opportunities for transformative learning to occur during college.

Statement of Purpose

The purpose of this study is to examine the degree to which residential status (i.e., being a residential versus commuter student, and what type of commuter student) influences undergraduate students' perceptions of their overall experience at a private, urban, religiously-affiliated university in the Northeast region of the United States. The study utilizes NASPA Assessment and Knowledge Consortium assessment instruments in an effort to better understand the differences in how residential students and their commuter peers residing off campus with peers/fellow students, commuter living with parents, or commuter living with spouse, partner, or children have differing perceptions of the college student experience.

In the context of this analysis, the primary purpose of providing students with the opportunities to participate in assessment is to enable an institution to understand student perceptions of climate of an institution (Astin, 1993b). Perception, as defined by Astin is the student subjective experience of the institution or how they perceive their environment (Astin, 1993b, p. 290).

Astin, through forty years of research defined the strongest environmental effect on positive satisfaction for a college student is leaving home to attend school (Astin, 1993b). Other environmental variables with positive satisfaction correlations involve emphasis on diversity, student-student interaction, participation in student clubs or organizations, socializing with

persons from different racial or ethnic groups, attending racial or cultural awareness workshops, participating in intramural sports, and hours attending religious services, college grade point average (GPA), and receiving vocational or career counseling (Astin, 1993b). The strongest negative effective of overall satisfaction is lack of student community but others include receiving personal or psychological counseling, as a result the student is often self-identifying as being depressed, as well as holding off-campus jobs (Astin, 1993b).

To emphasize a specific component of this analysis, Astin spent significant time coming to define student life, or the non-academic experience of students which is almost always tied to impactful and meaningful experiences in student organizations and socialization on campuses (Astin, 1993b). This specific area is also noted as being the most affected by other environmental variables because it can be impacted by the size of the institution, majors at the college or university, and campus climate in general (Astin, 1993b). The student experience, or student life, in this particular study is that which includes socialization, cultural opportunities, extra- or co-curricular organizations, as well as campus life in general (Astin, 1993b). Involvement in said experiences ties heavily to students having a positive or negative experience while they are in college (Astin, 1993b). As already noted, student life or involvement in this capacity is that which draws from participation in clubs and organizations, intramural sports, religious participation, active participation in racial or ethnic programming, as well as participation in intercollegiate athletics, and attendance in racial or cultural awareness programming (Astin, 1993b).

In 2009, the NASPA Assessment and Knowledge Consortium formed to advance assessment efforts in higher education and to encourage collaboration across multiple student affairs services as they relate to student engagement and learning (NASPA Assessment and

Knowledge Consortium, 2014). Presently, the consortium includes the National Association for Campus Activities (NACA), the Association for Student Conduct Administration (ASCA), the Association of College and University Housing Officers—International (ACUHO-I), the National Orientation Directors Association (NODA), the Association of College Unions International (ACUI), the National Intramural-Recreational Sports Association (NIRSA), the Association of Fraternity/Sorority Advisors (AFA), and the Center for Collegiate Mental Health (CCMH), EVERFI (formerly Outside the Classroom), and Campus Labs Baseline (formerly Collegiate Link) (see NASPA Assessment and Knowledge Consortium, 2014).

A unique component of the NASPA Assessment and Knowledge Consortium assessments is that each instrument was designed by NASPA and a collaborating partner in an effort to look at student data trends, perceptions, self-articulated learning outcomes, and impressions of programs. Each assessment also relies upon theoretical frameworks presented by NASPA and their collaborating partner to discern evidence of specific learning outcomes in each instrument. These assessments can be evaluated by utilizing demographic data such as gender, race, if they are a transfer to the college, first to attend college, and their residential status as means in which to explore how their academic major, grade point average, work or home life obligations, hours engaged in classwork and study, and areas of co-curricular engagement influence their overall experience.

Data such as these provide a campus with a unique opportunity to analyze specific student populations, in this case being commuting students and their residential peers, to determine if there are differences in how students express their perceptions of campus, and Student Affairs programs, self articulate learning outcomes or inhibitors to such and determine if co-curricular programs are sufficiently serving students in a holistic capacity.

While data gathered from each of the NASPA Assessment and Knowledge Consortium instruments are without doubt valuable to the programs for which they were designed, the data have larger implications for a Division of Student Affairs. It is quite common in these divisions that departments fail to ‘close the assessment loop’ by presuming that their data or research is not of value to other programs or departments. Unfortunately, this trend is quite common in many Student Affairs programs, and by keeping data within a particular program, it fails to impart change upon the larger division agenda or demonstrate how key student populations are being holistically developed.

Unlike student engagement instruments like the NSSE or CIRP which rely heavily upon their academic focus, the NASPA Assessment and Knowledge Consortium instruments assess student involvement through the lens of Student Affairs. The data collected through these instruments provide a different way to analyze specific differences in sub-populations found on a campus that tie directly to how a student does or does not engage in co-curricular endeavors which has bearing on their potential for persistence, campus satisfaction, and developmental growth (Astin, 1977, 1993b).

Significance of Study

In spite of the vast efforts of scholars to understand how commuter students differ from residential counterparts, there is still much lacking in how these students differ in perceptions of student experiences when the various sub-populations of the commuter students are analyzed. This is particularly important given that nationally, commuter student populations continue to increase and bring with them a number of new variables that influence how administrations should respond to student needs.

The primary purpose of the study is to better understand the differences in perceptions between residential and commuter student sub-populations at a private Northeast, urban university located in the Northeast region of the United States, where just over one half of the students reside in on campus housing. This campus is also unique in that it also has an entire college dedicated to non-traditional adult learners.

Prior to the inception of a division wide assessment committee for Student Affairs in 2010, efforts for student assessment were all but non-existent. Furthermore, assessment which did occur was largely found in satisfaction based surveys that only engaged 'active' student participants. The assessment team found that departments were not actively sharing their data results with other departments, and there was not a strong comprehensive understanding of the perceptions of students on the campus. Little was known about how the students individual experiences (inputs), were being impacted by their broader collegiate experiences (environment), and how those affected their overall perceptions and dispositions (outputs).

The NASPA Assessment and Knowledge Consortium instruments were the first efforts of this assessment team to encourage Student Affairs professionals to begin to understand the perceptions of the student body and how they interacted with the programs and services available on campus. Student response was modest, however, it also, for the first time, enabled the Division of Student Affairs to engage with a wider cross-section of students.

This study utilized a series NASPA Assessment and Knowledge Consortium instruments that specifically focused on: a) the general experience of a collegian, b) mental health and counseling, c) campus activities and involvement, d) career development and aspirations, and e) campus recreation and intramurals. Each of these areas are marked as significant identifiers for potential student development and growth and have been widely identified by numerous scholars

as areas worthy of concentrated analysis (NASPA Assessment and Knowledge Consortium, 2014).

By looking at each assessment and then analyzing the data by looking at residential and commuter student sub-populations, it will be possible to see how perceptions of students college experience differ by residential status. It is further believed that by analyzing the differences between types of commuters, particularly when broken down into the sub-populations of commuters living with roommates; commuters living with family; and commuters living with spouses, partners, and/or children that there are likely notable differences in how these students engage with their campus relative to their residential peers.

Another assumption is that these students will self-identify 21st century co-curricular learning outcomes that include emphasis upon cognitive complexity, knowledge acquisition, integration, and application, humanitarianism, civic engagement, interpersonal and intrapersonal competence, practical competence, and persistence and academic achievement which demonstrate a more transformative and comprehensive process of individual development (Learning Reconsidered, 2004).

A common challenge, particularly evident in a Division of Student Affairs, is the tendency to look at individual assessment for the sole purpose of seeing how a program, service, or content area has been received by students. They typically group students into defined categories like class year, residential, and commuters but rarely go beyond that analysis to understand how sub-classifications can play a significant role in how a student perceives their campus and also their learning environment.

Few studies have analyzed the NASPA Assessment and Knowledge Consortium instruments and how they demonstrate difference in residential and commuter student populations.

This study is unique in that it looks at the primarily co-curricular to discern students perceptions of their collegian experience. These perceptions include campus climate, self-articulation of learning outcomes, and levels of campus involvement as they differ between residential and commuter student sub-populations.

When viewed as individual surveys these five instruments demonstrate perceptions evidenced through specific programs, services, or content areas. However, the impact of these instruments may be diminished if their data are not used in a larger context of understanding the differences between how residential and commuter students perceive their campus in totality.

Because the nature of student learning is layered, rarely does a disposition, trend, or outcome occur in a singular program, department, or service area. Student growth, particularly in the context of a division of Student Affairs is meant to be evidenced across multiple experiences all of which build toward an individuals' overall development.

This study is also significant because it demonstrates a concerted effort to look past the 'silo or mine shafts' often associated with department-specific assessment. It demonstrates how student perceptions must be evidenced across a campus, particularly as they relate to providing supportive and tailored services for both residential and all unique commuter populations.

Research Questions

The purpose of this study is to examine whether residential status influences perceptions of the college student experience at a private, urban, religiously-affiliated university in the Northeast region of the United States.

This study will address the following questions:

1. Does student involvement in campus activities differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?
2. Do perceptions of diversity differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?
3. Do perceptions of campus safety differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?
4. Do issues of mental health differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?
5. Do perceptions of recreation differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?
6. Do career development and aspirations differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?

Each of these questions will look at the differences evidenced in on-campus residential students versus those who live off campus; noting that the latter category will be further broken down by those who identify as (a) as living with roommates, (b) family members, or (c) with a spouse, partner, or their own families. Differences found in demographic data will also provide clarity as to how variables such as class rank, age of student, race, total hours worked (if any), and major can also become significant factors in higher education retention as noted in the literature (Tinto, 1975, 1993).

Definition of Terms

The following terms are being defined herein in an effort to provide clarity as they relate to the literature associated with commuter and residential populations.

Assessment “is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development” (Palomba & Banta, 1999, p.4).

Benchmarking in higher education seeks to identify best practices found across campuses. It can be internal, competitive, or generic and typically looks at comparisons of practices, procedures, and protocols (Upcraft & Schuh, 1996).

Co-curricular Engagement pertains to activities contributing to the academic learning experience; especially activities that provide students with opportunities to learn and develop skills through active participation. Co-curricular activities and programs may be led by faculty or staff, or by students themselves, but they must have stated goals and measured outcomes (Purdue University Student Success and Co-Curricular Assessment Team, 2014).

Commuter Students are “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).

Engagement relates to the time and effort that students put into studies and activities which lead to experiences and outcomes for student success (Kuh, 2001, 2009). It is also what an institution does to engage their students (Kuh, 2009).

Evaluation “is any effort to gather, analyze, and interpret evidence which describes institutional, divisional, or agency effectiveness” (Upcraft & Schuh, 1996, p. 18).

Integration is “the extent to which students come to share the attitudes and beliefs of their peers and faculty and the extent to which students adhere to the structural rules and requirements of the institution—the institutional culture” (Wolf-Wendel, Ward, & Kinzie, 2009, p. 414).

“Involvement is the amount of physical and psychological energy a student devotes to the academic experience” (Astin, 1999, p. 518).

Learning is a complex, holistic, multi-centric activity that occurs throughout and across the college experience. Student development, and the adaptation of learning to students’ lives and needs, are fundamental parts of engaged learning and liberal education. True liberal education requires the engagement of the whole student—and the deployment of every resource in higher education (Learning Reconsidered, 2004, p. 6).

Perceptions are “students’ subjective experiences at the institution” or how they see their college environment (Astin, 1993b, p. 290).

Student Affairs is a common divisional name for those departments whose services offer direct services to students and often function outside of the capacity of academic or business affairs on a college campus. “Student Affairs” is often interchanged with the term “Student Life” on many campuses.

Student as commuter is a term “used to highlight the essential character of the relationship of the commuter student with the institution of higher education” (Jacoby, 1989, p. 5-6).

Student Experience is the overall collegian experience gained by a student through the specific integration of academics and student life based programming.

Student Involvement is typically regarded as the co-curricular or student life based programming which has positive impact on student experience through student interaction in clubs and organizations, participation in intramural or intercollegiate sports, multicultural programming, being elected to student office, and attending religious services (Astin, 1993b).

Transformative learning outcomes are complex and cumulative. These outcomes result from the knowledge, attitudes, and skills learned in the classroom, experiences across the campus

communities, interaction with peers, and off campus activities. Students' experiences, including orientation, core courses, sports teams, campus activities, peer tutoring, residence hall floor programs, service learning, internships, action research, and capstone courses all interact to help students achieve college learning outcomes" (Learning Reconsidered, 2004, p. 23).

Summary

Since its inception, American higher education has placed significant emphasis upon residential campus environments, and as an undue consequence, has created campus systems and cultures which do not necessarily serve the needs of commuting residents. As higher education continues to evolve, it brings with it the rise in non-traditionally aged, minority, and transfer students who are, in many instances electing to commute to school.

Should college campuses not respond to the needs of these students and better understand how they differ from residential populations, they stand to have increased student departure. Furthermore, should the manner in which commuter students interact and engage with their campuses fail to be understood by Divisions of Student Affairs there is a likelihood that these students will not be adequately addressed in programs, supportive services, or models for necessary for their holistic development and growth.

This chapter has offered a succinct overview of the literature surrounding commuting students in American higher education; the following chapter will provide an extensive analysis of the existing literature surrounding the history of American higher education with emphasis on residential populations, the rise in commuting students and the theoretical frameworks which bear relevance on the study.

CHAPTER II: REVIEW OF THE LITERATURE

The purpose of this chapter is to provide a review of the literature of how commuter students and their residential counterparts interact with university environments. This chapter introduces the historical origins of the traditional college campus which has ultimately informed how institutions of higher education have tended to favor residential populations in their programs and services. The literature review then provides an overview of the unique attributes of the commuter student and how these have continued to evolve in the late 20th century and early 21st century. The literature review also evaluates theories of student engagement, perceptions of collegians and their campuses, and the notion of persistence when looking at co-curricular programs and services which impact commuter and residential populations in different ways.

College campuses have distinguished between residential and commuter students since the inception of the Serviceman's Readjustment Act (G.I. Bill) integrated veteran students on college campuses in the 1940s. The 1950s and 1960s saw significant enrollment increases as American higher education grew and brought with it the need for expanded residences on campuses to accommodate the swell in student populations. Furthermore, as the pursuit for post-secondary education grew, so did the distinction between college and non-college experiences which separated commuters from their campuses (Astin, 1993b). It was not until the 1970s that institutions began to realize that commuter students had different needs than their residential peers and began to study this population largely in an effort to understand and increase retention.

Since that time, commuter students have been regarded as both complex and diverse because they are difficult to categorize for most institutions of higher education (Jacoby, 1989). Many schools continue to struggle with adequate ways to serve this population, particularly in

light of the fact that as higher education continues to adopt more non-traditional students, this has direct impact on commuting populations. This reality postulates the need for institutions of higher education to critically analyze how the needs of commuting and residential sub-populations differ on 21st century college campuses.

Early American Higher Education and the 'Traditional' College Student

Since its inception, American higher education has existed with the specific intention of allowing faculty and staff to provide holistic vocational and professional training (Nuss, 2003). When pre-colonial institutions like Harvard College were founded, they placed emphasis “proper intellectual disciplines” as means in which to train clergy (Barr, Keating, & Associates, 1985; Handlin & Handlin, 1970).

Even in its early years, the American educational system favored on campus residential models in an effort to provide character development through consistent interaction with faculty and staff in issues of social, spiritual, and moral nature (Barr et al., 1985; Fenske, 1980a; Miller, Winston, & Mendenhall, 1983; Thelin, 2003). Whether these interactions took place in a dining hall or common area, they were meant to develop collegians as productive members of society (Fenske, 1980a; Miller, Winston, & Mendenhall, 1983; Nuss, 2003; Thelin, 2003).

In early schools, this environment focused on standards of appropriate social behavior and conduct as the majority of residential campus student bodies were comprised of male students who were often little more than fourteen years of age (Thelin, 2003; Upcraft & Moore, 1990). As a consequence, American colleges and universities had need to adopt the model of “*in loco parentis*” from 17th century English residential universities as a means in which college administrations had to act, in lieu of parents, who entrusted their sons to be fully educated while at school (Fenske, 1980a; Handlin & Handlin, 1970).

Over time, American colleges and universities expanded education as a means to channel social mobility, advancement of careers, and the opportunity for young adults to adjust to the society to which they would be expected to play a part (Handlin & Handlin, 1970). Colleges such as William and Mary, Yale, the University of Pennsylvania, Columbia, Brown, Rutgers, Dartmouth, Salem, Dickinson, and Hampton-Sydney all incorporated aspects of European university models that encouraged both the study of liberal arts and professional fields like medicine and law on residentially based campuses in both metropolitan and at the time, rural areas of the Eastern seaboard (Handlin & Handlin, 1970; Lucas, 1996).

The landscape of higher education further changed with the advent of industrialism and the rise of science. In the late 18th and early 19th century, the diversity of classes that were afforded the opportunity to attend institutions of higher learning also changed profoundly (Handlin & Handlin, 1970). At this time, possessing a college degree did not denote the ability for students to “get ahead” although acquisition of a degree did tend to lend to social prestige (Nuss, 2003; Thelin, 2003).

Students in the 19th century were actively invested in participating in something outside of their classroom studies. Colleges during this time prided themselves on the ability for campuses to typically offer “enough latitude to allow almost every type of student to go his own way, the college was also consciously a whole community—“one family, socially considered.” (Handlin & Handlin, 1970, p. 57). A challenge to this notion of community was the fact that students had interest in oversight of groups which at times caused conflicts with college officials who feared too much collegiality might detract from curriculum (Thelin, 2003).

Students developed the “extracurriculum” or collegial organizations that encouraged political, faithful, or fraternal association during these earliest years that included literary

societies, debate clubs, dining clubs, athletic endeavors, drama and singing clubs, and academic lettered organizations like Phi Beta Kappa (Fenske, 1980a; Miller et al., 1983; Nuss, 2003).

Many upperclassmen engaged in ‘rush’ athletic activities or rituals which initiated new collegians to campuses which would be seen as a form of hazing by today’s standards (Miller et al., 1983).

Interestingly, the rise in the “extracurriculum” was what brought about the establishment of student affairs on many campuses as staff was needed to accommodate the nuances of these programs. The social Greek-letter system of sororities and fraternities was one such example (Nuss, 2003). Staff was hired on college campuses in this era to both support as well as monitor the behaviors of these groups (Miller et al., 1983). In the same way, athletic engagement and the rise of athletic teams heralded the need for medical professionals which caused the development of campus based health service programs or infirmaries on campuses during this time (Nuss, 2003). All of these programs grew and thrived as the result of on campus residential populations.

Two other major changes in higher education during the 19th century came about as the result of the integration of women and minority students on campuses. The openings of Oberlin College (1833) as the first coeducational institution, Wesleyan Female College (1836), and Rockford College (1849) forever changed the landscape of American higher education and heralded more tide changes (Miller et al., 1983).

U.S. government became involved in higher education in the 19th century through the establishment of the Morrill Acts of 1862 and 1890 which founded land-grant and state institutions. These new colleges and universities enabled the government to increase universal access to higher education through reduced tuition costs for students who would otherwise have

been unable to attend a post-secondary program (Lucas, 1996; Miller et al., 1983; Nuss, 2003; Thelin, 2003). The first Morrill Act (1862) established land grant colleges to bolster the American educational system as one dedicated to not only traditional humanistic studies but also agriculture and mechanical education which were fields in desperate need in the country during that time (Lucas, 1996; Miller et al., 1983; Nuss, 2003). The Morrill Act (1890) established public-funded, but still segregated Black colleges in seventeen states (Lucas, 1996; Nuss, 2003). Both Morrill Acts also enabled women to become active participants in higher education as more institutions were being founded or allowing them access to classrooms (Nuss, 2003). Similar access was granted to Native Americans through funding in the Land Grant Act of 1890 (Thelin, 2003).

The rise of diversity on college campuses, even for those still largely segregated by gender or race, significantly impacted all college campuses, faculty, and their staff because in the late 19th and early 20th century, issues of discrimination was pervasive in academic and co-curricular settings (Thelin, 2003). New positions like Deans of Male or Deans of Female students were common from 1870 to 1910 because these individuals needed to be responsible for the well-being of students who resided on campuses in these eras (Carpenter, 1983).

Another significant change in education during this time was the decrease in faculty engagement with students outside of the classroom which gave rise to divisions of student affairs assisting in the social, physical, moral, and spiritual well-being of students (Fenske, 1980a; Nuss, 2003; Thelin, 2003). These professionals also helped established student development theory as a means in which to unfold human potential and build refined levels of individual function in collegian aged students (Kuh, Gonyea, & Rodriguez, 2002).

Largely, student development theory came about as a means in which student personnel or student services staff found means in which to support the academic mission of an institution through the growth of socially responsible, well rounded students who had strong foundations for successful careers (Arbuckle, 1953; Nuss, 2003). Staff were hired for health centers, vocational guidance, psychological services (mental hygiene), and ‘extracurriculum’ engagement on campuses (Carpenter, 1983; Nuss, 2003). Even global issues like World War I and health pandemics affected campuses as there was greater need for good health services and stronger housing facilities that could accommodate growing student populations (Miller et al., 1983).

In the 1920s, a need for increased vocational guidance fueled a movement under Frank Parsons who looked to employ holistic growth and ‘best fit’ educational explorations for students and their chosen vocations (Arbuckle, 1953; Evans, Forney, and Guido-DiBritto, 1998; Miller et al., 1983). Parson’s vocational guidance movement also helped to launch many counseling bureaus on campuses that incorporated structured vocational planning, educational conversation, and graduate placement for eager students (Miller et al., 1983). The theory remains relevant today to link self-understanding and “the extent to which college graduates experienced certainty of choice and success in finding meaningful employment” (Upcraft & Moore, 1990b, p. 44).

A more robust period of student services came about after World War I when schools looked to provide supportive educational models to nurture students (Fenske, 1980a). These ambitions required more staff, so this precipitated not only hiring on campuses across the country. Professional associations and field specific organizations developed to accommodate the professional and theoretical needs of these individuals (Carpenter, 1983).

Staff were no longer regarded as merely “watchdogs” for populations of students as they had been previously, and in progressive instances, the positions that were created for student

personnel professionals reported to deans or in some cases, even university presidents (Arbuckle, 1953). For other institutions, this change did not come about until much later (Arbuckle, 1953).

The robustness of the field established in the 1920s was nearly derailed after the Great Depression when schools had need to make significant cuts in funding for non-essential programs and services (Fenske, 1980a). Academic and character development were two of the most detrimental cuts during this time because these two areas did not generate revenue for institutions (Fenske, 1980a). Scholars and practitioners clashed during this era as a result of these eliminated positions because those individuals who were asked to step back into these roles were faculty (Fenske, 1980a). It was to the benefit of student personnel staff that professional organizations had been established, because it was these entities that stepped in to do research to demonstrate the need for student development on campuses (Fenske, 1980a).

One of the first groups to do so was the American Council on Education (ACE) who began to gather data in 1926 in an effort to work with the American College Personnel Association (ACPA) to bring holistic student growth and development to a wider audience (Fenske, 1980a; Bloland, Stamatakos, & Rogers, 1994). These findings led to the *Student Personnel Point of View* (1937) which even today is regarded as both a guiding and seminal document in student affairs. This report “recognized the proud lineage of higher education” as a means in which to cultivate students (Evans et al., 1998, p. 6). The Committee found that:

“One of the basic purposes of higher education is the preservation, transmission, and enrichment of the important elements of culture—the product of scholarship, research, creative imagination, and human experience. It is the task of colleges and universities so to vitalize this and other educational purposes as to assist the student in developing to the

limits of his potentialities and in making his contribution to the betterment of society” (The Student Personnel Point of View, 1937, p. 1).

By defining “other educational purposes as to assist the student in developing to the limits of his potentialities and in making his contribution to the betterment of society,” (*The Student Personnel Point of View*, 1937, p. 1) the field of student affairs was finally established. The document made efforts to define what student development professionals should do on a campus to support academic endeavors. *The Student Personnel Point of View* recognized that early colleagues largely dealt with issues “*in loco parentis*,” discipline, financial aid, student health, vocational or educational counseling, and other fields that were more extracurricular in nature (The Student Personnel Point of View, 1937). It noted that a college, as an entity is responsible to meet the developmental needs of all students in both formal and informational ways while providing resources and opportunities for them to learn without being prescriptive (Miller & Prince, 1976).

It offered assumptions meant to allow for exploration of students in collegiate environments which included:

- Intellectual development is just one aspect of the growth of a student; others include social, emotional, interpersonal, moral, and vocational development.
- Theories about college students are not meant to be used to treat all students as though they had the same characteristics. These theories describe the relationships between and among characteristics.
- The educative process is interactive, not linear.
- The educational process involves not only knowledge but also skills and attitudes (Upcraft & Moore, 1990, p. 45).

A second *Student Personnel Point of View* report written by the American Council of Education in 1949 explored several other concepts introduced in light of the change in universities after World War II. In this document, there was further emphasis upon the students well rounded development which included the physical, social, emotional, spiritual, and intellectual (The Student Personnel Point of View, 1949). The report articulated that a student should be an active participation in their development as a part of their maturation process by involvement in both the democratic process and social engagement (The Student Personnel Point of View, 1949). One way that students were encouraged to do so was through the extra or co-curricular which changed the way that student personnel were expected to operate on campuses (Bloland et al., 1994). Students sought roles on their campus communities that invited them to participate in decision making through committee participation, governance, and leadership which connected them to faculty and staff (Arbuckle, 1953).

The Student Personnel Point of View (1949) also identified that as the purpose of higher education changed, it was meant to focus on the “whole” student rather than just their intellectual growth (Arbuckle, 1953, p. 22). The United States after World War II had established itself as a global power, and it encouraged institutions to look at their student populations as future global leaders (Arbuckle, 1953; Lucas, 1996).

The 1940s became an era identified as the “golden age” of higher education as it gave rise to the preeminence of education in American society at large (Thelin, 2003). Truman launched several Presidential Commissions to evaluate how colleges could “become the means in which every citizen, youth and adult, is enabled and encouraged to carry his education, formal and informal, as far as his native capacities permit.” (Handlin & Handlin, 1970, p. 73). Chaired by George F. Zook, former president of the American Council on Education, the commission

made sweeping recommendations to remove racial, ethnic, and financial barriers to education and urged provision of financial aid to students (Fenske, 1980a).

One of the factors that the commission made note of in their reports was that American youth were already actively seeking access to post-secondary education. While many young adults wanted to attend college, others felt societal or parental pressure to attend college to increase their vocational choices. Another factor in the rise of post-secondary enrollment was the passage of the Serviceman's Readjustment Act (G.I. Bill) which provided veterans funding to attend college and gain professional skills.

The rise in college bound students not only enabled more access to schooling, it created a practical problem for nearly every institution of post-secondary education in America. These institutions did not have adequate physical resources to accommodate the students, nor did the curriculum being offered trend with the interests of many students (Thelin, 2003). Many institutions strained to find spaces to host classes and in other instances, they struggled to find housing for them. As a direct result, the Title IV Housing Act (1950) helped to finance many of the present day college dormitories found on campuses across the country, co-educational residence halls, and also apartment style living for older or married students (Thelin, 2003).

The Commission also articulated a need to immediately establish local community colleges across the United States to provide access for two year compulsory programs. These junior or two year colleges also altered the landscape of education by encouraging students to commute to school which brought about new issues for student personnel that involved creating adequate spaces for commuter students, their needs, and unique population trends (Thelin, 2003).

Student Personnel Services in Higher Education written in 1953 by Dugald Arbuckle was one of the earliest documents written about the relationship between student personnel

professionals and student populations (Arbuckle, 1953). He noted “every institution of higher learning needs a program of student services that is dedicated to the welfare of the individual [students]” (Arbuckle, 1953, p. 2). Arbuckle was also one of the earliest scholars who noted what would become a consistent theme in the field of student affairs. Staff, in these capacities often have “the status of orphans. They have no history and no tradition, and often they have been put into operation because of public pressure rather than because the administration of the college really believed that there was a need for them” (Arbuckle, 1953, p.25). His primary justification for student personnel was that they addressed numerous issues of both academic and personal nature with students that faculty typically did not (Arbuckle, 1953).

Student personnel in the 1950s also had continued demands in which they met the cultural, co-curricular, and academic contexts of campuses through an increase in programs and services which now typically also included Orientation programs, student activities, housing and dining services, teaching support, academic enrichment clinics, admissions, vocational guidance, and student aid (Evans et al., 1998).

Furthermore, as major contributions in psychology, philosophy and natural science increased in the 1950s they brought the advancement of understanding human behavior which founded many campus based counseling centers, religious services, and health services where they had not existed prior (Evans et al., 1998). Another variable which precipitated these services was the increased dismissal of active service military men as the result of some form of mental disorders (personality disturbances) that made counseling centers altogether more necessary as veterans were attending college in droves (Arbuckle, 1953).

Career development also became a significant component of student affairs during this time as Super identified that career choice must draw upon knowledge of self and also the ‘world of work’ (Upcraft & Moore, 1990).

The 1960s was another prolific time of change for higher education as students and administrations struggled with wartime politics, racism, civil unrest, and social issues crept onto campuses (Bloland et al., 1994). Many schools grew in size to be labeled “multiversities” which brought with it overenrolled courses, crowded housing, and impersonal systems of engagement between students, administration, and faculty (Thelin, 2002).

Higher education had changed exponentially since the early 20th century, and as a result, institutions needed to look at how to deal with collegians. Government funding leveraged through the Vocational Educational Act (1963), Health Professions Act, and Title VI of the Civil Rights Act (1964) increased access for many to attend college while also unwittingly causing more strife on campuses. Women, minorities, and students of differing socio-economics came to schools and changed their landscapes (Nuss, 2003). Pre-existing regulations imposed on any of these populations were abolished in the 1960s and many students sought equal treatment across campuses as the result of the civil rights movement.

An attribute of students of the 1960s that was not largely evidenced by peers in earlier generations was their demand for autonomy on campuses. Collegians were no longer interested in being governed by *in loco parentis* and questioned authority figures and university policies (Bloland et al., 1994). The Supreme Court decision reached in *Dixon v. Alabama State Board of Education* (1961) abolished *in loco parentis* as a practice when justices determined that any student over the age of eighteen was considered a legal adult. Furthermore, the court also determined if a student attending a publically funded institution, they were not obligated to

relinquish their constitutional rights while matriculating (Nuss, 2003). When *in loco parentis* faded in university settings, it encouraged a collaborative process for student conduct based upon negotiations between administrations, student affairs staff, and students (Carpenter, 1983).

Distinctions drawn for professionals working in student affairs ranged from those staff being regarded as respected, and also instrumental in preserving harmony on campuses during the various demonstrations endemic in the 1960s to outwardly hostile (Carpenter, 1983). Naysayers denigrated staff and their programs as being without content, skills, ethics, and having failed to prove itself as a valid field within university settings (Carpenter, 1983). While these concerns were, of course, to some degree merited, it also drew a significant distinction between how the academic and the non-academic spheres of a university operated. In the case of student affairs, early student development theory was utilized as real-time, on-ground, and tangibly evident.

In 1966, the Department of Health, Education, and Welfare identified seventeen student service administrative functions that it felt should be maintained on campuses by divisions of student affairs. The administrative functions identified were: recruitment, admissions, non-academic records, counseling, discipline, testing, financial aid, foreign students, nurse-care services, medical services, residence halls, married student housing, job placement, student union, student activities, intramural athletics, and religious affairs (Miller et al., 1983). In many instances, since these programs had not previously operated at schools or had not been found in student affairs, these recommendations led, at least in state funded institutions to new staff positions being established.

That same year, the American College Personnel Association (ACPA), the now extant Council of Student Personnel Associations (COSPA), and the Hazen Foundation attempted to

redefine the role of student personnel staff, in an effort to address the recommendations from the government. These recommendations led to several seminal field documents published in the early 1970s (Bloland et al., 1998). A theme evident in these recommendations was the need for greater measure of the creative impact of those who worked with students (Bloland et al., 1998; Evans et al., 1998).

The Hazen Foundation's Committee on the Student in Higher Education (1968) prioritized human development in the formation of the whole student (Evans et al., 1998; Miller & Prince, 1976). This postulated that:

“We are...interested primarily in improving the quality of American higher education. We are convinced that the knowledge of human development from the behavioral sciences now makes possible a wider vision of what the school can accomplish and of more effective ways of teaching. American higher education has not paid enough attention to human development as part of its mission, and the time has come for this neglect to tend—in the name of better education” (Miller & Prince, 1976, p. xi).

ACPA *Tomorrow's Higher Education Project (T.H.E.)* positioned the importance of student development theory imperative in the field of student affairs and also offered a student development model to be used in the training of future student affairs professionals (Miller et al., 1983; Evans et al., 1998). Other prolific documents included *The Student Learning Imperative* (1966) and Brown's *Student Development in Tomorrow's Higher Education—A Return to the Academy* (1972) which looked at the distinction between student learning and their experiences in co-curricular settings (Evans et al., 1998; Miller et al., 1983). In both instances, there was an identified need to evaluate the interrelation of student affairs professionals and their peers in the academic classrooms for student success.

As *The Future of Student Affairs* noted “the informal curriculum of student affairs programs deserves coordinate status with formal instruction, since out-of-classroom educational experiences not only promote nonintellectual development but act as a catalyst for integrating the cognitive, affective, and psychomotor objectives of postsecondary education” (Miller & Prince, 1976, p.2). This publication, sponsored by ACPA, brought several significant issues to light. It noted that student affairs professionals tended to be obligated professionally to be reactive rather than proactive in day to day job functions and that they must also be able to readily anticipate change as it comes (Miller & Prince, 1976).

Miller and Prince attempted to, in the context of a wider student affairs audience, define the vocabulary of the field in an effort to move discourse forward. It identified the term student personnel work as something of the past in which the value of work of staff was only evidenced outside of the classroom (Miller & Prince, 1976). Student affairs was, in their estimation, now a created a subdivision of a university akin to academic affairs or business affairs (Miller & Prince, 1976). Similarly, student affairs practitioners, workers, or professionals were staff members who were responsible for fulfilling the work functions of this subdivision (Miller & Prince, 1976). Finally, a student development educator is any person, be they faculty or a student affairs staff member who makes concerted efforts to bring about growth of collegians (Miller & Prince, 1976). Their definition of student development was, at that time, the most transformative of all definitions, and one which helped to position theoretical frameworks in later conversation. “At the most basic level, [student development] means the development of the whole college-going human being. But here it is defined more specifically as the application of human developmental concepts in postsecondary settings so that everyone involved can master increasingly complex

developmental tasks, achieve self-direction, and become independent. It is, then both a philosophical goal and the means for achieving it” (Miller & Prince, 1976, p.3).

As noted in *The Future of Student Affairs* four functions which needed to exist to establish intentional student development included goal setting, assessment, procedural strategies for change on a campus, and program evaluation (Miller et al., 1983). Each function enabled student affairs staff to work directly with a student in meaningful and collaborative ways which validated the work of the division. Goal setting, for example, enabled students to look with a professional staff member to identify life ambitions and find means in which those can tangibly be realized (Miller et al., 1983). Assessment, in this early document identified profiles of student needs, educational and personal goals, an inventory of behaviors, creation of a plan to achieve goals, continuous reflection of said plan, and evaluation of the goals toward achievement (Miller et al., 1983). Procedural strategies was the most essential function of the model as it included the establishment of instruction, consultation, and environmental resource management. In this capacity, these functions provided environments in which student affairs staff could educate students in collaborative, consultative, or advisory functions, and create climates which enabled development and learning (Miller et al., 1983). The final component of program evaluation ultimately enabled professionals to evaluate the efficacy and success of the aforementioned model to make necessary changes.

Students who attended institutions of higher education in the 1970s were affected by societal changes like their peers of the 1960s. Grants, loan programs, and federal work study was actively offered by the government to stimulate students to attend college (Thelin, 2003). With this funding, there came a push for accountability for campuses which caused the public to be more interested in what the typically isolated ivory tower did to educate collegians.

Landmark legislation like Title IX of the Educational Amendments of 1972 enabled women to be admitted to intercollegiate athletics, new academic fields of study, and doctoral programs that were previously unattainable (Thelin, 2003). Students with disabilities were provided equal access to campuses through Section 504 of the Rehabilitation Act in 1973 and this only grew as the Vocational Rehabilitation Act of 1990 further established university accountability for students with disabilities (Thelin, 2003). In interesting observation of scholars during this period was that, generally speaking, students of the 1970s were viewed as ‘uninvolved’ and politically conservative (Fenske, 1980b).

In the 1970s a new ‘ecological perspective’ came about through the Western Interstate Commission for Higher Education that suggested that:

- Students enter college with their own personalities, attitudes, values, skills, and needs based upon their prior experiences in their homes, families, communities and peer groups.
- Students enter into an environment they have never before encountered, physically different from anything they have experienced before, more homogeneous and intense.
- The college environment can have a powerful impact on students, depending on the institution’s history, composition, size, collective attitudes, values, and needs.
- Students, particularly freshman, have a high need to identify and affiliate with other students; campus facilities, faculty, staff, and students provide this opportunity.
- Students affect environments, and environments affect students.
- Some students are very susceptible to the press of the environment, while other seem immune.

- Some environments are weak, unstable, and less rapidly changing, while others are strong, stable, and less likely to change.
- When there is congruence between the student and his or her environment, the student is happier, better adjusted, and more likely to achieve personal and educational goals.
- Collegiate environments can be described, influenced, and channeled by the institution for the betterment of students (Upcraft & Moore, 1990, p. 49).

Institutions of the 1980s and 1990s were also profoundly impacted by accountability as a result of the inflated costs of college, significant increases in student debt, and decreased job markets. Another significant concern of institutions during this era was the rise in ‘subpopulations’ of students that included women, ethnic and racial groups, non-traditional students, international students, and students who questioned their sexual orientation (Evans et al., 1998; Upcraft & Moore, 1990). While these populations rose during this era, so did other specific groups of students identified as being part of honors programs, student athletes, and also commuters (Upcraft & Moore, 1990). All of these populations required specific attention and subsequently, student affairs staff were once again asked to adapt to student needs and student development theory expanded its frame of reference.

Student engagement became a core component of campus culture and student affairs after Astin published findings that correlated student success and retention in 1985. His theory postulated that students invested energy in ‘objects,’ which could be co-curricular or academic in nature, and that as a result of their involvement, they would demonstrate learning proportional to their engagement (Upcraft & Moore, 1990).

Statistics gleaned from the period from 1984 to 1994 showed a 61% increase in the number of minority students that attended universities, an increase in non-traditional students,

part-time students, and many more students being employed while attending college. Pascarella and Terenzini's *How College Affects Students* (1991) showed many of these issues but brought others of significance to light. Nearly a decade later, "*Studying College Students in the 21st Century: Meeting New Challenges*" showed the need to begin to reconsider concepts of outcome based learning in university settings (Pascarella & Terenzini, 1999). They identified that oftentimes, scholars tend to be narrow in scope, and guided by the academic while negating other practical issues which can affect student learning and success such as rising costs, incorporation of technology, distance education, and heterogeneity of student populations (Pascarella & Terenzini, 1999).

Students of the late 20th century and the early 21st century have also been drastically impacted by technology, global society and economic trends. Those students who attended college in the period of the 1980s and 1990s were denoted as "scrappy, pragmatic, and free-agents," members of Generation X, and those that were typified as being driven by 'winning' and little else (Howe & Straus, 2003). Faculty found differing levels of engagement with students who were driven by grades, high paying jobs, and staying within comfortable circles of influence (Howe & Straus, 2003). In a different way, those who began college in 2000, or the Millennials also altered the educational landscape (Keup, 2008). This student population, born in the 1980s were largely confident, sheltered, team oriented, conventional in values espoused by their families, while also feeling high pressure for academic success and being high achievers (Howe & Straus, 2003; Keup, 2008).

These changing student populations gave way to a need for further exploration of the 21st century collegian and their campus experience (Keup, 2008). The National Association of Student Personnel Administrators (NASPA) and the American College Personnel Association

(ACPA) are the professional organizations that support, advance, and encourage innovation in the field of Student Affairs. They have been, and continue to be advocates in efforts to strengthen student learning at universities, and do so with the penultimate goal of creating well rounded scholars who will make contributions to society. NASPA and ACPA have also been at the forefront of reflecting upon using assessment in higher education as a means to demonstrate student learning outcomes which in turn, evidences the accountability necessary for policymakers, the public, and consumers (Learning Reconsidered, 2004). As noted within, “the need to do so is clear: few of the social, economic, cultural, political, and pedagogical conditions and assumptions that framed the structures and methods of our modern universities remain unchanged” (Learning Reconsidered, 2004, p. 1).

In 2004, collaboration between the two entities yielded the first of several documents which placed emphasis upon the value of the student experience while also taking a candid and at times critical evaluation of the higher education system in America. *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* demonstrated the value of integrated use of all resources available on a campus to educate and prepare a student (Learning Reconsidered, 2004).

The document, while largely meant to establish the relationship between student affairs and the campus, nonetheless, does so while allowing the document to demonstrate how student affairs makes attempts to partner with the academic endeavors of a collegian which in turn affects their learning outcomes (Learning Reconsidered, 2004). Accountability is identified for all colleagues and educators on a campus as a necessity and this must occur for the betterment of student and society (Learning Reconsidered, 2004). American society, as noted, has an expectation that its system of higher education will produce students who are prepared for citizenship (Learning Reconsidered, 2004).

Several areas of consideration raised in addition to those of accountability through demonstrated learning outcomes evidenced in *Learning Reconsidered* also involve the ‘democratization’ of higher education where all high school graduates have access to some form of postsecondary instruction, the shift in how college will be financed and by whom, diminished financial support for colleges and also their institutions, economic trends, public policy, changing student population, diversification of a campus, and the changed expectations of the outcomes of a college education (Learning Reconsidered, 2004).

With the publication of *Learning Reconsidered 2: Implementing a Campus-Wide Focus on the Student Experience* in 2006, ACPA and NASPA were joined by several other professional organizations that work with students including the Association of College and University Housing Officers—International (ACUHO-I), Association of College Unions—International (ACUI), the National Academic Advising Association (NACADA), the National Association for Campus Activities (NACA), and the National Intramural-Recreational Sports Association (NIRSA). This body of partner associations represents a significant portion of student affairs and also academic support services in an effort to broaden the scope, understanding, and models of student learning that *Learning Reconsidered 2* postulated in an effort to allow student affairs to also position a stake in university accountability. Like its predecessor, *Learning Reconsidered 2* identified the need to reevaluate and model learning on college campuses but gave rise to several other significant issues as well. One of these is the notion that the construction of meaning no longer only occurs in the academic context (Learning Reconsidered 2, 2006). This denotes that the change in student demographics, their purpose in education, life experiences and other variables have significant influence in how that student functions in higher education and society (Learning Reconsidered 2, 2006). Reasons for many attending college are utilitarian, and

largely in an effort to find a career which was different than their academic predecessors which forces other issues of accountability into conversation (Learning Reconsidered 2, 2006).

Another noteworthy point is that learning must be integrative and also transformative (Learning Reconsidered 2, 2006). From the academic perspective, this denotes a new way of allow students to think about the context of their learning in a larger picture (Learning Reconsidered 2, 2006). In a similar, and more pointed way, society would demand that those same individuals are equipped with learning to think independently, and in a more powerful way so that they can serve the world around them vocationally as well as civically (Learning Reconsidered 2, 2006).

Changing Tides in 20th Century Campuses

A significant challenge in appropriately addressing commuter student populations was that much of the earliest research on collegians was being limited exclusively to full-time students which left out a major cross section of students (Astin, 1975, 1977, 1993b; Chickering, 1974; Kuh, 1995, 2002; Kuh et al., 2001; Stewart & Rue, 1983).

Furthermore, when there was discussion of non-resident students, much of the data was negative and did not adequately address the needs of commuters at large. Scholars disputed that a generalist model of classifying students did not work, particularly when it was becoming evident that the traditional aged collegian was not, in fact the norm (Andreas, 1983; Stewart & Rue, 1983).

Even the term commuter, was not, for much of the 1970s, 1980s, and 1990s clear in who it defined. The simple notion of a student as commuter itself was not shared collectively from campus to campus, or by various institutions across the country (Stewart & Rue, 1983). As such, when commuter focused scholarship emerged in the 1980s there was an effort to first define what specifically classified someone as a commuter:

Most commuter affairs specialists use commuter to convey the broadest possible meaning: those students who do not live in university-owned housing on campus. However, commuters are made up of a number of different subgroups, and not all subgroups are distinguished by characteristics that also define the kinds of services they require (Stewart & Rue, 1983, p. 4).

Even the National Clearinghouse for Commuter Programs (NCCP) and the Council for the Advancement of Standards in Higher Education (CAS) have used the simple definition of a commuter as a student who does not live in institutional owned or operated housing on campus (Andreas, 1983; Jacoby, 1989, 2000a, 2000b; Kuh et al., 2001; Stewart & Rue, 1983). This unto itself is problematic because it does not widely look at the distinct differences in the diversity of a commuting population from their residential peers (Andreas, 1983).

Moreso, this student population, on average, represents nearly 85% of all current college students in the United States, and should current enrollment trends continue, the statistic will only increase (Jacoby & Garland, 2004; National Association for College Admission Testing, 2014; Ortman, 1995).

It is obvious based on these factors that commuter students are a significant portion of our students enrolled in American colleges and universities, but yet they remain less researched than their residential peers, outside, perhaps of their attrition and non-completion rates (Tinto, 1975, 1993).

The Rise in Commuter Students and Historical Background

Because many scholars still tend to regard undergraduate students as either on campus residents or commuters, it is effectual to look at the later outside of the homogenous classification of those who reside off campus by looking at data which is demographic in nature

(Dugan, Garland, Jacoby, & Gasiorski, 2008; Jacoby & Garland, 2004; Roe Clark, 2006).

Typically speaking, commuting students are often more diverse in ethnicity, race, enrollment status, age, as well as obligations outside of school which often include family, employment, and co-curricular engagement (Andreas, 1983; Chickering, 1974; Jacoby, 1989, 2000a, 2000b; Jacoby & Garland, 2004; Ortman, 1995; Stewart & Rue, 1983).

Many perceptions of commuting students stem directly from the post World War II campus enrollment booms when the Serviceman's Readjustment Act (G.I. Bill) brought veterans to college after returning from war. Many of these students, were not necessarily the same age as a 'traditional' collegian, and many of them also had families and spouses of their own which necessitated them balancing full-time studies and work obligations.

The 1950s and 1960s also brought academic booms as students were encouraged to attend college so that America could compete in a global economy and remain a political super power. Because of the rise in campus enrollments, another practical issue that affected schools were that many of them did not have enough housing to accommodate all of their students and many students who resided in proximity to their campuses chose to commute. Other variables like open admissions further increased this commuting population, and in many cases, these students came to be called 'townies' or 'day-students' because they came to campus for class and left (Astin 1977, 1993b; Jacoby, 2000a, 2000b; Stewart & Rue, 1983). Commuter schools in primarily urban environments came to be known as 'street-car colleges,' and other terms that were used for such institutions were factories or supermarkets (Jacoby, 1989; Riesman & Jencks, 1962).

These commuting students, also, in a number of instances, were considered less academically qualified, and were not treated the same way as residential peers (Stewart & Rue,

1983). Commuting students were further alienated in the 1960s by the prevalence of campus protests, whereby in some cases, students protested for the rights to reside off campus which further divided students from their campus administrations (Stewart & Rue, 1983).

When scholars looked at commuter populations in the 1970s and 1980s several misconceptions were brought to light (Andreas & Kubik, 1980; Jacoby, 1989). The first was that non-traditional students in that era were largely over the age of 24 or 25 and chose to commute to their campuses (Stewart & Rue, 1983; Jacoby, 2000a, 2000b). Another issue was that on other campuses many administrations assumed that commuters were primarily evening or part-time students (Stewart & Rue, 1983). For the majority of cases though, as 80% of all students commuted in those decades, there needed to be a more efficient way of looking at who commuted and what variables comprised a commuter student (Jacoby, 1989, 2000a, 2000b; Stewart & Rue, 1983). Progress in this area was made as scholars attempted to begin to create ways for institutions to understand the differences between commuting populations (Andreas, 1983; Andreas & Kubik, 1980; Jacoby, 1989; Stewart & Rue, 1983).

While these characterizations worked effectively in the earliest literature and research, it should be noted that these distinctions are presently ineffectual in certain regards when looking at 21st century collegians as the average age for an individual pursuing a bachelor's degree has changed since that time, as have other definitions that relate to the terms of independent or dependent students. Looking at the historical literature, however, the first variable which predicated how a student interacted with a campus was whether they were a dependent or independent commuter (Andreas, 1983; Jacoby, 1989; Stewart & Rue, 1983). Dependent students were those who resided with family members while independent students might have lived in apartments or houses with friends or by themselves (Andreas, 1983; Jacoby, 1989;

Stewart & Rue, 1983). They also offered the option of residing in fraternity or sorority housing, however, that unto itself was a tenuous classification of commuter student since both the NSSE and CIRP, as well as many campuses considered those to be residential students (Kuh et al., 2001).

A secondary variable of consideration was that students were traditional or nontraditional in age (Jacoby, 1989; Jacoby & Garland, 2004). In 1983, a student who was twenty-five was considered a non traditional student if they were in pursuit of a bachelor's degree (Stewart & Rue, 1983). Present statistics published by the National Center on Education Statistics (NCES) classify students as nontraditional if they pursue a master's degree before the age of twenty-five (National Center for Educational Statistics, 2014). Non traditional students, during this era were also those who could potentially have a spouse or children and were believed to have returned to school after some break in education (Jacoby, 1989; Jacoby & Garland, 2004; Stewart & Rue, 1983). The final variable was whether or not a student was considered part or full time in their enrollment (Jacoby, 1989; Jacoby & Garland, 2004; Stewart & Rue, 1983).

From these variables and how students were perceived to have interacted with their campus, eight undergraduate prototypes of commuter students were defined that included:

1. Dependent, traditional, full-time;
2. Dependent, nontraditional, full-time;
3. Dependent, nontraditional, part-time;
4. Dependent, traditional, part-time;
5. Independent, traditional, full-time;
6. Independent, nontraditional, full-time;
7. Independent, nontraditional, part-time;

8. Independent, traditional, part-time (Jacoby, 1989; Stewart & Rue, 1983).

In 1980, the American Council on Education made an effort to better understand the breakdown of the 3,037 institutions of higher education which showed, at that time, over one-third of all campuses did not offer on-campus housing and that at 61% of all institutional students are commuters, 68% at public universities, 66% at public four-year universities, 76% at public two-year universities, 58% at private universities, 41% at private four-year colleges, and 50% at private two-year colleges (Stewart & Rue, 1983). Research gleaned from the Carnegie Council on Policy Studies in Higher Education, the National Center for Education Statistics, the U.S. Bureau of the Census, and Alexander Astin through the CIRP showed an equally high number of students who articulated being commuters as well (Stewart & Rue, 1983).

The difficulty in the generalizability of research and data about commuter students also made the way that they were classified were tedious to the point where recommendations were made for each campus to look specifically at their own commuter populations versus the generalizations being made through national assessments (Andreas, 1983; Andreas & Kubik, 1980; Jacoby, 1989, 2000a, 2000b; Stewart & Rue, 1983). Literature also recommended to look at the commuter students “as a very large, independent body of individuals, each one with a set of expectations and needs” (Andreas & Kubik, 1980, p. 3).

Multiplicity was a term introduced in an effort to better understand these students as well because of the variety of life roles that commuters often assumed in comparison to residential peers (Andreas, 1983; Andreas & Kubik, 1980; Jacoby, 1989; Jacoby & Garland, 2004; Ortman, 1995). Commuters were generally, as noted earlier, more broad in their age than residential peers who were frequently 18 to 22 years old and were more apt to work during their degree

(Andreas; 1983; Andreas & Kubik, 1980; Chickering, 1974; Jacoby & Garland, 2004; Ortman, 1995; Pascarella & Terenzini, 1991).

As the commuter population grew on college campuses, so did the increase in adult learners and also minority students. In the 1970s and the 1980s a body of literature grew in response to these student populations that included multicultural education and andragogy. For the former population, much of this research indicated a need to view the adult learner as a heterogeneous body of individuals with vast and expansive life experiences, attitudes, values, and interests (Chickering & Associates, 1981; Knowles, 1980, 1984). These learners, are unique in that they are self-directed; already have resources for learning; understand the developmental tasks associated with their social role; are more problem centered than subject centered; are motivated by internal factors versus external ones; and need to know why they are learning something (Jacoby & Garland, 2004; Knowles, 1980, 1984). Minority students, like non-traditional students, have a different identity that can be influenced by interaction with staff at the college and also their own perceptions (Roe Clark, 2005). These students, in various studies have also demonstrated that they are more likely to feel disconnected or isolated from the college experience and need formal sources of support for success (Baker, 2008; Feagin et al., 1996; Nagasawa & Wong, 1999).

These commuter students also, oftentimes, divided time between work, home, school, and social lives which frequently resulted in them having to prioritize which areas were of greater importance (Andreas, 1983; Andreas & Kubik, 1980; Jacoby, 1989, 2000a; Jacoby & Garland, 2004; Ortman, 1995; Roe Clark, 2006). In many cases, this ultimately resulted in commuter students reporting less time being engaged in their campus through activities and organizations (Jacoby, 2000a; Ortman, 1995).

A potential consequence, research revealed was that only intellectual development was taking place at school where as the social and emotional development that should accompany them was not (Andreas, 1983; Andreas & Kubik, 1980; Chickering, 1974). This deficit was one, that if looked at carefully, could show a discernable difference in the outcomes of the commuter experience from residential peers. Competing priorities, such as family, friends, work, and even commuting time often resulted in schedules that compartmentalized students time into inflexible schedules (Andreas, 1983; Andreas & Kubik, 1980; Jacoby, 1989, 2000a, 2000b; Jacoby & Garland, 2004).

Faculty and staff struggled with ways to address these students because many of them were unable to conceptualize how a student could have a ‘real’ college experience without living on campus (Andreas, 1983; Jacoby, 1989; Stewart & Rue, 1983). A major issue affecting commuter students as noted by Barbara Jacoby, former Director of the National Clearinghouse for Commuter Programs (NCCP), were administrations upon the campuses in which these students matriculate:

The dominance of the residential tradition of higher education continues to shape the development of policies and practices, even at predominantly commuter institutions. Most administrators and faculty members earned their degrees at traditional residential institutions and tend to impose their own experiences on other educational environments. Administrators often inadvertently believe that commuter students can be served by the substitution of parking lots for residence halls, while maintaining essentially the same curricular and programmatic formats (Jacoby, 1989, p. 6).

Student Affairs professionals were those who were, in most cases on campuses around the country, tasked with providing resources for these students, but also struggled to adequately do

so because up until the late 1970s nearly all student development theory was centered upon residential populations (Jacoby, 1989; Miller & Prince, 1976; Ortman, 1995; Stamatakos, 1980). There was even more recognition that there was an unfortunate but real prejudice in how commuter students were viewed (Jacoby, 2000a, 2000b; Miller & Prince, 1976; Ortman, 1995; Stamatakos, 1980). Commuter students, particularly in this era, were seen as individuals who were either disinterested in campus programs or did not need services since they already had support systems outside of campus (Jacoby, 1989; Stewart & Rue, 1983).

Advocates of understanding the commuter experience recommended looking at patterns of student involvement, employment, research and their scholarship, job placement, and alumni information in an effort to better inform this diverse body of students (Andreas, 1983; Andreas & Kubik, 1980; Kuh et al., 2001). This found credence in divisions of student affairs largely because the needs of the commuters were not adequately being addressed there or in their academic environments on their campuses (Jacoby, 2000a, 2000b). Much of these efforts were also problematic because these professionals limited their efforts to support services and programs that emphasized the staff's influence (Andreas, 1983).

Comprehensive institutional response models were developed by experts utilizing the CAS Standards and Guidelines as a means in which campuses could better accommodate commuter students:

1. The institution should modify its mission statement, if necessary, to express a clear commitment to the quality of the educational experience of all its students and should have that change endorsed by its governing board.
2. The president, vice presidents, deans, and all other top administrators should frequently and consistently articulate the institutions commitment to the student-as-

- commuter when dealing with the faculty, staff, students, the governing board, alumni, community members, and others.
3. The institution should regularly collect comprehensive data about its students and their experiences within the institution.
 4. Regular evaluation processes should be put in place to assess whether the institutions programs, services, facilities, and resources address the needs of all students equitably.
 5. Steps should be taken to identify and rectify stereotypes or innaccurate assumptions held by members of the campus community about commuter students and to ensure that commuter students are treated as full members of the campus community.
 6. Long and short range administrative decisions regarding resources, policies, and practices should consistently include the perspective of the student-as-commuter.
 7. In recognition that students experiences in one segment of the institution profoundly affect their experiences in other segments and their perceptions of their educational experience as a whole, quality practices should be constent throughout the institution.
 8. The classroom experience and intereactions with faculty should be recognized as playing the major roles in determining the overall quality of commuter students education.
 9. Curricular and co-curricular offerings should compliment one another, and considerable energy should be directed to ensure that students understand the interrelationship of the curriculum and co-curriculum.

10. Faculty and staff at all levels should be encouraged to learn more about the theoretical frameworks and models that lead to a fuller understanding of the student-as-commuter.
11. Top leadership should actively encourage the various campus units to work together to implement change on behalf of student-as-commuter.
12. Technology should be used to the fullest extent possible to improve the institutions ability to communicate with its students and to streamline its administrative processes.
13. Executive officers and members of the governing board should actively work toward ensuring that commuter students and commuter institutions are treated fairly in federal, state, and local decision making (e.g. student financial aid, institutional decision making) (Jacoby, 1989, pp. 8-9).

In more recent years, a rising national trend is that minority students often commute to their college campuses (Jacoby, 1989; Jacoby, 2000a). This statistic is also one that will likely continue to increase due to rising trends in minority college attendance, as well as a trend for adults to be returning to college as well (Jacoby, 2000a, 2000b; Learning Reconsidered, 2004; National Center for Educational Statistics, 2014; Ortman, 1995).

More than ever before, commuters are also much more diverse in age and life experience now than they had been in the previous eras, and unfortunately, the majority of assessment and research focus of collegians over the past twenty years has focused on the ‘traditional’ 18 to 22 year old undergraduate who commonly resided on campus (Jacoby, 1989, 2000a, 2000b; Pascarella & Terenzini, 2005). Current statistics from NCES identifies the current average undergraduate to be, nationally, 25 years of age (Kirk & Lewis, 2013; National Center for

Educational Statistics, 2014). These students, while certainly poised to provide insights into campus cultures and engagement, left for a conspicuous absence of students who were multi-tasking work and family responsibilities while attempting to complete a college degree (Kirk & Lewis, 2013).

Furthermore, as students are now often attending, on average, a minimum of two colleges before 'landing' in their degree granting institution, particularly as many more students are paying for the entirety of their college education, it is unreasonable to assume that all students would fall into the category of being either dependent or independent in nature (Kirk & Lewis, 2013; Kuh et al., 2014; Learning Reconsidered, 2004).

In 21st century higher education, it is more realistic to look at commuting students into three categories which are distinct in nature, but more readily adopt the common characteristics of both traditionally aged and non traditionally aged collegians. These categories are whether commuter students reside off campus either alone or with peers, other reside with parents and or family, and yet others have their own spouses, partners, or children.

These collegians, in many cases, are juggling far more than merely just an academic workload. Many of them are working numerous hours to pay for their education or familial obligations while attempting to finance their educations (Kirk & Lewis, 2013). More importantly, and frequently less considered by researchers, are the simple obstacles to a commuter attaining a degree that stem from simple issues that are often beyond their control like weather, traffic, public transportation, and fuel costs (Jacoby, 1989, 2000a, 2000b; Jacoby & Garland, 2004; Ortman, 1995). Commuting students have to be acutely aware of these variables because they frequently and unwittingly can inhibit academic success and are not issues that peers who reside on campus have frequent need with which to be concerned.

Aptly coined ‘reinvented students,’ Keeling explained of the contemporary commuting student:

Students’ lives, like those of their parents and caregivers, are absolutely more complicated today (by jobs, debt, and transportation, for example) and the ranking of college...or of studying, or classes, among their immediate priorities have clearly changed...Student is no longer every student’s primary identity...Student is only one identity for people who are also employees, wage workers, opinion leaders or followers, artists, friends, children...parents, partners, or spouses” (Keeling, 1999, p. 4).

Scholarship Innovates Perceptions of Commuter Student Experiences

In the 1970’s a robust body of literature grew as scholars began to actively incorporate assessment as a means in which they were able to understand the value of college in the midst of continued criticism from stakeholders about the cost and benefits of a college education.

From this scholarship came a significant collection of research that continues to influence college campuses presently and has remained telling in its findings despite the fact that some of its is nearly forty years old. In certain ways, this demonstrates the consistency of higher education, but also shows the alarming fact that many campuses have not necessarily made progress in understanding the difference between their commuters experiences and that of their residential populations.

Arthur Chickering

Chickering was the innovator who chose to look at student satisfaction with college life as his predecessors tended to look primarily at either academic success or mental health (Baird, 1969; Graff & Cooley, 1970; Jacoby, 1989). His research, even though still limited in its focus

of commuter students, nonetheless made efforts to understand this population. Prior to his studies, the only existing study of commuter students, conducted in 1960 by Prusok identified that these students, typically, when living off campus appeared to be satisfied with their collegian experiences (Jacoby, 1989; Prusok, 1960). The same study denoted these students as marginal members of the community, which unto itself was extremely problematic (Jacoby, 1989; Prusok, 1969).

Further negative assumptions of commuter students during this era was the tendency for researchers to believe that student's delayed personal maturity by failing to leave home, and these same students were oftentimes also considered at higher risk for mental disorder (Kronovet, 1965; Kysar, 1964). These studies were also, due to the lack of other research, commonly cited and became standard beliefs in the field which propagated negative perceptions about commuter students.

Chickering, while changing the way that scholars understood commuter students, nonetheless did affirm certain stereotypes about this population with his publication of *Commuting versus Resident Students* (1974). His findings postulated that resident students were 'haves,' within society while their commuting peers were 'have nots' and used residential students as the baseline by which their commuting peers were analyzed (Chickering, 1974). This resulted in findings that identified off campus students as diverse in nature, but less invested in their campus, its culture, and its activities (Chickering, 1974). Through these characterizations, he nonetheless designed a concept of integration of experiences which tied student involvement to learning (Chickering, 1974).

Alexander Astin

While Chickering altered the landscape of understanding the commuter student experience, he was joined in this area by Alexander Astin whose groundbreaking work in the field of student engagement happened with the publications of *Preventing Students from Dropping Out* (1975), and *Four Critical Years* (1977), and *What Matters in College* (1993b).

Four Critical Years remains, to date, one of the most cited works in higher education to date because it sought to look at the impact of college on students in an era when policymakers demanded to understand college students in an era of economic decline (Astin, 1993b). This study also drew from a multi-year analysis of data gleaned from the Cooperative Institutional Research Program (CIRP) to answer whether higher education influenced students' career opportunities, aspirations, values, personality, behavior, and life-styles while also looking for demonstration of them having become more competent and knowledgeable (Astin, 1977).

Astin's research was unique in that it did not seek to determine the impact of college, but sought to find the differences that college attendance can have upon how an individual develops during that time versus other studies which looked for change and growth in students (Astin, 1977). In the rationale for the study, Astin noted "the real issue is not the impact of college characteristics' or, more precisely, the 'comparative impact of different collegiate experiences.' More information is needed on the relative impact of various types of collegiate experiences" (Astin, 1977, p. 6).

His research drew responses from over 225,000 students at 300 American institutions of higher education and paralleled already existing data that suggested that commuter students did not have the same experience as their campus residential peers (Astin, 1975; Chickering, 1974).

In the course of the CIRP analysis, Astin also developed a “taxonomy of student outcomes” that in many ways, are the same that are utilized today.

The first component of the taxonomy, outcome types classify behavior into cognitive (intellective) outcomes and noncognitive (affective) outcomes. Cognitive outcomes utilize higher order mental processes like logic or reasoning whereas noncognitive (affective) outcomes are those which relate to student attitudes, values, self-concepts, aspirations, and behavior (Astin, 1977). The second component, data types, are either psychological in nature (the internal traits of the individual) or behavioral which are observable activities which are both necessary to assess either cognitive or affective outcomes (Astin, 1977). The third component, time dimensions, are the periods in which data can be classified or collected to assess outcomes and traditionally are longer in range simply due to the nature in which college growth occurs (Astin, 1977).

One of the most important findings of Astin’s research was the consistent and emphatic correlation between a student residing on campus and their overall success in college. Astin went so far as to note, “by far the most important environmental characteristic associated with college persistence is living in a dormitory during the freshman year,” before also noting that after controlling other variables, residing on campus contributes 12% chances to a student completing their degree” (Astin, 1977, p. 109).

Other areas where Astin noted significant differences between residential and commuting students could be found in career development, extra or co-curricular engagement, engagement with faculty, and leadership development. With specific regard to co-curricular engagement, Astin found that students had a higher likelihood of being elected to student office if they resided on campus freshman year. He also found correlations between those students who held president

level leadership positions in high school representing about 24% of the elected officer positions in organizations in college. Other specific organizations that resident students tended to demonstrate higher levels of engagement in were student government, Greek lettered organizations (social fraternities and sororities), and athletics.

Astin also found correlations between those students who held leadership or president level positions in high school remaining likely to do so in college. An unfortunate statistic, endemic to this day, was that female students were less likely, in coeducational environments to be successful in achieving leadership roles when competing with male counterparts. He also noted that “college alumni often claim that the most significant skills or competencies gained from the college experience were not learned in the classroom. These competencies may be acquired through extracurricular activities or through informal interaction with faculty and peers” (Astin, 1977, p. 122-123).

Student satisfaction was an area that Astin focused on that previous research had neglected as the area was deemed subjective and he rationalized that “given the considerable investment of time and energy that most students make in attending college, the student’s perception of value should be given substantial weight” (Astin, 1977, p. 164). These subjective responses, when analyzed with intentionality, gauged the direct satisfaction of specific aspects of both a college and also gained perceptions of environmental factors related to academics, the co-curricular, and faculty which are both valuable and necessary components of understanding how students interact with their campus (Astin, 1977).

Astin’s analysis focused on satisfaction that was associated with the undergraduate experience and how being involved on campus had significant bearing on positive gains which mirrored previous research in the field (Astin, 1975, 1984; Chickering, 1974). Students who

resided on campus, at large, had higher levels of engagement in leadership and athletic engagement, were likely to have participated in social membership in a fraternity or sorority, and also higher emphasis upon the sociality that came from the college experience (Astin, 1977, 1984).

The study also revealed that residential students demonstrated higher gains in interpersonal self-esteem, persistence and aspirations to graduate, as well as seek professional degrees (Astin, 1977). These residential students also were, if male, more likely to have higher grade point averages. Students also, if living on campus had a greater likelihood of implementing career plans in business.

A radical way to summarize the importance of this analysis was found in one sentence. “Residents express much more satisfaction than commuters with their undergraduate experience, particularly in the areas of student friendships, faculty-student relations, institutional reputation, and social life” (Astin, 1977, p. 220-221).

With the publication of *What Matters in College* (1993b) Astin continued an analysis of the national CIRP data as he continued to attempt to better understand college impact by looking at the student experience. While the study did note, as previous iterations had, that it looked at undergraduate students in the United States as a limitation, it nonetheless did begin to better address the rise in adult students and began to attempt to also point to the rise in part-time students increasing in American higher education (Astin, 1993b).

In this study, the analysis expanded considerably from the 1970s as “the data cover a wide range of cognitive and affective student outcomes, affording the opportunity to examine how the college experience affects more than eighty measures of attitudes, values, behavior, learning, achievement, career development and satisfaction” (Astin, 1993b, p. 4).

The analysis also offered insight on the fact that should students choose not to attend college that they would have need, and likely be doing something else in its place which meant that developmental growth was still occurring in young people regardless of whether or not they elected to attend college. A distinction he noted, however, was the difference that college makes in the development of an individual (Astin, 1993b). This development was hampered, in the fact that it emphasized change and growth and did not look for the notion of impact, or the relative impact of specific types of college experiences (Astin, 1993b).

What Matters in College? presented a new and unique methodology for approaching student satisfaction which had been an area largely untouched in earlier assessment because it often did not have appropriate pretests by which to measure its findings. Astin argued that this class of outcomes, could in fact, be tenable if students were asked whether or not they expected to be satisfied with college (Astin, 1993b).

Contemporary discussions of the ‘outcomes’ of higher education or of improved ‘assessment’ in higher education frequently overlook student satisfaction. This area covers the student’s subjective experience during the college years and perceptions of the value of the college experience. Given the considerable investment of time and energy that most students make in attending college, their perceptions of the value of that experience should be given substantial weight. (Astin, 1993b, p. 273).

His theory was also bolstered by prior research that demonstrated that self-prediction was an accurate form of measurement (Astin, 1977).

Student satisfaction was analyzed in specific student involvement characteristics that included social activism, artistic inclination, hedonism, leadership, status striving, self-concept,

writing ability, desire to achieve, physical health, emotional health, and psychological well-being (Astin, 1975, 1977, 1984, 1993b).

The study also looked at the potential willingness for a student to re-enroll in the same college as a means in which to relate environmental and involvement measures to overall satisfaction but found that typically these satisfactions were found to be higher if a student goes away to school or commutes at a distance from their home (Astin, 1993b).

Like preceding studies, Astin found that students who reside on campus have positive relationships with faculty but those who reside off campus in private rooms or apartments did not (Astin, 1993b). It also found that working in a full-time job has the highest level of outcomes which were uniformly negative, particularly in light of achieving a bachelor's degree (Astin, 1993b). Some of his later research also denotes that commuting ultimately is negatively correlated to the attainment of a bachelor's degree and continuance to graduate school (Astin, 2014).

George Kuh

Another key researcher in understanding the differences between the residential and commuter student is George Kuh, who is credited with developing the National Survey of Student Engagement (NSSE). In a vast body of work which began in 2000, NSSE is an instrument that assesses thousands of students in year to year analyses which tend to be heavily pro-residential populations in relation to their being engaged (Kuh, 1995, 2001, 2009; Kuh et al. 2001; Kuh et al. 2002; Kuh et al. 2008).

According to Kuh, the NSSE as an instrument was “specifically designed to assess the extent to which students are engaged in empirically derived, good educational practices and what they gain from their college experience” (Wolf-Wendel, Ward, & Kinzie, 2009, p.413).

Using clusters of benchmarks that address levels of academic challenge, active and collaborative learning, student interaction with faculty members, enriching educational experiences, and supportive campus environments this instrument purports to determine effective educational practice that are key dimensions of undergraduate experiences (Kuh et al., 2001). These dimensions, while not able to assess learning outcomes directly, do have strong correlations to personal development outcomes (Wolf-Wendel et al., 2009).

The NSSE only surveys freshman and senior students so it has a different level of analysis than longitudinal studies or surveys that enable all four class years to respond. In its first iteration (2000-2001) the NSSE revealed through self-reporting of students that “residential students were more engaged in effective educational practices and—in all likelihood—were benefitting more from their college experience” (Kuh, et al., 2001, p. 6). The finding reported that students who lived on campus reported higher gains in personal and social competence, and this was assumed to have been the result of interpersonal and social dynamics that exist in residential communities (Kuh et al., 2001).

Nearly all subsequent NSSE data yields similar responses which continues to demonstrate that there have to be better ways to understand the distinctions between commuter and residential students.

Theoretical Models through Which to Understand the Differences Between Commuter and Residential Students

Within the literature surrounding commuter and residential students, there are specific components that extend far beyond those evidenced in Chickering, Astin, and Kuh's findings. Those all unequivocally point toward differences between residential and commuter student populations, however, there are other theoretical models which also influence these populations in totality. These models will be discussed succinctly as each has its own vast body of research and will be utilized as a means in which to provide a larger context on how to understand the difference between commuter and residential students and their levels of engagement with their college campuses. Models presented will include retention and integration, human development theory, psychosocial theory, cognitive development, person-environment, Maslow's Hierarchy of Needs, mattering, and student involvement.

Retention and Integration

Much research has been conducted on whether residency on campus has an impact on college retention, and this topic is one which demonstrates disparity in its findings (Schudde, 2011; Tinto, 1993; Turley & Wodke, 2010). Some scholars assert that there is a significant impact on student's learning when they reside on campus (Pascarella and Terenzini, 1991; Young, n.d.) while others dispute that there is little causal evidence to support such claims (Beal & Noel, 1980; Schudde, 2011).

It is hard to dispute that students who reside on campus do not have more consistent access to a vast myriad of resources that contribute to their potential success (Schudde, 2011).

Students who reside on campus have different levels of social support because typically their peers are more apt to have similar experiences as they adapt to living away from home and pursuing degrees and are also less likely to experience psychological stressors which result in them choosing to drop out of school (Schudde, 2011).

Isolation is the most widely cited form of psychological stress which results in a student ultimately leaving college and as such, numerous scholars have cited the benefit of on campus residency to prevent this from occurring (Roe Clark, 2006; Ting, 2000; Tinto, 1993). Other have noted that by choosing to live on, or in very close proximity to campus that they will have greater likelihood of persistence and degree completion (Pascarella & Terenzini, 1991).

Tinto has been instrumental in looking at integration as a core component of student retention, and that the more that a student is invested and involved in their campus the less likely they are to withdraw from their academic program of study (Schudde, 2011; Tinto, 1993). Integration, in this capacity, is the 'fit' of a student to their institution and, as noted in the Student Departure Model (1993), predicates that personal and academic social systems or backgrounds are what determines whether or not a student stays at said institution (Tinto, 1975; Tinto, 1993; Young, n.d).

This model while used primarily to discern student departure from college is valuable in its application of social psychology, behavior, and perception (Milem and Berger, 1997; Tinto, 1993). The model postulates that perceptions of environment lead to individual behaviors, that, if viewed along with involvement theory, are a powerful mechanism to understand why students do, or do not persist in school (Astin, 1984; Habley & McClanahan, 2004; Milem & Berger, 1997; Tinto, 1993).

Involvement, as noted by Tinto, is one of the singlemost important components for student success (Berger & Milem, 1999; Tinto, 1975, 1993). These opportunities form social norming environments for students and ultimately shape how they engage with their campuses (Milem & Berger, 1997; Young, n.d). These moments are defined by Tinto as those that happen when separation, transition, and incorporation takes place in which a student leaves prior experiences to adopt those of their respective institution (Berger & Milem, 1997; Milem & Berger, 1997; Tinto, 1993).

These steps enable students to separate from previous ties while not fully distancing from them. Separation is particularly challenging for students who might be commuting as they are part of both their new environment as well as their old one. As students transition, they begin to look to understand their new environment but have not yet adopted standards of behavior or practice. There is potential dissonance in these experiences as the values, attitudes, behaviors, ideas, and norms are often, in a college environment different than those of their past (Berger & Milem, 1999; Milem & Berger, 1997). Frequently, this results in students rejecting normative beliefs of their family and this period of ‘passage’ is one which enables a full-transition or immersion to occur (Milem & Berger, 1997; Tinto, 1993). Incorporation is that moment in which a student espouses the new values of their campus while also being appropriately contextual (Tinto, 1993). For the largesse of research, this focus has generally demonstrated positive gains associated with academic and social integration (Astin, 1993b; Tinto, 1993), however, it is also sanguine, and necessary to note, that in certain cases, these experiences are not always favorable. Social peer interaction and integration can also lead to potentially self destructive or negative behaviors like substance abuse, self-indulgence, and overspending (Astin, 1993b; Schudde, 2011).

For the majority of analysis related to retention and integration, background characteristics, behavioral, and perceptual models have been used to understand persistence, campus integration, and student involvement (Berger & Milem, 1997; Braxton & Brier, 1989; Braxton, Jones, Hirschy, & Hartley, 2008; Hartley, 2011; Kuh et al., 2008; Kuh et al., 2001).

Chickering, Astin, and Kuh all show significant gains in residence student success which they attribute to living on campus (Astin, 1975, 1977, 1993b; Chickering, 1974; Kuh, 1995, 2002, 2008, 2009; Kuh et al., 2001). These same students also demonstrated active campus involvement, so it has always been assumed that there was a direct correlation between retention and involvement since those students who became attached to their college or university were most likely to persist and complete their degrees (Astin, 1977, 1993b; Chickering, 1974; Kuh, 1995, 2009; Kuh et al., 2008; Kuh et al., 2001; Schudde, 2011). Campus immersion, in nearly all cases, show greater gains academically, and they also show that students ultimately adopt the values endemic of their campus culture (Pascarella & Terenzini, 1991; Young, n.d). Conversely, those students who do not become invested in their campus, especially if they are commuting and do not develop new peer relationships are likely to be dissatisfied with their collegian experience (Christie & Dinham, 1991; Young, n.d).

While Tinto remains the most preminent researcher in this field, his work has been criticized for its failure to account for the impact of external demands upon the commuter student like travel, scheduling, work, and familial commitments as well as the need to distinguish between behavior and perceptual measures which are inherent in this type of analysis (Astin, 1993b; Bean, 1980; Pascarella & Terenzini, 1991; Young, n.d). These variables, while certainly sanguine in his early work, have only been magnified in the 21st century with stratospheric gas and transportation costs, rise of non-traditional students, and the tendency of collegians to work

more during school now than peers of the past. Even the manner in which commuter students look for systems of support from family and friends differ from that of resident students and other scholars have also noted that external demands also affect persistence overall (Cabrera, Castaneda, Nora & Hengstler, 1992; Jacoby, 2000a).

More recent studies have sought out further understanding of whether or not there is potential for greater differences in achievement which correlates to degree completion which are related to race when combined with other variables like residence status (Farley, 2002). A recent study demonstrated that there was a little to no difference between the GPA of a white student and where they lived (Turley & Wodtke, 2010). The same study also identified that African American students frequently had higher GPA's than their peers who resided off campus, especially if they lived with family members which shows the multiplicity in the role of a commuter students' life (Turley & Wodtke, 2010).

Human Development Theory

The basis of the American educational system was to produce well developed individuals and this is most evidenced in the application of human development theory. As it relates to the college campus, these theories have largely been based in student development and seek to incorporate opportunities for changes in their beliefs, behaviors, and values (Jacoby, 1989).

Psychosocial Theory

Psychosocial theory has been built upon Erikson's research that an individual develops their personality through social contexts or a sequence of stages found in their life cycle (Erikson, 1963; Evans et al., 1998; Miller & Prince, 1978; Upcraft & Moore, 1990). In its

essence, Erikson's theory postulates that individuals face psychosocial crises as they are exposed to "unencountered demands and circumstances" which ultimately help them to redefine themselves and grow (Miller & Prince, 1976, p.7). This theory also creates balance of maturity levels, and the expectation of change from others. In the case of the collegians, their stage as being both young adults and also adults, predicates that they would be addressing issues of intimacy, isolation, generativity, and stagnation (Erikson, 1963; Miller & Prince, 1976). All of those concerns would be expected of most collegians as the result of the unfamiliarity of their environments, development or lack of friendships and potential romantic relationships, as well as academic progress or non progress, achievement of emotional independence from family, and preparation of vocation (Erikson, 1963; Miller & Prince, 1976). All of these components, are vital, in the capacity of a collegian developing into an actualized and productive individual.

Arthur Chickering also became a significant contributor to psychosocial and student development theory when he published *Education and Identity* (1969). His later publication, *Vectors of Development* (1993) helped to define age specific cultural norms and roles that define environment, culture, and gender related influences in an effort to establish identity (Evans et al.,1998). These include:

1. Developing competence
2. Managing emotions
3. Moving through autonomy toward interdependence
4. Developing mature interpersonal relationships
5. Establishing identity
6. Developing purpose
7. Developing integrity (Young, 2003, p. 181).

In Chickering's early theories of the late 1960s, he brought psychosocial developmental theory into higher education as a means to respond to the complexity of contemporary era (Miller & Prince, 1976; Miller et al., 1983). These early vectors had specific functions as they related to the "young adult" of college. The benefit of the vectors in identify development is that these enable students the opportunity to continuously explore themselves in a less rigid experience (Young, 2003).

Cognitive Development

Cognitive development theory largely derives from the work of Piaget as a means in which to begin to allow individuals to shift the way in which they perceive and reason (Jacoby, 1989). All of this is done through intentional focus on past experiences and the environment, with particular emphasis on moral issues and reasoning (Evans et al., 1998; Miller & Prince, 1976, Miller et al., 1983; Upcraft & Moore, 1990; Young, 2003).

Cognitive development enables individual change to occur when individuals are challenged by ideas or problems that necessitate them reconstructing the way that they themselves look at the situation (Jacoby, 1989).

Person-Environment

The foundation of person-environment theories are unique in that theorists look at this as developmental growth occurring as the result of interaction between a person and their environment (Holland, 1973; Jacoby, 1989); personal characteristics and the environment of a situation (Roe, 1957); and the context of a situation and individual behavior (Walsh & Betz, 1985).

Largely, the most important component of these theoretical foundations is the basis of an individual finding an environment which is the right 'fit' for them (Huebner, 1980; Jacoby, 1989). If these two are deemed 'good,' they typically have a positive impact whereas if they are determined to be 'bad,' it tends to have the opposite effect.

Campus Ecology

Campus ecology is a theoretical model that looks at how a student interacts with their campus environment. It looks at the environment in its totality to see the potential for growth of an individual (Banning, 1980; Jacoby, 1989). The theory looks at ways in which deficiencies in an environment ultimately impact a student, and this, in a very tangible way has been seen in studies that have placed specific emphasis upon how particularly when they are commuters can have significant points of disconnect with their environments.

The ecology model recommended for the development of a campus ecosystem which could be used as a way to improve the environment for students (Andreas & Kubik, 1980; Banning, 1980; Hurst, 1987). Totalistic in its views, the ecology model looked at both physical and theoretical underpinnings so that it is just as important for an environment to serve a utilitarian function while also enabling a student to have perceptual and behavioral growth (Banning, 1980).

Ecology model considerations, particularly for commuter students would be influenced by the need for commuter lounges and spaces for these students to be if they are not in class or at the library (Roe Clark, 2006). In the same capacity, due consideration should be given for non traditional students who might have different needs of a health center than that of a traditionally aged college student (Jacoby & Garland, 2004).

Another way that campus ecology can be utilized is to look at course schedules and departmental services to determine if the time that they are offered serves the needs of commuting students (Banning & Hughes, 1986). Conversely, could the same be said about services being provided for residential students? If not, then perhaps the campus ecosystem needs to be evaluated.

Maslow's Hierarchy of Needs

While Maslow research is undeniably grounded in human development theory, it also, singularly can be applied to nearly every facet of higher education and virtually every program and service offered in a Division of Student Affairs/Life. The Hierarchy of Needs (1982) defines the the fundamental needs of collegians that range from lowest to highest and include:

- Physiological—shelter, food, and sleep;
- Safety—protection against harm, security, consistency;
- Belongingness and love—acceptance, affection;
- Esteem—self-respect, worth, status;
- Self-actualization—development of full potential and individuality (Jacoby, 1989, p. 52).

Higher education administrators and faculty must ground all facets of work in this hierarchy. For residential students, the concepts of physiological needs are in theory met with the provision of residence and dining halls. For commuter students, this experience differs in that they ask for places to rest in between classes and locations where they might purchase or prepare meals (Roe Clark, 2006). These students are looking for their most basic needs to be met before anything else (Jacoby, 2000a, 2000b; Jacoby & Garland, 2004). Safety is a universal concern for all collegians, however, the manner in which they might interpret their perception of safety can differ greatly between these populations (Jacoby, 1989; Kelly & Torres, 2006;

Ortman, 1995). Should students not feel a sense of belonging and esteem on their campus, they will not be able to attempt to achieve the self-actualization (Jacoby, 1989; 2000a, 2000b; Jacoby & Garland, 2004; Ortman, 1995).

College administrations must make efforts to show students that they are valued and that they are welcome in a community regardless of their status as a residential student or commuter (Jacoby & Garland, 2004).

Mattering

Conceptually, mattering is “the feeling that others depend on us, are interested in us, are concerned with our fate, or experience us as an ego-extension” (Rosenberg & McCullough, 1981, p. 165). While the supportive campus environment is defined as one of the most important educational practices, many residential students find this support on campus in relation to their commuting peers (Jacoby & Garland, 2004; Kuh et al., 2001). Oftentimes, commuting students are not adequately prepared to understand the relationships that they must establish with academic-advisors, and other support staff, particularly those in areas where they are not actively engaged (Jacoby & Garland, 2004).

Chickering, Schlossberg, and Warren expanded this model of mattering to include adult learners in 1989, and variations of this have been incorporated into NCCP programming as a means in which to combat marginality (Jacoby & Garland, 2004). This notion of marginality is the simple concept by which a student does not matter and has the potential to impact any student who does not feel part of their campus (Schlossberg & Warren, 1985). When campuses have failed to achieve this sense of mattering, or belonging, students, simply will fail to thrive (Jacoby & Garland, 2004).

Family Systems

As a theoretical framework, the role that family plays in an individual's life is imperative to understand how collegians can be impacted by this during college (Bowen, 1978). This variable has vast implications for commuter students as they are likely to be impacted by family issues while attending college.

For students who have supportive family members, this helps to nurture and encourage their success during school. Students who do not have such a supportive family environment may find that they are discouraged from completing their academic programs simply because their relatives do not find value in this experience (Jacoby, 1989). Others may feel challenged by the dissonance in blending their lives as students and members of families (Ortman, 1995).

First-generation college students are most likely to find that their relatives do not understand why they are encouraged to actively participate in campus culture and activities (Jacoby & Garland, 2004). In the same capacity, there are also challenges that many commuter students face if they are unable to actively be involved with their family due to the rigors of their academic programs (Jacoby & Garland, 2004). Social integration is the most common inhibitor for first-generation collegians since they are departing from familial expectation and experience (Roe Clark, 2005). In this capacity, family and childhood friends can serve as either an asset or liability in the overall success of the student (Roe Clark, 2005).

In a similar capacity, as parental engagement has increased over the past decade, in the lives of traditionally aged collegians, it is also imperative to look at the potential for parental interventions to thwart the development of autonomy of collegians (Cullaty, 2011). Conceptually, autonomy is one of the most essential developmental goals of collegians and stems from the research of Chickering as a means in which to demonstrate one of the fundamental

milestones of this population (Chickering, 1974; Chickering & Reisser, 1993; Cullaty, 2011; Pascarella & Terenzini, 2005).

As the trend of parental engagement has grown with the arrival of millenials on college campuses, this nonetheless created challenges in how parents can unwittingly sidetrack their offspring's growth if over-involved in their transition to young adulthood (Cullaty, 2011). If parents do not allow the natural progression of separation or adult development to occur (Levinson, 1978) it is all but impossible for the student to become an autonomous adult (Chickering & Reisser, 1993).

Work

Yet another significant detractor to collegian success is the affect that work has on students pursuing their degree (Dundes & Marx, 2006; Furr & Elling, 2000; Galbraith & Merrill, 2012; King & Bannon, 2002; Kulm & Cramer, 2006). In the past twenty five years, the cost of tuition has increased three times higher than median family incomes with tuition and fees rising 38% in the last decade alone (Boehner & McKeon, 2003; Kulm & Cramer, 2006). To draw a parallel of this statistic to economic impact, since 1985 college education has inflated 500% while the consumer price index has only risen 115% (Odland, 2012).

Students leave college with significant loan debt and this debt has surpassed credit card debt in the past decade. The consequence of such is that as these individuals attempt to lower the cost of their loans, they seek employment. Presently, statistics generated by NCES find that 80% of undergraduates work during school, and it appears that half of those students are working per week in various capacities (National Center for Educational Statistics, 2014). At the beginning of the 21st century, one in five full-time students worked thirty five hours or more per week, on-campus employed students worked 9.6 hours on average, and commuter students worked 24.4

hours on average per week (King & Bannon, 2002; Furr & Elling, 2000). That statistic in 2014 suggests that 15% of students work less than twenty hours per week, 18% of students work twenty to thirty four hours, and 7% of all full time students work thirty five or more hours per week, largely in efforts to finance education (National Center for Educational Statistics, 2014).

The research regarding work and its impact upon college student success is varied, at best in its findings. The majority suggest that some form of work, particularly if it is lesser in hours, has little effect on GPA. Others noted students who do not work have lower GPA's than peers who work less than under 15 hours per week (King, 1999; Dundes & Marx, 2006). The U.S. Department of Education's National Center for Education Statistics (NCES) on the other hand, reports that students who work more than 15 hours per week have lower GPA's (National Center for Educational Statistics, 2014). More studies found that limited employment (ten hours) had positive impact on students as did working on campus (Kulm & Cramer, 2009; Kuh, 2009).

Even more studies, however, found excessive work schedules (30 to 35 hours) having negative impact on academic progress (Astin, 1993b; Furr & Elling, 2000; King & Bannon; Kulm & Cramer, 2009). By nature of such categorization, 35 hours is analogous to full-time employment and this variable, when paired with students pursuing degree leads to higher drop out of school (Orszag, Orszag, & Whitmore, 2001).

Student Involvement

Student involvement as both a theory and a practice is vital to understand how and why students have either a positive or negative experience during their collegian years. It is quite simply, a significant component of the education of a collegian, and occurs both in coincidence and also, at times, in isolation of academic endeavors. Deemed 'extracurricular,' co-curricular, or even other curriculum, there is little argument that student engagement contributes to

outcomes of collegian growth (Astin, 1977, 1985, 1993b; Kuh, 1995; Pascarella & Terenzini, 1991, 1995; Tinto, 1993).

National data has shown promise in collegian participation in activities as the NSSE noted in 2010 that 53% of collegians reported participation in one hour or more per week in clubs or organizations (Dugan, 2013). Similarly findings reported that 80% of all college students participate in at least one organization by the end of their senior year (Dugan, 2013, 2011). In all of these cases, the importance of these activities is underscored by the profound change that comes about by peer interaction in student growth and development (Dugan, 2013; Newcomb, 1962). Scholars have noted that what a student does, rather than who they are or where they have chosen to attend college are the largest predictor of educational gains (Dugan, 2013; Kuh et al., 2005; Pascarella & Terenzini, 2005).

Student involvement is intimately tied to the potential for developmental outcomes to be manifest in these experiences which range from psychosocial development, cognitive development, and identity development (Pascarella & Terenzini, 1991, 1995).

Much of the challenge in defining how this engagement based learning was the direct result of the lack in clearly defined ways to measure learning outcomes, particularly as they related to non-academic divisions on campuses. As Astin noted in *Achieving Educational Excellence* (1985):

1. Involvement refers to the investment of physical and psychological energy to the academic experience.
2. Involvement involves along a continuum. Different students manifest different degrees of involvement in a particular task, and the same student manifests different degrees of involvement in different tasks at different times.

3. The extent of involvement can be measured both quantitatively and qualitatively.

Quantitative measures include number of hours spent studying; qualitative measures reflect the extent to which a student comprehends reading assignments as opposed to staring at the textbook and daydreaming.

4. The amount of student learning and development associated with any educational program is directly proportional to the quantity and quality of student involvement in it.
5. The effectiveness of all educational policies or practices is directly related to their capacity to increase student involvement (Astin, 1985, p. 135-136).

This theory, grounded largely in persistence, came to define the manner in which Astin helped to innovate student involvement as a conceptual model that brought union to academic and co-curricular experiences in the lives of college students (Astin, 1977, 1984, 1985, 1993b). Even Astin's investment in the National Institute of Education's *Involvement in Learning* report tied student involvement to achievement, persistence, and educational attainment (Astin, 1984; Kuh, 2009). In nearly all of his work, Astin theorized that the more involved a student was in their collegian experience the more successful they would be overall (Astin, 1975, 1977, 1984, 1993b).

From his theories came the Input-Environment-Output (I-E-O) model that looks at characteristics of effect of on-campus participation in academic and social activity on various learning outcomes (Astin, 1984). This model has been one of the most widely applied in student involvement theory for the means in which it ties the student directly to their environment and their experiences. A challenge noted in the use of this model, has been that researchers need to identify how they apply the concepts of involvement, engagement, and integration to their studies. These are environmental variables that influence outcome variables and should not be

confused as such (Wolf-Wendel et al., 2009). One such way that Astin has done this is to look candidly at means in which to assess “the impact of various environmental experiences by determining whether students grow or change differently under varying environmental conditions” (Astin, 1993b, p.7). By looking at these environments and collegians, it is possible to achieve specific desired educational outcomes.

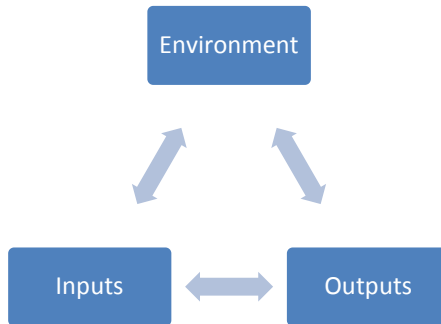


Figure 1. Astin’s Input-Environment-Output (I-E-O) model (1993b).

Tinto also noted the critical role of involvement in student persistence as “there appears to be an important link between learning and persistence that arises from the interplay of involvement and the quality of student effort. Involvement with one’s peers and with the faculty, both inside and outside the classroom, is itself positively related to the quality of student effort and in turn to both learning and persistence” (Tinto, 1993b, p. 71).

Integration theory, is where Tinto makes specific reference to student involvement as it relates to the campus and how a student becomes involved (Tinto, 1975, 1993b). Herein, he describes the potential of activities or co-curricular involvement as a means in which to better integrate a student to their campus which will, in all likelihood make for a better ‘fit’ between student and their college or university (Chapman & Pascarella, 1983; Milem & Berger, 1997; Tinto, 1975, 1993). Specific and noted activities were those tied to involvement in residence hall

activities, student union activities, faculty interaction, intramural sports, Greek life, curricular, co-curricular, and extra-curricular programs (Milem & Berger, 1997; Tinto, 1993).

Pascarella and Terenzini in *How College Affects Students* (2005) made note that the engagement, or time and energy that a student expends has a positive connection to all desired outcomes of their education. Furthermore, this concept can be taken further as Kuh noted that it is also vital that institutions encourage student participation in activities (Kuh, 2001, 2009). Research honed from national assessment efforts like the NSSE demonstrate, in totality that engagement effects are typically positive for all students, and this includes those of racial or ethnic diversity, first in family to attend college, and those who have been determined as less prepared for college (Kuh, 2009).

Where studies have shown deficits in specific populations performance or involvement, it has been widely recommended that attention and emphasis be made to close those gaps. This has been happening, in several different ways over the past decade.

Dispositional engagement, or the potential for a student to become involved in their campus is recommended as a means in which to get students engaged by asking early on in a first year or prior to enrollment what a student is interested in doing (Kuh, 2009).

There is also equal need to evaluate the relationship between practitioner (higher educational professional/faculty member) and student relationship because this is often entirely overlooked in research and it creates deficits on learning opportunities (Bensimon, 2007; Wolf-Wendel et al., 2009). An example of where this has been demonstrated is in institutions looking to overemphasize student involvement in their activities and not looking at whether or not they are integrated in such a setting (Bensimon, 2007; Wolf-Wendel et al., 2009).

Micro-level analysis of student involvement has fallen under criticism in the past twenty years in that if a student is being evaluated for the benefit of a membership in a particular organization (Greek life, multi-cultural organizations, arts, etc) this does not account for the fact that these students are also likely concurrently involved in other groups which ultimately impact their perspectives (Asel, Siefert, & Pascarella, 2009; Dugan, 2013; Pascarella & Terenzini, 1999; Pascarella, Flowers, & Whitt, 1999; Pike, 2000; Pike & Kuh, 2005). These multi-layered experiences frequently either augment or inhibit involvement and do not look for cross-divisional, or even various means in which personal development occurs (Dugan, 2013).

Another significant component of student involvement is the way that student behaviors and perceptions can and do impact their social interaction with peers which when properly evaluated, can allow an institution of higher education to better understand their students needs (Braxton, Hirschy, & McClendon, 2004; Kuh, et al., 2008; Milem & Berger, 1997; Schudde, 2011).

CHAPTER III: METHODOLOGY

This chapter describes the methods used in this study, first looking at the procedure for data collection and the characteristics of the samples used, as well as a discussion of the various construct measurements of the benchmarks. Data analysis, research questions, and limitations conclude this section.

Instruments

The National Association of Student Personnel Association (NASPA) is one of two preeminent associations that support “the advancement, health, and sustainability of the student affairs profession” (NASPA, 2014).

In 2009, NASPA established the NASPA Assessment and Knowledge Consortium to create assessment instruments to “provide colleges and universities with actionable campus-specific and benchmarking data to shape and enhance programming inside and outside the classroom” (NASPA Assessment and Knowledge Consortium, 2014).

These benchmarks are unique in their approach from national engagement and retention assessments in that they were designed by NASPA in collaboration with cooperating professional organizations that support higher education professionals on college campuses that include the National Association for Campus Activities (NACA), the Association for Student Conduct Administration (ASCA), the Association of College and University Housing Officers—International (ACUHO-I), the National Orientation Directors Association (NODA), the Association of College Unions International (ACUI), the National Intramural-Recreational Sports Association (NIRSA), the Association of Fraternity/Sorority Advisors (AFA), EVERFI (formerly Outside the Classroom), and the Center for Collegiate Mental Health (CCMH) (NASPA Assessment and Knowledge Consortium, 2014).

Another cooperating partner is Campus Labs Baseline, an educational assessment company “that provides the technology, resources, and expert consultation required to create an integrated, coordinated, and comprehensive assessment approach across the campus. Accessible to all stakeholders, Baseline was designed to connect and translate assessment data for the purposes of improving the student experience both inside and outside the classroom” (Campus Labs Baseline, 2014). The purpose of Campus Labs Baseline is to enable campuses “to measure learning, document student involvement, and inform strategic directions. Through sophisticated assessment and reporting tools, divisions and departments can collect direct and indirect measures of learning, benchmark with peers, and use assessment results to improve programs and services” (Campus Labs Baseline, 2014).

Each benchmark is unique in its content, and has been designed by NASPA with a cooperating professional organization in an effort to articulate field specific learning outcomes, and general student-learning outcomes that have been informed by student development theory. The benchmarks also incorporate specific opportunities for student demographic data and respective individual levels of engagement within the program to be articulated. “The partnerships [that design the assessments] ensure that the data collection, results, and utilization of the information will be meaningful for their respective fields” (Vanderlinden, 2009).

The benchmarks were designed by NASPA and cooperating partners “who reviewed the assessment instrument for relevancy” in their initial disseminations (Vanderlinden, 2009). The Consortium assessments also offer campuses the opportunity to look across datasets at student perceptions, outcomes, and experiences in comparison to campus operational data, programming, and best practices (NASPA Assessment and Knowledge Consortium, 2014).

While numerous NASPA benchmarks exist, for the purpose of this study, five were specifically chosen to analyze specific areas of student perception that might differ between residential and commuting students and were selected based upon variables that can influence satisfaction including student involvement, campus safety, diversity, mental health, career aspirations, and recreation. These specific areas are evidenced in the following benchmarks; Campus Recreation and Intramurals, Career Aspirations, Counseling and Mental Health, Profile of the College Student, and Student Activities and Involvement.

Sample

The data for this study were collected in the spring 2012 and 2013 semesters at a private, urban, religiously-affiliated university in the Northeast region of the United States, and represent the most current comprehensive benchmark data available in the aforementioned programs and services on campus. These data were collected by the Division of Student Life through the Student Life Assessment Team (SLAT), the Center for Student Involvement, Career Center, Recreation and Intramurals, University Counseling Center, and the Office of Student Conduct. Departments coordinated their benchmarks so that multiple assessments were not being conducted at the same time.

Participating departments requested email addresses for the campus full-time and part-time students from the Registrar so that random samples of freshman, sophomore, junior, senior, and also graduate and/or professional phase students could be defined to build a potential base of survey respondents. Once those random samples were assigned, the participating department worked with Campus Labs Baseline (formerly StudentVoice) to send selected students an invitation to participate in the assessment via electronic mail. The electronic mail request included both the invitation as well as a unique link which enabled the student access to the

online survey. All collected data were housed for the NASPA Assessment and Knowledge Consortium on the Campus Labs Baseline servers to ensure security. Once students completed the assessment, their email addresses were expunged from the data and they were generated a random number that enabled analysis of an individual’s answers to be seen in comparison to campus peers. Students were not obligated to participate and could also exit instruments at any time and were also able to skip any questions that they did not wish to answer.

Because the data was pre-existing, the following table displays the overall invitations for participation in the surveys as well as the percentage of completed surveys and total populations that responded prior to graduate level students and/or professional phase students being removed. In the initial dissemination of the surveys, the participating departments were ambitious in their efforts to captivate significant student engagement and looked for substantial response percentages which were not evidenced.

Table 1

Pre-Existing Survey Data

Survey	Total Number Invited to Participate in Survey	Percentage Who Responded (Rounded)
Student Activities and Involvement	1,850 students	11%
Profile of the College	1,850 students	14%
Student Experience		250 students
Mental Health and Counseling	4,568 students	14%
		642 students

Table 1 (Continued)

Campus Recreation	4,515 students	13% 395 students
Career and Professional Aspirations	1,887 students	9% 584 students

Construct Measurements and Psychometrics

Because this study was primarily concerned with the differences of the perceptions of undergraduate residential and commuter students, the surveys on Student Activities and Involvement, Profile of the College Student Experience, Mental Health and Counseling, Campus Recreation, and Career and Professional Aspirations surveys were analyzed for differences in how these populations responded to issues related to student involvement, recreation, campus safety, diversity, career aspirations, mental health, as well as their campus experiences and self-articulation of learning outcomes as evidenced in these assessments.

Initial data were processed using the Statistical Package for the Social Sciences (SPSS) 22 to gather descriptive statistics such as the mean, median, variance, and standard deviation of the instrument samples. Due the nature of the instruments acting as independent assessments as well as the fact that these were not conducted at the same time with the same student population, individual one-way ANOVAS were conducted to determine if the independent variable (e.g. residence status) and its multiple levels (resident students, commuters residing with roommates, commuters residing with family, or commuters residing with spouse/children/partners) and whether they differ on their dependent variables (e.g. individual responses to each survey sub-scale).

Because only one of the instruments had been externally validated, reliability tests were conducted by the researcher to assure that the questions on a scale worked effectively to answer the specific questions.

Table 2

Reliability Scales

Survey	Survey Sub-scales	Reliability Values (Cronbach Alpha)
Student Activities and Involvement	Organization/Club Involvement	($\alpha=.992$)
	General Involvement	($\alpha=.909$)
Profile of the College Student Experience	Diversity	($\alpha=.765$)
	Campus Safety	($\alpha=.891$)
Mental Health and Counseling	Depression	($\alpha=.833$)
	Anxiety	($\alpha=.856$)
	Substance Use	($\alpha=.871$)
Campus Recreation	Self-Articulated Learning Outcomes	($\alpha=.952$)
Career and Professional Aspirations	Campus Based Career Development	($\alpha=.941$)
	Career Dispositions and Aspiration	($\alpha=.735$)
	Sources of Career Information	($\alpha=.940$)

Data Preparation

After the researcher gained permission to use pre-existing data by appropriate university administration and the Institutional Review Board, the researcher was granted access to the raw

data through Campus Labs Baseline server and transferred this data to SPSS 22 for any necessary data-recoding and analysis. During that time, it was checked for missing values, non-normality, and any potential out of range responses. Any graduate level student and/or professional phase student responses that were acquired in the pre-existing data were also expunged due to the study only including undergraduate responses which reduces the total number of survey respondents when looking at those findings in the data analysis in Chapter 4.

Missing Data

The majority of missing data in all of the surveys was most prevalently seen in items found later in the survey which is coincident with survey fatigue research. Students also were given the opportunity to opt out or pass instrument questions which also accounted for the potential of missing data.

Data Analysis

Preliminary descriptive statistics that included means, frequencies, and ranges were run to analyze the data for demographic purposes. After looking at those results, the researcher was confident that it was best to analyze the research questions using one-way analysis of variance (one-way ANOVA) that analyzed the residents in comparison against commuters living with peers/friends, commuters living with family, commuters living with spouses/partners/children, and commuters living alone (Green and Salkind, 2008). Where data required further investigation as the result of statistically significant alpha values, post-hoc tests were run with a Scheffe alpha value.

Research Question 1

The first research question answered was “Does student involvement in campus activities differ between residential and commuter students who reside with roommates, family, or

spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of 100 undergraduate students who completed the NASPA Assessment and Knowledge Consortium Student Activities survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommates), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables aligned with specific club and/or organization membership, overall student engagement, and self-articulated learning outcomes.

Research Question 2

The second research question answered was “Do perceptions of diversity differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of 113 undergraduate students who completed the NASPA Assessment and Knowledge Consortium Student Profile of the College Student survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommate), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables that looked at diversity within the survey.

Research Question 3

The third research question was “Do perceptions of campus safety differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of

undergraduate 113 students who completed the NASPA Assessment and Knowledge Consortium Student Profile of the College Student survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommate), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables that looked at differences in academic distress and social anxiety.

Research Question 4

The fourth research question was “Do issues of mental health differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of 484 undergraduate who completed the NASPA Assessment and Knowledge Consortium Student Mental Health and Counseling survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommate), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables that looked at campus safety within the survey.

Research Question 5

The fifth research question was “Do perceptions of recreation differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of 395 undergraduate students who completed the NASPA Assessment and Knowledge Consortium Recreation survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommate), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables associated with mental health as related to social anxiety and academic distress.

Research Question 6

The final research question was “Does career development and aspirations differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. The data set of 529 undergraduate students who completed the NASPA Assessment and Knowledge Consortium Career Development and Aspirations survey was analyzed to answer the research question.

A one-way ANOVA was used to determine differences between the independent housing variable with four levels: residential, off campus (roommate), off campus (family), off campus (spouse/partner/children) and the multiple dependent variables associated with career preparedness.

Limitations of the Study

The following limitations were identified for this study. First, the NASPA Consortium assessment instruments could only be administered to campuses that participated in the Consortium through their membership in Campus Labs Baseline (formerly StudentVoice).

Second, the instruments were analyzed from only the perspective of one university for the purpose of this study, so it did not present how the campus responded in comparison to other peers at participating institutions. While this larger body of data is available both for all participants in the benchmarks as well as a private university specific focus, that study did not enable the detailed research of a single institution and how its students perceived its programs.

Third, the analysis was meant to comprise a wider campus brushstroke and as such, certain benchmarks and their data were not included due to their potential exclusion of the wider campus perspective (i.e., Student Conduct and Academic Integrity demonstrating self-reported learning outcomes of students who were involved in violations or Freshman Orientation which is only open to freshman students).

Fourth, the analysis is not entirely generalizable to all institutions of higher education in America. This institution is a private faith-based institution located in the Northeast with a significant population of commuting students located in an urban environment. Presumably, larger public, private, or two-year institutions with different sub-populations might have different findings than those encapsulated in the benchmarks. Additionally, the benchmarks were exclusively administered in a web-based setting, which might have had bearing for students who might have preferred a paper document.

Fifth, NASPA worked collaboratively with the various professional organizations affiliated with Student Affairs professionals to develop these benchmarks, and while there were face validity tests conducted prior to their launch, the assessments have not gone through external validity review as individual instruments, outside of the Mental Health and Counseling measure, the Counseling Center of Assessment of Psychological Symptoms-62 (CCAPS-62) (Locke, Buzolitz, Lei, Boswell, McAleavey, Sevig, and Hayes, 2011).

The researcher utilized SPSS 22 to conduct psychometric tests which enabled the questions to be grouped into scales, however, due to the lack of pre-existing validation for all but one of the surveys utilized, analysis were run on an item-by-item basis. Had the individual scales been utilized, it could have potentially obscured unique ideas which could have been diminished using a scale analysis.

Recommendations have already been made to both Campus Labs Baseline and NASPA that these assessments should undergo more rigorous analysis so that they can become externally validated instruments and that their data findings can be further disseminated into a larger discourse of higher education. Unfortunately, this limitation is one endemic in Student Affairs as professionals typically utilize percentages on single items versus statistical processes when conducting research which is another way in which this particular division is unique from peers in Academic Affairs. Those who developed the surveys were not concerned with construct validity and scale reliability as much as they were interested in student responses that were largely based in satisfaction.

Another issue that the research wishes to articulate as a limitation is that the scales themselves utilized multi-answer options in certain questions which oftentimes forced a student to answer “not applicable” at the same time as “not offered” or “does not apply to me.” When looking at perceptual differences there is a significant difference between those responses that needs to be evaluated in an effort to better understand student needs.

One final limitation worthy of note is that in certain surveys, the overall responses of some of the sub-populations is quite small (specifically, commuters with spouse/partner/children) so generalizability should be cautioned. In instances where this occurred, it is noted in the data analysis and findings.

CHAPTER IV: RESULTS

This chapter presents the results of the study, the purpose of which was primarily concerned with the differences of the perceptions of residential and commuter students and how these populations responded to issues related to student involvement, diversity, campus safety, mental health, recreation, career aspirations, and campus generalized experiences at a private, urban, religiously-affiliated university located in the Northeast region of the United States. The findings are organized to respond to the specific research questions presented in Chapter 1. Data were analyzed using SPSS 22 to conduct one-way ANOVAS to determine how specific areas of student engagement in the aforementioned areas differed between residential and commuter students. Specific emphasis was placed upon distinctions drawn between the commuter populations as those commuters who reside with peers/alone, commuters who reside with family, or commuters who reside with spouse/children/partners.

The chapter will provide descriptive statistics for each survey as well as the specific tests utilized to analyze the data. It will then present the findings of the results of the analysis as they relate to answering the questions of how student perceptions of different areas of Student Affairs differ between resident and commuter students. Finally, the chapter will conclude with a summary of the results of the findings.

Conceptual Insights

The surveys utilized provide specific insights into the student perceptions which Astin, in particular, found valuable to analyze in the course of much of his research as those subjective responses gauged satisfaction, campus environment, and the collegian interaction with their campus (e.g., Astin, 1977). His research in later studies drew similar conclusions to his seminal work and continued to affirm the need for administrations to place emphasis upon looking at the

distinctions between residential and commuter student populations as his work tended to find that residential students achieved higher gains than commuting peers (Astin, 1993b, 2001). Likewise, the work of student engagement that Kuh has analyzed since the late 1990s also continued to affirm that there were disparities between residential and commuter peers which warrant present analysis (Kuh, 2009, 2001, 1995; Kuh et al., 2001).

The responses were analyzed by using one-way ANOVA to compare scores of resident students and their commuter peers as defined by the sub-groups of those living with roommates, family, or spouse/partner/children. It is worthy of note that because all of the surveys included descriptive or demographic data questions at the conclusion of the surveys, that as a consequence of survey fatigue, those numbers often demonstrate a difference in the data population versus those of earlier questions, the majority of which included perceptions of programs and services. Because the study focused specifically on only undergraduate populations, it also necessitated that any graduate students who had responded to the surveys be removed, as well as the expunge of any student who identified as being part of a professional academic program of study which reduced the total number of population in each survey.

Another observation worthy of note prior to the analysis of the data findings is that each survey had significantly varied population sizes which ultimately has bearing and weight upon how data was interpreted. Because each survey also had significantly differing questions, it was not possible to look across data sets, so each instrument and its respective sub-scales were analyzed individually. Overall, while this does reflect an inherent limitation, ultimately it provided significant unique insights in how the differences between how residential students and their commuter peers perceive their campus experience.

Demographic data for each instrument which includes student residency status, gender, class standing, enrollment, age, potential transfer status, hours of work per week, first generation college status, and whether or not they would choose the institution again for their degree acquisition (see Appendix A-E). While the demographic data does not assist in the process of answering the research questions, it does, by nature of its content to look at issues that literature notes can affect enrollment, retention, degree completion, and generalized student involvement (Astin, 1977, 1993b; Tinto, 1993).

Each survey also demonstrates the uniqueness of the student populations that responded to each survey in the two year cycle in which these assessments were conducted. In the majority of cases, most students are deemed ‘traditional’ in age, however, there were a number of outlier students that were older than the national average which indicates a rise in ‘non-traditional’ aged population on a campus that had not typically seen students of these ages in previous years. In the same way, the rising cost of education is evident in the overall number of students who identified working during their academic year, with particular note on how many hours these students dedicate to that while also enrolled in pursuit of their degree.

Data Insights

Sample Description in the Student Activities and Involvement Survey

The sample that completed the Student Activities and Involvement survey was comprised of 100 students, 55% of whom were on-campus residents, 20% were commuters who resided off-campus with roommates, 16% were commuters who resided off-campus with family, and 9% were commuters who resided off-campus with a spouse, partner, and/or children. Of the viable sample population, there was a larger percentage of female students (68%) to males (27%), while 5% identified they would prefer not to answer the question. Participant responses in descending

order of participation were seniors (35%), freshman (27%), juniors (22%), and sophomores (15%) as well as 1% for a non-degree pursuit which is often coincident with a certificate program or pre-requisites for professional level programs after completion of a baccalaureate degree.

Age breakdowns were not necessarily coincident with class years as (62%) were in the age group between 19 to 21, (15%) were 22 years old, (11%) were 18, and (14%) identified as being age 27 or older. Most were enrolled full time (97%), had never transferred from another college (88%), and were not the first to attend college in their families (84%). In this sample, many students did not work during school (38%), however (50%) identified worked between 1 and 30 hours, as well as those who identified working between 31 and 40+ hours (12%) which are typically congruent with full-time working schedules. Final statistics note the majority of students, if having had the opportunity, would return to this institution if they were to start a degree over (64%), while other peers were less optimistic (36%).

Sample Description in the Profile of College Students Survey

The undergraduate sample that completed the Profile of the College Student survey in an effort to understand perceptions of safety and diversity was comprised of 113 students, 58% of whom were on-campus residents, 21% were commuters who resided off-campus with roommates, 15% were commuters who resided off-campus with family, and 5% were commuters who resided off-campus with a spouse, partner, and/or children. Of the viable sample, there were a larger percentage of female students (75%) to males (25%). Participant responses in descending order of participation were seniors (29%), juniors (29%), freshman (22%), and sophomores (20%).

Age breakdowns were not necessarily coincident with class years as (71%) were in the age group between 19 to 21, (12%) were 22 years old, (8%) were 18, and (9%) identified as being age 25 or older. Most were enrolled full time (95%), had never transferred from another college (87%), and were not the first to attend college in their families (85%). In this sample, many students did not work during school (40%), however (50%) identified worked between 1 and 30 hours, as well as those who identified working between 31 and 40+ hours (10%) which are typically congruent with full-time working schedules. Final statistics note the majority of students, if having had the opportunity, would return to this institution if they were to start a degree over (71%), while other peers were less optimistic (29%).

Sample Description in the Mental Health and Counseling Survey

The undergraduate sample that completed the Mental Health and Counseling survey in an effort to understand perceptions of safety and diversity was comprised of 484 students, 67% of whom were on-campus residents, 17% were commuters who resided off-campus with roommates, 12% were commuters who resided off-campus with family, and 4% were commuters who resided off-campus with a spouse, partner, and/or children. Of the viable sample, there were a larger percentage of female students (75%) to males (25%). Participant responses in descending order of participation were freshman (32%), juniors (27%), seniors (21%), and sophomores (20%).

Age breakdowns were not necessarily coincident with class years as (69%) were in the age group between 19 to 21, (7%) were 22 years old, (20%) were 18, and (4%) identified as being age 24 or older. Most had never transferred from another college (92%), and were not the first to attend college in their families (90%). In this sample, many students did not work during school (30%), however (30%) identified worked between 1 and 30 hours, as well as those who

identified working between 31 and 40+ hours (3%) which are typically congruent with full-time working schedules. Final statistics note the majority of students, if having had the opportunity, would return to this institution if they were to start a degree over (68%), while other peers were less optimistic (22%) and 10% were unsure if they would return to the school.

Sample Description in the Campus Recreation Survey

The undergraduate sample that completed the Campus Recreation survey was comprised of 395 undergraduate students, 74% of whom were on-campus residents, 16 % were commuters who resided off-campus with roommates, 9% were commuters who resided off-campus with family, and 1% were commuters who resided off-campus with a spouse, partner, and/or children. Of the viable sample, there were a larger percentage of female students (70%) to males (29%), and 1 % identified as being transgendered. Participant responses in descending order of participation were freshman (30%), juniors (29%), sophomores (23%), and seniors (18%).

Age breakdowns were not necessarily coincident with class years as (73%) were in the age group between 19 to 21 years, (13%) were 19 years old, (9%) were 22 years old, and (5%) identified as being age 24 or older. All were enrolled full time (100%), had never transferred from another college (91%), and were not the first to attend college in their families (87%). In this sample, many students did not work during school (49%), however (50%) identified worked between 1 and 30 hours, as well as those who identified working between 31 and 40+ hours (1%) which are typically congruent with full-time working schedules. Final statistics note the majority of students, if having had the opportunity, would return to this institution if they were to start a degree over (73%), while other peers were less optimistic (18%), while 9% were uncertain.

Sample Description in the Career Development and Aspirations Survey

The undergraduate sample that completed the Career Development and Aspirations survey was comprised of 529 students, 66% of whom were on-campus residents, 19% were commuters who resided off-campus with roommates, 10% were commuters who resided off-campus with family, and 5% were commuters who resided off-campus with a spouse, partner, and/or children. Of the viable sample, there were a larger percentage of female students (74%) to males (25%), and 1% preferred not to identify their gender. Participant responses in descending order of participation were freshman (27%), juniors (27%), seniors (24%), and sophomores (22%).

Age breakdowns were not necessarily coincident with class years as (74%) were in the age group between 19 to 21, (12%) were 22 years old, (7%) were 18, and (7%) identified as being age 24 or older. Most were enrolled full time (97%), had never transferred from another college (87%), and were not the first to attend college in their families (88%). In this sample, many students did not work during school (40%), other students did identify as working between 1 and 35 hours (55%), as well as those who identified working between 36 and 40+ hours (5%) which are typically congruent with full-time working schedules. Final statistics note the majority of students, if having had the opportunity, would return to this institution if they were to start a degree over (79%), while other peers were less optimistic (13%), and 7% were uncertain if they would return to the institution.

Research Question 1

The first research question answered was “Does student involvement in campus activities differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?”

As previously noted, this question was analyzed using SPSS 22. After the data set was adjusted to remove any responses from graduate level students, a total sample of 100 students was analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students.

This question was meant to determine the differences in how resident students and their commuter peers might differ in their participation in student involvement in specific clubs and organizations, types of self-identified skills and our learning outcomes identified by potential participation in activities, opportunities for interaction with peers, faculty, staff, and increased awareness of campus and campus community.

The responses were analyzed by through a one-way ANOVA which analyzed scores of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. The results are summarized for the student organization/club involvement scale in Table 2. Student organization tests were analyzed an alpha level of $p < .05$ since these responses did not scaffold.

The survey was administered using Likert scales to allow students to respond to the questions. The student organization/club involvement scale from 1 for “I do not attend or participate in activities,” 2 “for I attend events/participate in activities,” 3 for “I actively participate in/help to plan events/activities,” and 4 for “I hold a leadership position in events/activities.” The initial data also offered a field for students to respond with “Not

applicable/Not offered on campus,” however this field was removed prior to data analysis as it was ultimately too confusing to consolidate not applicable and not offered in one answer since they draw reference to two specifically different perceptions.

The general involvement Likert scale coded responses from 1 for “strongly agree,” 2 “somewhat agree,” 3 “neither agree nor disagree,” 4 “somewhat disagree,” and 5 “strongly disagree.”

Student engagement remains one of the most important areas of emphasis in student affairs as a campus environment where students become involved are more likely to be those who complete their degrees. Astin, in the majority of his research also noted that residential students had a greater tendency to demonstrate engagement in student government, Greek lettered organizations, and athletic groups (Astin, 1977). As such, one of the specific areas of analysis was focused on looking specifically at types of student organizations and whether the undergraduate students who participated in the survey were involved on campus. For those that identified involvement, it was then possible to determine whether or not that population differed in their levels of engagement if they resided on campus versus commuting. The types of student organizations referenced in the survey are indicative of the most commonly offered types of clubs and organizations on most college campuses and included general involvement, athletic/recreational engagement, campus activities, community service, membership to a Greek lettered organization, honor societies/professional organizations, orientation programming, residence life, performing and media arts, political activism, Student Government, and spiritual groups. As noted by both Kuh and Astin, these organizations and the opportunities provided through student involvement are significantly associated with student degree completion,

satisfaction, and overall success (Astin, 1975, 1977, 1993b; Kuh, 1995, 2002, 2009; Kuh, Gonyea, & Palmer, 2001; Schudde, 2011).

Other areas of student involvement that were analyzed were those that enabled students to articulate opportunities by which they were able to interact with peers who had similar as well as different perspectives and interests, interaction with faculty and staff, satisfaction with collegiate experiences, involvement with additional activities, and feeling part of the campus community. These areas provide greater insight to social integration of a collegian on campus and a sense of connectedness to a campus that often leads to greater likelihood of degree completion (Astin, 1993; Schudde, 2011; Tinto, 1993). In the same way, student interaction with faculty, staff, and peers in a non-academic setting is equally impacting to a collegians experience (Astin, 1977, 1993).

Table 3

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Organization/Club Involvement

	SS	df	MS	F	p	η^2
Campus Involvement						
Between Groups ^a	17.37	3	3.60	6.00	.001*	.162
Within Groups ^b	89.66	93	.97			
Total	107.03	96				
Athletics/Sports						
Between Groups ^a	6.73	3	2.24	4.79	.004*	.154
Within Groups ^b	43.49	93	.46			
Total	50.22	96				

Table 3 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Campus Recreation						
Between Groups ^a	9.94	3	3.31	5.53	.002*	.151
Within Groups ^b	55.72	93	.59			
Total	65.67	96				
Campus Events						
Between Groups ^a	2.11	3	.70	1.67	.179	.051
Within Groups ^b	39.16	93	.42			
Total	41.27	96				
Community Service						
Between Groups ^a	9.38	3	3.12	4.07	.009*	.117
Within Groups ^b	70.57	92	.76			
Total	79.95	95				
Greek Letter						
Between Groups ^a	23.66	3	7.88	7.58	.000*	.196
Within Groups ^b	96.78	93	1.04			
Total	120.45	96				
Honor Societies						
Between Groups ^a	9.03	3	3.01	3.51	.018*	.104
Within Groups ^b	77.87	91	.85			
Total	86.90	94				
Orientation Leader						
Between Groups ^a	10.76	3	3.58	4.79	.004*	.135
Within Groups ^b	68.86	92	.74			
Total	79.62	95				
Performing Arts						
Between Groups ^a	.54	3	.18	.34	.796	.011
Within Groups ^b	48.79	92	.53			
Total	49.33	95				

Table 3 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Political Activism						
Between Groups ^a	1.06	3	.35	1.21	.311	.039
Within Groups ^b	26.18	89	.29			
Total	27.24	92				
Residential Life						
Between Groups ^a	1.65	3	.55	1.20	.313	.038
Within Groups ^b	41.77	91	.45			
Total	43.43	94				
Student Government						
Between Groups ^a	.37	3	.12	.38	.761	.012
Within Groups ^b	29.64	93	.31			
Total	30.02	96				
Student Media						
Between Groups ^a	.74	3	.24	.63	.595	.020
Within Groups ^b	36.53	93	.39			
Total	37.27	96				
Spiritual						
Between Groups ^a	2.35	3	.78	1.49	.221	.047
Within Groups ^b	47.74	91	.52			
Total	50.10	94				
Academic Professional						
Between Groups ^a	22.97	3	7.65	9.40	.000*	.233
Within Groups ^b	75.76	93	.81			
Total	98.74	96				

Note * $p < .05$, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

Student involvement, at least as it related to the majority of activities did not demonstrate that there were significant differences in the level of involvement of students as demonstrated by non-significant alpha scores for the following scale categories; campus events $F(3,93)=1.67$, $p=0.179$; performance arts $F(3,92)=0.34$, $p=0.796$; political activism $F(3,89)=1.21$, $p=0.311$; residential life $F(3,91)=1.20$, $p=0.313$; Student Government Association $F(3,93)=0.38$, $p=0.761$; student media $F(3,93)=0.63$, $p=0.595$; and spiritual $F(3,91)=1.49$, $p=0.221$.

While those specific areas of student involvement did not show significant differences in levels of student organization and club involvement between the residential and commuter students, there were a number of different student organizations that did demonstrate significant differences in participation between residential and commuting students. These organizations included campus involvement $F(3,93)=6.00$ $p=0.001$ and power to detect the effect was .162; athletics $F(3,93)=4.79$, $p=0.004$ and power to detect the effect was .154; campus recreation $F(3,93)=5.53$, $p=0.002$ and power to detect the effect was .151; community service $F(3,93)=4.07$, $p=0.009$ and power to detect the effect was .117; Greek lettered organizations $F(3,93)=7.58$, $p=0.000$ and power to detect the effect was .196; honor societies $F(3,91)=3.51$, $p=0.018$ and power to detect the effect was .104; Orientation leader $F(3,92)=4.79$, $p=0.004$ and power to detect the effect was .135; and academic professional organizations $F(3,93)=9.40$, $p=0.000$ with power to detect the effect being .233.

Because several tests demonstrated statistical significance, multiple comparison post-hoc tests were run using Scheffe in an effort to understand and distinguish how some of these differences were influenced by the various sub-populations of the study. The results of these post-hoc analyses can be found in Table 3.

Table 4

Post-Hoc Test Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Organization/Club Involvement

	M	SD	p
Campus Involvement			
On Campus	2.23	.92	.042**
Off Campus with Roommates	3.00	1.29	
Off Campus with Family	1.86	.91	.014**
Off Campus with Spouse/Partner/Children	1.50	.53	.006**
Athletics/Sports			
On Campus	1.40	.68	.016**
Off Campus with Roommates	2.00	.81	
Off Campus with Family	1.31	.60	.038**
Off Campus with Spouse/Partner/Children	1.14	.37	.052**
Campus Recreation			
On Campus	1.40	.65	.002**
Off Campus with Roommates	2.21	1.03	
Off Campus with Family	1.56	.89	.007**
Off Campus with Spouse/Partner/Children	1.28	.48	.070**
Community Service			
On Campus	2.01	.84	
Off Campus with Roommates	2.55	1.09	
Off Campus with Family	1.68	.79	.046**
Off Campus with Spouse/Partner/Children	1.42	.53	.045**

Table 4 Continued

	M	SD	<i>p</i>
Greek Letter			
On Campus	1.76	1.07	.021**
Off Campus with Roommates	2.63	1.30	
Off Campus with Family	1.18	.54	.001**
Off Campus with Spouse/Partner/Children	1.00	.00	.006**
Honor Societies			
On Campus	1.73	.88	
Off Campus with Roommates	2.31	1.24	
Off Campus with Family	1.37	.71	.043**
Off Campus with Spouse/Partner/Children	1.42	.53	
Orientation Leader			
On Campus	1.38	.82	
Off Campus with Roommates	2.05	1.31	.043**
Off Campus with Family	1.06	.25	
Off Campus with Spouse/Partner/Children	1.00	.00	
Academic Professional			
On Campus	1.80	.89	
Off Campus with Roommates	2.89	1.10	
Off Campus with Family	1.62	.80	.016**
Off Campus with Spouse/Partner/Children	1.28	.48	

Note **p* values correspond to specific comparison groups: **=off campus with roommates

In all instances, the *p* values that were determined to be significant were in comparison of the off-campus commuters who reside with roommates in comparison to their other off campus and on campus peers. Campus involvement overall yielded $p=0.042$ for on campus residents,

p=0.014 for commuters living with family, and 0.006 for commuters residing with spouses/partners/children in comparison to off campus commuter who resided with roommates. In relation to athletics p=0.042 for on campus residents, 0.014 for commuters living with family, and 0.006 for those who reside with spouses/partners/children in comparison to off campus commuters who reside with roommates. In campus recreation p=0.002 for on campus residents versus off-campus peers living with roommates. Community service yielded p=0.046 for commuters who reside with family and p=0.045 for those who reside with spouses/partners/children in comparison to those commuters who reside with roommates. Greek letter organization involvement was just as significant as p=0.021 for on campus residents, p=0.001 for those commuters who live with family, and p=0.006 for those commuters who reside with spouses/partners/children in comparison to commuter peers who reside with roommates. In similar ways, honor society membership differs as p=0.043 for those commuters who reside with family, in Orientation leaders p=0.043 for those who reside on campus, and p=0.016 for those who live off campus with family in comparison to commuters who reside with roommates.

Due to the small sample size of the commuters who reside with spouse/partners/children the generalizability of those results should be used with caution as evidenced by the results specific to Greek letter organizations and Orientation.

Table 5

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) General Involvement

	SS	df	MS	F	p	η^2
Met individuals with different interests						
Between Groups ^a	5.06	3	1.68	1.69	.174	.054
Within Groups ^b	88.63	89	.99			
Total	93.69	92				
Met individuals with similar interests						
Between Groups ^a	6.71	3	2.23	2.68	.052	.083
Within Groups ^b	74.27	89	.83			
Total	80.98	92				
Faculty interaction						
Between Groups ^a	7.67	3	2.55	1.95	.127	.062
Within Groups ^b	116.39	89	1.30			
Total	124.06	92				
Staff interaction						
Between Groups ^a	13.19	3	4.39	3.17	.028	.099
Within Groups ^b	120.56	87	1.38			
Total	133.75	90				
Part of campus community						
Between Groups ^a	7.51	3	2.50	2.24	.089	.071
Within Groups ^b	98.22	88	1.11			
Total	105.73	91				

Table 5 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Become more involved						
Between Groups ^a	16.59	3	5.53	4.53	.005*	.133
Within Groups ^b	108.58	89	1.22			
Total	125.18	92				
Satisfaction has improved						
Between Groups ^a	3.01	3	1.00	.86	.461	.028
Within Groups ^b	103.26	89	1.16			
Total	106.28	92				
Likely to donate after graduation						
Between Groups ^a	9.18	3	3.06	1.83	.146	.058
Within Groups ^b	148.42	89	1.66			
Total	157.61	92				
More likely to participate in alumni events after graduation						
Between Groups ^a	3.80	3	1.26	.86	.463	.029
Within Groups ^b	129.26	88	1.46			
Total	133.07	91				

Note * $p < .005$, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

When looking at perceptions of general campus involvement residential and commuter populations did not demonstrate significant differences in their responses after the alpha was adjusted to .005 for the exception of one area which was to become more involved on campus whereas $F(3,89)=4.53$, $p=0.005$ and power to detect the effect being .133.

Meetings peers with different interests $F(3,89)=1.69$, $p=0.174$; meeting peers with similar interests $F(3,89)=2.68$, $p=0.52$; interaction with faculty $F(3,89)=1.95$, $p=0.127$; interaction with staff $F(3,87)=3.17$, $p=0.127$; part of campus community $F(3,88)=2.24$, $p=0.028$; satisfaction with campus overall $F(3,89)=0.86$, $p=0.461$; likelihood to donate after graduation $F(3,89)=0.86$, $p=0.461$; and likelihood to participate in alumni events after graduation $F(3,88)=0.86$, $p=0.463$.

Table 6

Post-Hoc Analysis Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) General Involvement

	<i>M</i>	<i>SD</i>	<i>p</i> *
Become more involved on campus			
On Campus	3.52	1.21	
Off Campus with Roommates	4.22	.80	
Off Campus with Family	3.06	.85	.030**
Off Campus with Spouse/Partner/Children	2.66	1.36	.036**

Note **p* values correspond to specific comparison groups: **=off campus with roommates

Becoming more involved on campus yielded significance of $p=0.030$ for off campus commuter with roommates when compared to those commuters living with family and a $p=0.036$ for those who reside off campus with spouses/partners/children in comparison to off campus commuter who resided with roommates.

Research Question 2

The second research question answered was “Do perceptions of diversity differ between residential and commuter students who reside with roommates, family or spouses, partners,

and/or children?”

The question was analyzed using SPSS 22 statistical software. After the data set was adjusted to remove any responses from graduate level students, a total population of 113 students were analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students.

Diversity, as both a concept as well as a theoretical framework remains one of the most widely researched subjects in higher education to date. Because of the broadness of the topic, the emphasis upon the subject within the scale here focuses on generalized perceptions of diverse campus populations versus being more specific to talk about potential racial, ethnic, or religious perspectives.

The survey was administered using Likert scales to allow students to respond to the questions. The diversity Likert scale coded responses from 1 for “strongly agree,” 2 “somewhat agree,” 3 “neither agree nor disagree,” 4 “somewhat disagree,” and 5 “strongly disagree.” A response of “not applicable” was removed from the study as it did not allow for a fruitful understanding of diversity issues.

Specific areas that were analyzed in an effort to answer this question focused on various facets of diversity which include but were not limited to student perceptions of campus climate as it related to overall diversity, students’ contribution to diversity, campus acceptance of racial and ethnic diversity, sexual orientation and transgendered students, disability awareness, international students, and fair treatment of students on campus.

The responses were analyzed in a one-way ANOVA of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. In this analysis, the alpha of each test was adjusted in accordance with the Bonferroni adjustment and

significance levels were altered accordingly. The results are summarized for the perceptions of campus diversity scale in Table 3. These results were analyzed an alpha level of .005.

Table 7

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Campus Diversity

	SS	df	MS	F	p	η^2
Campus is diverse						
Between Groups ^a	15.20	3	5.06	3.55	.018	.116
Within Groups ^b	115.54	81	1.42			
Total	130.75	84				
I add to diversity of campus						
Between Groups ^a	2.00	3	.67	.30	.824	.011
Within Groups ^b	180.03	81	2.22			
Total	182.04	84				
I learn about diversity-related issues						
Between Groups ^a	4.59	3	1.53	1.03	.380	.038
Within Groups ^b	116.58	79	1.47			
Total	121.18	82				
Campus is accessible to people with physical disabilities						
Between Groups ^a	2.71	3	.90	.43	.731	.016
Within Groups ^b	168.27	80	2.10			
Total	170.98	83				

Table 7 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Campus is supportive of those who identify as gay, lesbian, or bisexual						
Between Groups ^a	6.97	3	2.32	.90	.442	.033
Within Groups ^b	202.59	79	2.56			
Total	209.56	82				
Campus is supportive of people who identify as transgender						
Between Groups ^a	3.18	3	1.06	.42	.735	.016
Within Groups ^b	196.33	79	2.48			
Total	199.51	82				
My Campus is supportive of people with diverse ethnic backgrounds						
Between Groups ^a	0.38	3	.12	.08	.966	.003
Within Groups ^b	116.60	80	1.45			
Total	116.98	83				
Campus is supportive of international students						
Between Groups ^a	1.80	3	.60	.46	.708	.017
Within Groups ^b	102.41	79	1.29			
Total	104.21	82				

Note * $p < .005$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

Findings of the perceptions of campus diversity did not demonstrate any significant differences between resident and commuter students, perhaps as the result that these student groups all are having similar experiences on campus. Campus is diverse $F(3,81)=3.55$, $p=0.018$; I add to diversity of campus $F(3,81)=0.301$, $p=0.824$; I learn about diversity related issues $F(3,79)=1.038$, $p=0.380$; campus being accessible to people with physical disabilities $F(3,80)=0.431$, $p=0.731$; campus as being supportive of people who identify as being gay, lesbian, or bisexual $F(3,79)=0.906$, $p=0.442$; campus being supportive of people who identify as being transgendered $F(3,79)=0.426$, $p=0.735$; campus being supportive of people from diverse ethnic backgrounds $F(3,80)=0.089$, $p=0.966$; campus being supportive of international students $F(3,79)=0.464$, $p=0.708$; and for students feeling they are treated fairly as students $F(3,81)=1.589$, $p=0.198$.

Research Question 3

The third research question was “Does perceptions of campus safety differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?” The question was analyzed using SPSS 22 statistical software. After the data set was adjusted to remove any responses from graduate level students, a total population of 113 students was analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students.

Campus safety remains one of the most fundamentally important issues on college campuses and ties directly back to Maslow’s hierarchy of needs, postulating that one must feel safe in an environment in order to thrive. Numerous studies have been conducted across the country regarding this subject, but because the population of this particular institution is largely female, it is worth note that particular emphasis should be paid to the manner in which safety of

female students is maintained on a campus. Earlier studies related to women's perceptions of safety on campus directly tied student campus engagement and use to how safe they felt in specific spaces which included the library, parking lots, and other public areas (Currie, 1994). Furthermore, even in spite of efforts made by university administrations, in many instances, female students will remain concerned walking alone on a campus in the evening (Kelly and Torres, 2006). When factoring in the location of an institution in an urban environment, these areas must also be investigated to determine student perceptions of safety.

The survey was administered using Likert scales to allow students to respond to the questions. The campus safety Likert scale coded responses from 1 for "extremely safe," 2 "very safe," 3 "moderately safe," 4 "slightly safe," and 5 "not at all safe." A variable for "not applicable/does not apply to me" was removed from the data analysis prior to analysis.

Specific areas that were analyzed in an effort to answer this question focused on specific areas of the campus and the surrounding community and included student level of comfort walking on campus during day and in the evening, walking in surrounding community during day or in the evening, waiting for public transportation, walking in the parking garage, and studying late at the library.

The responses were analyzed using one-way ANOVA of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. Because the one-way ANOVA was conducted multiple times, the alpha of each test was adjusted in accordance with the Bonferroni adjustment and significance levels were altered accordingly. The results are summarized for the perceptions of campus diversity scale in Table 4. These results were analyzed at an alpha level of $p < .006$.

Table 8

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Campus Safety

	SS	df	MS	F	p	η^2
Walking on campus (after dark)						
Between Groups ^a	10.28	3	3.42	3.17	.029	.111
Within Groups ^b	82.10	76	1.08			
Total	92.38	79				
Waiting for public transportation (after dark)						
Between Groups ^a	1.72	3	.57	.43	.727	.020
Within Groups ^b	85.26	65	1.31			
Total	86.98	68				
Walking in parking garages (after dark)						
Between Groups ^a	6.69	3	2.23	1.55	.209	.065
Within Groups ^b	96.17	67	1.43			
Total	102.87	70				
Walking to residence hall (after dark)						
Between Groups ^a	15.58	3	5.19	3.96	.011	.144
Within Groups ^b	93.00	71	1.31			
Total	108.58	74				
Working in the library late at night						
Between Groups ^a	12.95	3	4.31	2.37	.078	.096
Within Groups ^b	122.03	67	1.82			
Total	134.98	70				

Table 8 Continued

	SS	df	MS	F	p	η^2
In community surrounding campus (day)						
Between Groups ^a	4.36	3	1.45	1.30	.281	.048
Within Groups ^b	87.38	78	1.12			
Total	91.75	81				
In community surrounding campus (night)						
Between Groups ^a	1.70	3	.56	.34	.795	.014
Within Groups ^b	123.16	74	1.66			
Total	124.87	77				
Campus overall						
Between Groups ^a	7.13	3	2.37	4.43	.006*	.143
Within Groups ^b	42.89	80	.53			
Total	50.03	83				

Note * $p < .006$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

There was only one statistically significant difference in how resident student and off campus peers perceived campus safety and that related to campus overall as safety overall $F(3,80)=4.43$, $p=0.006$ and power to detect the effect at .143. Because this finding was statistically significant, a post hoc tests was conducted and the following results were interpreted using Scheffe for analysis.

After the Bonferroni adjustment the remaining responses were no longer deemed statistically significant and demonstrated the following; walking on campus after dark $F(3,81)=3.17$, $p=0.029$; waiting for public transportation after dark $F(3,65)=0.43$, $p=0.727$; walking in

garages after dark $F(3,67)=1.55$, $p=0.011$; working in the library late at night $F(3,71)=2.37$, $p=0.078$; being in the surrounding community during the day $F(3,78)= 1.30$, $p=0.281$; and for being in the surrounding community at night $F(3,74)=0.34$, $p=0.795$.

Table 9

Post-Hoc Analysis Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Campus Safety

	<i>M</i>	<i>SD</i>	<i>p</i> *
Campus overall			
On Campus	4.24	.68	
Off Campus with Roommates	4.11	.58	.035 ^c
Off Campus with Family	4.00	1.00	
Off Campus with Spouse/Partner/Children	3.00	1.00	.007 ^c

Note **p* values correspond to specific comparison groups: ^c= on campus residents, ^{**}=off campus with roommates, and ^e=off campus with spouse/partner/children

As noted above, once again there were some statistically significant differences between the populations as they related to campus safety which manifest in the following ways. There were differences evidenced in the manner in which those students who resided on campus saw overall safety in comparison to off campus peers who resided with spouses/partners/children as $p=0.007$ but caution must be exercised as this was a small sample of commuters who responded. In the same capacity, commuters who lived off campus with roommates also had differences in the way in which they viewed campus safety in comparison to peers as $p=0.035$.

Research Question 4

The fourth research question was “Do issues of mental health differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?”

The question was analyzed using SPSS 22 statistical software. After the data set was adjusted to remove any responses from graduate level students, a total population of 608 students was analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students. Specific areas that were analyzed in an effort to answer this question included student levels of anxiety, depression, and substance abuse.

In the case of this particular question, the necessity to understand the emotional and mental health needs of college students has continued to rise in the past two decades (Locke, McAleavey, Zhao, Lei, Hayes, Castonguay, Li, Tate, & Lin, 2011). In most cases, evidence has specifically shown rise in a myriad of issues including but not limited to academics, depression, stress, anxiety, and substance abuse all of which have significant impact upon student success (Locke et al., 2011). Three areas of specific focus in an effort to answer this question looked at how perceptions of student mental health differ as they relate to depression, anxiety, and substance abuse and how these might differ between residential and commuter students.

The survey was administered using Likert scales to allow students to respond to the questions. The Likert scales for the depression, anxiety, and substance use were all coded with responses ranging from 0 for “not at all like me,” 1 “not like me,” 2 “neither like me nor not like me,” 3 “like me,” and 4 “extremely like me.”

The responses were analyzed using one-way ANOVA of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. Because

the ANOVA was conducted multiple times, the alpha of each test was adjusted in accordance with the Bonferroni adjustment and significance levels were altered accordingly. The results are summarized for the perceptions of depression scales are found in Table 10. These results were analyzed an alpha level of $p < .003$. The perceptions of anxiety scales are found in Table 11, with results being analyzed at an alpha level of $p < .005$. Perceptions of substance abuse and scales are found in Table 12 and were analyzed at an alpha level of $p < .008$.

Table 10

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Depression

	SS	df	MS	F	p	η^2
I feel disconnected from myself						
Between Groups ^a	5.53	3	1.84	1.07	.358	.007
Within Groups ^b	812.64	475	1.71			
Total	818.18	478				
I don't enjoy being around people as much as I used to						
Between Groups ^a	21.89	3	7.29	4.06	.007	.025
Within Groups ^b	852.94	475	1.79			
Total	874.84	478				
I feel isolated and alone						
Between Groups ^a	5.24	3	1.74	1.03	.377	.007
Within Groups ^b	800.59	474	1.68			
Total	805.83	477				

Table 10 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
I lose touch with reality						
Between Groups ^a	2.99	3	.99	.90	.438	.006
Within Groups ^b	522.54	475	1.10			
Total	525.54	478				
I feel worthless						
Between Groups ^a	.98	3	.32	.28	.835	.002
Within Groups ^b	543.67	474	1.14			
Total	544.65	477				
I feel helpless						
Between Groups ^a	.78	3	.26	.17	.911	.001
Within Groups ^b	689.45	470	1.46			
Total	690.24	473				
I am enthusiastic about life						
Between Groups ^a	2.17	3	.72	.74	.526	.005
Within Groups ^b	459.81	472	.97			
Total	461.99	475				
I have unwanted thoughts I can't control						
Between Groups ^a	6.13	3	2.04	1.08	.353	.007
Within Groups ^b	893.06	476	1.87			
Total	899.20	479				

Table 10 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
I feel sad all the time						
Between Groups ^a	2.76	3	.92	.71	.541	.005
Within Groups ^b	604.80	472	1.28			
Total	607.56	475				
I have thoughts of ending my life						
Between Groups ^a	1.78	3	.59	.65	.581	.004
Within Groups ^b	432.08	476	.90			
Total	433.86	479				
I like myself						
Between Groups ^a	3.48	3	1.16	1.08	.355	.007
Within Groups ^b	509.10	475	1.07			
Total	512.58	478				
I find that I cry frequently						
Between Groups ^a	.37	3	.12	.08	.971	.001
Within Groups ^b	741.10	476	1.55			
Total	741.48	479				
I feel that I have no one who understands me						
Between Groups ^a	7.67	3	2.55	1.38	.246	.009
Within Groups ^b	876.90	476	1.84			
Total	884.59	479				

Note * $p < .003$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

There were no significant differences in the way in which the resident students answered the questions regarding perceptions of depression in relation to their commuter peers who reside off campus.

Statistics showed; I feel disconnected from myself $F(3,475)=1.07, p=0.358$; I don't enjoy being around people as much as I used to $F(3,475)=4.06, p=0.007$; I feel isolated and alone $F(3,474)=1.03, p=0.377$; I lose touch with reality $F(3,475)=0.90, p=0.438$; I feel worthless $F(3,474)=0.28, p=0.835$; I feel helpless $F(3,470)=0.17, p=0.911$; I am enthusiastic about life $F(3,472)=0.74, p=0.526$; I have unwanted thoughts that I cannot control $F(3,476)=1.08, p=0.353$; I feel sad all the time $F(3,472)=0.71, p=0.541$; I have thoughts of ending my life $F(3,476)=0.65, p=0.581$; I like myself $F(3,475)=1.08, p=0.355$; I find that I cry frequently $F(3,476)=0.08, p=0.971$; and I feel that no one understands me $F(3,476)=1.38, p=0.246$.

Table 11

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Anxiety

	SS	df	MS	F	p	η^2
There are many things that I am afraid of						
Between Groups ^a	3.29	3	1.09	.83	.478	.005
Within Groups ^b	622.38	471	1.32			
Total	625.67	474				

Table 11 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
My heart races for no good reason						
Between Groups ^a	16.99	3	5.66	3.71	.012	.023
Within Groups ^b	722.59	474	1.52			
Total	739.59	477				
I am anxious I might have a panic attack in public						
Between Groups ^a	2.51	3	.83	.78	.501	.005
Within Groups ^b	505.00	475	1.06			
Total	507.52	478				
I have sleep difficulties						
Between Groups ^a	7.47	3	2.49	1.19	.312	.007
Within Groups ^b	991.18	474	2.09			
Total	998.66	477				
My thoughts are racing						
Between Groups ^a	3.34	3	1.11	.51	.671	.003
Within Groups ^b	1020.53	474	2.15			
Total	1023.87	477				
I have spells of terror or panic						
Between Groups ^a	1.41	3	.47	.36	.777	.002
Within Groups ^b	610.02	475	1.28			
Total	611.43	478				
I feel tense						
Between Groups ^a	10.63	3	3.54	1.84	.138	.012
Within Groups ^b	908.81	474	1.91			
Total	919.45	477				

Table 11 Continued

	SS	df	MS	F	p	η^2
I am easily frightened or startled						
Between Groups ^a	3.82	3	1.27	1.23	.297	.007
Within Groups ^b	488.06	472	1.03			
Total	491.88	475				
I experience nightmares or flashbacks						
Between Groups ^a	2.22	3	.74	.50	.68	.003
Within Groups ^b	696.30	474	1.46			
Total	698.52	477				

Note * $p < 0.005$, with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

Like the responses to perceptions of depression, the student population did not produce statistically significant responses in how they responded to perceptions of anxiety when compared to their residential peers.

Statistics showed that students responded in the following ways to the anxiety scale; there are many things that I am afraid of $F(3,471)=0.83$, $p=0.478$; my heart races for no good reason $F(3,474)=3.71$, $p=0.012$; I am anxious that I might have a panic attack while in public $F(3,475)=0.78$, $p=0.501$; I have sleep difficulties $F(3,474)=1.19$, $p=0.312$; my thoughts are racing $F(3,474)=0.51$, $p=0.671$; I have spells of terror or panic $F(3,475)=0.36$, $p=0.777$; I feel tense $F(3,474)=1.84$, $p=0.138$; I am easily frightened or startled $F(3,472)=1.23$, $p=0.297$; and I experience nightmares or flashbacks $F(3,474)=0.50$, $p=0.68$.

Table 12

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Substance Abuse

	SS	df	MS	F	p	η^2
I use drugs more than I should						
Between Groups ^a	1.69	3	.56	.58	.628	.004
Within Groups ^b	462.16	475	.97			
Total	463.85	478				
I drink alcohol frequently						
Between Groups ^a	49.50	3	16.50	10.18	.000*	.061
Within Groups ^b	767.60	474	1.62			
Total	817.10	477				
When I drink alcohol, I can't remember what happened						
Between Groups ^a	13.23	3	4.41	4.13	.007	.025
Within Groups ^b	506.87	475	1.06			
Total	520.10	478				
I drink more than I should						
Between Groups ^a	15.75	3	5.25	4.41	.004	.027
Within Groups ^b	562.05	473	1.18			
Total	577.81	476				
I enjoy getting drunk						
Between Groups ^a	38.32	3	12.77	6.23	.000*	.038
Within Groups ^b	970.61	474	2.04			
Total	1008.93	477				

Table 12 Continued

	SS	df	MS	F	p	η^2
I have done something I regretted because of drinking						
Between Groups ^a	31.08	3	10.36	4.75	.003	.029
Within Groups ^b	1036.01	475	2.18			
Total	1067.09	478				

Note * $p < 0.008$, with Bonferroni adjustment, M =Mean, SD =Standard Deviation, p = Sig. (2-tailed); ^aVariations in the degrees of freedom (df) below, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

In the perceptions of substance use, there were two statistically significant differences between resident and commuter sub-populations which were found in how they responded to I drink alcohol frequently $F(3,474)=10.18$, $p=0.000$ and power to determine the effect at .061; and I enjoy getting drunk $F(3,474)=6.23$, $p=0.000$ with a power to determine the effect at .038. Both of them were run through a post-hoc analysis to determine the specific differences in populations.

Table 13

Post-Hoc Analysis Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Substance Abuse

	M	SD	p*
I drink alcohol frequently			
On Campus	.94	1.23	.000**

Table 13 Continued

	<i>M</i>	<i>SD</i>	<i>p</i> [*]
Off Campus with Roommates	1.73	1.43	
Off Campus with Family	.71	1.23	.000 ^{**}
Off Campus with Spouse/Partner/Children	.75	1.20	.023 ^{**}
I enjoy getting drunk			
On Campus	1.43	1.48	.043 ^d
Off Campus with Roommates	1.88	1.36	
Off Campus with Family	.84	1.26	.001 ^{**}
Off Campus with Spouse/Partner/Children	1.15	1.30	

Note ^{*}*p* values correspond to specific comparison groups: ^{**}=off campus with roommates, and ^d=off campus with family

In these post-hoc analysis, the majority of the responses were found to be significant differences between those commuters who live with roommates and their peers. In the case of drinking alcohol frequently, $p=0.001$ for those who resided on-campus and those who lived off campus with family in comparison to those who lived off campus with roommates, whereas those who lived off campus with family were $p=0.043$ in comparison to those who live on campus.

Research Question 5

The fifth research question was “Do perceptions of recreation differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?”

The question was analyzed using SPSS 22 statistical software. After the data set was adjusted to remove any responses from graduate level students, a total population of 569 students were analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students.

Recreational sport engagement, as well as athletic engagement has grown in recognition as a means in which students' can achieve a sense of campus identity as well as health and wellness which has demonstrated a need to analyze how students respond to the opportunities to engage in this program during their undergraduate years (Sturts & Ross, 2013). A variety of literature affirms the importance of recreation for satisfaction of campus experiences, an opportunity to build campus communities, as well as leadership and other life-skills developments (Elkins, Forrester, & Noel-Elkins, 2011; Lindsey, 2012; Lindsey & Sessoms, 2006). More than merely 'fun,' recreational facilities have the opportunity to offer health and fitness programming, as well as a place of stress reduction for students (Huesman, Brown, Lee, Kellogg, & Radcliffe, 2009). Recreation also offers a place for students to engage in athleticism through club and intramural sports which also continue to bear value in student involvement theory and when recreational programs are designed with intentionality, it is possible to see gains in student satisfaction, academic success, and student retention (Astin, 1977, 1984, 1985, 1993b; Clopton, 2009; Tinto, 1975; 1993).

With these theoretical concepts in mind, the recreation survey was analyzed in an effort to determine whether perceptions of recreation differ between residential and their commuter peers and respective sub-populations. Because of the purported value of recreational programming and its vast evidence in literature, specific areas that were analyzed in an effort to answer this question included characteristics that intramural, athletic, and physical activities are purported to increase satisfaction in undergraduate experiences that include team-work, cooperation, concentration, general wellness, and a variety of areas that also focus on potential self-identified learning outcomes that include conflict resolution.

The survey was administered using Likert scales to allow students to respond to the questions. The Likert scale coded responses from 1 for “definitely,” 2 “somewhat,” and 3 “not at all.”

The responses were analyzed by comparing independent sample t-tests scores of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. Because the independent t-tests were conducted multiple times, the alpha of each test was adjusted in accordance with the Bonferroni adjustment and significance levels were altered accordingly. The results are summarized for the recreation scales are found in Table 14. These results were analyzed an alpha level of $p < .002$.

Table 14

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Recreation

	SS	df	MS	F	p	η^2
Self confidence						
Between Groups ^a	.69	3	.23	.53	.662	.004
Within Groups ^b	155.69	356	.43			
Total	156.38	359				
Sense of adventure						
Between Groups ^a	4.14	3	1.38	2.56	.054	.021
Within Groups ^b	190.67	354	.53			
Total	194.81	357				

Table 14 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Athletic ability						
Between Groups ^a	.92	3	.30	.63	.596	.005
Within Groups ^b	173.40	354	.49			
Total	174.33	357				
Concentration						
Between Groups ^a	1.64	3	.54	.96	.410	.008
Within Groups ^b	199.49	351	.56			
Total	201.14	354				
Fitness level						
Between Groups ^a	.44	3	.14	.40	.750	.003
Within Groups ^b	128.87	355	.36			
Total	129.31	358				
Respect for others						
Between Groups ^a	1.86	3	.62	1.10	.347	.009
Within Groups ^b	199.08	353	.56			
Total	200.95	356				
Multicultural awareness						
Between Groups ^a	1.06	3	.35	.74	.523	.006
Within Groups ^b	168.29	354	.47			
Total	169.36	357				
Sense of belonging/association						
Between Groups ^a	.08	3	.02	.04	.986	.000
Within Groups ^b	200.93	354	.56			
Total	201.01	357				
Communication skills						
Between Groups ^a	.34	3	.11	.21	.885	.002
Within Groups ^b	189.76	353	.53			
Total	190.11	356				

Table 14 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Balance/coordination						
Between Groups ^a	1.19	3	.39	.76	.513	.006
Within Groups ^b	184.36	355	.51			
Total	185.56	358				
Physical strength						
Between Groups ^a	.64	3	.21	.58	.628	.005
Within Groups ^b	130.40	353	.36			
Total	131.04	356				
Problem solving skills						
Between Groups ^a	2.21	3	.73	1.48	.218	.013
Within Groups ^b	173.94	351	.49			
Total	176.15	354				
Feeling of well-being						
Between Groups ^a	.50	3	.16	.45	.712	.004
Within Groups ^b	129.62	356	.36			
Total	130.12	359				
Time management skills						
Between Groups ^a	.25	3	.08	.15	.925	.001
Within Groups ^b	195.27	356	.54			
Total	195.53	359				
Group cooperation skills						
Between Groups ^a	1.94	3	.64	1.18	.315	.010
Within Groups ^b	193.49	355	.54			
Total	195.43	358				
Get a good night's sleep						
Between Groups ^a	.59	3	.19	.32	.807	.003
Within Groups ^b	214.90	356	.60			
Total	215.50	359				

Table 14 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Between Groups ^a	2.61	3	.87	1.65	.177	.014
Within Groups ^b	187.02	355	.52			
Total	189.64	358				
Multi-task						
Between Groups ^a	.69	3	.23	.35	.788	.003
Within Groups ^b	232.17	354	.65			
Total	232.86	357				
Stress management						
Between Groups ^a	1.18	3	.39	.81	.486	.007
Within Groups ^b	171.76	354	.48			
Total	172.95	357				
Develop friendships						
Between Groups ^a	.84	3	.28	.46	.707	.004
Within Groups ^b	214.51	355	.60			
Total	215.35	358				
Weight control						
Between Groups ^a	1.79	3	.59	1.23	.299	.010
Within Groups ^b	172.19	355	.48			
Total	173.98	358				
Overall health						
Between Groups ^a	.46	3	.15	.47	.702	.004
Within Groups ^b	117.76	355	.33			
Total	118.23	358				

Note * $p < .002$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

Results from the resident student in comparison to their peers who reside off campus with roommates did not, in any instance, yield any significant differences in their perceptions of

campus recreation. As should be noted from these results, the students were asked to provide perceptions of how they believe that personal participation in recreation, athletic, and health related programming can, overall contribute to their physical and developmental growth.

While the questions were presented in a scale that evaluated perceptions of growth, the results are presented here as they are correlated to physical engagement. For sense of adventure $F(3,354)=0.53$, $p=0.662$; for athletic ability $F(3,354)=2.56$, $p=0.054$; for fitness level $F(3,355)=0.40$, $p=0.75$; for balance and coordination $F(3,355)=0.76$, $p=0.513$; for physical strength $F(3,353)=0.58$, $p=0.628$; for feelings of well-being $F(3,356)=0.45$, $p=0.712$; for stress management $F(3,354)=0.81$, $p=0.486$; and for weight $F(3,355)=1.23$, $p=0.299$; and for overall health $F(3,355)=0.47$, $p=0.702$.

For questions that asked for students to draw connections between life-skills development and recreational engagement, those results also did not yield significant differences in the perceptions between residential and their off campus peers who resided with roommates. For self-confidence $F(3,356)=0.53$, $p=0.662$; for concentration $F(3,351)=0.96$, $p=0.054$; for respect for others $F(3,353)=1.10$, $p=0.347$; for multicultural awareness $F(3,354)=0.74$, $p=0.523$; sense of belonging $F(3,354)=0.04$, $p=0.986$; for communication skills $F(3,353)=0.21$, $p=0.885$; for problem solving skills $F(3,351)=1.48$, $p=0.218$; for time management $F(3,356)=0.15$, $p=0.925$; for group cooperation skills $F(3,355)=1.18$, $p=0.315$; for an ability to get a good night's sleep $F(3,356)=0.32$, $p=0.807$; for leadership skills $F(3,355)=1.65$, $p=0.177$; for ability to multi-task $F(3,354)=0.35$, $p=0.788$; and for ability to develop friendships $F(3,355)=0.46$, $p=0.707$.

Research Question 6

The final research question was “Does career development and aspirations differ between residential and commuter students who reside with roommates, family, or spouses, partners, and/or children?”

The question was analyzed using SPSS 22 statistical software. After the data set was adjusted to remove any responses from graduate level students, a total population of 579 students were analyzed to determine whether there were discernable differences between residential and the sub-classifications of commuter students. In this survey, in certain areas, if students did not actively participate in the program service or provision, they were not asked to provide responses which results in differences in the variation of response numbers in the three different areas assessed.

Specific areas that were analyzed in an effort to answer this question included emphasis upon specific areas both on and off campus where students identified seeking answers to career questions, as well as specific competencies and skill sets that students identified gaining by utilizing career services.

Vocational choice remains a core component of the undergraduate experience as faculty, staff, and administration work with students to hone their interests into specific majors and ultimately post-graduate employment or continued academic studies. While a body of literature exists in this field, it nonetheless does not necessarily continue to embrace the 21st century learner and the differences in how they are interacting with career aspirations and vocational choices (Holland, 1959). Students are actively utilizing personal networks as well as social media/networking sites to build opportunities and all of these areas influence how they look at career advice, utilize career services, and develop marketable competencies.

This question will answer whether or not there are differences in the career development and aspirations of residential and commuter peers as they relate specifically to perceptions of career development, career disposition and aspirations, and sources of career information.

The survey was administered using Likert scales to allow students to respond to the questions. The perceptions of campus based career development and perceptions of sources of career information scales were coded from 1 for “very helpful,” 2 “somewhat helpful,” 3 for “not very helpful,” 4 for “not at all helpful,” and 5 “Not applicable.” Not applicable scores were removed prior to the analysis.

The perceptions of sources of career disposition and aspiration Likert scale was coded from 1 for “strongly agree,” 2 “somewhat agree,” 3 “neither agree nor disagree,” 4 “somewhat agree,” and 5 “strongly disagree.”

The responses were analyzed by using one-way ANOVA scores of resident students versus peers who commute and reside with roommates, family, or spouses, partners, and children. Because the ANOVA was conducted multiple times, the alpha of each test was adjusted in accordance with the Bonferroni adjustment and significance levels were altered accordingly. The results are summarized for the campus based career development are found in Table 15. These results were analyzed an alpha level of $p < .005$. Perceptions of career disposition and aspiration scales are found in Table 16, with results analyzed at an alpha level of $p < .003$. The final section analyzed was perceptions of sources of career information which was analyzed at an alpha level of $p < .006$ and can be found in Table 17.

Table 15

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Campus Based Career Development

	SS	df	MS	F	p	η^2
Individual career counseling						
Between Groups ^a	2.38	3	.79	.68	.565	.040
Within Groups ^b	56.93	49	1.16			
Total	59.32	52				
Resume writing and review						
Between Groups ^a	.76	3	.25	.54	.654	.011
Within Groups ^b	67.56	144	.46			
Total	68.32	147				
Career skills testing						
Between Groups ^a	1.33	3	.44	.73	.554	.167
Within Groups ^b	6.66	11	.60			
Total	8.00	14				
Job search assistance						
Between Groups ^a	3.88	3	1.29	1.21	.318	.078
Within Groups ^b	46.06	43	1.07			
Total	49.95	46				
On campus job-fairs						
Between Groups ^a	0.11	3	.03	.047	.986	.001
Within Groups ^b	97.23	117	.83			
Total	97.35	120				

Table 15 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Internship/Co-op Assistance						
Between Groups ^a	1.43	3	.47	.55	.645	.034
Within Groups ^b	40.25	47	.85			
Total	41.68	50				
Graduate School Information						
Between Groups ^a	4.80	2	2.40	6.00	.030	.632
Within Groups ^b	2.80	7	.40			
Total	7.60	9				
Practice Interview Sessions						
Between Groups ^a	.98	3	.32	1.43	.271	.223
Within Groups ^b	3.43	15	.22			
Total	4.42	18				
Career and Employment Workshops						
Between Groups ^a	4.85	3	1.61	2.29	.100	.203
Within Groups ^b	19.01	27	.70			
Total	23.87	30				
Online resume and job listing						
Between Groups ^a	2.28	3	.76	1.33	.275	.075
Within Groups ^b	28.01	49	.57			
Total	30.30	52				

Note * $p < .005$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

Students had the opportunity to articulate particular campus based resources in career and vocational placement and development on this survey and the results from commuter residents who reside with roommates did not yield any statistically significant differences. Students responded; $F(3,54)=1.07$, $p=0.369$ for individualized or one on one career counseling; $F(3,145)=0.37$, $p=0.768$ for resume writing and review; $F(3,11)=0.73$, $p=0.554$ for career skills testing; $F(3,48)=1.18$, $p=0.325$ for job search assistance; $F(3,122)=0.19$, $p=0.901$ for job fairs; $F(3,53)=0.43$, $p=0.729$ for internship assistance; $F(2,7)=6.00$, $p=0.030$ for graduate school preparation; $F(3,17)=0.43$, $p=0.728$ for practice interview sessions; $F(3,33)=0.62$, $p=0.604$ for employment workshops; and $F(3,50)=0.98$, $p=0.40$ for online job database and resume cross-listing.

Table 16

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Perceptions of Career Disposition and Aspiration

	SS	df	MS	F	p	η^2
Connection of major to careers						
Between Groups ^a	.03	3	.01	.00	.999	.000
Within Groups ^b	726.82	519	1.40			
Total	726.86	522				
Confidence to create a resume						
Between Groups ^a	10.46	3	3.48	2.62	.050	.015
Within Groups ^b	687.71	518	1.32			
Total	698.17	521				

Table 16 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Prepared to interview for jobs						
Between Groups ^a	5.40	3	1.80	1.29	.276	.007
Within Groups ^b	716.99	515	1.39			
Total	722.39	518				
Articulate my life goals						
Between Groups ^a	2.60	3	.86	.65	.583	.004
Within Groups ^b	692.06	519	1.33			
Total	694.66	522				
Articulate my values, attitudes, and beliefs						
Between Groups ^a	5.30	3	1.76	1.37	.249	.008
Within Groups ^b	661.62	515	1.28			
Total	666.92	518				
Seek career advice/counseling/info						
Between Groups ^a	2.00	3	.66	.47	.700	.003
Within Groups ^b	734.93	522	1.40			
Total	736.93	525				
Land a job in my chosen field						
Between Groups ^a	4.35	3	1.45	1.05	.367	.007
Within Groups ^b	660.19	481	1.37			
Total	664.54	484				
Critical thinking/problem solving skills						
Between Groups ^a	8.40	3	2.80	2.79	.040	.016
Within Groups ^b	520.72	520	1.00			
Total	529.13					

Table 16 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Diversity perspectives have changed						
Between Groups ^a	5.79	3	1.93	1.70	.166	.010
Within Groups ^b	588.00	518	1.13			
Total	593.80	521				
Ready to work with diverse cultures						
Between Groups ^a	2.80	3	.93	.78	.502	.005
Within Groups ^b	614.29	516	1.19			
Total	617.10	519				
More likely to complete my degree						
Between Groups ^a	7.85	3	2.61	2.41	.066	.014
Within Groups ^b	561.75	517	1.08			
Total	569.61	520				
Satisfaction with college has improved						
Between Groups ^a	8.30	3	2.76	2.33	.073	.013
Within Groups ^b	616.12	520	1.18			
Total	624.43	523				
Gained skills/abilities for post college						
Between Groups ^a	5.49	3	1.83	1.85	0.136	.011
Within Groups ^b	513.30	521	.98			
Total	518.79	524				

Note * $p < .003$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

When given opportunities to articulate their perceptions of career dispositions and aspirations, resident students and their commuter peers did not demonstrate any significant differences overall.

Connection of major to career opportunities yielded statistics $F(3,519)=0.00$, $p=0.999$ for connection of major to career; $F(3,518)=2.62$, $p=0.05$ for ability to write resume that showcases their skills and talents; $F(3,515)=1.29$, $p=0.276$ for feeling prepared to interview for jobs; $F(3,519)=0.65$, $p=0.583$ for ability to articulate life goals; $F(3,515)=1.37$, $p=.249$ for ability to articulate values, attitudes, and beliefs; $F(3,522)$, $p=0.47$ for active seeking of career counseling, advice, or information; $F(3,481)=1.05$, $p=0.367$ for ability to find in a job in a chosen field or career of choice/course of study; $F(3,520)=2.79$, $p=0.04$ for the establishment critical thinking and problem solving skills; $F(3,518)=1.70$, $p=0.166$ on how perspectives on diversity have grown and changed as they relate to the workforce; $F(3,516)=0.78$, $p=0.502$ for feeling prepared to work with people of diverse backgrounds, cultures, and races; $F(3,517)=2.41$, $p=0.066$ for greater likelihood of degree completion; $F(3,520)=2.33$, $p=0.073$ that satisfaction has grown with college experience as the result of career exploration; $F(3,521)=1.85$, $p=0.136$ that they feel confident that they have gained skills and abilities to put into place after college.

Table 17

One-Way ANOVA Comparing Residential Students and Commuter Peers (Off Campus with Roommate, Off Campus with Family, Off Campus with Spouse/Partner/Children) Sources of Career Advice

	SS	df	MS	F	p	η^2
Academic Advisor						
Between Groups ^a	4.50	3	1.50	1.63	.181	.011
Within Groups ^b	389.46	423	.92			
Total	393.96	426				
Alumni from Institution						
Between Groups ^a	.80	3	.26	.37	.771	.005
Within Groups ^b	157.83	221	.71			
Total	158.64	224				
Career Services Staff						
Between Groups ^a	1.74	3	.58	.71	.545	.008
Within Groups ^b	207.20	254	.81			
Total	208.95	257				
Faculty						
Between Groups ^a	1.60	3	.53	.92	.430	.007
Within Groups ^b	235.42	407	.57			
Total	237.02	410				
Friends/Peers						
Between Groups ^a	1.19	3	.40	.64	.585	.004
Within Groups ^b	269.14	436	.61			
Total	270.34	439				
Parents/Other Family						
Between Groups ^a	2.11	3	.70	1.12	.340	.007
Within Groups ^b	280.24	447	.62			
Total	282.35	450				

Table 17 Continued

	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Professional in Field						
Between Groups ^a	4.00	3	1.33	2.69	.046	.021
Within Groups ^b	187.43	378	.49			
Total	191.43	381				
Online Social Network Sites						
Between Groups ^a	4.77	3	1.59	2.02	.111	.022
Within Groups ^b	217.22	276	.78			
Total	221.90	279				

Note * $p < .003$ with Bonferroni adjustment, ^a represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children, ^b represents the between groups of resident students, commuters living with roommates, commuters living with family, and commuters living with spouses/partners/children

As Noted with their earlier responses, there were no significant differences between how commuter student sub-groups and residential peers in how they received information regarding careers. $F(3,423)=1.63$, $p=0.181$ for academic advisors; $F(3,221)=0.37$, $p=0.771$ for alumni; $F(3,254)=0.71$, $p=0.545$ for career services; $F(3,407)=0.92$, $p=0.430$ for faculty; $F(3,436)=0.64$, $p=0.585$ for friends; $F(3,447)=1.12$, $p=0.340$ for parents; $F(3,378)=2.69$, $p=0.046$ for professionals in field, and $F(3,276)=2.02$, $p=0.111$ for online social network sites.

Summary

The purpose of this analysis were to determine whether or not there were any differences in perception as they related to undergraduate students who resided on campus versus those of their commuter peers who either lived off campus with roommates, family members, or spouses, partners, and/or children.

Five specific areas of student involvement were selected to analyze these perceptual differences between student populations which included student activities and involvement, diversity, campus safety, mental health, recreation, and career aspirations and development.

In each area of student involvement, survey instruments were utilized along with scales of engagement and or perceptions which enabled the researcher to determine whether there were statistical differences between the residential and commuter sub-populations.

While the majority of the responses did not yield evidence to conclude that there were finite or discernable differences between the sub-groups of commuters and residential peers, there were twelve specific areas where significant differences were Noted between residents and commuters, oftentimes most prevalently found in resident students and their commuter peers who reside off campus with roommates or with spouses.

In the student activities and involvement scales, there were tests conducted on the overall levels of student involvement in clubs and organizations and general campus involvement. Nine of the twelve significant findings were evidenced in the involvement scales which tie specifically to literature suggesting that the more involved and invested in a campus the more likely that the student will be to persist and complete their degree (Astin, 1975, 1977, 1993b; Tinto, 1975; 1993). As evidenced by the statistical analysis, the means of the instruments were analyzed to determine whether or not there are statistical differences between these student populations. There were no statistically significant differences in student involvement between commuter and resident students for the exception of campus involvement, athletics, campus recreation, community service, Greek lettered organizations, honor societies, Orientation leaders, student media, and academic professional groups. These tests, as well as those for general engagement and getting more involved yielded the largest amount of distinctions in student populations.

Another area of differences in perceptions of resident and commuter students are witnessed in how they view campus safety. There was a significant difference in the perception the safety of campus overall between the resident students and their commuter peers.

In perceptions of mental health there were specific differences evidenced in substance use with students who expressed that they enjoyed getting drunk and also drank frequently in the resident population versus commuter peers.

Commuter sub-populations and residential peers did not identify any statistically different perceptions of campus diversity, recreation, or career development or aspirations when these scales were adjusted using the Bonferroni correction to account for multiple statistical tests.

In conclusion, while there were not the overwhelming differences in perceptions between residential and commuter students that the researcher had hoped for, there were specific differences that are worthy of future consideration in how divisions of student life look at these distinct student populations.

CHAPTER V: DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

The primary purpose for this dissertation was to compare differences in the perceptions of resident and commuter students and how these correlated to their experiences within Student Life based programs and services. NASPA Consortium surveys were used to investigate these perceptions and the ways that students responded to participation in student activities and organizations, issues of diversity and safety, recreation, mental health, and career development and aspirations.

Discussions in this chapter are based upon the statistical results found in Chapter IV. Implications of the results will be discussed in the context of the literature review of this study and recommendations for future research will be addressed.

Discussion of Results

Demographics

While demographic statistics did not ultimately factor into the way in which the questions were analyzed, several characteristics were nonetheless worthy of Note, particularly in the context of the literature and how it relates to commuter student engagement with college campuses. These statistics might also, in certain instances, provide future insights on ‘getting to the why.’ Here, why is quite simply why are students involved or not involved, why are their perceptions of a campus positive or negative, and how are variables like their emotional or physical well-being potentially also playing a role in their potential success at college.

The statistics revealed that more females participated in the surveys than male counterparts; 68% (student activities), 75% (diversity and campus safety), 70% (recreation), 75% (mental health), and 70% (career development and aspirations).

Due to the unusually small population of minority students on the campus at large, those statistics did not provide insight into the experiences of the minority or international student as much as the researcher would have liked.

Other statistics worthy of note are those of students who identified working between 30+ hours per week, which is coincident with full time employment; 12% (student activities), 11% (diversity and campus safety), 2% (recreation), 3% (mental health), and 13% (career development and aspirations).

In the same way, transfers also had a decent percentage of responses; 3% (student activities), 5% (diversity and campus safety), 9% (recreation), 9% (mental health), and 3% (career development and aspirations).

A final area of note was those students who identified as being first generation college students; 16% (student activities), 15% (diversity and campus safety), 13% (recreation), 10% (mental health), and 12% (career development and aspirations).

These areas, when factored against other variables like campus residency versus commuter students are still known to have significant impact on retention and academic success (Tinto, 1975, 1993, 2003).

Research Question I

Research question one sought to answer does student involvement in campus activities differ between residential and commuter students who reside with roommates, family, and spouses, partners, and/or children. Findings gleaned from the analysis of this question point to several significant areas of difference in involvement and these relate to how commuters. These activities are overall campus involvement, athletics, campus recreation, community service,

Greek membership, honor societies, Orientation leaders, student media, and academic/professional organizations.

Looking at the data presented in chapter 4, there is evidence to suggest that in this instance, that there is a difference in the levels of engagement between resident and commuter students. In the majority of the responses, means showed that students were involved in organizations either by nature of attending or by helping to plan or being involved without, overall, being the leadership of the groups. With that being said, because of the total number of residents who participated in the surveys, they had higher means than their commuter peers, but at in the same token, those commuters, particularly those who resided off campus with roommates were ‘more’ involved than residents.

While those statistics certainly point toward a specific difference in the levels of involvement between resident and commuter sub-populations, when looking to answer the question overall, one must also evaluate that the majority of the evidence demonstrated in comparing the mean scores of these groups at large. In an effort to be concise, the easiest way to summarize the levels of activity of the students would be as follows; there are differences in the overall levels of engagement of the students, but they seem to in most instances, balance one another out. Clubs and organizations that necessitated larger on campus commitment (like overall campus involvement or student media) had larger student involvement of those on-campus versus their off-campus peers.

The researcher notes that the findings of this study support a personal assumption that students find meaning and experience within their own activities and organizations, but it is imperative that efforts are made across campus to cultivate these interests by faculty, staff, and administration. Areas like athletics typically are ‘siloes’ at smaller institutions without strong or

nationally recognized athletic programs and if this area of engagement is to be viewed as an indicator of potential retention for students, more effort must be paid to incorporate students into these experiences.

Another significant component of why the levels of engagement might not be as different as expected could be that in the past decade divisions of student affairs have placed efforts on attempting to engage all undergraduate students in campus activities in efforts to promote retention (Tinto, 1975, 1993). What this suggests, when looking at the findings is that there are not presently perceptible differences found in the ways that students who commute engage in activities versus their on campus peers which means that there is validation that students are being encouraged to participate regardless of their residential standing.

In summary, and in spite of the limitations of populations noted, the results at this institution do not demonstrate, outside of the areas of campus involvement, athletics, campus recreation, community service, Greek lettered organizations, honor societies, Orientation leader, student media, and academic/professional organizations any significance difference between student involvement of resident and commuter students.

Research Question II

Research question two sought to answer whether perceptions of diversity differ between residential and commuter students who reside with roommates, family, and spouses, partners, and/or children. After Bonferroni adjustments were made to the alpha scores, there were no statistically significant perceptions found between the commuter and resident students.

Research Question III

Research question three sought to answer whether perceptions of campus safety differed between resident and commuter students who reside with roommates, family, and spouses,

partners, and/or children. This section revealed an interesting difference in the perceptions of residential and commuter students, with relation to their overall concept of safety.

For the most part, resident students reported overall feeling less safe on campus than commuter peers which draws an interesting distinction between the interactions of the population and their campus at large. It also, with potential and more extensive evaluation when paired against campus crime statistics, and open ended questions regarding safety that were not analyzed make efforts to understand how both resident and commuter students see their environment and what makes it either safe or not.

It is an area, while overall not being of much statistical significance, is the foundation upon which all student engagement lies and merits further analysis in the future.

Research Question IV

Research question four sought to answer whether perceptions of mental health differ between residential students and their commuter peers who reside with roommates, family, spouses, partners, and/or children.

When addressing issues related to substance abuse, there were several statistically significant areas that focused on frequent alcohol consumption, and enjoying being drunk. Data revealed in these instances, that although the students did not indicate participating in these abusive behavior patterns to excess, that the resident students articulated behaviors which were slightly more abusive than their off campus peers.

Research Question V

Research question five sought to answer whether perceptions of recreation differ between residential students and their commuter peers. Perhaps most confounding, particularly in light of current literature regarding recreational environments, was the overwhelming lack of statistically

significant findings from the recreation survey. The researcher believes that should further emphasis have been placed upon looking at the pre-existing levels of fitness, recreation, and health of the students, this survey and its perceptions might have yielded different results.

The majority of the students reported that their behavior was, perceptually speaking, demonstrative of their having gained life skills as the result of participating in recreational programming.

Research Question VI

Research question six sought to answer whether perceptions of career development and aspirations differ between residential and commuter students. The final question, like those in the other surveys did not yield a body of statistically significant data after Bonferroni adjustment.

Summary

In summary, as the researcher looks at the data, one can draw a few inferences. The first would be that there is initial discouragement that the students are not ‘more engaged,’ or ‘more enthusiastic,’ about programs or services. One might have hoped their perceptions would be far more enthusiastic or favorable. Drawing distance from the data, information of this nature provides an institution with a significant opportunity to see where disconnects might be occurring with students to better serve the needs of both resident and commuter populations.

The data has shown, in its twelve statistically significant findings that there are some distinct ways in which resident students perceive their campus in comparison to the majority of their commuter peers. In some ways they are positive, and in some ways they are negative, particularly when looking at distinctions in safety where commuters feel more comfortable in the campus setting than those who reside there, or even in the distinctions in the fact that resident students consume alcohol more than their commuter peers. These findings more widely support

Tinto's theories of engagement (1975, 1993) and retention than those of Astin or Kuh which denote that largely, resident students are more engaged than commuter peers. At the same time, the study suggests in its differences found between these groups that further studies and analysis of student engagement are warranted and necessary.

Evaluating this information as a candid and objective researcher, the conclusion can be drawn that if one was to be asked are their differences in perceptions between commuter and resident students, the answer is yes. Are these differences grandiose in nature? As the data points out, not necessarily. The data does show that generally speaking, the students do interact with a campus differently as commuters and residents. With careful evaluation of future efforts, it is entirely possible for any institution to fully meet the needs of both unique groups of undergraduates.

Recommendations

In an effort to contribute more research on how perceptions of commuter sub-populations may differ from residential peers on contemporary college campuses and to build on the findings of this study, the following section outlines recommendations for future use and research. These recommendations are broken down into suggestions for further studies and application in institutional practice.

Recommendations for Further Studies

The effort to understand differences between residential and commuter students is not a new conceptual model, but nonetheless, there has not been a panacea developed to address the differences in these populations over the past fifty years in higher education (Jacoby 1989, 2000a, 2000b; Jacoby & Garland, 2004). Presently the majority of efforts are being made on campus to campus basis, and due to the hands on approach often taken by student affairs

professionals, the value of much of this work is being lost in a larger academic discourse because they are not making attempts to publish their findings or best practices. Furthermore, as a related consequence much of those good faith efforts are also being driven conceptually and not being validated by assessment efforts.

Commuter students in the 21st century are more complex and diverse than their earlier peers. More students than ever are commuting in an effort to cache the escalating costs of college tuition. Non-traditional students are matriculating and bringing with them a rise in the national average of an undergraduate, as well as the potential that they might already be married, in committed relationships, or have children which also changes the landscape of their on campus needs.

In the same capacity, the majority of literature continues to either look at student engagement from the vantage point of it being focused largely upon residential populations or not creating sub-populations of commuter students when they have the opportunity (Astin, 1977, 1993b; Kuh, 1995, 2001, Kuh et al., 2002, Kuh et al., 2008).

Either way, by attempting to generalize a population as being merely resident versus commuter, it stands to lose sight of the fact that these groups are, in many respects different. Oftentimes, the offices within divisions of Student Affairs outside of those specifically focused commuters, oftentimes do not factor these differences into how they provide programs or services.

In order to more thoroughly understand the differences between these populations, researchers need to conduct more studies to investigate the differences in how commuter sub-populations perceive their campus experiences, particularly as they relate to non-academic opportunities for engagement. The purpose of such research would be to find out how these

populations are interacting with their campus, participating or not participating in activities and services, and looking at the various issues examined in this study to use data collected to assess the effectiveness of Student Affairs programming as it relates to commuter student populations.

While the current study used pre-existing data collected from current campus populations, it may be further illuminating to conduct the same study with a larger sample of students in upcoming years. Significant efforts would need to be made in this instance, to specifically seek out commuter students and encourage their participation and input to gauge perceptual differences between them and their resident peers.

Additional research might also focus on how students who at one time resided on campus might have altered behaviors or levels of engagement if moving off campus in later years of school. The purpose of such a study, in this instance would be to investigate what impact pre-existing levels of engagement had upon students who transitioned to a commuter model and if this decreased their perceptions of being part of the campus community, overall campus experience, and their level of involvements.

Similarly, much more concentrated analysis is needed to examine the perceptions of commuter students who reside with spouses, partners, and/or children. As national statistics continue to show rises in this population coming to colleges and universities, this group of students has not typically been incorporated into Student Affairs programming models. These students would be helpful in allowing administrators to understand whether or not programs and services are allowing them opportunities to become fully invested as members of a campus community.

In addition, more studies that allow commuter students to provided qualitative data should be incorporated into enabling students to articulate their levels of engagement on their

campus. Typically, and as noted in literature, this population remains largely un-investigated, particularly in light of perceptions of campus involvement and experiences. Should this trend continue uninterrupted, the validity of national studies will need to be questioned since they are generalizing the experiences of residential populations to reflect those of their commuter and at times, non-traditional peers.

On an entirely different note, it would also be interesting to explore the perceptions of university administrators and Student Affairs professionals as they relate to how the needs of resident students differ from those of commuters. Such a study would also cause departments to candidly evaluate their programming models to determine if they are actually serving the needs of all campus populations, or if they are largely serving the needs of only resident students.

The present study was conducted using pre-existing data generated by random samples of students at a mid-sized private institution. While this campus had a sizable commuter population, the survey did not ultimately demonstrate the true statistic of this population in the students that chose to respond. Further research similar to this study is needed with specific emphasis at looking to better incorporate commuter populations, so that a more representative sample of students can be tested in future studies.

With specific respect to the testing methods, the data was retroactive, so the researcher had to adopt the results without any efforts to continue to encourage wider participation in the surveys. Similarly, by having invited random samples of students to participate in the surveys, this did not allow emphasis to be placed upon the residential as a primary component of analysis. The survey instruments themselves were also lengthy and as such, some students did not complete all of the questions which caused, in certain instances, for questions to be rendered moot in analysis. Additionally, the original data sample included graduate level students, health

science professional phase students, and law students so these students were removed from analysis in this study. Future research using this population might also reveal significant differences in the adoption of campus culture, programming, and services.

Although the NASPA Consortium/Campus Labs Baseline instruments were tested for base validity and found to be effective, they do not have the same level of national recognition as an instrument like the NSSE. The researcher still struggles with whether or not to advocate for the use of this instrument in an effort to better understand commuting sub-populations since it only incorporates freshman and senior responses, thus eliminating a valuable cross section of students, particularly in the context of retention theory (Lerer & Talley, 2005; Olivas, 2011; Tinto, 1975, 1993).

A final recommendation includes one that evaluates literature on the subject of commuter students. Scholars continue to neglect to note the significant distinction between commuter populations which continues to inhibit the ability to campuses to take critical steps toward changing or reevaluating program models. Some literature has moved toward the model to analyze sub-populations of commuters but these are looking at differences in variables like race or first generation college attendance (Roe Clark, 2005, 2006). The researcher theorizes that if more collective efforts to evaluate the distinguishing characteristics of commuters as those who reside with peers, family, or spouses, partners, and/or children would yield differing responses. By looking at these sub-populations it would also be possible to analyze differences in other variables such as students who had potentially resided on campus, age and work differentials, and finally the support structure of families and degree retention and resilience.

Another area worthy of note would be the intentional and focused use of technology as a means in which to better serve the needs of all student populations and in more meaningful ways

that simply disseminating information on a website. Technology has the capacity to engage faculty and staff in discourse with students in synchronous or asynchronous settings which is imperative, particularly for students who might be commuting at a distance or might even be studying abroad for a semester but still have needs associated with their campus. Even student activity based interactive software and platforms have been developed as means in which students can become engaged, record their levels of involvement, and actively take up ownership and roles within groups.

Recommendations for Institutional Practice

Although the results of the study do demonstrate that there are differences in the perceptions of resident and commuter students as they interact with various student life based programs and services, it would be interesting to explore these perceptions further as a concentrated and division wide assessment effort. While the NASPA Consortium surveys were certainly a means in which to begin to explore student perceptions in program specific ‘silos,’ this nonetheless does not enable a larger and more collective effort of campus engagement that looks at how a student perceives their experience overall.

By seeking to do something of this capacity, it would not be necessary to eliminate the already existing NASPA Consortium surveys as they remain resources in program specific perceptions and trends. Instead, the researcher recommends the development of a hybrid assessment that would look to build upon the seminal literature of both Astin and Tinto to enable students to think longitudinally across their experiences to intuit more connections between their campus engagement overall (Astin, 1975, 1977, 1993b; Tinto, 1975; 1993).

A comprehensive and collaborative assessment of this nature would also enable a division of Student Affairs to look at ways in which their programs and services work as

complimentary rather than competing entities. Furthermore, it would also enable a division to look at specific campus based sub-populations such as commuters to determine if their needs are being best served by current campus offerings.

Further information can be generated from this study regarding the differences in residential and commuter populations that can be shared across campuses to look at ways in which divisions of Student Affairs must be conscientious of other programmatic or physical services which include campus safety (Campus Police), library facilities (Academic Affairs), athletics, substance abuse (Counseling/Various academic clinic programs), and alumni engagement (Alumni Affairs/Development). These programs or services might find the information contained therein useful in the way in which they work with a division of Student Affairs to engage with residential and commuter populations. In any case, it is vital for a division of Student Affairs to regularly make efforts to assess their programs (Bloxham & Boyd, 2007; Cooper & Saunders, 2000; Oburn, 2005; Schutt, Garrett, Lynch, & Dean, 2012).

Given the transferability of this study due to the NASPA Consortium model, it would behoove divisions of Student Affairs to find ways to share their survey results with one another in ways that look at the data as more than merely percentages. Student sub-populations such as commuters, international students, minority students, transfers, and first generation collegians all should be analyzed in the context of their responses and not merely ‘tossed’ into the mix with the assumption that their responses are going to be the same as residential peers.

Conclusions

In the past forty years, higher education has changed and as a result, the landscape of college campuses has had need to embrace the reality that with rising costs have come an increased population of students who commute to campus. These students, particularly, when

broken into sub-categories of those who reside off campus with peers, family, or spouses, partners, and/or children have different needs than peers who reside on college campuses. This research concludes that in certain specific instances, these commuter students have significantly different perceptions of their campus experience and their engagement in student life programs and services. While the majority of the differences were related to specific levels of student organization involvement, career dispositions, substance use, and campus safety, the study brought light a larger realization that the perceptual areas of student emphasis require a cross-campus collaboration to incorporate students into an institution.

While there were not necessarily visible differences in other scales or survey instrument responses as they related to campus involvement, recreation, and perceptions of diversity, this may suggest that more concerted efforts need to be made to better understand current levels of student engagement and how these differ between residents and commuter students.

This study, however, did provide evidence to suggest that divisions of Student Affairs should not function in 'silos,' and must make diligent efforts to incorporate other divisions into the manner in which students become involved on a campus.

The researcher is hopeful that educators in higher education will find this study as a resource in understanding the ways in which commuter sub-populations differ on a campus and will make more concerted efforts to serve these populations with the understanding that they are different than residential peers. The researcher has recognized this significance in the duration of this study, and it is similarly critical for other administrators to do the same in efforts to enable commuter students to be successful academically and persist in degree completion. This finding is particularly essential in an age of assessment and increased accountability, so it is hoped that that the study can be used as a template for other institutions to evaluate the differences between

their residential and commuter populations for the overall success and holistic growth of their students.

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Appendix A

Descriptive Statistics of Campus Activities Survey (On Campus Residents and Commuter Student Responses)

Variables	Total	%
Residence Status	100	100
On-Campus	55	55
Off-Campus with Roommates	20	20
Off-Campus Family	16	16
Off-Campus with Spouse/Partner/Children	9	9
Gender Identity	99	100
Man	27	27
Woman	67	68
I prefer to not respond to this question.	5	5
With Which Race Do you Identify	99	100
Asian/Pacific Islander	3	3
Black/African-American	3	3
Latino(a)/Hispanic	3	3
Middle Eastern	3	3
White	73	74
Multiracial	4	4
I prefer to not respond to this question.	10	10
Class Standing	98	100
First year/Freshman	26	27
Sophomore	15	15
Junior	22	22
Senior	34	35
Non-degree seeking	1	1

Appendix A (Continued)

Variables	Total	%
In Which College is your Major	99	100
Business	14	14
Education	3	3
Health Sciences	13	13
Liberal Arts / Humanities	2	2
Natural and Environmental Sciences	13	13
Leadership and Professional Advancement	9	9
Liberal Arts	16	16
I have more than one major	5	5
Nursing	9	9
Pharmacy	15	15
Enrollment Status	99	100
Full time	96	97
Less than full time	3	3
What is your GPA	98	100
3.5 - 4.0	52	53
3.0 - 3.4	34	35
2.5 - 2.9	7	7
2.0 - 2.4	1	1
Below 2.0	1	1
NA/Do not have a GPA yet	3	3
Age	98	100
18	9	9
19	19	19
20	22	22.5*
21	21	21.5*
22	15	15
23	1	1
27 and beyond	11	11

* Small percentiles of .05 occur as the result of rounding errors

Appendix A (Continued)		
Variables	Total	%
Transfer to School	100	100
No	88	88
Yes, from a two-year college	2	2
Yes, from a four-year college or university	10	10
Work	99	100
0 hours	38	38.5*
1 - 10 hours	16	16
11 - 20 hours	25	25.5*
21 - 30 hours	9	9
31 - 40 hours	7	7
More than 40 hours	4	4
First Generation College Attendance	100	100
No	84	84
Yes	16	16
Would You Choose this Institution Again	100	100
Not sure	15	15
Definitely would not	7	7
Probably would not	14	14
Probably would	34	34
Definitely would	30	30
How Likely Will You Be To Re-enroll	100	2
Extremely unlikely	2	2
Somewhat unlikely	2	5
Somewhat likely	5	77
Extremely likely	77	14

* Small percentiles of .05 occur as the result of rounding errors

Appendix B

Descriptive Statistics of Profile of College Experience (On Campus Residents and Commuter Student Responses)

Variables	Total	%
Residence Status	113	100
On-Campus	66	59
Off-Campus with Roommates	24	21
Off-Campus Family	17	15
Off-Campus with Spouse/Partner/Children	6	5
Gender Identity	112	100
Man	28	25
Woman	84	75
I prefer to not respond to this question.	0	0
With Which Race Do you Identify	111	100
Asian/Pacific Islander	2	2
Black/African American	1	1
Latino(a)/Hispanic	2	2
White	99	89
Multiracial	1	1
I prefer to not respond to this question.	6	5
Class Standing	114	100
First year/Freshman	25	22
Sophomore	23	20
Junior	33	29
Senior	33	29
What is your Major	112	100
Business Administration	17	15
Education	11	10
Health Sciences	19	17

Appendix B Variables (Continued)	Total	%
Leadership and Professional Advancement	5	4.5
Liberal Arts	23	20.5
Music	6	5
Natural and Environmental Sciences	11	10
Nursing	6	5
Pharmacy	13	12
Other	1	1
Enrollment Status	113	100
Full time	108	96
Less than full time	5	4
GPA	114	100
4.0 or higher	6	5
3.5 - 4.0	61	53
3.0 - 3.4	35	31
2.5 - 2.9	11	10
2.0 - 2.4	0	0
Below 2.0	1	1
NA/Do not have a GPA yet	0	0
Age	113	100
18	9	8
19	26	23
20	31	27
21	24	21
22	14	12
23	2	2
25 and beyond	7	7

* Small percentiles of .05 occur as the result of rounding errors

Appendix B Variables (Continued)	Total	%
Transfer to School	114	100
No	101	89
Yes, from a two-year college	3	3
Yes, from a four-year college or university	10	8
Work	114	100
0 hours	45	40
1 - 10 hours	20	18
11 - 20 hours	30	26
21 - 30 hours	9	8
31 - 40 hours	5	4
More than 40 hours	5	4
First Generation College Attendance	114	100
No	97	85
Yes	17	15
Would You Choose this Institution Again	112	100
Not sure	0	0
Definitely would not	7	6
Probably would not	26	23
Probably would	41	37
Definitely would	38	34
How Likely Will You Be To Re-enroll	112	100
Somewhat likely	10	9
Extremely likely	89	79
Not applicable/Graduating	13	12

Appendix C

Descriptive Statistics of Mental Health and Counseling Survey (On Campus Residents and Commuter Student Responses)

Variables	Total	%
Residence Status	481	100
On-Campus	322	67
Off-Campus with Roommates	82	17
Off-Campus Family	57	12
Off-Campus with Spouse/Partner/Children	20	4
Gender Identity	484	100
Man	122	25
Woman	362	75
Transgendered	0	0
I prefer to not respond to this question.	0	0
With Which Race do you Identify	482	100
Asian American/Asian	11	2
Black/African-American	14	3
Hispanic/Latino/a	9	2
Middle Eastern	4	1
American Indian or Alaskan Native	2	1
White	431	89
Multiracial	6	1
Self-Identify:	5	1
Class Standing	476	100
First year/Freshman	154	32
Sophomore	94	20
Junior	126	27

Appendix C (Continued) Variables	Total	%
Senior	102	21
Major	Not Asked in Survey	
Enrollment Status	Not Asked in Survey	
What Is Your GPA	463	100
3.5 - 4.0	244	70
3.0 - 3.4	155	21
2.5 - 2.9	54	7
2.0 - 2.4	10	1.5*
1.0-1.9	4	.5*
Age	469	100
18	92	20
19	111	24
20	101	22
21	109	23
22	31	7
23	7	2
24 and beyond	18	2
Transfer to School	479	100
No	440	92
Yes, from a two-year college	17	3
Yes, from a four-year college or university	22	5
Work	456	100
0 hours	218	48
1 - 10 hours	71	15
11 - 20 hours	117	26
21 - 30 hours	28	6

Appendix C(Continued)

Variables	Total	%
31 - 40 hours	14	3
More than 40 hours	8	2
First Generation College Attendance	476	100
No	426	90
Yes	50	10
Would You Choose this Institution Again	478	100
Not sure	47	10
Definitely would not	32	7
Probably would not	73	15
Probably would	169	35
Definitely would	157	33
Will You Be Re-Enrolling	100	100
Not applicable/Graduating	54	11
Extremely unlikely	6	1
Somewhat unlikely	7	1.5*
Somewhat likely	32	7
Extremely likely	372	78
Not sure	7	1.5*

* Small percentiles of .05 occur as the result of rounding errors

Appendix D

Descriptive Statistics of Campus Recreation Survey (On Campus Residents and Commuter Student Responses)

Variables	Total	%
Residence Status	399	100
On-Campus	295	74
Off-Campus with Roommates	63	16
Off-Campus Family	37	9
Off-Campus with Spouse/Partner/Children	4	1
Gender Identity	407	100
Man	118	29
Woman	286	70
Transgendered	1	.5*
I prefer to not respond to this question.	2	.5*
With Which Race Do You Most Identify	406	100
African American/Black	6	2
Asian/Pacific Islander	10	3
Hispanic/Latino/a	3	.5*
Indigenous/Native American/American Indian	2	.5*
White	368	90
Multiracial	10	3
Prefer not to respond	5	.5*
Other	2	.5*
Class Standing	400	100
First year/Freshman	121	30
Sophomore	93	23
Junior	111	28
Senior	71	18

*Rounding errors occur for .5 percentages

Appendix D (Continued)		
Variables	Total	%
Non Degree Seeking	4	1
In What Area Is Your Major	397	100
Business	72	18
Education	29	7
Health Sciences	161	41
Liberal Arts/Humanities	53	13
Mathematics	2	.5*
Physical Sciences	36	9
Social Sciences	7	2
Technology	2	.5*
Visual and Performing Arts	5	1
I have more than one major	7	2
Undecided	3	1
Other	20	5
Enrollment Status	400	100
Full time	400	100
Less than full time	0	0
What Is Your GPA	393	100
3.5 – 4.0	234	59.5*
3.0 – 3.4	138	35
2.5 – 2.9	20	5
2.0 – 2.4	1	.5*
Age	344	100
18	43	13
19	80	23
20	101	30
21	73	21
22	32	9
23	3	1
24 and beyond	12	3

Appendix D (Continued)		
Variables	Total	%
Transfer to School	392	100
No	356	91
Yes, from a two-year college	12	3
Yes, from a four-year college or university	24	6
Work	395	100
0 hours	194	50
1 - 10 hours	65	16
11 - 20 hours	95	24
21 - 30 hours	34	9
31 - 40 hours	5	.5
More than 40 hours	2	.5
First Generation College Attendance	398	100
No	346	87
Yes	52	13
Would You Choose this Institution Again	394	100
Not sure	34	9
Definitely would not	13	3
Probably would not	59	15
Probably would	147	37
Definitely would	141	36
How Likely Are You to Re-Enroll	395	100
Extremely unlikely	8	2
Somewhat unlikely	1	.5*
Somewhat likely	18	5
Extremely likely	329	83
Not sure	3	.5*
Not applicable/Graduating	36	9

Appendix E

Descriptive Statistics for Career Development and Aspirations Survey (Resident and Commuter Students)

Variables	Total	%
Residence Status	529	100
On-Campus	351	67
Off-Campus with Roommates	99	18
Off-Campus Family	54	10
Off-Campus with Spouse/Partner/Children	25	5
Gender Identity	527	100
Man	132	25
Woman	390	74
Transgendered	0	0
I prefer to not respond to this question.	5	1
With Which Race Do You Identify	528	100
Asian/Pacific Islander	28	5
Black/African-American	17	3
Latino(a)/Hispanic	10	2
Middle Eastern	3	.5
Indigenous/Native American	1	.5
White	440	83
Multiracial	12	2
I prefer to not respond to this question.	17	3
Class Standing	579	100
First year/Freshman	155	27
Sophomore	129	22
Junior	155	27
Senior	136	23.5
Other (Non Degree Seeking)	4	.5

Appendix E (Continued)

Variables	Total	%
What Is Your Primary Area of Study	530	100
Business	110	21
Computer Science	5	1
Education	32	6
Engineering	3	1
Health Sciences	165	31
Liberal Arts/Humanities	82	15
Mathematics	4	1
Physical Sciences	48	9
Social Sciences	10	2
Technology	3	.5*
Visual and Performing Arts	10	2
I have more than one major	12	2
Undecided	4	1
Other	41	7
Not applicable/I do not have a major.	1	.5*
Enrollment Status	525	100
Full time	507	96
Less than full time	18	4
What is your GPA	529	100
3.5 – 4.0	309	58
3.0 – 3.4	183	34.5*
2.5 – 2.9	31	6
2.0 – 2.4	5	1
Below 2.0	1	.5*
Age	529	100
18	36	7
19	142	27
20	123	23
21	125	24
22	65	12

Appendix E (Continued)

Variables	Total	%
23	4	1
24 and beyond	34	6
Transfer to School	528	100
No	460	87
Yes, from a two-year college	22	4
Yes, from a four-year college or university	46	9
Work	532	100
0 hours	215	40
1 – 10 hours	82	15
11 – 20 hours	132	35
21 – 35 hours	50	6
36 – 40 hours	32	2
More than 40 hours	21	2
First Generation College Attendance	529	100
No	466	88
Yes	63	12
Would You Choose this Institution Again	530	100
Not sure	41	8
Definitely would not	22	4
Probably would not	45	9
Probably would	198	37
Definitely would	224	42
How Likely Are You To Re-Enroll	531	100
Extremely unlikely	12	2
Somewhat unlikely	5	1

Appendix E (Continued)

Variables	Total	%
Somewhat likely	27	5
Extremely likely	414	78
Not sure	3	1
Not applicable/Graduating	70	13
