

To the Graduate Council:

I am submitting a final electronic dissertation written by Steven J. Hood entitled “Interrelationships of Academic Readiness, Social Integration, and Perceptions of Residence Hall Experiences of Returning Sophomores at a Southern University.” I have examined the final copy of this dissertation and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education with a major in Learning and Leadership.

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## **Dedication**

I would like to dedicate this research to my wonderful wife, Tiffani. Your support throughout our marriage and the last several years has been wonderful. Words cannot express how I feel about you nor can I adequately show my gratitude for the sacrifices you have made throughout my doctoral studies. I truly appreciate all that you have done for me and for our family during this endeavor. I am so fortunate to be able to call you my wife. I love you very much and hope that I can provide you with a fraction of the support that you have given to me.

I would be remiss if I didn't also dedicate this project to our three children, Kyra, Ashley, and Caroline. I am very proud of each of you and look forward to seeing you continue to grow and mature. I know great things are in your future. I look forward to sharing many more memories with you all. I will always love you very much.

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## **Abstract**

The purpose of this study was to examine the interrelationships of academic readiness, social integration, and perceptions of residence hall experiences of returning sophomores at a southern university. The literature has provided a basis for the impact of academic readiness on retention as well as the role of social integration on the overall freshman experience. This study added to the existing body of research by collecting information from freshmen through the Beginning Survey of Student Engagement (BSSE) prior to enrollment, the National Survey of Student Engagement (NSSE) during the spring semester of first year and a Residence Hall Perception survey administered during spring semester of the sophomore year. These data were analyzed to determine what differences existed from pre-enrollment social expectations and actual experiences according to academic readiness. Furthermore, it explored the perceptions of residence hall experiences based upon academic readiness. The findings from this study revealed statistically significant results for expectations of time spent in co-curricular activities as compared to actual time spent in co-curricular activities during the freshman year. The study also found other important information about the interactions the freshmen had with roommates and friends. There was also great insight into their involvement with campus organizations during the first year, as well as perceived advantages and disadvantages of living on campus as a freshman. Administrators will be able to utilize this research by designing first year residential programs that enhance the overall experience for future freshmen.

Interrelationships of Academic Readiness, Social Integration,  
and Perceptions of Residence Hall Experiences of  
Returning Sophomores at a Southern University

A Dissertation Presented for  
The Doctor of Education Degree  
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## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND TO THE PROBLEM**

Retention is a growing concern among college and university administrators. Persistence rates impact institutional ratings, affect recruitment of faculty and staff, and have a long term economic and professional impact on students, both those who are retained and those who are not. Like many other institutions, retention has been a concern at the University of Tennessee at Chattanooga (UTC), which is a Carnegie-classified master's level institution experiencing campus growth among entering freshmen and changes in admission criteria. The fall 2008 enrollment was just over 9800 students and the undergraduate enrollment for the same term was just shy of 8400 students. The campus housing capacity nearly doubled in the previous seven years to just over 2800 bed spaces and, as a result, approximately 1/3 of all undergraduate students lived on-campus during the fall of 2008. More specifically, the university provided housing to 58% of the fall 2008 first time freshmen, who make up 44% of all residential students at the university. While the institution clearly grew residentially, the overall enrollment has remained relatively flat during the past seven years. However, it is important to know that first time freshmen enrollment has grown from 1473 in the fall of 2002 to 2083 in the fall of 2008 (Fact Summary Sheet, 2002 & 2008). This represents a 41% increase in size of the first time freshmen class on-campus over this seven year period.

The type of enrollment changes, along with the growth of the residential population was almost certain to impact the experiences and perhaps the needs of

students. As more students lived on-campus, there was a greater demand for many campus services that were often targeted toward undergraduate students. In this case, the increased number of freshmen living on-campus contributed to already strained resources that were designed to aid in the success of first time freshmen students. There were not only a greater number of first time freshmen enrolled, but many more of these individuals were choosing to live on-campus. Those students who lived on-campus tended to take advantage of campus programs and services, therefore creating a drain on services. Unfortunately, most of the offices that provide support services had seen little to no increase in operating budgets or staffing despite the growth of campus residents. The lack of resources and services were evident in many campus service areas; some of the more notable areas included student activities, student judicial process, health and wellness programming, orientation and first year student transition. Each of these departments, along with student housing, compliments the others and provides important programmatic services for the first year student experience.

### **Statement of the Problem**

The declining retention rate at UTC presented administrators with a great concern. The freshmen to sophomore retention rate for first year students entering in the fall of 2007 was approximately 60% (One Year Retention Rates, 2008), while many similar institutions across the country achieved retention rates in the neighborhood of 75% (Braxton, Milem & Sullivan, 2000). This issue had been a significant concern for the institution and needed to be addressed in a coordinated and collaborative fashion in order to begin improving the freshmen to sophomore retention rate. As efforts focused on

improving retention rates, it was important to understand the experiences of students who lived on-campus and how those experiences contributed to a decision to return for a second year. As the experiences of first year residential students are understood, administrators will be able to develop programs designed to enhance the positive outcomes as a result of living on-campus.

The fall 2000 freshman class was retained at a rate close to 74%. Since the fall of 2000, the retention rates gradually declined each year to fewer than 61% in 2007. There was an exception in fall 2006, which showed an increase of approximately 1.5%. Gaining additional insight into the experiences and perceptions of freshmen living on-campus may enable administrators to design programs that are better able to encourage students to return for the sophomore year.

### **Rationale for the Study**

The growth in campus housing and change in academic admission requirements provided a perfect opportunity to look more closely at the academic readiness of freshmen. In addition to academic readiness, this was an excellent time to understand the level of student engagement that occurred for freshmen students during the fall 2008 semester. The research also explored the experiences of students who lived on-campus as freshmen and decided to return as sophomores. The new information can help to expand on student engagement through a more in depth understanding of first year residential experiences.

At the time of the research, the admission requirement for an incoming student was a 2.75 high school GPA (4.0 scale) along with a minimum composite score of a 17

on the ACT. An alternative admission requirement was for the student to have a 2.0 high school GPA with a composite score of 21 on the ACT. The primary change that prompted this new admission standard was the institution's elimination of the conditional admission status that was in effect prior to the fall 2008 school year. Before this change in policy, a prospective student could have been admitted conditionally with a high school GPA of 2.0 and a composite score of 17 on the ACT. As a result of this policy change, conditional admission status was no longer an option for students; a new student was either admitted or not. In addition to the elimination of the conditional admission status, this change has led to a higher academic profile for the freshman class for the institution. The mean ACT score for the fall 2008 freshman class was 22.4 (Fact Summary Sheet, 2008). This is a .4 increase from the fall 2007 and is .7 higher than the mean ACT score of the previous nine years of freshman classes entering the university (Fact Summary Sheet, 2000-2007). Some members of the university community believed that this change would have had a positive impact on the freshmen to sophomore retention rate by bringing in students who were better equipped for the rigors of higher education.

Alexander Astin (1999) suggested that there is more to academic success in college than being a high performing student in high school. More specifically, Astin described a highly involved student as one who not only devoted time to meeting the academic demands of college, but who was also actively involved in student organizations and a variety of extracurricular activities. Tinto & Goodsell (1999), learned that the level of involvement in extracurricular activities was an important

indicator that students were also socially integrated. Students who became socially integrated or engaged tended to persist at a significantly higher rate than students who were not. As administrators grapple with this retention issue, it may seem logical to move forward with the implementation of even higher academic standards for incoming freshmen. However, entrance requirements should not dismiss or replace the examination of the potential role student engagement might play in the retention of a student from the freshman to sophomore year. This research sought to determine the level of social integration for freshmen. It also sought any differences that may have existed for students based upon academic readiness.

### **Purpose of the Study**

The study sought to understand the relationship between academic readiness and academic major as well as the relationship between first year student engagement and academic readiness levels. Furthermore, the research examined how social expectations at the beginning of the freshman year compared to actual practices at the end of the year. Finally, a closer look at the perceptions of students regarding their residence hall experience according to academic readiness allowed the researcher to gain insight into the reasons students return. Retention does serve as the catalyst and interest in this study, but because it is not longitudinal in nature this is not a retention research project. It does however have retention implications. As the data were collected and analyzed, administrators were able to gain insight into these factors and how they may contribute to a student's decision to return for the sophomore year.



### **Significance of the Study**

This research could provide a greater understanding of the role housing plays in student experiences. It also could provide additional data regarding varying experiences of residential students based upon their academic readiness. Understanding the residential experiences could be an important element in gaining insight that allows for programmatic improvement. Specifically, the research may reveal variance in residential experiences according to academic preparedness, which would further allow for program development to better meet student needs.

This research could provide policy makers the reason to develop a community model that connects both the academic and social needs of freshmen students. An intentional living learning community is one type of program that was found to connect academic and social needs. A properly designed living learning community has the potential to help students connect with others around some common interest, an academic curriculum, or both. In a community such as this, students had the opportunity to get to know one another through classes, and this provided a level of social and academic comfort for a new student (Tinto & Goodsell, 1993). In addition to getting to know others, students who participated in living learning communities tended to report higher levels of satisfaction with their campus experience, which correlated with higher retention rates (Li, McCoy, Shelley & Whalen, 2005). In a similar study by Joseph Berger (1997), the sense of community that was developed in a campus residence not only led to more positive feelings about the campus, but also revealed the tendency of these students to be involved at deeper levels. The students tended to participate in

campus organizations and had more interaction with faculty.

The findings of this research may have the opportunity to inform administrators in the development of programs related to meeting the needs of freshmen residents according to their academic readiness and their residential experience. These programs could compliment other initiatives that have the chance to help restore the retention rates back to those of the late 1990's or early 2000's. This study also may add to the existing research base regarding the social experiences of residential students. Furthermore, it could provide insight into the relationship between academic readiness for those who lived on-campus and their level of student engagement. The research could open the door for the development of effective programs based upon a balance of academic and social needs of freshmen students. As these academic and social needs are met, freshmen may be more likely to return for their sophomore year and make a significant step towards graduation.

### **Research Questions**

1. For sophomore students who lived in the residence halls during their freshman year, was there a relationship between academic readiness, as determined through an index using high school GPA and ACT score, and their academic major?
2. How did students' social expectations at the beginning of their freshman year compare with their practice at the end of the year?
3. What was the relationship between students' first year student engagement and their academic readiness levels?
4. How did the academic readiness of freshmen students impact their perceptions of their residence hall experiences?

## **Delimitations**

The study was directed at understanding the interrelationships of academic readiness, social integration, and perceptions of residence hall experiences of returning students at the University of Tennessee at Chattanooga. While the study provided excellent information that will help administrators make plans to improve student experiences and improve retention rates, it should be noted that the study is not about retention. While retention does serve as a catalyst for the study, this study is not longitudinal in nature, a research design which would be necessary for a retention study.

The researcher collected and analyzed existing data regarding academic readiness and utilized a survey instrument to obtain insight into the students' perceptions about the freshmen residential experiences. The researcher focused the study only on freshman residents of campus housing and not those who lived off-campus. The unique experiences of on-campus students were important enough to direct efforts toward this group alone in the research. The findings were used to determine if the experiences varied according to academic readiness levels and, therefore, provided an opportunity to design programs to specifically meet the needs of residential students according to academic readiness.

## **Limitations**

This study was limited by the small response rate of members of the population. The population consisted of those 2<sup>nd</sup> year students from the approximately 1500 students in the freshman class who lived on-campus during the 2008-2009 academic year. In order to get the best understanding of the varying experiences students had according to

their academic preparedness, it was important to have as many participants as possible. In order to maximize participation, the population was sent an initial e-mail invitation to participate in the online survey. Three reminder e-mails were also sent to further encourage participation in the survey. Names of those who chose to take part in the survey were entered in drawings for various prizes as an additional incentive to participate. A limited response rate occurred, ultimately hindering the potential for the research to inform significant program change.

There were other limitations associated with the disproportionate response rates of some participant groups. The study found an unusually high response rate from women when compared to the number of women who lived on-campus during the fall of 2008. This was also true for the residents from one apartment complex. In each of these cases, the data could have been skewed towards the experiences of women and residents of one specific residence hall.

The study also was limited by the fact that this specific research has never been done before, therefore the survey instrument developed by the researcher had yet to be used. Despite this limitation, the instrument was validated by professional colleagues for content and face validity. The limitations will be further discussed in Chapter 3.

### **Assumptions**

Within this research, the researcher assumed that the participants gave accurate responses to the survey questions. Although all responses were anonymous or kept confidential, it was possible that some participants were tempted to provide socially desirable answers. Participants may have felt that the institution was looking for a

particular answer when it comes to the student engagement of first year students.

Therefore, the researcher sought to reassure student participants that all responses would be anonymous or, at a minimum, remain confidential in order to maximize participation as well as response accuracy. Since data collected regarding actual student engagement were

compared to social expectations that students reported prior to first semester enrollment, it was important to have the most accurate responses possible. In addition, participants were advised that data collected were intended to improve future experiences of first year residential students; therefore, honest feedback was most helpful as changes based on these results may be considered in the future.

### **Conceptual Framework**

Alexander Astin (1999) introduced a theory known as Student Involvement, which is the center for much of the literature related to this study. Student Involvement Theory is important because it touched on the importance of social involvement for students while providing for a healthy level of overall student involvement, particularly during the freshmen year. The first year experience was found to be critical for the entire experience; therefore, this year deserves extra attention in order to provide the best opportunity for student success. The literature review expanded on this concept since there had been significant research on the value of building social connections in order to be successful. Student Involvement Theory also addressed the significance of students' connectedness with their academics. Astin's (1999) research identified the importance of both the social and academic life of a student. A student who found social connections

but was unable to meet academic requirements was at risk. Likewise, a student who was meeting academic requirements but failed to fit into the campus socially was in jeopardy of not persisting. Astin (1999) defined Student Involvement Theory by stating it “refers to the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518). A highly involved student was defined as one who spent a significant amount of time studying, actively participated in student organizations, and regularly interacted with faculty and other students. Student Involvement Theory emphasized participation by the student in the learning process, whether learning was within or outside of the classroom (Astin, 1999).

This Student Involvement Theory asserted that students had limitations, which required administrators to design a student’s experience in order to maximize involvement without requiring unrealistic time commitments. The theory claims it is important to design campuses, buildings, outdoor space, and class schedules to create more natural opportunities for students to interact with one another as well as with faculty (Astin, 1999). Facilities may be complimented by policies that foster student interaction. One example of a policy that fosters student interaction would be to require freshmen to live on campus. When freshmen lived on-campus, they had more opportunities to become active participants in their education, thus resulting in them being more highly involved students (Astin, 1999). The concept of involvement informs the basis of this research. Student Involvement and other related theories are expanded in the literature review.

## **Definition of Terms**

There are several terms used throughout this document for which it is necessary to provide an operational definition to ensure readers understand the research. The terms are listed below.

- Academic major is the specific field of study upon which a student may choose to focus his or her academic efforts.
- Academic profile is the overall high school GPA and ACT of a particular entering freshman class.
- Academic readiness is an indicator of how ready a freshman is for college, calculated by creating an index score through a formula where high school GPA and ACT composite score are used.
- Active learning is the type of learning when a student is able to become deeply involved through actually doing the things that are being taught.
- Beginning Survey of Student Engagement (BSSE) is a national survey used prior to college enrollment to understand what first year students expect from their first year of college. The instrument looks at all facets of college life. For this study only certain questions related to out of classroom social experiences were used.
- Extracurricular activities refer to involvement with campus organizations during his or her academic career.
- Freshmen interest group refers to a type of living learning community, where freshmen share a common interest, live together in order to have ease of

programming opportunities around the topic of interest and in some cases take classes together.

- Graduation rates are the percentage of students who began college during a given fall semester and have graduated by the spring semester 6 years later (ie. the number of fall 2000 freshmen enrollees who have graduated by spring 2006).
- Learning community is a community of learners who are brought together through common courses that are interconnected in order to maximize student learning.
- Living learning community is a program that brings the residential experience in line with learning. The learning could be specifically linked with an academic course or field of study. It may also be linked to other types of learning that are not as closely related to the classroom (ie. leadership development, outdoor recreation, etc.).
- National Survey of Student Engagement (NSSE) is a national survey used at the end of the first year of college and again at the end of the fourth year to better understand about the level of student engagement in virtually every aspect of the student experience. This study focuses on a portion of the data from the NSSE that is related to the out of classroom social experiences.
- On-campus housing for the institution in this study includes both university owned and foundation owned residences, which were privately managed apartments. It does not include fraternity or sorority housing.



- Persistence is the return rate of first time freshmen students who return to the institution for their second or sophomore year. This term is used interchangeably with retention.
- Retention refers to the one year return rate of entering freshmen students who elect to return to the institution for their second or sophomore year. This term is used interchangeably with persistence.
- Satisfaction refers to the degree of a student's belief that he or she is getting the best possible experience.
- Social integration is the degree of social connection a student has in his or her college experience. This could mean developing friendships, becoming involved in campus organizations, etc.
- Student Involvement Theory is Alexander Astin's theory, which recognizes the importance of the total social experience on the overall college experience (Astin, 1999).
- State of Utah Index is the index used to determine admission according to high school GPA and ACT score in the state of Utah. In this research project, this index score was used to determine whether a student is a low, medium or high academic achiever upon entry into college.
- Student engagement is a broad topic covering many areas. For the purpose of this research, student engagement was defined and measured according to the freshman student out of classroom social experiences.

## **CHAPTER TWO**

### **REVIEW OF THE LITERATURE**

#### **Introduction**

This study focuses on the relationship of student housing as a factor in retention based upon academic readiness and student engagement. Before the research can be fully understood, it is necessary to grasp related findings from previous studies in order to provide the context for this research. The literature suggested a focus in three areas in order to properly unveil research related to this topic. The first focus in the literature is on general factors affecting the retention of first year students. It further expanded on matters related to a student's academic readiness and how academic readiness influences persistence. Finally, an exploration of the literature on student involvement (or student engagement) is necessary for a better understanding of the social needs of a college freshman.

#### **Retention**

The topic of retention for colleges and universities around the country continues to rise to the top as an issue that must be addressed by administrators. The risk is great for those institutions that are not able to achieve a level of success as it relates to student retention. Lower retention rates for institutions have resulted in significant financial loss and lower graduation rates along with jeopardizing schools' images among stakeholders (Lau, 2003). This is more than just a minimal risk. Astin (1997) claims "it would be irresponsible, if not self-defeating to fail to provide the support needed for students to be successful and eventually earn a degree even if it takes more than four

years” (p. 656). Before administrators can provide the support needed for student success, it is necessary to have a better understanding of why students leave and what can be done to minimize the loss of students from the freshman to sophomore year. It is easy to understand the disadvantages associated with lower retention rates; however, it is more difficult to understand the reasons why students leave college or why they choose to remain in school. According to Tinto (1993), 75% of students who left did so during their first two years of college. With such a high percentage of students dropping out in the first two years, it is even more important to gain a greater understanding of why students leave or why they choose to stay.

Astin (1975), in some of the earlier work regarding retention, identified a number of factors impacting the retention of students. This study also sought to gain an understanding of why students leave. Furthermore, the research addressed not only numerous pieces of demographic data, but also academic performance in high school, which has been found to be among the greatest predictors of future performance in college. Beyond the boundaries of academic and demographics, the study also investigated the role of financial aid, employment, residence, the characteristics of the institution and the student/institution match. Astin’s research revealed numerous demographic variables that significantly influenced the likelihood of graduation. The findings revealed important information about men, women, race, and religious affiliation and what influence each factor had regarding the retention of students. Outside of gender, race, and religious affiliation, some of the other contributing factors aiding in the retention of students included college GPA, remaining single without children, living on-

campus, having part-time jobs, and maintaining a healthy level of extracurricular involvement. While Astin (1975), found many other variables related to retention, those aforementioned were among the most significant according to his research. Astin's (1975) research is still looked upon today as some of the landmark research on the retention of undergraduate students.

Over the years, there have been several other studies of variables identified as key to predicting the retention of students, most of which were consistent with Astin's (1975) findings. The variables that have outlasted the test of time are high school grade point average, college entrance exam scores (ACT or SAT), first year college grade point average, race/ethnicity, and gender (Reason, 2003). A student who achieved an A average in high school was found to be seven times more likely to graduate college within four years as compared to a student who graduated from high school with a C average (Astin, 1987). Similar to high school GPA, college entrance exams (ACT and SAT) have been reported a positive linear relationship with retention. More specifically, Levitz, Noel and Richter (1999) found that institutions reporting the highest average of entrance exam scores had retention rates of 91%, as opposed to those institutions reporting the lowest average entrance exam scores, which retained only 56% of their students. Once a student enrolled in college, researchers began to look at first year college GPA as a measure of predicting persistence. Allen (1999, as cited in Reason, 2003) found that first-year college GPA was a significant predictor of between-year retention for all students in the study regardless of race.

Later retention studies sought to determine the correlation with race and

ethnicity and, as a result, these two variables were combined into one variable by some researchers. While combining race and ethnicity may not have been the right thing to do, it has been a common practice in the literature. Some of the most recent studies have revealed with statistical significance that Asian American and Caucasian students were more likely to persist than other racial groups (Reason, 2003). These findings were supported by Muraugh, et al. (1999, as cited in Reason, 2003) in an extensive study at Oregon State University. However, the effects of race were mitigated when other demographic variables such as family income, marital status, and gender were considered. This helps to better understand that when studying retention, race alone does matter, but it is less significant when considering multiple variables such as high school and college GPA, age, major, and special program participation. Institutions that only utilize ACT and high school GPA found that Caucasian students scored on average almost four points higher than African-American students on the ACT and score approximately .25 higher for their high school GPA. For Hispanic students the gap existed, but it was not quite as large, at approximately two points lower than Caucasian students on the ACT and .10 lower for high school GPA. This study also found that the college GPA averages for both African American and Hispanic students were notably lower than those of Caucasian students, at approximately .50 and .20 less respectively (Noble, 2003).

Retention studies regarding gender have resulted in mixed findings. Early studies found men graduating at significantly higher rates than women (Astin, 1975), while the more recent study by Peltier; et al. (1999, as cited in Reason, 2003) determined that

women were graduated at higher rates. A study by Reason (2003) was unable to find a statistically significant difference in the retention rates between men and women since 1999. The mixed results for the impact of gender indicated the need for additional gender-based retention studies in order to learn more about the differences and similarities between men and women and their college persistence.

In an interesting study by Kiser and Price (2008), whose research looked at many of the same aforementioned retention variables, a unique variable surfaced as a significant in the prediction of persistence. This study found, most notably among white students, that those who persisted earned six more cumulative credit hours at the end of the first year than those who did not persist. This was true despite both groups having very similar mean GPAs and standard deviations. This brought about a different retention variable that had not yet been introduced in the literature.

The demographic retention variables were helpful in understanding the broad concept of student retention, however, it was also important to gain insight as to why students left school when non-demographic variables were the cause. The research suggested that there were many reasons for a student departure, but only some of those could be controlled by the institution. The reasons discovered by Tinto (1987) which were outside of the institution's control included family/personal matters, financial problems, personal difficulties, and changes in academic or career goals. While an institution may have had little to no opportunity to influence, for example, a family emergency, there were other factors that the institution did have the ability to exercise at least some control. These reasons were broken into four categories: adjustment,

difficulty, incongruence, and isolation (Tinto, 1987).

Adjustment was defined as “the inability of individuals to separate themselves from past forms of association” (Tinto, 1987, p. 48). This could have been the result of an inability or unwillingness to move away from social or peer connections in high school into a new environment. It may have been related to the challenge of being away from family for the first time. On the other hand, Tinto suggested that the adjustment to college may not have been completely social in nature; it may have been an academic or an intellectual issue. Tinto concluded that a new student will face many challenges during the adjustment to college; the adjustment issues may stem from social, academic or intellectually related matters and any could result in a student failing to persist. He concluded that colleges and universities should seek to find the students who are struggling with their adjustment in order to intervene before it was too late.

Tinto’s research further claimed that college also brought about new academic demands that some students were not prepared to handle. This was true both for students who performed well in high school and those who may have been sub-par academically. The students who struggled often reported the lack of guidance and support for a particular subject as compared to high school. This is known as difficulty, which was found to be more prominent for certain students. Difficulty is one of the greatest challenges for students who came from poor performing public high schools. In fact, it was not uncommon for the best student from a poor performing school to struggle to a greater degree than an average student from a higher performing school (Tinto, 1987). While academic difficulty in some cases did overlap with adjustment issues, it was still

unique in the identification of students who chose not to return to campus. A student who experienced academic difficulty may have been facing an obstacle in one or more classes and, depending upon the severity could have eventually separated from the institution. Overcoming difficulty was found to be quite challenging. A student must have first recognized a need for help and been willing and able to ask for help. If a student was able to recognize the need and seek assistance, then it was critical for the institution to have the resources available to help the student overcome the difficulty.

The third of Tinto's categories was congruence, which also may seem to overlap with adjustment and difficulty. Congruence was found to be related to academic or social matters, thus creating the overlap. Incongruence may have occurred due to academic expectations being either too high or too low resulting in voluntary departure. Students may leave the institution because they felt the school was either too hard or too easy. Expectations that were too high for a student to achieve may have eventually led to involuntary departure from the institution. Likewise, expectations that were too low may result in departure as the student was looking for enrollment in a more rigorous institution. Whether voluntary or involuntary departure, this could clearly overlap with difficulty. Incongruence also resulted between a student and his or her peers (Tinto, 1987). Incongruence between peers was seen through differing religious views, age, race, gender or social orientation. This would take place when the majority of the student body held or was perceived to hold one belief or value and the minority of students had opposing views. Differing religious views may have occurred at private faith based institutions that were seeking to have a more diverse student body. As the diversity of



belief penetrated the campus, in some cases it led to an uncomfortable setting for students with a belief system contrary to the majority and resulted in an eventual departure for those with differing beliefs. Similar experiences occurred at public institutions, where some members of the student body did not adopt the values of the college or university, and resulted in departure for the student (Tinto, 1987).

Finally, isolation was the last category where an institution had some influence on whether or not a student chose to return. Isolation, like congruence, was shown to overlap with adjustment and difficulty, but it actually was an issue that went deeper. Isolation was found to occur when a student was not building connections with someone on-campus. The connections could be with a faculty member, staff member or a fellow student. Isolation often occurred for students who were previously able to make the necessary social connections to fit into a community, but were not able to do so in college. Isolation did not just occur for those students who may easily be recognized as socially awkward or out of place. It also did not occur just for students who were not performing well in the classroom. In fact, many students who reported a feeling of isolation were doing well academically. Isolation was often more prominent for students who were married or in a position that required full-time work. Those responsibilities prevented students from being able to make important connections to the institution (Tinto, 1987). The connections that a student made at his or her institution were quite important and directly impacted the decision to return for a second year and beyond. A student found to be isolated was clearly at risk and less likely to persist. Campus resources may have never reached these students due to the difficulty of identifying

someone who was isolated. Identification was most difficult of all reasons for departure, because it was not uncommon for a student in this situation to be performing well academically and therefore go unnoticed until it is too late.

While the earlier work of Astin and Tinto may seem somewhat dated, researchers revealed that issues of the 1970's and 1980's were not so different than what was found in the 1990's. Terenzini, et al. (1996) delved into the reasons students did not return for their second year. First of all, it was discovered that some students left due to personal finances, a poor fit for the student, change in academic or career goals or other personal circumstances that were beyond the institution's control. Secondly, they determined that some institutions had failed to create an environment where students could have their educational needs met both inside and outside the classroom. Third, some students were unable to integrate into the student population and this resulted in not meeting the academic requirements as well. Any of these could have led to additional stress, which made a student feel overwhelmed during the first year of college. Finally, students may have failed to return because they did not fully value the importance of an education.

Tinto (1975) asserted the importance of providing a balance of support for all students. A student who was socially integrated into campus but lacked sufficient integration into the academic part of the campus could have easily left the institution. Social connections and academic connections were important, but they were not independent of one another. Terenzini's (1996), research contributed to a better understanding of the balance between academic and social support that a student needed to persist. In addition, the 1997 research by Tinto found that more significant academic

involvement contributed to greater social connection for students. Tinto's (1999) research revealed that the more actively involved a student was in their learning, the more likely they would persist to the second year and beyond. Therefore, it was critical that an institution provide consistent and clear information about its requirements. Furthermore, he ascertained that institutions should provide the necessary academic, social, and personal support that a student would have needed to be successful (Tinto, 1999). It was important to find this balance because as "academic and social integration increases, so does persistence" (Kiser & Price, 2008, p. 423).

Astin (1999) synthesized all of this research as well as his own and coined the term social integration. The notion of social integration encompasses not only what most would think of in regards to a student making friendships and having quality social interaction, but it went deeper. Beyond the building of peer friendships, it referred to involvement with campus life. He deemed a socially integrated student as one involved with campus organizations whether they were in a Greek organization, a campus ministry, intramurals or any other campus group. The concept of social integration even went a little deeper by referring to interactions between students and faculty or between students and staff. This was where formal academic learning and involvement on-campus met. It was a step toward a student developing holistically (Astin, 1999). As the research revealed the risks associated with adjustment, difficulty, incongruence, and isolation, it was noticed that social integration was, or at least could have been, an aspect influencing a student's decision to return.

As seen in the research, there was some conflicting data regarding the influence

social integration had on academic integration and vice versa. However, it was clear that both were important. Students who did not succeed academically were less likely to remain at the institution and in some cases may have been placed on academic probation or even suspension due to poor performance. Likewise, students who were not able to integrate socially may not have stayed for a second year regardless of how they had done in the classroom. Providing an outlet for active involvement learning seemed to be the key according to Tinto (1999). Active learning was a shift from what most freshmen had experienced. Bonwell and Eison (1991) revealed most first year students learned as spectators, because there were limited opportunities for student participation. The classes that they took were also detached from one another, therefore making it difficult for students to try and make connections between the courses that they were taking. Active learning allowed for the students to not only be engaged in the work they were doing, but also to understand what they were doing as they obtained new information. As active learning took place, students would have been more likely to view their course work as something that was rewarding. Furthermore, active learning led to more classroom interaction and friendship development that could make such a difference in a student's decision to return (Braxton, Jones, Hirschy & Hartley III, 2008). Creating opportunities for active learning in order for students to participate at higher levels rather than simply observing was recognized as a challenge, but it was found to be another method for enhancing the retention rate of first year students.

As higher education processed the factors of retention, the 21<sup>st</sup> century was fast approaching and many wondered what would change, if anything, in the 2000's.

Pascarella and Terenzini (1998) began to look at the many retention related issues and offered a summary of their findings to help administrators build successful models for retention. The conditions outlined included:

...small institutional size, strong faculty emphasis on teaching and student development, a student body who attended college full time and resided on-campus, a common general education emphasis or shared intellectual experience in curriculum, and frequent interaction in – and outside the classroom between students and faculty and between students and their peers. (Pascarella & Terenzini, 1998, p. 152)

Creating an environment that fostered each of these conditions was no small task, particularly while taking on both old and new challenges. Institutions have found that the population of students to be more diverse, therefore generating new student support needs. The new century would also bring about more part-time commuter students who worked more hours, which was an obstacle to social and academic integration (Pascarella & Terenzini, 1998). Institutions also found themselves in a time of shrinking financial support, which obviously made it more difficult to build successful retention models which called for additional resources. Shrinking financial support has also been found to be a challenge in dealing with new demands for greater technology that was changing daily and may have been able to help with retention. Pascarella and Terenzini (1998) suggested bringing more technology to the traditional classroom to aid in the teaching and learning process. Regardless of which direction this discussion would go, it was thought to be imperative that administrators keep the focus on the needs of students in

order to retain them (Pascarella & Terenzini, 1998).

Lau (2003), in a complementary fashion, recommended different approaches that if implemented appropriately would better meet freshmen student needs, and therefore improve upon retention rates. Learning centers were one tool she suggested to support students. An example of a learning center could simply be a specialized tutoring center for math or it could have been a place for students with disabilities to get additional assistance according to their specific needs. Another option would be to implement a required freshmen year program where first year students would be involved in a manner that connected them to the campus in many facets. These types of programs have been found to produce higher academic achievement along with increased student satisfaction, helping to create an environment for students to achieve greater things in the classroom as they were motivated to reach their highest potential (Gaff, 1997 as cited in Lau, 2003).

The retention studies showed that keeping student needs in the forefront of planning throughout higher education was found to be of obvious importance, but it was particularly important as it related to a student's first year of college. From the very first communication prospective students received, the message should be consistent about institutional requirements. If the message was ambiguous or unclear, confusion may set in very early for the students. Once the standards were clearly set and the support needed for academics was provided, social and personal needs came next. The need for involvement of all while learning was important in order for students to be retained (Tinto, 1999). The research also found it to be important to build facilities that fostered involvement, active learning, diversity, and interaction between students and their peers

as well as students and faculty, since buildings helped to create intentional encounters. This was seen in the building of residential facilities that formally or informally created positive interaction for students and even opportunities to connect learning in the classroom with where they lived (Tinto, 1999).

### **Reasons Freshmen Choose to Remain in School for a Second Year**

As research has revealed more of the reasons why students leave an institution, it is important to understand some of the factors that have contributed to a student's decision to remain in school. The factors reviewed in the following sections were related to academic readiness, social integration or student engagement, student housing and (living) learning communities.

#### **Academic Readiness**

In looking at the research related to academic readiness for college, in general the findings showed that students who performed better in high school as well as on college entrance exams tended to persist and graduate at higher rates (Gifford, Briceno-Perriott & Mianzo, 2006). While this is true, earlier research has also found some students who did not do well either on the entrance exam or did not produce a quality GPA in high school, yet were able to succeed in college (Reason, 2003). Due to this phenomenon, there has been additional research into the use of index scoring for college admission criteria. Research has found varying strategies which have been used to implement an index to determine admission standards, but in general such an index allows for a score generation based upon a student's combined high school GPA and ACT or GPA and SAT score or perhaps some other academic variable. Some institutions have decided to use an index

beyond the basic admission criteria to create a more diverse student body, which can be hindered if bias exists in a standardized test (Reason, 2003). If creating a more diverse campus is not a goal for an institution, then the use of only high school GPA or entrance exam scores may be sufficient. However, it should be noted that high school GPA or entrance exam scores alone did not consistently predict college GPAs. The use of the index scores did lead to a narrower standard deviation of college GPA. This finding supported the idea that an index score served as a better predictor for not only the retention of first year students, but for graduation rates as well (Gayles, 2006).

According to Gayles (2006), an example of a formula used by one university to generate an index score was:  $\text{Index score} = (\text{high school GPA} \times 500) + (\text{SAT Math} + \text{SAT Verbal})$ . This procedure addressed the admission concern surrounding the use of the SAT alone, as there was an abundance of criticism surrounding this test. The most notable criticism of the SAT is related to race and socioeconomics. The SAT has been found to be highly correlated with parental education level and income. The higher the educational level of parents and the higher the parental income level, then the higher SAT scores for the student (Gayles, 2006). Since minority test takers often had parents with less education and lower annual income, it severely limited a minority student's access to higher education. It was for this reason that some institutions have decided to utilize an index as opposed to a standardized test to make admission decisions.

In a study at two large southern public universities, researchers learned that in addition to high school GPA and entrance exam scores, locus of control played a significant part in the academic success while in college (Gifford, Briceno-Perriott &



Mianzo, 2006). Students with an internal locus of control, which is an indication that the student believed he or she had the ability to control an outcome, achieved significantly higher college GPAs than those classified as having an external type. This same study found that the freshmen who returned for a second year of college had significantly higher GPAs as freshmen than those who did not return (Gifford, Briceno-Perriott & Mianzo, 2006).

In a similar study, Christopher Mattson (2007) delved into high school leadership experiences as another variable to complement high school GPA and entrance exam scores in making admission decisions. This research found that students with leadership experience in high school, which was defined as a formal position in a club or sport, had slightly lower SAT scores but slightly higher high school GPAs. Once the students with leadership experience entered college, they performed better in the classroom with a mean college GPA that was approximately .17 higher than their counterparts who lacked high school leadership experience. Mattson (2007) asserted that institutions should look deeper than the use of high school GPA and SAT/ACT as these scores did not tell enough of a student's story and were not an adequate predictor of college success.

The study by Davidson and Beck (2006) added another layer to the existing body of research related to academic performance and retention. This research examined more closely the role of six psychological variables in a freshman's decision to return for a second year. The six areas were structure dependence, creative expression, reading for pleasure, academic efficacy (belief in their own academic ability), academic apathy, and mistrust of instructors. The significant findings in this study were not terribly surprising

in that the students reporting low academic efficacy and high academic apathy were found to be much more likely to have lower first semester GPAs and were less likely to return for their second year than their counterparts. While this may seem somewhat intuitive, it allowed administrators to take a closer look at their students in order to meet some needs before poor academic performance may force a student into a decision to not return. The research also suggested that identifying those with low academic efficacy and high apathy early on could have led to putting those students in contact with various support services or resources to help them achieve a level of academic success.

Salinitri (2005) conducted a study on low performing freshmen students who participated in a mentoring relationship with a faculty or staff member. The relationship between the mentor and mentee for the most part could have been characterized as an informal relationship where they would meet one on one throughout the first year. The students would discuss any number of things ranging from academic and professional interests, scheduling of classes, their own self-efficacy, or time management, to their varying social concerns. The purpose of the project was to encourage students as well as to point them to various campus resources while a connection between the student and a faculty or staff member was created. The results were that students reported satisfaction with the program and performed better in the classroom, which was evident in fewer failing grades, overall higher GPA and ultimately higher retention rates. More specifically, at the end of the program nearly 90% of the students were in good academic standing as compared to 57% of their counterparts who were not mentored during their freshmen year. Providing a good experience for a student through a mentor helped low

academic achieving students to achieve a level of success that otherwise they may not have experienced.

### **Student Housing**

The social integration that was needed for every student coming into college, regardless of gender or academic performance, often manifested itself very naturally for students who lived on-campus. The literature shows that students who lived on-campus had more opportunities to meet other students, were better able to build valuable friendships with others, were exposed to a variety of social events on-campus, and successfully transitioned away from high school friendships (Astin, 1975). This was all true despite the many negative issues that students had brought up regarding the on-campus living accommodations, which included small living arrangements, limited privacy, and campus policies (Christie & Dinham, 1991). In the qualitative research by Christie (1991), students who lived off-campus reported feeling that those who lived on-campus were having an easier time meeting people and making friends. The students who lived on-campus reported similar experiences in meeting new friends as suggested by off-campus students. The social connections made while living on-campus also helped to create a positive campus experience and decision to return for the sophomore year.

Christie (1991) went on to summarize the value of residential experiences by emphasizing the ease of making social connections due to living in close proximity to other students as well as having easy access to information regarding other campus events. Living on-campus was one way in which students were able to have more

student-to- student as well as student-to-faculty interaction, both of which were found to be key aspects for overall satisfaction with their campus experience (Astin, 1993).

The same research found there to be three effects that were directly attributable to living in a campus residence hall: “positive effects on attainment of the bachelor’s degree, satisfaction with faculty and willingness to re-enroll in the same college” (Astin, 1993, p. 367). Furthermore, the research of Alexander Astin (1999) found, “living in a campus residence was positively related to retention and this positive effect occurred in all types of institutions and among all types of students regardless of sex, race, ability or family background” (Astin, 1999, p. 523). It was also stated that a student who lived on-campus was more likely to develop a connection to campus. This connection served as a key component of a student’s decision to return to campus for a second year and beyond (Astin, 1999).

Pike (2002) demonstrated that there were other benefits beyond the social development that occurred for students who chose to live on-campus. Living on-campus tended to expose students to a more diverse environment, which was one way that these students reported more growth in their openness to new ideas. While this was generally true regardless of where the students lived, it tended to be more prevalent for students living in traditional residence halls, which typically included one or more large common area meeting locations. Since the rooms for residents were typically small with more than one resident per room, a desire to socialize in larger more comfortable locations existed. It was this type of residential design that created opportunities for students to meet and interact with fellow residents by creating more traffic and natural encounters through normal activity.

Pike (2002) also maintained that the social integration that occurred for students living on-campus was critical to the overall experience of students. It was obvious that a degree of academic success would be required in order to continue, but one can easily forget about the importance of social integration to campus life. Pike maintained that living among many students who came from similar background as well as from very different backgrounds not only helped in making friends but in becoming open to new people and new ideas. Being open to new things was also found to translate into openness in the classroom as students were exposed to many new concepts and theories through their academic discipline. The benefits of a diverse community were great, however, it was important to understand “that simply enticing a group of students with diverse backgrounds to attend an institution did not guarantee greater openness to diversity” (Pike, 2002, p. 296). Positive and sustained interactions between diverse students required ongoing efforts from administrators in order to reap the benefits.

Inkelas, Vogt, Logerbeam, Owen and Johnson (2006) added to the literature by suggesting that students who lived on-campus were more engaged with campus life and were more likely to persist from their freshmen to sophomore year. This notion was further supported by the research of LaNasa, Olson and Alleman (2007), who found that on-campus students reported greater satisfaction with their college experience in the NSSE (National Survey for Student Engagement).

In summary, living on-campus has proved to have a positive relationship with retention in multiple studies over the years (Astin, 1973; Chickering, 1974; Astin, 1977; Astin 1982; Astin, 1999). Students who lived on-campus were found to have a much

better chance of persisting to their sophomore year and eventually earning a bachelor's and or professional degree (Astin, 1999).

### **Learning Communities and Living Learning Communities**

Learning community (LC) and/or a living learning community (LLC) were two other strategies that have been used to help incorporate students into campus life and help create experiences that aid in the transition to college. A learning community is not just focused on the academic connection, but is another opportunity for social connections as well. A living learning community was intended to do both. LLCs have been tools to bring the out of classroom experiences to the classroom and vice versa. Both LCs and LLCs have had a focus on almost any topic imaginable and generally speaking have been successful.

Tinto (1993) studied the Freshmen Interest Groups (FIG) at a large public university. These groups were primarily set up around English composition courses along with optional courses of interest and allowed for participation with both students who lived on-campus and those who commuted to campus. For those students who lived off-campus, one of the greatest advantages reported by participants was the social connection that they established through the FIG learning community. The students felt somewhat isolated either living at home or in an off-campus apartment, making it difficult to build the ever important social networks needed to be successful in college. The opportunity to meet other students was one of the primary reasons that students decided to participate in the FIG.

Beyond the opportunity to meet new people, the students were able to build

relationships because they would see one another on an almost daily basis and for students at a large university, seeing a familiar face was an important part of their feeling connected. This notion was even supported by those who had a difficult time making friends in the FIG. Those who struggled and reported dissatisfaction with the FIG stated it was because they did not seem to fit into the group. Tinto's (1993) conclusion was that the students were seeking to belong and if the FIG could not help them belong, then they would seek to fit in somewhere else. Overwhelmingly, the students involved in a learning community reported more opportunities to fit in socially as the greatest benefit of the FIG. The students almost never mentioned what they learned in the classes they took but rather cited the impact of relationships they were able to establish through the courses they took.

For those students who participated in the FIG and lived with other FIG members their reports were similar. The most notable difference was that they seemed to have fit into campus socially more quickly than other students. In addition, and perhaps more important, the students had more opportunities to link the classroom learning with the social connections that were made. This was critical as many students at colleges and universities around the country first established a social network, doing so at the expense of their academic work.

However, this group of students involved in the FIG living learning community seemed to have taken advantage of the social benefit while managing to balance the academic rigors with other aspects of college life (Tinto, 1993). The FIG participants stated that meeting other people was one of the main reasons for choosing to be part of

the program. The freshmen were saying that they had a need to connect to the campus on a social level as much as anything else. The FIG helped to meet that need and as students became more comfortable with one another, they were then able to feel more comfortable in classroom interactions. According to students in the FIG, once their social needs were met then they were able to focus on the academic demands of college. Ultimately, the students were able to navigate both successfully (Tinto, 1993).

While learning communities have many benefits, one of the primary focuses of a LC in the research was to “promote knowledge integration and peer collaboration” (Franklin, 2000, p 33). The results were that students demonstrated an appreciation for connected and shared learning. This happened, at least in part, because of the enhanced interaction between students and the professor. A program such as this, where students took classes in a cohort model and were able to build an effective support group to aid freshmen in the transition to college, have been more successful in promoting peer collaboration. In addition, the students reported that they were better able to recognize the threads where their courses were woven together allowing for a deeper understanding of the material. According to Tinto (1997), learning communities facilitated a student’s knowledge construction through shared learning, therefore enhancing student learning. The students who participated in Franklin’s (2000) study demonstrated not only experienced enhanced learning, but also indicated an appreciation for group work that helped accomplish an academic requirement in addition to having built a support network with fellow students. The connected learning that occurred through a LC was important for a successful first year of college (Franklin, 2000).



Terenzini, Pascarella and Blimling (1996) indicated that in addition to higher levels of involvement and interaction, students participating with an academic based LLC had higher levels of achievement and were more involved with faculty. Kanoy and Bruhn (1996) also contributed to the field of study by revealing higher GPAs for participants in a LLC. LLCs are touching virtually every aspect of a campus experience and have had a considerable impact on satisfaction which cannot be overlooked. When administrators considered the time and energy that many students invest in attending college, the student's perceptions should not be bypassed. Additional insight was gained into student perceptions regarding their first year experience, through an assessment of satisfaction as measured for students participating in a LLC. The study sought to understand if the satisfaction of students involved in a LLC was different than the satisfaction of students who were not involved in a LLC. Students who participated in a LLC tended to experience higher levels of involvement, interaction, and satisfaction than those who were not participants in an LLC (Pike, Schroeder & Berry, 1997).

The research has clearly revealed many benefits associated with participation in an LLC, but it is important to understand some of the other variables associated with the LLC that impacted student satisfaction. Higher satisfaction was found to be important because it was positively correlated with retention (Blimling, 1993). In the case of the study by Li, McCoy, Shelley II and Whalen (2005), the LLC known as Fresh Start was housed in a traditional residence hall; it provided restricted visitation hours for members of the opposite sex and was also considered to be substance free. The students involved in this LLC had access to an academic resource coordinator whose primary role was to

support the academic needs of the students living on the hall. The academic resource coordinator was an addition to the community advisors, also known as resident assistants, located in all other residence halls.

The freshmen students who were a part of the Fresh Start program reported at the end of their first year that they were more satisfied with their overall campus experience than did other freshmen who did not participate in the LLC (Li, McCoy, Shelley II & Whalen, 2005). Programs such as this one lent further support that LLCs should be designed for freshmen in order to enhance their overall campus experience. Not only did they have more opportunities to be involved with peers and perhaps faculty, but the students were more satisfied with their campus experience and may have been more likely to return as sophomores.

One LLC known as Essence at the University of South Alabama was studied in order to better understand its impact on retention (Flynn, Lee & Hilton, 2008). The hypotheses tested in this study were that GPAs and graduation rates would be higher for participants in the Essence program. Another hypothesis was that minority students and men who participated in the program would have higher GPAs and graduation rates compared to their counterparts who were not program participants. The Essence program was designed to introduce students to college life while integrating classroom learning with their on-campus living experience. This was done through an introductory college course combined with residential programming designed to complement what was taking place in the course. The findings revealed that Essence participants earned a first year GPA that was .15 higher than non-participants and graduation rates were 45% higher.

The advantages proved to be equivalent for both Caucasian students and minorities, however, the benefit to women seemed to be stronger than for men (Flynn, Lee & Hilton, 2008). This program provided support for the development of more LLCs to integrate freshmen students into the college or university. The students were more likely to be socially and academically successful and expressed greater satisfaction than students who were not part of a LLC.

The final aspect from the literature related to learning communities is the idea of creating an environment for active learning. In Bonwell and Eison's 1991 study, faculty had the opportunity to create an environment in the classroom where "active learning" would have taken place. Active learning would have occurred when students were involved in doing things associated with the subject and putting thought into why and how the work should be done. While active learning may be more difficult to teach in some disciplines and easier for others, it has proven to be an effective strategy to enhance student learning. Active learning was found to foster more interaction between students in the classroom, which created opportunities for friendship development. As friendships developed, active learning created a link between academic and student life, which was good both for the student and the institution. More importantly, when active learning took place, research suggested that there was a positive impact on student learning (Sorcinelli, 1991). Beyond a positive impact, the students viewed their course work as something that was more personally rewarding (Braxton, Milem & Sullivan, 2000). Furthermore, active learning has been linked directly to persistence at eight residential private colleges and universities with religious affiliations (Braxton, Jones, Hirschy & Hartley III, 2008).

There is great depth and breadth in the literature on the subject of freshman year satisfaction and retention, which are the foundation of this research project. The previous findings lent weight to the idea of learning more about the relationships between academic readiness and academic major, as well as how social expectations prior to enrollment compared to actual social experiences at the end of the first year. The literature also provided merit to investigating the relationship between first year social experiences and academic readiness. Finally, the review of the literature suggests that additional research be done to better understand how academic readiness impacts the perception of freshmen residence hall experiences.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Introduction**

This study used a mixed methods design in order to determine the interrelationships of academic readiness, social integration and the perceptions of residence hall experiences of returning sophomores at the University of Tennessee at Chattanooga. The data collection process utilized existing data from participants regarding their social expectations prior to enrollment and their actual social experiences. It also collected data regarding student feedback on a residence hall perception survey. These data were added to enrollment data in order to address the following research questions.

1. For sophomore students who lived in the residence halls during their freshman year, was there a relationship between academic readiness, as determined through an index using high school GPA and ACT and their academic major?
2. How did students' social expectations at the beginning of their freshman year compare with their practice at the end of the year?
3. What was the relationship between students' first year student engagement and their academic readiness levels?
4. How did the academic readiness of freshmen students impact their perceptions of their residence hall experiences?

This chapter continues with the description of the study design, subjects, methods and procedures, limitations, and data analysis. The data analysis section focuses on each

research question and the statistical methods used with a brief description of those methods.

### **Design of Study**

The study used a mixed-methods approach in addressing the research questions. The first three research questions utilized descriptive statistics to understand previously collected data. The final question was designed to collect both quantitative and qualitative data via a survey instrument that sought to understand more about freshmen perceptions of their residence hall experiences. The mixed-methods approach yielded a thorough picture of freshmen residence hall experiences while highlighting any differences that existed based upon academic readiness prior to enrollment.

### **Overview of Methods and Procedures**

Sophomore students who had lived in resident housing as freshmen were invited to participate in the study. Students were asked to consent to allow access to their data that had already been collected by UTC. More specifically, consent requested access to high school GPA, ACT scores, and results of their Beginning College Survey of Student Engagement (BSSE) and National Survey of Student Engagement (NSSE) scores from their freshman year.

For the purpose of this study, the State of Utah Index Score (Utah State Board of Regents, 2008) was used to classify academic ability. The State of Utah Index score took into account both high school GPA and ACT score to develop an index score necessary for admission into any of the state colleges or universities. This model, along with UTC admission criteria, defined low academic achievers, medium academic achievers and high

academic achievers at UTC. Once an index score had been developed, the researcher was able to determine the rate of return according to academic ability for the entire population of students who lived on-campus during the freshmen year.

Beyond admission and enrollment statistics, it was also important to understand the level of student engagement for freshmen who lived on-campus, which had been seen as a key variable in the retention of students in previous studies. At a minimum, student engagement would be seen through the number of organizations a student had joined or with which he/she had developed an affiliation. The research further explored the varying levels of student engagement based upon academic preparedness. Student engagement data from two online surveys and one paper and pencil survey were used: the Beginning College Survey of Student Engagement (BSSE) and the National Survey of Student Engagement (NSSE). The BSSE was given to first time freshmen students who attended orientation prior to enrolling for the fall 2008 semester. The survey was given in a paper and pencil format during the orientation. The second survey was given online to a random sample of all freshmen at the end of their first year of college. These surveys provided valuable insight into what level of student engagement was expected prior to enrollment and the actual level of engagement after experiencing two semesters of college. The use of the NSSE survey allowed the researcher to observe the progression of experiences related to campus engagement over the course of the first year of college.

The quantitative data from the three surveys, along with the enrollment information were analyzed by using a statistical software package that is commonly

known as SPSS. SPSS allowed for efficiency in running various statistical analyses designed to help answer the research questions (SPSS, 2009). The qualitative data were processed by using content analysis, a strategy used to find patterns or themes from vast amounts information (Morse & Richards, 2002, as cited in Berg, 2007).

### **Subjects**

The population in this research project was sophomore students at the University of Tennessee at Chattanooga who had been first year freshmen residential students during the fall semester of 2008. The population was made up of 1024 students; the sample consisted of 291 students who agreed to be a part of the study. The vast majority of these students graduated from high school in the spring of 2008 and enrolled at UTC for the first time in the fall of 2008. Additional survey data were collected and analyzed from participants who completed the Beginning Survey of Student Engagement (BSSE) before enrollment. The BSSE revealed information regarding the expectations about the student engagement that occurred during their first year of college. In addition to the BSSE data, an additional survey instrument that was designed for this study was used to solicit information from participants regarding their residential experiences (see Appendix C).

### **Data Analysis**

The first research question was addressed by analyzing ACT and high school GPA in order to establish an index score for each participant and determine if he or she was a low, medium or high academic performer. Once the level of academic performance had been established, the relationship between academic readiness and academic major was identified. The data gathered were analyzed employing descriptive



statistics, which are used “to summarize data so they can easily be comprehended” (Patten, 2005, p. 97). More specifically, the data were presented for better understanding through the use of frequencies, percentages and chi-square to determine significance.

The second research question also used descriptive statistics to determine the relationship between the variables of student engagement prior to enrollment and actual student engagement after the first year. Inferential statistics were also used, specifically through the use of a paired samples *t-test*, to determine if there were statistical differences in social expectations or actual student engagement of freshmen residents before and then at the end of their freshman year. The *t-test*, one of the most widely used statistical tests and likely the most well known, is a simple and straightforward test that can be applied in many situations (Lowry, 2009). “The *t-test* is often used to test the null hypothesis regarding the observed difference between two means” (Patten, 2005, p.119). A paired samples *t-test* was used to compute the difference between two variables and to determine if the average difference was significantly different from zero (Schloesser, 2000).

The third research question involved the use an analysis of variance (ANOVA). An ANOVA is much like a *t-test*; however, it has an advantage in that it is able to compare multiple means when a *t-test* can only compare two means (Patten, 2005). The ANOVA was used to determine if there was statistical significance to the students’ first year social experience based on academic readiness. A subsequent comparison of multiple means tests revealed any significant statistical differences that may have existed for the three groups of students. In addition to the ANOVA, the chi-square was used to

determine if significant differences existed between academic readiness and perceptions of institutional support for thriving socially and the opportunity to attend campus events.

The fourth research question was addressed by using data from surveys collected from first year residential students during the spring semester of their sophomore year. Much like the first question, descriptive statistics were used in order to summarize the quantitative data collected from the survey completed by participants (Patten, 2005). The survey also lent itself to collecting more detailed information through questions within the survey instrument, to determine a deeper understanding of the issues (Web Social Research Methods, 2009). In order to properly gain insight into student perceptions, it was necessary to go beyond a summary of data and dig deeper into student experiences by asking open-ended questions on the survey instrument used in the research.

These strategies lead to significantly more data to be analyzed. Morse and Richards (2002, as cited in Berg, 2007) claimed that the volume of information found in a qualitative study is enormous; therefore there must be a way to manage the data in order to get the most from the study. It is for this reason that the data from the open-ended questions were analyzed through the use of content analysis. "Content analysis is a careful, detailed, systematic examination, and interpretation of a particular body of material used in an effort to identify patterns, themes, biases, and meanings" (Leedy & Ormrod, 2005, as cited in Berg, 2007). As the data were reviewed, key words or phrases were labeled in such a way to be able to interpret the responses. A process of sorting the different themes then took place to ensure that each theme was recognized by the researcher.

## **CHAPTER FOUR**

### **ANALYSIS OF DATA**

#### **Introduction**

The purpose of this study was to determine the interrelationships of academic readiness, social integration, and perceptions of residence hall experiences of returning sophomores at the University of Tennessee at Chattanooga. The data collection process employed the use of both existing enrollment and survey data along with additional information from a residence hall perception survey instrument. Enrollment data were collected on the 291 participants who agreed to be part of the research. The data collected included high school GPA, ACT or SAT score, academic major, gender, and race demographics. In addition, results collected from two previously administered surveys were also gathered for participants. The Beginning Survey of Student Engagement (BSSE), which was administered to students attending orientation prior to enrollment during the summer of 2008, was one source of survey data used in this study. Of the 291 students who agreed to be part of the study, 195 had completed the questions on the BSSE while attending orientation.

The second existing survey used in this study was the National Survey of Student Engagement (NSSE), which was administered during the spring semester of the freshman year. There were 38 students who agreed to be part of this study and who also completed the NSSE. There were a total of 28 students who completed both the BSSE and the NSSE and agreed to be part of this research project. The 291 students who agreed to be part of this study also took an on-line residence hall perception survey. There are four research questions that guided the study:

1. For sophomore students who lived in the residence halls during their freshman year, was there a relationship between academic readiness, as determined through an index using high school GPA and ACT and their academic major?
2. How did students' social expectations at the beginning of their freshman year compare with their practice at the end of the year?
3. What was the relationship between students' first year student engagement and their academic readiness levels?
4. How did the academic readiness of freshmen students impact their perceptions of their residence hall experiences?

Chapter 4 contains the results of both the quantitative and qualitative data collected both the existing survey data as well as the data collected in the residence hall perception survey.

### **Quantitative Data**

The population for this study was made up of members of the fall 2008 freshmen class who lived on-campus at the University of Tennessee at Chattanooga and returned to the institution for their sophomore year. There were a total of 1024 students in the population. The residence hall perception survey, which is where participants gave permission to use the specified existing data, had 291 participants for a 28.4% response rate. In order to determine the academic readiness of participants, an index score was calculated using the State of Utah Index (Utah State Board of Regents, 2008), which is based upon high school GPA and ACT or SAT test scores. Based upon that index, the participants were broken into high, medium, and low groups in terms of their academic

readiness. A normal curve distribution, which would show 64% of participants being in the medium readiness group and the remaining 32% equally distributed among the high and low readiness groups, was used to define the groups. After applying the index, the academic readiness analysis specifically resulted in 54 participants considered high academic readiness, 183 medium, and 54 low. The results are presented in Table 4.0.

Table 4.0  
*Frequency and Percentage by Academic Readiness*

Readiness	<i>N</i>	%
Low	54	18.6
Medium	183	62.9
High	54	18.6
Total	291	100.0

Additional frequency data are found in Tables 4.1 and 4.2 for gender and race. As seen in Table 4.1, there are 76 males and 215 females which represent 26.1% and 73.9% of the participants respectively. The survey sample is disproportionate on the basis of gender breakdown of freshmen residents for the fall 2008 (59.4% women and 41.6% men) and is discussed further in Chapter 5.

Table 4.1  
*Frequency and Percentage by Gender*

Gender	<i>N</i>	%
Male	76	26.1
Female	215	73.9
Total	291	100.0

Table 4.2 provides frequency data based upon race, which represents consistent participation when compared to the actual breakdown of the race of residential freshmen

in the fall of 2008. The table shows 227 Caucasian, 52 African American, and 12 other, which represents 78.0%, 17.9%, and 4.1% of all participants respectively. This compared to 68% Caucasian and 32% African American, who actually lived on-campus during the fall of 2008.

Table 4.2  
*Frequency and Percentage by Race*

Race	<i>N</i>	%
Caucasian	227	78.0
African American	52	17.9
Other	12	4.1
Total	291	100.0

Frequency Tables 4.3 through 4.6 provide more data from the residence hall experience survey, which establishes some background for other data collected. Table 4.3 highlights the breakdown of responses according to residence hall. The highest number ( $N = 63$ ) of participants is from Lockmillers Apartments, which makes up 21.6% of all respondents. This is a little high in proportion to the number of freshmen that Lockmillers housed, which was approximately 15%. All other residence halls were in proportion to the number of freshmen who lived in that particular complex during the fall semester of 2008.

Table 4.3  
*Frequency and Percentage by Residence Hall*

Residence Hall	<i>N</i>	%
Boling	41	14.1
Decosimo	37	12.7
Guerry	6	2.1
Johnson Obear	37	12.7
Lockmiller	63	21.6
Stophel	55	18.9
UC Foundation	15	5.2
Walker	37	12.7
Total	291	100.0

Table 4.4 reveals that the majority of residents involved in the study lived in a building of preference (85.9%), but not with preferred roommates (35.7%). Not living with preferred roommates could mean that the students didn't have any preferred roommates or space availability didn't allow them to live with a preferred roommate. Approximately 1/3 stated that they lived in a building of preference and had at least one preferred roommate. There are additional data found in the table on those students who had a roommate of preference, but not a building preference as well as those with neither a building nor roommate preference. The results for both of these are that only 1.7% of the sample had a roommate of preference but did not live in a building of preference and 12.4% did not have a preferred roommate nor did they live in a building of choice.

Table 4.4  
*Frequency and Percentage by Room and Roommate Status*

Room Status	<i>N</i>	%
Building and Roommate Preference	104	35.7
Building Preference, but not Roommate	146	50.2
Roommate Preference, but not Building	5	1.7
No Building or Roommate Preference	36	12.4
Total	291	100.0

Table 4.5 provides important information on how long it took students to fit in socially. Nearly 60% of students indicated that they fit in socially within the first month, while another 25% took *one to two months* and another almost 9% fit in within the first semester. Overall, 92.8% of participants stated that they were able to fit in socially within the first semester.

Table 4.5  
*Frequency and Percentage on Time to Fit in Socially*

Time to Fit In Socially	<i>N</i>	%
1 month or less	168	57.9
1-2 months	75	25.9
1 semester	26	9.0
more than 1 semester	14	4.8
did not fit in	7	2.4
Total	290	100.0

Table 4.6 provides insight about whether students believed living on-campus provided adequate opportunities to develop significant friendships, meet people who



were different, or be involved in residence hall and campus activities/events. It should be noted that no less than 83% of students answered yes to these questions with 93.8% answering yes to the question about developing significant friendships.

Table 4.6  
*Frequency and Percentage of Interactions and Experiences*

Interactions and Experiences	<i>N</i>	%
<b>Developed Significant Friendships</b>		
Yes	272	93.8
No	18	6.2
Total	290	100.0
<hr/>		
Interactions and Experiences	<i>N</i>	%
<b>Meeting People Different from Self</b>		
Yes	244	84.1
No	46	15.9
Total	290	100.0
<b>Participation in Residence Hall Programs</b>		
Yes	252	86.9
No	38	13.1
Total	290	100.0
<b>Participation in Campus Activities/Events</b>		
Yes	242	83.4
No	48	16.6
Total	290	100.0

Before analyzing the data related to the first research question, whether there was a relationship between academic readiness and academic major, it is also important to review the academic major related data. The academic majors of participants were too numerous to conduct a valid statistical analysis, therefore the participants were grouped

either by college or with other similar majors in order to adequately analyze the data. When consolidated in this manner, there were 12 different academic major groupings which ranged from pre-major to business to health sciences. The results of the academic major after being combined are found in Table 4.7.

Table 4.7  
*Frequency and Percentage by Academic Major*

Academic Major	<i>N</i>	%
Biology	17	5.8
Business	49	16.8
Chemistry	18	6.2
Communications	10	3.4
Education	28	9.6
Engineering	14	4.8
Health Sciences	46	15.8
History/English	17	5.8
Performing Arts	10	3.4
Social Sciences	29	10.0
Undecided/Pre-Major	40	13.7
Other	13	4.5
Total	291	100.0

The four largest academic majors or major groupings were business, with  $N = 49$  or 16.8% of participants, health sciences ( $N = 46$  or 15.8%), undecided/pre-majors ( $N = 40$  or 13.7%), and social sciences ( $N = 29$  or 10%) of respondents. These four groups made up over one half of all participants at 56.3%. The remaining eight majors accounted for the other 43.7% of respondents. Each of these eight groups represented a range of 10 to 28 responses or 3.4% to 9.6% of total participants.

In order to determine whether significant differences were present between

academic majors, a chi-square test was performed and contingency coefficients calculated. The chi-square test is a family of distributions used to test for significance, and the contingency coefficient is used to determine the degree of association between two variables (Hinkle, Wiersma & Jurs, 2003).

Table 4.8 reveals data from each of the 12 academic majors. The data points show not only the actual count overall by readiness group, but also the count in each academic major.

Table 4.8  
*Crosstab by Number and Percentage of Academic Major and Academic Readiness*

Academic Major	Low		Medium		High		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Biology	1	1.9	11	6.0	5	9.3	17	5.8
Business	11	20.4	29	15.8	9	16.7	49	16.6
Chemistry	1	1.9	11	6.0	6	11.1	18	6.2
Communication	3	5.6	5	2.7	2	3.7	10	3.4
Education	7	13.0	16	8.7	5	9.3	28	9.6
Engineering	3	5.6	11	6.0	-	-	14	4.8
Health Sciences	7	13.0	31	16.9	8	14.8	46	15.8
History/English	3	5.6	11	6.0	3	5.6	17	5.8
Other	1	1.9	6	3.3	6	11.1	13	4.5
Performing Arts	4	7.4	4	2.2	2	3.7	10	3.4
Social Sciences	5	9.3	20	10.9	4	7.4	29	10.0
Undecided/Pre-Major	8	14.8	28	15.3	4	7.4	40	13.7
Total	54	100.0	183	100.0	54	100.0	291	100.0

The data described in Table 4.8 provided the necessary information to conduct the chi-square test. The test showed that there was no significant association between academic readiness and major ( $\chi^2 = 24.847$ ,  $df = 22$ ,  $p = .304$ ). In order to be significant, the probability ( $p$ ) would need to be .05 or lower. The findings provide for an understanding that there was not a significant relationship between academic readiness and academic major.

The second research question, addressing how students' social expectations at the beginning of their freshmen year compared with their practice at the end of the year, required the collection of data from the previously administered BSSE and NSSE surveys. BSSE and NSSE are widely used by colleges and universities in order to better understand the level of engagement expected by students prior to enrollment and actual engagement while enrolled. Both NSSE and BSSE touch on a wide variety of aspects of student engagement, ranging from coursework to faculty interactions, exposure to diversity, and co-curricular involvement.

For the purpose of this research question, two questions from both BSSE and NSSE were used to compare expectations with actual experiences. The first question from BSSE, which is in two parts, asked how many hours a student expected to spend in a typical 7-day week participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.). The second part of the question asked how many hours the student expected to spend relaxing or socializing (watching TV, partying, etc.). Participants were directed to answer both questions with a range of hours, such as *1 - 5 hours*, *6 - 10*, etc.

Two similar questions in the NSSE survey asked about actual time spent involved with co-curricular activities and time spent relaxing or socializing. The NSSE instrument was administered online during the spring semester of the freshmen year. This comparison allowed for a better understanding of expected time spent participating in co-curricular activities and time spent relaxing or socializing as indicated on the BSSE and actual time spent in these areas, which was discovered on the NSSE.

The second BSSE question asked how important it was to the student that the college or university provided support for students to thrive socially. The second part of the question asked on the BSSE how important was it to the student that the college or university provided opportunities to attend campus events and activities. Both parts of this question were answered on a scale ranging from *not important* to *very important*. The NSSE survey dealt with both of these questions in a similar manner, but it allowed for a different type of response. The response in the NSSE is on a Likert scale, where respondents used a scale where *very much*, *quite a bit*, *some*, and *very little* were options for participants.

In order to answer the second research question, the data from BSSE and NSSE were compared through the use of a paired samples *t-test*, which was used to compute the difference between two variables and to determine if the average difference was significantly different from zero (Schloesser, 2000). The paired samples statistics are reviewed in Table 4.9; the paired samples *t-test* follows in Table 4.10.

Table 4.9  
*Frequency, Mean and Standard Deviation for Paired Samples*

		<i>N</i>	<i>M</i>	<i>SD</i>
Pair 1	BSSE Co-curricular	28	3.39	1.750
	NSSE Co-curricular	28	2.54	1.666
Pair 2	BSSE Social Activity	28	3.46	1.374
	NSSE Social Activity	28	3.64	1.311
Pair 3	BSSE Social Support	28	4.75	1.323
	NSSE Social Support	28	2.93	.813
Pair 4	BSSE Campus Events	28	4.93	1.016
	NSSE Campus Events	28	3.04	.744

The findings revealed in Table 4.9 provide the mean (*M*) scores and standard deviation (*SD*) for both the BSSE and NSSE. The table reveals that students expected to spend approximately 12 hours involved in co-curricular activities, but they actually spent closer to eight hours. The researcher was able to determine this by converting the student responses into time spent. A response of 2 indicates 6 – 10 hours of time, a response of 3 indicates 11 – 15 hours, therefore a mean score of 2.54 represents approximately 12 hours. The expected to actual time spent decreased for co-curricular activities, while there was a slight increase when comparing expectations to actual time for socializing. In looking at pairs three and four, the result indicated that students found it important to have social support prior to enrollment ( $M = 4.75$ ) and the same students also felt that there were *quite a bit* of social support from the institution ( $M = 2.93$ ). The fourth pair also revealed that opportunities to attend campus events was important prior to beginning the freshmen year ( $M = 4.93$ ). This is in addition to the fact that the students felt that the institution provided *quite a bit* of opportunity to attend various campus events and activities ( $M =$

3.04).

The paired samples *t-test* as seen in Table 4.10 reveals important information in this study. The *t-test* is used to determine the difference between two means and the paired samples *t-test* allows for an understanding of the difference in the means, in this case from the BSSE to the NSSE. The research findings are significant for pairs one, three, and four. Pair one resulted in  $t = 2.072$ ,  $df = 27$  and  $p = .048$ . Statistical significance is also found in pair three, which resulted  $t = 6.460$ ,  $df = 27$  and  $p = .000$ . Finally pair four was also statistically significant and resulted in  $t = 8.838$ ,  $df = 27$  and  $p = .000$ . Also, in this case, pair two, the comparison of the BSSE and NSSE social activity, is the only pair that is not significantly different as noted with  $t = -.535$ ,  $df = 27$  and  $p = .597$ .

Table 4.10  
*T Scores, Degrees of Freedom and p Value*

Pair 1	BSSE Co-curricular – NSSE Co-curricular	2.072	27	.048
Pair 2	BSSE Social Activity – NSSE Social Activity	-.535	27	.597
Pair 3	BSSE Social Support – NSSE Social Support	6.460	27	.000
Pair 4	BSSE Campus Events – NSSE Campus Events	8.838	27	.000

The third research question, which sought to determine the relationship between students' first year engagement and their academic readiness levels, used both ANOVAs and cross tabulation in the analysis. Two of the questions used from the NSSE provided respondents the opportunity to answer by selecting the range of time spent participating in co-curricular activities and the range of time spent on social activities. The amount of time spent for each question could only have one correct answer for each participant.

This type of data is known as nominal data (Hinkle, Wiersma & Jurs, 2003). The question involves the use of analysis of variance (ANOVA) to test for significance. The descriptive data from the ANOVA can be found in Table 4.11.

Table 4.11  
*Frequency, Mean and Standard Deviation*

NSSE Co-curricular	Low	4	2.75	2.217
	Medium	23	2.78	1.704
	High	10	1.90	.994
	Total	37	2.54	1.609
NSSE Social Activity	Low	4	3.50	1.291
	Medium	23	3.52	1.123
	High	10	4.10	1.792
	Total	37	3.68	1.334

Table 4.11 allows for a visual illustration of the answers to the two questions based upon academic readiness. The mean score on the NSSE co-curricular involvement is almost identical with a  $M = 2.75$  (maximum of 8.0) for those considered low in academic readiness and a  $M = 2.78$  for those medium performers in academic readiness, while those high on the academic readiness scale had a  $M = 1.90$ . The research revealed through this table that those high on the academic readiness scale are spending approximately 4 less hours per week involved in co-curricular activities than expected in the BSSE. The standard deviation ( $SD$ ) for each range from  $SD = .994$  for high performers to a  $SD = 2.217$  for low performers, where the  $n = 4$ . The lower the  $n$ , then the more likely the  $SD$  will be a higher number making this an expected finding. Since the  $SD = .994$  for high performers, the data suggests that of this group the range in time



spent on co-curricular activities is less than five hours for any of the respondents. Once again, this can be inferred by translating the student responses into the time spent by the high academic readiness group on the NSSE co-curricular question.

The descriptive statistics in Table 4.11 also provide additional information regarding the amount of time students spend in social activities. As noted in the section on co-curricular involvement, low and medium readiness students spent almost identical amounts of time in social activities with mean scores of 3.50 and 3.52, respectively. The mean score of the high readiness students was actually higher with a mean score of 4.10. The high readiness students were spending on average approximately 2.5 hours more per week on general social activities than other students. The mean social scores according to academic readiness are also seen in Table 4.15. The table also points out that the  $SD = 1.291$  for low readiness,  $SD = 1.123$  for medium and readiness and the  $SD = 1.792$  for high readiness.

Table 4.12 and 4.13 illustrate the findings of the ANOVA that was conducted on the NSSE co-curricular activities and the NSSE social activities. In both cases, the data suggest that there is no significance at the .05 level, as seen in the case of the NSSE co-curricular where the significance is .347 and for NSSE social it is at .513.

Table 4.12

*Anova Table of NSSE Co-Curricular by Academic Readiness*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.626	2	2.813	1.092	.347
Within Groups	87.563	34	2.575		
Total	93.189	36			

Table 4.13

*Anova Table of NSSE Social Activity by Academic Readiness*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.469	2	1.234	.681	.513
Within Groups	61.639	34	1.813		
Total	64.108	36			

As the data analysis continued to focus on the relationship between first year student engagement and academic readiness levels, two other NSSE questions were examined. These two questions asked students to what extent the institution emphasized the support needed to thrive socially, and what opportunities existed to attend campus events and activities. The response options for these two questions were *very much*, *quite a bit*, *some*, and *very little*. These data were analyzed through the use of cross tabulations and the chi-square test, which is used to determine the degree of association between two variables (see Tables 4.14 and 4.15).

Table 4.14  
*Crosstab by NSSE Social Support and Academic Readiness*

NSSE Social Support	Low		Medium		High		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Very Much	-	-	2	8.7	1	10.0	3	8.1
Quite a Bit	-	-	4	17.4	3	30.0	7	18.9
Some	4	100.0	12	52.2	3	30.0	19	51.4
Very Little	-	-	5	21.7	3	30.0	8	21.6
Total	4	100.0	23	100.0	10	100.0	37	100.0

Table 4.14 presents a cross tabulation of the results from the 37 respondents who not only agreed to participate in the study, but had also previously completed the NSSE instrument during the spring semester of their freshmen year. Since the total number of cases ( $N = 37$ ) was relatively small, it was rather difficult to adequately compare the actual to the expected. However, the findings did show that the actual number of responses was relatively close to the expected. The greatest variance was found in the responses from the participants which indicated that the institution provided *some* support to thrive socially. The low academic performers expected to have a count of 2.1, while the actual count was 4.0. Among the high academic readiness group, the expectation was 5.1 while the actual count in this group was 3.0.

The chi-square test demonstrated that there is no significance ( $p < .05$ ) between academic readiness and student engagement as indicated in the NSSE social support provided by the institution ( $\chi^2 = 5.736$ ,  $df = 6$  and  $p = .453$ ) The finding supported the fact that significance did not exist between academic readiness and perceived social support from the institution.

Table 4.15 is a cross tabulation of the results from the same 37 respondents who answered the NSSE social support question (Table 4.14). The table shows the responses according to the number of respondents by readiness group.

Table 4.15  
*Crosstab by NSSE Campus Events, Academic Readiness and Social Support*

NSSE Social Support	Low		Medium		High		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Very Much	-	-	2	8.7	-	-	2	5.4
Quite a Bit	1	25.0	1	4.3	2	20.0	4	10.8
Some	2	50.0	13	56.5	6	60.0	21	56.8
Very Little	1	25.0	7	30.4	2	20.0	10	27.0
Total	4	100.0	23	100.0	10	100.0	37	100.0

The chi-square test showed that there was no significant difference between academic readiness and student engagement described as institutional support of campus activities and events. The specific results were  $\chi^2 = 3.971$ ,  $df = 6$  and  $p = .681$ . Therefore, the findings were that there was not a relationship between academic readiness and support through campus activities and events provided by the institution.

The final quantitative data that are revealed in Table 4.16 stem from the residence hall survey. This table presents the findings from participants who answered the final question from the residence hall perception survey. The question asked if the campus living experience contributed to the decision to return for the sophomore year. The results found show that 83.5% of participants believed that living on-campus contributed to their decision to return for the sophomore year.

Table 4.16  
*Frequency and Percentage of Decision to Return*

Living On Contributed to Decision to Return	<i>N</i>	<i>%</i>
Yes	242	83.5
No	48	16.5
Total	290	100.0

### QUALITATIVE DATA

The qualitative data in this study are the result of the responses to five inquiries used in the residence hall experience survey. The five are listed below and provide the framework for the findings.

1. Please describe in as much detail as you like the type of interactions that you had with your roommates during your freshman year.
2. Please describe in as much detail as you like the type of interactions that you had with other friends during your freshman year.
3. Please list any campus organizations that you were regularly involved in during your freshman year.
4. In your opinion what was the biggest advantage to living on-campus as a freshman?
5. In your opinion what was the greatest disadvantage to living on-campus as a freshman?

The purpose was to learn more about the social interactions for residents. Specifically, were there any differences in experiences based upon academic readiness? While there were not any specific patterns or themes based upon academic readiness, there were overall patterns and themes. The results did not reveal any distinctions of

roommate experiences based upon the academic readiness. The findings in this area will be referred to as positive, negative, and neutral.

The positive themes that came out among each of the readiness groups were that the roommates would eat together, play games, and generally socialize together. The fact that the roommates ate together was evidenced numerous times and often referred to the roommates sharing meals prepared by the students, at campus dining facilities or off-campus restaurants. Eating together was the most prominent of the three positive themes that emerged while analyzing the data. It is clear that positive interactions with roommates took place during meal times, regardless of where the meal was shared. The respondents implied that meals together may have been planned and prepared much like a family would share a meal or they may have had meals after an impromptu trip to a campus dining facility or an off-campus restaurant.

The next positive theme discovered through the use of content analysis was the playing of games. Most students did not elaborate on the type of games that were played; a few did refer to playing video games, but the type of game did not seem to be as important as the fact that these students were enjoying similar recreational activities. Pike (2002) maintained that the positive campus interactions that occurred for campus residents were critical to an overall campus experience for freshmen.

The third positive finding was classified as “hanging out.” Some of the respondents used this phrase, while others made statements about watching TV together, just talking together and doing whatever may have come up at the time. While there do

not appear to be any particularly unique aspects of positive experiences for high, medium or low academic performers, it is apparent that there were many positive encounters between roommates during the freshmen year. The results found from this question alone are a reminder of the summary by Christie (1991) which referred to the ease of making social connections for those who live on-campus because of their close proximity to other students.

There were also some negative findings in this portion of the study. Some of the participants, regardless of academic readiness levels, expressed that there were disagreements with roommates. In most cases, there were not any specific details provided about the disagreements, just that they had occurred. Some of the respondents referred to the disagreements being minor or about things that didn't really matter all that much, but others would refer to roommates that "partied" too much. One student stated that she had a roommate that was "loud, rude, and just hard to live with." The majority of the participants were able to either work out their differences or at least manage to work through them while they were still living together. There were, however, a few situations that were severe enough conflicts to cause one or more of the roommates to change rooms during the freshman year.

The final theme that was discovered while analyzing the data was neither positive nor negative, but it was something that came up frequently. Many students stated that they lived with one or more roommates who were friends from high school or that they at least had they selected one another as roommates. While in and of itself this seems neutral, it was observed that most comments about living with friends from high school

were positive in nature. For example, one response discovered in the research, “I knew all my roomies except one from my hometown, so we did lots of activities together such as going to movies or taking a walk.” There were other negative statements about knowing roommates from high school that in comparison were in the minority. One student said, “One of my roommates was a friend from high school, but by the end of it we weren't really friends anymore.” Another concern that emerged related to high school friends was from the perspective of the roommate of two or more high school friends. It appeared that students in this situation had a difficult time penetrating the existing friendships and felt less at ease with their roommate experience, since they were feeling as if they were the “odd man out”.

The data revealed findings similar to those obtained in response to the first question. Again, there was no common thread based upon academic readiness. Since the focus was about friends, the comments in this area were all positive in nature, most notably found to be associated with campus organizations. The survey participants often referred to interacting with their friends through fraternity and sorority life, and/or involvement in campus ministries, academically related organizations, and intramural sports. Some of the specific comments by student survey participants included, “I joined a fraternity and loved it.” Another student stated “I knew no one at UTC when I came, so I had to make all new friends. The main way I did this was through joining clubs. Campus Crusade for Christ really helped me with this and I am still really connected within it.” Other students made reference to friends made through academically related



organizations or experiences, such as being part of the university Honor's Program, Theatre Department organization or the Emerging Leaders program, which was a living learning community available to approximately 20 students. One student said, "I loved the people I met my freshman year, in my classes and within the Honor's Program." Other students referred to participating in intramural sports or playing sports on their own with friends. In fact, friendships were formed through such events as indicated by this student, "I made a lot of friends through classes, intramural sports, and a campus ministry." Clearly, friendships were formed in many ways by the residents of student housing during their freshman year and these friendships were evidently important to the positive perceptions of students' first year of college. Friendships and social interactions were found to strengthen the overall experience and aid in the decision to return for the sophomore year (Kiser & Price, 2008). It does not matter how or where the friendships were made, but it was critical that friends were made. This is validated by the fact that 93.5% of respondents indicated that they had at least one significant friendship during their first semester of college. This was articulated quite well by one student response, "I feel that the friendships I made during my freshman year are more significant than any past friendships. We were able to spend more time together and had more options in how to spend our time."

As the attention turned toward involvement through campus organizations during the freshmen year, the pattern continued in that there was not any noticeable difference based upon high, medium or low academic performers. Many of the participants in this case simply listed the organizations where they were involved during their freshman year.

There were two categories of organizations where students were involved that were quickly noticed during the analysis phase: Greek affiliation and involvement with campus ministries. There were numerous references from students about virtually every Panhellenic and Inter-Fraternity Council Greek organization. The mentioning of campus ministries also appeared to be evenly distributed across the Christian faith based ministries. There were many other campus organizations in which students expressed involvement, which included student government (SGA), freshman senate, intramurals, varsity athletics, dance team/cheerleaders, and academic clubs. The students who returned for their sophomore year were clearly involved with a variety of campus organizations during their freshman year. Virtually every participant referred to being involved with campus organizations regardless of his or her academic readiness classification. The social interactions that occurred through campus organizations appeared to be quite meaningful to the students who participated in this survey.

After developing a greater understanding as to the experiences with roommates and friends, the qualitative analysis then sought to determine what participants perceived as the greatest advantage and disadvantage to living on-campus as a freshman. There were two very important conclusions which emerged from reviewing the data related to perceived advantages of the students who participated in the survey. The fact that students who lived on-campus had tremendous opportunities to meet other people was an advantage. The need to make social connections with other students was quite important according to the responses from many in this survey. The perceptions of the students in this survey were consistent with the findings of Astin (1999), who determined that if

students were integrated socially, they were more likely to learn and develop holistically. There is a need to fit in and living on-campus was identified as a way to meet other students, many of whom were in the same situation. The situation of being a freshman away from home and perhaps not knowing many people at the institution can be scary for many first year students, therefore creating opportunities to make friends is critically important.

The second item that was found was the convenience associated with living on-campus. Convenience meant a number of different things to students. For many, there was the convenience of being able to get up and walk to class in just a few minutes. This was noted by those who stated they enjoyed being able to sleep as late as possible. Others maintained that they simply liked the idea of not having to search for a parking space that, according to participants, is an apparent challenge for commuter students. One student said it like this, “The greatest advantage of living on-campus as a freshman, in my opinion, is that you live right there near all of your classes, you really do not have to worry about the parking.”

The above statement represents the opinions of many first year residents. Others also felt convenience was not just limited to classes or the liberating feeling of not have to find a place to park each day, but it also provided ease of access to residence hall and campus activities. The activities ranged from small scale resident assistant programs or larger scale concert or athletic events, but they all provided benefits in the minds of the residents. Still others appreciated the proximity to campus dining, which helped to take the worry away from their own food preparation. Finally, there were residents who

enjoyed the ability to go to the downtown Chattanooga area so quickly and easily. The downtown area was reported as providing a variety of entertainment options ranging from dining to night clubs and a many other attractions for college age students. The stated advantages to living on-campus were almost endless as the participants shared many other reasons that they enjoyed living on-campus during their freshman year. One student said it best: “I definitely felt that I got an upper hand on learning how to live on my own without my parents. I loved taking care of my own place and met a lot of people in some weird ways. Living on-campus was a way to get me to become more comfortable to college.” This statement provides an excellent summary as to the advantages of living on-campus during the freshman year.

The final portion of the qualitative research was based upon the perceived disadvantages to living on-campus as a freshman. There were a few themes that surfaced from this question. First and foremost was the issue of rules as noted by numerous residents. This is not a new finding in student housing related research; Li, McCoy, Shelley II and Whalen (2005) reported in a living learning community study that one of the greatest concerns reported by students was the policies that restricted freedom. This is similar to this study where many students indicated that they felt restricted by the numerous rules that were in place by the housing department or the university. The primary rule specifically mentioned was the fact that the university prohibited students from being able to possess or consume alcohol on-campus. A number of participants simply used the word “rule” as a disadvantage and did not provide any additional information. That was the case in this short, but direct comment from one resident

regarding the greatest disadvantage to living on-campus: “The rules and regulations about housing.” It is difficult to interpret comments such as this one, but they were numerous in the raw data.

The second most noticed perceived disadvantage was the cost of living on-campus. In general, there was very little explanation as to the specific concern with the cost. It was unclear if the students felt the facility was not worth the cost or perhaps it was that off-campus apartments could be found at a lower cost. It could have been in reference to the meal plan requirement, which results in an additional \$1100 out of pocket per year for residents of campus housing. According to one participant, “The cost was by far the greatest disadvantage. Being required to buy a meal plan every semester was a huge waste of money for me.” While other students mentioned eating together as an activity with friends or roommates, it appeared that at least a few perceived the meal plan requirement along with overall cost of campus housing to be a disadvantage.

The third most noticed pattern from this question included the reference to noise within the apartments. One student said, “The apartments had thin walls, so you could hear everything.” Some students referred to noise in general, implying that it was coming from other apartments, while others stated that their own roommates were the ones causing the noise as indicated by a student who made a direct statement, “My greatest disadvantage was having loud roommates.” Another noise variable was the nuisance fire alarms that occur from time to time. This was noted by one participant who said, “Fire alarms are the biggest disadvantage, people are immature and pull them, it was a big problem as a freshman.”

## **Summary of Results**

The analysis of data helps in understanding more about the relationship between academic readiness and student engagement during the freshman year. It was clear that a significant relationship between academic readiness and academic major did not exist. However, while exploring the social expectations of students before beginning the freshman year and actual experiences at the end of the freshman year, significance was found in three of four data points. The data showed significance when comparing co-curricular, social support, and campus event expectations with actual experiences. It was also important that the institution was perceived as providing support for students to thrive socially and opportunities to attend campus events and activities. Statistical significance was not found in the time spent relaxing or socializing when comparing expectations to actual experiences. Statistical significance again was not found in analyzing the data on first year student engagement and academic readiness levels. Finally, the qualitative data revealed interesting responses regarding student experiences ranging from interactions with roommates and friends as well as gaining insight into the perceived advantages and disadvantages of living on-campus. However, there were no noticeable differences in feedback based upon academic readiness.

## **CHAPTER FIVE**

### **SUMMARY, DISCUSSION, AND CONCLUSIONS**

#### **Introduction**

The purpose of this study was to examine the interrelationships of academic readiness, social integration, and perceptions of residence hall experiences of returning sophomores at the University of Tennessee at Chattanooga. Previous studies have shown positive correlation between retention and each of the variables including high school GPA and ACT/SAT scores (Reason, 2003). There have been other studies that investigated and found that the impact of social integration had a positive influence on satisfaction levels (Astin, 1999). Furthermore, satisfaction levels of students have resulted in higher persistence rates for freshmen (Inkelas, Vogt, Longerbeam, Owen & Johnson, 2006). This study contributed to the existing body of literature by examining the academic readiness of freshmen according to high school GPA and ACT/SAT scores as well as social expectations prior to enrollment, actual social experiences at the end of the first year, and perceptions of the residence hall experience. Since both academic readiness and social integration have been found to be important in the research, it is necessary for higher education administrators to broaden their understanding of how these variables are interrelated for students who lived on-campus. The information found provides an important foundation to the development of programs designed to enhance the overall student experience.

#### **Review of Methodology**

This study was executed with a mixed-methods approach with greater emphasis

on the use of quantitative data. The quantitative data used in this study were gleaned from enrollment statistics and various surveys administered to the sample before enrolling and during the first year of enrollment at the University of Tennessee at Chattanooga. Prior to enrollment, the institution collected students' high school GPAs and ACT scores in order to make admission decisions. For the purpose of this study, this information was converted into an index score based upon the formula used in the state of Utah (Utah State Board of Regents, 2008). The index score was then used to categorize students as high, medium or low in terms of academic readiness.

Additional data were collected and analyzed from two different surveys in which the fall 2008 freshmen class was invited to participate. The first survey was the Beginning College Survey of Student Engagement (BSSE), which was administered in a paper and pencil format during orientation prior to enrollment. The BSSE provided students an opportunity to share their expectations about the amount of time they expected to spend participating in co-curricular activities and time socializing. Students also shared their opinion regarding the importance of institutional support for thriving socially as well as opportunities to attend campus events and activities. The second survey, which was administered during the spring semester of the freshman year, is known as the National Survey of Student Engagement (NSSE). The NSSE is a complementary survey to the BSSE, but rather than looking at expectations it is used to understand more about students' actual experiences. The NSSE survey was administered online and students were invited to participate via e-mail. Like the BSSE, the NSSE asked about the amount of time students actually spent during their freshman year



participating in co-curricular activities and socializing. The NSSE also asked about emphasis of the institution in helping students to thrive socially and about opportunities provided for students to participate in campus activities or events.

The information from a residence hall perception survey dug deeper into the social experiences of residential students during their freshman year. The residence hall perception survey was both quantitative and qualitative in nature and was administered online during the early part of the sophomore year spring semester. The quantitative data from the residence hall perception survey provided additional information about each participant's room assignment status, the time it took for students to fit in socially, and whether or not there were adequate opportunities to make new friends, meet people who are different, or participate in residence hall activities and campus events. Finally, it provided an outlet for students to reveal whether or not they had a significant friendship during their first semester of college.

The residence hall perception survey was also the instrument used to collect qualitative data through five open-ended questions. The qualitative data were collected in order to provide a deeper understanding of the freshman year experiences (Web Social Research Methods, 2009). The qualitative data gathered required the use of content analysis in order to effectively manage the data (Morse & Richards, 2002, as cited in Berg, 2007). The themes and patterns were found while examining participant responses to the five open-ended questions. The questions on the survey were framed in such a way as to learn more about interactions between roommates and between friends. The survey also provided a way for students to identify any organizations with which they were

involved during the freshmen year. Finally, the survey allowed participants to share their opinion of the advantages and disadvantages to living on-campus.

### **Summary of Results**

The results of the study revealed both statistically significant findings and other findings that were not statistically significant. The research first demonstrated that there was not a relationship between academic readiness and major. This finding is important in order to insure any action taken to enhance the freshmen experience is taken for all students and not just for a group from a particular academic major. There was however, statistical significance when looking at the expectations of students and their actual experiences for three of the four questions on the BSSE and NSSE. The study showed that students expected to spend considerably more time involved in co-curricular activities than they actually spent, a difference of almost five hours per week. There was also significance in that students found social support to be important before enrolling and also felt that the institution provided *quite a bit* of support. Similar results were found in the analysis of the data regarding the BSSE and NSSE campus events and activities, where the expectations of survey participants were considered important. More specifically, the students felt that they had *quite a bit* of support from the institution through campus activities and events. There was no statistical significance found when comparing the expectations of time spent on social activities and actual time spent on social activities, which were nearly identical between the BSSE and NSSE.

Analysis of the data for the third research question determined that the findings were not statistically significant for the relationship between first year student

engagement and academic readiness levels. Regardless of academic readiness level, there were similar first year social experiences in regards to co-curricular involvement and social activities. Since there were no significantly different findings, administrators will be unable to infer that special co-curricular or socially related programming is needed for any specific academic readiness group.

The final research question was designed to understand if different perceptions existed between the different academic readiness groups. The findings did not reveal any unique perceptions from any of the three readiness groups, but there were several themes or patterns found that cut across all three groups. One of the most common themes included in the findings focused on the sharing of meals between roommates and friends. Sharing meals together was important as it provided a means for social encounters through lunch or dinner. Another theme made reference to playing games or simply hanging out together. The opportunity to hang out together was noted as way to spend valuable social time together in a number of activities. Other common themes found were in the type of organizations with which students were involved during their freshman year. Many were involved in Greek organizations, while others participated in various campus ministry organizations.

The final themes found were in the perceived advantages and disadvantages to living on-campus. Again, convenience was by far the greatest advantage shared by participants. Convenience for most was defined as the ease of access to campus facilities for class, campus activities, and dining. For others, convenience was more about the benefit of not having to “fight for parking.” The disadvantages shared by students were

the rules associated with living on-campus. Most respondents did not specify which rules were of concern, but those who did expressed dissatisfaction with the dry campus policy, which means that regardless of age students cannot possess or consume alcohol on-campus. The findings for this research question did not provide statistically significant insights into the perceptions according to academic readiness, but did reveal overall insights from all participants. The perceptions outlined in this section were found from all participants, regardless of their academic readiness prior to enrolling at UTC.

## **Discussion**

### **Interpretation of the Findings**

Once all of the quantitative and qualitative data were collected and analyzed, then answers to the four research questions became more evident. Enrollment data as well as other quantitative survey question information were used to answer the first three research questions and the qualitative data from the residence hall perception survey were used to answer the fourth question. The qualitative data provided important insights as to the residential experiences of freshmen, which were used to better understand both the positive and negative freshmen year experiences.

The respondents were proportionate to actual freshmen residents in most areas with a few exceptions. There were a disproportionate number of respondents that lived in Lockmilller Apartments, when comparing to all residents that lived in Lockmilller. Lockmilller is also the home of the university Honor's (UHON) Program. UHON is a highly competitive program for the best and brightest students, which may very well have placed the largest number of high readiness students into one residence hall. The

research did not ask about involvement in UHON, therefore it is unknown to what degree the findings have been skewed. In addition to the Lockmiller Apartment responses, there were a disproportionate number of responses from women. The fall 2008 freshmen class was made up of slightly less than 60% women, but women responded to this survey at a rate of almost 74%. Due to this, the findings lean more toward women and may not depict the experiences of men as accurately as they do for women. Finally, the response rate of African-American students was just shy of 18%, but African-American students made up 32% of all freshmen living on-campus, suggesting that the experiences of African-American students may be under-represented in the results.

While the data may not be proportionate based upon residence hall, gender, and race, the findings are important for the institution and should be reviewed closely in order to provide the greatest benefit for future students.

**Research Question 1: For sophomore students who lived in the residence halls during their freshman year, is there a relationship between academic readiness, as determined through an index using high school GPA and ACT score, and their academic major?**

A chi-square was used to determine if statistical significance existed between academic readiness and major. No significant association was found. This was the most straight forward finding as compared to the other three research questions. The 291 participants represented 12 different academic majors or groupings of similar majors. The number of participants by major or grouping ranged on the low end with 10 communication majors and on the high end of 49, who were business majors.

The findings for this research question validate the need for general enrichment or enhancement programs for all freshmen regardless of major. Programs designed to improve the freshman experience, while providing appropriate academic support increase the likelihood that freshmen will persist to their sophomore year.

**Research Question 2: How do students' social expectations at the beginning of their freshman year compare with their practice at the end of the year?**

The BSSE instrument was used to establish social expectations prior to enrollment. Specifically, the instrument provided expectations about both co-curricular involvement and social activity or event participation during the freshman year. Through converting the mean scores into an approximate number of hours that students expected to spend in these two categories, the research revealed that students had an expectation of spending 12 hours both in co-curricular involvement and social activities and events. The NSSE instrument provided the outlet to understand more about actual experiences in these same two areas. The study found that students spent four less hours involved in co-curricular activities than they expected prior to enrollment. This proved to be statistically significant.

A variation such as this indicated that students perceived they would have spent more time than they actually did with co-curricular activities and involved with campus organizations. Administrators should consider presenting these findings to future freshmen in order to provide them with information about the amount of time other students actually spent involved in campus organizations. This can be at least part of a

formula for a successful first year and a decision to return for the sophomore year.

The second part of the above question revealed that the expected time spent on social activities was approximately 12 hours according to the BSSE. This was very close to the actual time spent as found in the NSSE. This too can be a tool to provide students with an idea of how much time they should plan to spend involved in social activities during their freshman year. The results could help future students with time management and allow them to set realistic goals for their freshman year.

The second question from the comparison of the BSSE and NSSE, which was also in two parts, provided findings about the institutional support for students to thrive socially and opportunities provided for students to attend campus events. Before beginning college, as indicated in the BSSE, the students felt it was important to have support from the institution to thrive socially as well as to have opportunities provided by the institution to attend campus events. After one year on-campus, the students' NSSE results indicated that they felt the university provided *quite a bit* of support for both. This was statistically significant as demonstrated through a paired samples *t-test* that compared BSSE expectations to NSSE actual experiences. This aspect of the research is important; it contributed to an already existing body of research and suggested that institutions make reasonable efforts to help all students thrive socially and to provide opportunities to be involved in campus events and activities. The student responses to these questions revealed the importance of their first year social experiences.

**Research Question 3: What is the relationship between students' first year student engagement and their academic readiness levels?**

This question was answered through the use of descriptive statistics, ANOVA, cross tabulation and a chi-square. It was ultimately found through the ANOVA and chi-square that there was no statistical significance between first year student engagement and readiness levels. However, the research revealed that the high academic readiness group spent less time with co-curricular activities and slightly more time involved with social activities as compared to the low and medium readiness groups in the BSSE. While this was not statistically significant, it did contribute important information regarding the behaviors of the high readiness group during their first year of college. Despite this finding not being statistically significant, it provides important insight that may be shared with future freshmen and should be further investigated. Administrators should consider sharing this information to help future first year students decide how much time they should expect to spend in co-curricular activities. Making new students aware of the co-curricular time commitment made by students who persisted may be helpful in good decision making.

The low and medium readiness groups were virtually identical in the amount of time spent involved in co-curricular activities and social activities. While again this was not statistically significant, it showed the importance of providing opportunities to support all freshmen students through co-curricular and social activities regardless of academic readiness prior to enrollment. Through proper organization from the institution, students may be influenced by provision of additional encouragement and



support. In order to provide this support, it will be necessary through other means to develop a better understanding of their social needs. As additional insight is gained, beneficial social support can be designed and implemented to enhance experiences.

The NSSE survey focused on the perceived support from the institution for helping the student to thrive socially and to have opportunities to attend campus events and activities. Across each readiness group, the participants felt that the institution provided *some* support to help students thrive socially and to have opportunities to attend campus events. The survey allowed for students to select other options including *very much*, *quite a bit*, and *very little*. The research ascertained from this that the students believed there is room for the institution to improve its support of student social needs. The research showed in BSSE that the students' social expectations were important, but the support to thrive, as indicated in the NSSE, was somewhat lacking. This was found in general social needs as well as in the opportunities to attend campus events and activities. Therefore, the institution should take from this study that there may be a need to focus resources on the student social environment for all, regardless of their academic readiness. While additional research may be needed in order to determine the best way to go about supporting the social needs, it should take a priority when allocating resources for a campus.

**Research Question 4: How does the academic readiness of freshmen students impact their perceptions of their residence hall experiences?**

The research answered this question through the residence hall perception survey

and the use of five different open-ended questions that allowed for respondents to share additional information about their experiences with friends, experiences with roommates, campus organization involvement, and the advantages and disadvantages to living on-campus as a freshman. These qualitative data provided important information about student experiences, despite not finding any trends or themes for specific academic readiness groups. The participants revealed that living on campus was convenient for many reasons ranging from proximity to class, campus events, and organizational opportunities. The residential students also had more chances to make social connections that were important in becoming a part of the campus community.

The important themes that surfaced about interactions with roommates were the fact that the students would eat, play games, and socialize with roommates. Eating together was the most common interaction and it didn't seem to matter where they ate, but they did eat together often. They would eat together on-campus in the university center or dine together in the apartment and sometimes off-campus at area restaurants. The comments about playing games and socializing with roommates were more general in nature and could have meant different things for each participant, but they were clearly an important part of time together with roommates.

There was one negative aspect that surfaced about the interactions with roommates: roommates would have disagreements about things "that did not matter much." However, on occasion roommates had different value systems causing more severe roommate strife. The students' references to negative roommate experiences tended to be quite pointed, which implied a negative roommate situation

could seriously impact the residence hall experience in a harmful way.

The positive and negative roommate experiences occurred both for students who knew roommates from high school as well as those who didn't previously know their roommates. The fact that this was revealed in the study is a concern for administrators as this makes it more difficult to determine the best way to assign rooms and roommates.

The students reported similar positive experiences with their non-roommate friends as was reported with roommates, but the answers to this question began to overlap with the comments about campus organizations in which students were involved. The campus organizations proved to be a conduit to allow students to make friends during the freshman year. Many students cited involvement with Greek organizations and campus ministries as the two most noted areas of involvement. Greek affiliation and campus ministries were complemented with participation in a variety of other campus organizations such as student government, intramurals, and various academic clubs. The organizations noted were important aspects of student life and provided numerous opportunities to foster friendships.

Finally, the survey allowed for participants to share the advantages and disadvantages to living on-campus as a freshman. The advantages that came through convincingly in the study were the opportunity to meet other people and to make social connections. Next, the participants expressed the convenience of living on-campus. Convenience may have been about the ease of access to class, campus activities, or simply making it easier to avoid the hassles of parking on-campus for non-campus residents. The students were adamant about the advantages and these should be

highlighted for future freshmen to help frame the benefits of living on-campus.

The disadvantages shared by the students were the rules associated with living on-campus, the cost, and finally the noise from other residents. Many students expressed concern with the campus being “dry,” which implied that the freedom to possess and consume alcohol was important to many. The campus policy regarding alcohol is unlikely to be changed, as it would take considerable effort and support from many to even consider a change. There may have been other rules that caused concern, but they were not specifically mentioned. However, the concerns about both cost and noise something that housing administrators can address. The cost of campus housing should be carefully considered in all future plans to minimize the risk of driving students away from campus housing. The noise concerns are another issue that can be addressed and deserves attention from residence hall administration, student staff, and security as well as through educational programming designed to remind students that they are part of a larger community.

There were numerous findings through the qualitative aspect of this research that ranged from positive in nature to negative and even indications that students had challenging experiences that did not fit in either of those categories. The participants were asked if living on-campus contributed to their decision to return for their sophomore year. A strong majority of respondents, 83.5% , said “yes.” For many students, the on-campus experience was making a difference in their overall engagement with campus life and ultimately contributed in their persistence from the freshmen to sophomore year.

It is important for administrators to understand the perceptions of students, whether it is about roommates, friends, involvement in campus organizations, or the advantages or disadvantages to living on-campus. While this research was not able to distinguish experiences according to readiness, it provided valuable information about the student experiences at the University of Tennessee at Chattanooga.

### **Relationship of the Study to Previous Research**

There have been a number of research projects over the years that in part provided the interest for this study. Alexander Astin (1975) provided some of the landmark studies about the factors that influence retention. His work showed that variables such as high school GPA and entrance exam scores were among the most notable factors of retention. Tinto (1987) noted in his research that high school GPA had a strong positive linear relationship with retention. Similar findings involving high school GPA and entrance exam scores continued through the research by Levitz, Noel and Richter (1999) and the study by Gifford, Briceno-Perriott and Mianzo (2006). Clearly, academic readiness is important. There was also evidence found by Robert Reason (2003) that a number of lower performing high school students were able to be successful in college. The success of lower performing students was in part related to the social aspect of college life.

As the literature began to uncover some of the other key variables that influence a student's decision to remain in college, there was an emergence of information surrounding the social experiences. The research by Tinto (1997) found that students who had significant academic involvement were also more likely to have greater social connections. Many students were finding strong indications of being socially integrated

as a result of living on-campus (Christie, 1991), while others who participated in living learning communities reported higher levels of involvement than did others (Pike, Sschroeder & Berry, 1997). The relationship between academic life and social life that was discovered in the late 80's and 90's contributed to the research by Astin's (1999) study where the term social integration was coined. Social integration referred to having significant friendships, involvement with campus life and interactions with faculty.

The social integration went beyond just being around other students who were similar, but living on-campus exposed students to diversity of culture, beliefs, values, and helped students with being open to new ideas (Pike, 2002). Furthermore, students living on-campus who had opportunities to be part of living learning communities reported even higher satisfaction levels (Li, McCoy, Shelley II & Whalen, 2005).

The findings in each of these studies and similar studies were important in establishing the interest for this research. The literature addressed the role of academic readiness, the importance of social integration and findings about the experiences of students living on-campus. This study at the University of Tennessee at Chattanooga brings each of these elements together to add to the existing body of knowledge. This research specifically supports the findings regarding the importance of social integration. This is seen through the results revealed about the involvement with campus organization as well as the types of interactions with friends. In both cases, the examples of how students were integrated socially during the first year of college were clearer from this study.

## **Implications of the Study**

The goal of this research was to find out more about the interrelationships of academic readiness, social integration, and perception of residence hall experiences. It was the intent of the research to gain a greater understanding as to the experiences of freshmen students and determine if there was a difference based upon academic readiness. Some of the findings may be considered negative experiences, but it is still important to know about both the positive and negative experiences in order to develop a deeper understanding of all student experiences. A more broad understanding of student experiences may lead to the development of programs that will enhance the freshman year.

The decision to return after the freshman year has been linked to students successfully navigating both the academic and social aspects of college life (Kiser & Price, 2008). Studies have also shown that it is important for institutions to support the social needs of students, since the social connections have been reported as important (Astin, 1999). While other research shows that students who lived on-campus tended to be more engaged in campus life and reported higher levels of satisfaction (Inkelas, Vogt, Longerbeam, Owen & Johnson, 2006). Therefore, it is not surprising that Tinto (1993) found it to be important for institutions to balance the benefit of on-campus living with the academic needs of students.

The social integration as described by Astin (1999) was also found to be important in this study. The study revealed that 83.5% of the freshmen indicated that living on campus contributed to the decision to return to campus. As this data is linked

with social connections, which were reported as the greatest advantage to living on campus as a freshman, the value of living on campus as a freshman becomes clearer. Finally, when considering the fact that approximately 97% of freshmen reported having at least one significant friendship during their first year of college, the on-campus experience was shown to be important in this research.

Further implications for this study are related to learning communities and living learning communities. Tinto (1993) found that students who participated in living learning communities indicated that the relationships formed through the LLC had a greater impact than the course(s) associated with the program. In fact, the study found that making friendships was one of the primary reasons that the students chose to be involved with the LLC. Pike, Schroeder and Berry (1997) added to that concept by revealing that higher levels of involvement were discovered for students participating in LLCs. Li, McCoy, Shelley II and Whalen (2005) indicated that LLC participants were also more satisfied with their overall college experience.

Since this study provided mixed results in regards to statistical significance, it is important to utilize what was found to be significant in order to better support freshmen at the institution and within the residence halls. Where significance was not determined, there may be opportunities for administrators to learn more about student experiences in order to build sustainable programs designed to enhance the social engagement of freshmen at the University of Tennessee at Chattanooga and other institutions around the country. The utilization of more living learning communities should be strongly considered as programs to enhance the first year experience. The literature, as well as



findings from this study, set the stage for this type of program development and implementation to complement other efforts.

### **Recommendations for Future Studies**

While this study provided additional insight into the experiences of freshmen students, the research could be enhanced by broadening the scope to look at a larger sample. More specifically, there were only a small percentage of respondents who completed the NSSE survey. This is a limitation which makes it difficult to generalize to a larger population. If additional data were available about the actual first year experiences from a larger percentage of the population, it would be possible that different findings would surface regarding the social experiences based upon academic readiness. This is certainly true for the University of Tennessee at Chattanooga, but could also be the case for other institutions that utilize both the NSSE and BSSE or have the opportunity to measure social expectations and engagement through other methods.

In addition to increasing the sample size, research that includes a focus on first semester and first year college GPA as a tool to describe academic performance could be beneficial. The additional information on first year academic performance may lead to additional findings about the social experiences of students according to academic performance while in college as opposed to academic readiness prior to enrollment. First semester and first year college GPA have been found by some to be an even better predictor of student persistence (Allen, 1999, as cited in Reason, 2003). Findings that are of greater depth may lead to important programmatic decisions that could lead to assistance for students based upon their greatest need, whether academic or social in

nature. This would add a variation that was not considered in this study and again may provide important information to administrators.

Housing administrators who are concerned with applying best practices regarding room assignments could apply this research but only after a more focused study on the social experiences according to residence hall and room status. Finding out more from students about whether or not roommates were acquainted before enrolling in college and the quality of their relationships during the freshman year could determine if additional programmatic support should be provided based upon new findings. Furthermore, expanding the research by studying the type of roommate conflicts that occurred during the freshman year, the frequency of the conflicts, and ultimately how the roommates managed to deal with the conflicts could add enhance the existing literature. Roommates may have a tremendous influence, positively or negatively, and learning more about the role of roommates would not only be interesting but could be important to the overall experience as well as to decisions student make regarding whether or not to return for the sophomore year.

Finally, expanding this study to look at the students who did not return for the sophomore year could provide invaluable information to administrators. While some students may leave for reasons beyond their own control (Tinto, 1987), there are other students who, with the proper intervention, may decide to stay. It is for this reason that additional studies must look at the experiences of those who did not return after their freshman year in order to determine what contributed to the decision to leave. This type of study could have a significant impact and add greatly to the existing body of research.

Expanding upon this study would add even more important information to the existing body of literature. As more is learned about student experiences, then institutions will be able to greatly improve both the academic and social support that are provided to first year students.

### **Conclusion**

This study has contributed to an existing body of knowledge about the academic readiness of students, the role of social integration, and student perceptions of residence hall experiences. The research can assist administrators in future decisions surrounding the support of freshmen socially. This may be seen through new or different allocation of resources with the social integration of students in mind. The findings through the qualitative component of the research are also critical to the future programmatic decisions for both the housing department and the institution. There is the opportunity to enhance the positive findings as well as make changes in order to improve where negative items were discovered. This may in part be done through educating students on what they can expect from their campus living experiences, including the articulation of the advantages and disadvantages of living on-campus. It may also open the door for a thorough time management education program designed to aid freshmen in planning the best use of their time. Educating students about what they can expect may help with addressing issues before they become too serious. Ultimately this will be helpful in providing the best possible first year experience for college freshmen and contribute to persistence and graduation rates for all students.

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**APPENDIX A**

**Beginning College Survey of Student Engagement (BSSE)**

1. During the coming school year, about how many hours do you think you will spend in a typical 7-day week doing each of the following?

a. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.

0 1-5 6-10 11-15 16-20 21-25 26-30 30+

b. Relaxing or socializing (watching TV, partying, etc.)

0 1-5 6-10 11-15 16-20 21-25 26-30 30+

2. How important is it to you that your college or university provides each of the following?

a. Support to help you thrive socially

Not Important.....Very Important

1 2 3 4 5 6

b. Opportunities to attending campus events and activities

Not Important.....Very Important

1 2 3 4 5 6

## APPENDIX B

### National Survey of Student Engagement (NSSE)

1. About how many hours do you spend in a typical 7-day week doing the following?

a. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

0 1-5 6-10 11-15 16-20 21-25 26-30 30+

b. Relaxing and socializing (watching TV, partying, etc.)

0 1-5 6-10 11-15 16-20 21-25 26-30 30+

2. To what extent does your institution emphasize each of the following?

a. Providing the support you need to thrive socially

Very much Quite a bit Some Very little

b. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)

Very much Quite a bit Some Very little

## APPENDIX C

### Residence Hall Perception Questions

1. Gender
  - a. Male
  - b. Female
  
2. Freshman year housing assignment
  - a. Boling Apartments
  - b. Johnson Obear Apartments
  - c. Lockmiller Apartments
  - d. Guerry (aka 1000) Apartments
  - e. Decosimo (aka 2000) Apartments
  - f. Stophel (aka 3000) Apartments
  - g. Walker (aka 4000) Apartments
  - h. UC Foundation (aka 5000) Apartments
  
3. Please choose the option that best describes your first semester room assignment.
  - a. I was assigned to a building of preference with one or more desired roommates.
  - b. I was assigned to a building that was not my preference, but I did live with one or more desired roommates.
  - c. I was assigned to a building of preference with unknown roommate(s).
  - d. I was assigned to a building that was not my preference and with unknown roommate(s).
  
4. Did you have at least one significant friendship with a fellow student during your first semester of college?
  
5. How long did it take you to fit in socially to campus?
  - a. One month or less
  - b. One to Two months
  - c. One Semester
  - d. More than One Semester
  - e. I didn't fit in socially

6. Do you feel that your campus residential experience provided adequate opportunities to:
  - a. Make new friends  
Yes or No
  - b. Meet new people who are different from you  
Yes or No
  - c. Participate in residence hall activities and programs  
Yes or No
  - d. Participate in campus activities and programs  
Yes or No
7. Please describe in as much detail as you like the type of interactions that you had with your roommates during your freshman year.
8. Please describe in as much detail as you like the type of interactions that you had with other friends during your freshman year.
9. Please list any campus organizations that you were regularly involved in during your freshman year.
10. In your opinion what was the biggest advantage to living on-campus as a freshman?
11. In your opinion what was the greatest disadvantage to living on-campus as a freshman?
12. Did your on-campus living experience contribute to your decision to return to UTC for your sophomore year?

## VITA

Steven Hood lives in Chattanooga, Tennessee with his wife and three children. He began his career in 1995 after graduating from the University of West Alabama with a Bachelor of Science Degree in Business Administration and minor in Marketing. After working for several years in the private business world and eventually establishing a career path in higher education, he received a Master's Degree in Public Administration from Troy University in 2000. Upon acceptance of this dissertation in 2010, Hood received a Doctorate in Education an Education Doctoral Degree from the University of Tennessee at Chattanooga in Learning and Leadership.

Hood's professional experience in higher education has been focused in the area of housing and residence life. He has held positions both at Samford University in Birmingham, Alabama, as an Area Coordinator, and at the University of Tennessee at Chattanooga, as the Director of Housing and Residence Life. He has been actively involved in multiple professional organizations, including serving as the Secretary/Treasurer for the Tennessee Association of College and University Housing Officers from 2005 – 2008. He has also presented or co-presented on multiple occasions at professional housing conferences during his career. His presentations have focused on the role of public-private partnerships within the area of student housing, crisis response and sharing best administrative practices.

MEMORANDUM

TO: Steven Hood  
Dr. Vicki Petzko **IRB # 09-190**

FROM: Lindsay Pardue, Director of Research Integrity  
M. D. Roblyer, IRB Committee Chair

DATE: December 10, 2009

SUBJECT: IRB # 09-190: Interrelationships of Academic Readiness, Academic Engagement, Social Integration and Perceptions of Residence Hall Experiences of Returning Sophomores at a Southern University

The Institutional Review Board has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

***The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 09-190.***

Please remember that you must complete Form C when the project is completed or provide an annual report if the project takes over one year to complete. The IRB Committee will make every effort to remind you prior to your anniversary date; however, it is your responsibility to ensure that this additional step is satisfied.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page <http://www.utc.edu/irb> or email [instrb@utc.edu](mailto:instrb@utc.edu)

Best wishes for a successful research project.