

RELATIONS OF LEADERSHIP AND MOTIVATIONAL FACTORS
AND RESIDENTIAL SETTING OF
COLLEGE STUDENTS

By

DOUGLAS A. HALLENBECK

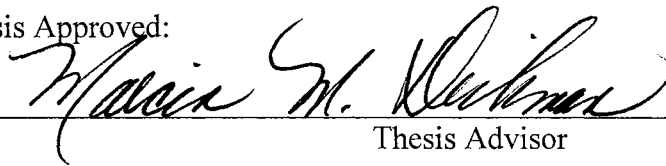
Bachelor of Science
Georgia College
Milledgeville, Georgia
1991

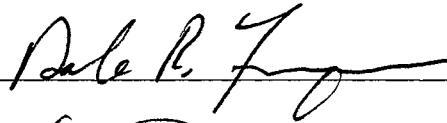
Master of Science
Mississippi State University
Starkville, Mississippi
1993

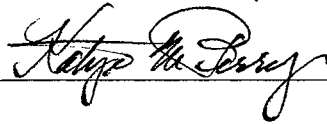
Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December, 2002

RELATIONS OF LEADERSHIP AND MOTIVATIONAL FACTORS
AND RESIDENTIAL SETTING OF
COLLEGE STUDENTS

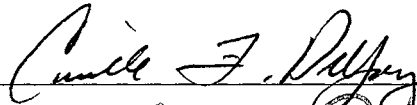
Thesis Approved:

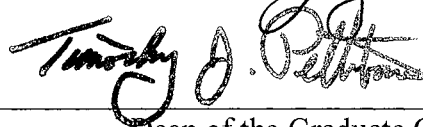

Thesis Advisor











Dean of the Graduate College

Acknowledgements

First and foremost, I must thank my parents for believing in me through the years. There were many times throughout my youth that I was willing to give up on myself, however, my parents would not let me and always encouraged me to be the best that I could. They helped me be me, and I hope I have made them proud. Without their love and support, I would not have made it this far.

Dr. Bob Huss has given me a great deal of support and is a tremendous role model. I truly appreciate the flexibility that he provided me in completing my coursework and my dissertation. I have been truly blessed to work in a department that is committed to the academic and professional development of the staff. Additionally, I must thank Sharon Stead, Carol McBryde, Kendra Weber, Rodney Maples and Wayne Prater. Their level of professionalism and performance enabled me to complete this dissertation and my coursework. Ms. Erica Woodley was also instrumental in helping me complete my dissertation. I can always count on her when I need someone to help out. I greatly value her as a colleague and a friend. I must also recognize Jean Koch as a very special person to me whom I admire greatly.

Furthermore, I am truly grateful for having Dr. Marcia Dickman as an Advisor. She has been a tremendous resource and has always pushed me to become a better Student Affairs professional. I am very thankful for Dr. Dale Fuqua's assistance and support. He always challenged me to keep going and

made me believe that I could finish this dissertation. I believe that I had the best committee possible, so I must also thank the rest of my committee, Dr. C. Robert Davis, Dr. Kayte Perry, and Dr. Camille DeYong.

I have been very fortunate to have a supportive and loving family. The love and support of my wife Amy has always inspired to me to continue, I would not be the man I am today, if were not for her strength, love, and understanding. I have also been blessed with the three greatest children in the world. Sydney, Ainsley and McKinley are the true joys of my life and what I accomplish I do for them. They have been very patient as daddy has been in class or writing. Their smiles and hugs always make my day brighter.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Theoretical Framework	2
Need for Study	5
Statement of the Problem	8
Definition of Terms	9
Assumptions and Limitations	12
Significance of Study	13
Research Questions	14
Organization of the Study	14
II. REVIEW OF THE LITERATURE	16
Introduction	16
Campus Ecology	19
Student Involvement	28
Leadership	36
Motivation	42
Summary	46
III. METHODOLOGY	48
Research Design	48
Research Questions	49
Participants	49
Instrumentation	51
Procedures	57
Data Analysis	58
IV. RESULTS	60
Research Question 1	60
Research Question 2	65
Research Question 3	67
Research Question 4	68
Research Question 5	69
Research Question 6	70
Summary	71

V.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	. 73
	Summary	. 73
	Discussion	. 82
	Conclusion	. 87
	Recommendations and Limitations	. 88
	REFERENCES	. 92
	APPENDICES	. 101
	APPENDIX AIRB Approval	. 101
	APPENDIX B Participant Instruction Sheet	. 103
	APPENDIX C Student Questionnaire	. 105
	APPENDIX D Astin's Permission to Use Research	. 111
	APPENDIX E Permission to use <i>Goals Inventory</i>	. 113
	APPENDIX F Demographics Sheet	. 115
	APPENDIX G Informed Consent Form	. 117
	APPENDIX H Correlation Matrix for Leadership Dimensions	. 119

LIST OF TABLES AND FIGURES

Table		Page
1.	Variance Associated with Astin's Typologies Initial Factors.	. 61
2.	Structure Matrix for Leadership Instrument 63
3.	Variance Associated with Leadership Inventory Rotated Factors	. 64
4.	Factor Scores Predicting Learning 65
5.	Factor Scores Predicting Performance 67
6.	ANOVAs for Leadership Dimensions and Residence 68
7.	ANOVA for Goals Inventory and Leadership Position: All 70
Figure		
1.	Factor Scree Plot of Leadership Dimension Initial Factors 62

Chapter One

Introduction

College graduates are expected to be leaders within the community. When a student leaves a university with a degree, they are often placed in positions of leadership at work and within the community. Therefore, leadership development should be an outcome of a college education. Leadership development is important to society as well as the individual. Astin (1984) reported that college students who are involved in the academic experience of the university are more likely to be successful in college than those who are not. Astin defined involvement as the “amount of physical and psychological energy that a student devotes to the academic experience” (p. 297). This includes time spent studying and going to class, as well as, the amount of time spent on campus in various other activities. These activities include interacting with faculty and other students, participating as a member of a student group, and holding a leadership position within a student organization. Cress, Astin, Zimmerman-Oster, and Burkhardt (2001) stated that students who are involved in leadership development activities experience positive outcomes from their college experience. The authors also reported that anyone who participates in leadership development activities realizes positive outcomes, which suggests that any student can benefit from leadership experiences. These positive outcomes are; a commitment to and better understanding of leadership, greater civic responsibility, awareness of multicultural issues, and the development of leadership skills (decision making skills, ability to deal with complexity, uncertainty, ambiguity, and taking risks).

Although leadership is often mentioned in university mission statements, it is seldom at the core of the curriculum or extracurriculum (Cress et. al, 2001). On college campuses, however, there are numerous, diverse opportunities for formal and informal leadership experiences. These experiences provide opportunities for deeper involvement within the university and, therefore, place the student in a position to be successful. These opportunities also provide leadership development outside the formal classroom setting. Most universities already have leadership opportunities available on their campuses, so attending to the leadership aspect of student development does not require new programs, rather greater attention to current programs. Student Affairs professionals can gain a great deal from understanding the relationship of leadership and motivational factors with residential setting. By understanding the underlying leadership and motivational traits of students that reside in differing environments, Student Affairs professionals can better facilitate the development of students. Student Affairs practitioners can provide greater exposure to experiences that will promote a higher level of student development to a larger population.

Theoretical Framework

Although there are many definitions of leadership, the definition used by Komives, Lucas, and McMahon (1998) is used in this study. Leadership is defined as “ a relational process of people together attempting to accomplish change or make a difference to benefit the common good” (p. 11). The authors use this definition because of its focus on the leadership process and not the individual leader. This definition is useful for university administrators because they are concerned with training and

developing leaders that are prepared to work well with others in a variety of settings once the students matriculate from the university. The settings where these graduates might provide leadership include work, family, local and national communities. Leadership is an important aspect of all of these settings and a concern for all people in today's society. Understanding the types of leadership exhibited by those in specific settings is useful in having an understanding of the people who are in those settings. It is the attitudes and beliefs of students in leadership positions that will determine whether leadership is exhibited (Komives, Lucas, & McMahon, 1998). So to determine the extent to which leadership is exhibited, first the attitudes and beliefs of students should be examined. This can be done by exploring the leadership and motivational traits of students.

Astin (1993a) developed a student typology to understand student's personalities by utilizing information about their attitudes, values, beliefs, self-concept, and behaviors. The typologies are based on Astin's (1984) student involvement theory. Certain characteristics, such as commitment to the university, involvement with faculty, time spent studying, and persistence at the institution are used to delineate group classification. Student involvement theory is based on the belief that the amount of time and energy a person dedicates to the university experience determines the level of success the student experiences. Identifying the involvement characteristics of a student to determine how groupings of involvement behaviors and attitudes affect success appears to be an important exercise. Pascarella, Whitt, Edison, Hagedorn, & Terenzini (1996) found evidence that college influences are somewhat specific to student subgroups. They suggested that colleges and universities need to understand the typology of the students to be able to better understand their development. Astin's (1993a) typologies were used in

this study as the leadership inventory. This was done because the typologies identify behaviors and attitudes specific to college students. These typologies allow the researcher to group involvement characteristics by grouping attitudes and beliefs. It is the behaviors and attitudes of the students that determine the success of leadership development programs and the overall success of the student. Additionally, the structural dimensions of the typologies were analyzed for this study.

Astin's (1993a) typologies are as follows: scholar, social activist, artist, hedonist, leader, status striver, and the uncommitted student. These typologies are fluid, people can move between typologies over time. In fact, students may and should be expected to move from one typology to another as they grow and mature during their college years. These typologies encompass a wide variety of attitudes and beliefs that relate to decisions that students make in college and the students' success. The typologies allow us to identify the behaviors and attitudes that relate to leadership. These typologies allow university administrators to understand students so that they can develop initiatives that will maximize student growth. The structural dimensions of Astin's (1993a) typologies identify the variance in behaviors and attitudes of students within the college community. While the leadership inventory used in this study is based on Astin's (1993a) typologies, the researcher determined not to use the specific typologies to categorize individual students; instead the scores were used as continuous variables. This was done so the researcher could determine a score for each typology for each participant. The intent of this study was not to categorize the participants, instead it was to examine how the leadership, motivational factors and residential setting relate to each other, therefore, using the typologies as a continuous variable proved to be more useful.

Understanding what motivates a student to seek a leadership position within an organization may be used to attract and retain students in leadership positions. Research has supported that being involved in leadership activities has a positive effect on a student's development (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Schuh & Laverty, 1983; Stanford, 1992; Winston, Bledsoe, Goldstein, Wisbey, Street, Brown, Goyen, & Rounds, 1997). According to Astin (1984), the most precious commodity on a college campus is student's time. Understanding a student's motivation for involvement helps the university understand how to best capture a student's attention, and, subsequently, their time. Identifying a common motivational goal within a group could help define group membership and provide valuable information to university administrators who are responsible for advising student organizations and designing leadership development programs.

Dweck (1986) identified two types of achievement motivation goals: performance and learning. Dweck observed that those individuals interested in performance goals wanted to obtain positive judgments about their ability, while those seeking learning goals wanted to increase their mastery. Performance goals can be viewed as a form of extrinsic motivation, and learning goals can be viewed as more intrinsically located. These goal orientations have seemed to provide a good means of understanding motivation in college students (Archer, 1994).

Need for Study

On college and university campuses, many leadership opportunities abound. Students must wisely select their level of involvement and the amount of time they

devote to various volunteer leadership opportunities. For the past couple of decades, student affairs administrators have viewed higher education as being more than just an in-class process (Creamer, 1990). Changes in higher education are more than just a student affairs phenomenon. Economics and erosion of public confidence in the higher education system has caused colleges and universities to focus more on outcomes such as student learning (Schroeder, 1996). College and universities need to better understand how to maximize student learning. Student behavior, such as student learning and leadership, cannot be viewed separately from his/her environment (Moos, 1973). Therefore, when studying leadership and motivational factors of students, one must take into account where the student lives. On many university campuses, there are two umbrella organizations that house a large percentage of students and identified student leaders: residence life and Greek life.

For the purpose of this study, an identified student leader is any student who holds an office whether they are elected or appointed by an elected official. Students that live on campus show greater levels of involvement (Astin, 1984). Astin further provided support for the idea that students who live on campus achieve greater success in terms of leadership and satisfaction with the university. On many college campuses, both residence life and Greek life housing would be considered on-campus residence. This is due to proximity to campus, ownership of the land where the students live (either a residence hall or a Greek house), and the rules that govern the residence. On many university campuses, a university code of conduct that determines the policies for each living unit governs both residence halls and Greek houses.

There appears to be a difference between these two living environments by observation. However, little research has been conducted to explore the differences between those that choose to live in residential life and those that choose to live in Greek life. Identifying differences in leadership and motivation factors can help university administrators better select training and development activities that meet the needs of specific groups. By understanding the leadership factors and the motivational goals of the leaders, a better job can be done in terms of recruitment and retention. This allows student affairs administrators a greater opportunity to interact directly with students and provide valuable experiences that will aid in the student's development. Additionally, administrators who advise student organizations can analyze the leadership characteristics and motivation of their students and determine if their current system is attracting the types of students that meet their organizational goals. There has been little, if any, research comparing the environment in residence halls to the environment in Greek houses. Therefore, this study will aid in filling in the gap of research comparing these two sub-environments.

There are many sub-environments within an university setting. These sub-environments are distinguished by student behavior, as well as, by physical space (Huebner & Lawson, 1990). Leadership experiences comprise a sub-environment that can be studied as having its own tasks that must be mastered. Huebner and Lawson further stated that while there is a body of research on the in-class and residence hall settings of campus ecology, little is known about the influence of social clubs, volunteer experiences, and other extra-curricular environments. Environments can be heterogeneous or homogeneous depending on the diversity of the sub-environment. The

diversity used by Huebner and Lawson (1990) includes not only racial and ethnic diversity, but also more broad characteristics such as choice of major, age, and learning style. Students tend to select environments in which others share similar characteristics. Additionally, students will change themselves to remain congruent with the environment. The proper person-environment interaction is one that has an appropriate balance of challenge and support. According to Sanford (1966), it is this balance that fosters an environment where a person can move to their next developmental level.

Statement of the Problem

The purpose of this study is to explore relations of leadership and motivational factors and residential setting of college students. Residence hall and Greek life students receive a great deal of university time and attention. Leaders are not born, they are made (Komives, Lucas, & McMahon, 1998). Therefore, the staff time and attention that these groups receive is an important resource in the development of leaders. Often, the leadership development on campus is seen as a “one size fits all” approach. The living environments of students that live in Greek houses and residence halls are different from one another. The environment is not the only difference; by a visual canvassing of these two groups, differences are apparent. If there are differences in leadership characteristics and motivations of student leaders that seek different types of student residences, it can be beneficial to determine the best way in which to recruit and retain student leaders, as well as, to provide stronger developmental experiences for the students. There is no single way that has been agreed upon to study homogeneity versus heterogeneity of student groups. By understanding the leadership factors and motivation of students,

training efforts can be focused to expand leadership skills and development more effectively. A deeper understanding of the differences between these two identified groups can help university administrators better understand why students choose one residence and/or involvement over another.

Definition of Terms

The Artist. The artist has a high rating in terms of artistic ability and values, creating artistic work, writing, and/or being accomplished in the performing arts. For a person to be placed in the artist group, s/he must have interest in more than one artistic area. Artists tend to come from well-educated families. Women are disproportionately represented in the artist group. Artists tend to have had artistic accomplishments in high school and have been involved in artistic endeavors such as plays. S/he tend to major in fine arts, music, speech, theater, journalism, and English (Astin, 1993a).

The Hedonist. The hedonist is mainly concerned with self-gratification. Students who drink, smoke, stay up all night, and advocate for the legalization of marijuana are classified hedonists. Not surprisingly, hedonists have lower high school grades than any other type. S/he come from average homes in terms of income and educational levels. African-American students are under-represented in this type. Hedonists tend to major in business, nursing, health technology and secretarial studies. Hedonists tend to seek out professional careers and not academic careers and do not have very high aspirations and show no pattern of career choices.

Hedonists tend to spend a great deal of time socializing and partying, and they tend to receive poor grades (Astin, 1993a).

The Leader. Leaders tend to perceive themselves as being popular, sociable, and outgoing. In general, leaders have a strong competence and interest in interpersonal skills. Leaders tend to come from affluent, well-educated families. Men and African-Americans are disproportionately represented in this type. Leaders tend to major in pre-law, clergy, or military service. Leaders tend to spend a great deal of time involved in athletic activities, student organizations, and partying. They are the least likely group to feel depressed or contemplate leaving the university (Astin, 1993a).

The Scholar. The scholar has high expectations, a strong academic and intellectual self-esteem, believes that s/he will obtain a high level of academic success and has high academic aspirations. Scholars tend to come from well-educated families. S/he tend to major in mathematics, science, and engineering (Astin, 1993a).

The Social Activist. High activity, assertiveness, and social involvement define the social activist. S/he reports that they feel that participating, helping, and being socially and politically active is important. In the social activist group, there is a disproportional amount of students from underrepresented groups. S/he tends to be more concerned with financing his/her education than any other type. Social activists tend to major in psychology, social sciences, education, and theology. Social activists are likely to be involved in political and social issues, participate in campus protests, attend a cultural workshop, and do volunteer work (Astin, 1993a).

The Status Striver. Being committed to being successful in his or her own business, having supervisory responsibility over others in the workforce, being well-off financially, obtaining recognition from peers, and becoming an expert in his/her field defines a status striver. African-American and Chicano students are well-represented in this type. Status strivers tend to come from somewhat less educated backgrounds and have poor academic performance in high school. Status strivers tend to be materialistic; s/he tend to major in accounting and business, physical education, agriculture, and architecture. S/he tend to receive poor grades, join a fraternity or sorority, and watch television (Astin, 1993a).

The Uncommitted Student. The uncommitted student is defined by his/her expectations concerning a change in majors, career choice, dropping out of college, and/or transferring institutions. The uncommitted student's relationship with the university is not stable. Uncommitted students tend to be undecided about their major. They typically perform academically as would be expected in relation to the general population; they report a lower achievement than other types (Astin, 1993a).

Leadership. Leadership is defined as “ a relational process of people together attempting to accomplish change or make a difference to benefit the common good” (Komives, Lucas, & McMahon, 1998, p. 11).

Learning Goals. Goals in which individuals seek to increase their knowledge and competence in order to gain mastery (Dweck, 1986).

Performance Goals. Goals in which individuals desire to gain favorable judgements of their competence and avoid negative judgements (Dweck, 1986).

Residential Setting. Is the location where the student currently resides while at college.

Student Involvement. “Amount of physical and psychological energy that a student devotes to the academic experience” (Astin, 1984, p. 297).

Student Leader. A university student that is currently in an elected leadership position or a student that is appointed to a leadership position by an elected student official.

Student Development. Theories that describe and explain the development of young adults (Winston & Anchors, 1993, p. 28)

Volunteer. A volunteer is a person who provides services without a personal financial benefit (Henderson, 1985).

Assumptions and Limitations

1. It is assumed that there are differences between the students who reside in residence life and those who reside in Greek life in terms of their leadership and motivational factors.
2. It is assumed that a person can have only one place of residence on a college campus at a specific point in time.
3. It is assumed that an individual’s scores on each of the motivation subscales are independent from the other subscale.
4. It is assumed that the scores on the assessment instruments truly represent the constructs.
5. It is assumed that there are differences in experiences based on the type of leadership position.
6. A limitation of this study is that it focuses on a population from one university, and, hence, generalizability is unknown.

7. A limitation of this study is that it uses participants that are already established in their place of residence, therefore, students could not be randomly assigned to residential setting.
8. A limitation of this study is that it is a correlation study, therefore, relationships not causality can be determined.

Significance of the Study

This study will be beneficial in helping student affairs administrators and faculty advisors understand the differences between students that live in Greek houses and residence halls, as well as, those who serve as leaders within residence life and Greek life. This allows those responsible for advising and training these groups to be able to focus training that will be the greatest benefit to the student and to the organization. By knowing the leadership factors of a student and his/her underlying motivational goal, experiences can be provided that increases his/her level of satisfaction, as well as developmental outcomes.

By understanding the differences between students based on residence, activities and developmental experiences can be provided to better meet the student's needs. This helps the stability of the organizations and the development of the student. By first determining whether there are differences between the leadership and motivation factors of those seeking different types of involvement on a campus, additional research could then explore these differences. If there is no difference in the students, then that, too, is valuable information in determining the type of leadership development program that should be designed. Members and the leaders shape the culture of an organization, and, if the university wants the culture to be positive and in line with its mission statement,

then it, first, must understand who the members are and what motivates them to be involved.

Research Questions

In order to explore the relationship of leadership and motivational factors and the leadership setting of college students, the following questions were addressed:

1. What are the structural dimensions of the leadership inventory?
2. Is there a linear relationship of the factor scores (leadership dimension) to the learning subscale on the *Goals Inventory*?
3. Is there a linear relationship of the factor scores (leadership dimension) to the performance subscale on the *Goals Inventory*?
4. Is there a difference in scores on the Goals Inventory (motivation factors) based on place of residence?
5. Are students living in residence halls significantly different from students living in Greek houses in terms of leadership dimensions?
6. Is there a difference in scores on the *Goals Inventory* (motivation factors) for those in a leadership position and those who are not?

Organization of the Study

Chapter 1 has identified issues important to the study of the differences in leadership factors and motivation between residence life and Greek life students. Astin's (1984) theory of involvement was briefly discussed. Astin's typologies were introduced,

as was Dweck's (1986) motivational goal classifications. Motivation in terms of student volunteers was discussed, as was the importance of campus residence. The purpose of this study and need for this study to the university, in particular student affairs, was provided.

Chapter two encompasses an overview of the literature related to campus ecology, student involvement, Astin's typologies, student leadership, and Dweck's motivational factors. Chapter three describes the methodology. This chapter also presents a description of the sample, the instrumentation, the research design, and the procedure. Chapter four presents the results of the study and analyses of the data. Chapter five provides a discussion based on the conclusions of the study and presents recommendations.

Chapter Two

Review of the Literature

Introduction

For the past couple of decades, student affairs administrators have viewed higher education as being more than just an in-class process (Creamer, 1990). Colleges and universities are in a state of transition. With the state of the economy and the erosion of public confidence in the higher education system, colleges and universities have to focus more on outcomes such as student learning (Schroeder, 1996). To fully optimize the environmental factors that play a role in student learning, one must understand not only the environmental factors of students' residence, but also, the people that reside in those environments. Colleges and universities have little impact on housing that is operated outside of university control. Both residence halls and Greek houses are typically under the direction and/or control of university polices and regulations. So, to best understand the educational and developmental impact of living environments, it is reasonable to start by analyzing the two types of residences in which the university has programmatic control and interest. Pascarella and Terenzini (1995) have reported that students change while in college and that these changes are complex and encompass the entire person. These changes can be linked theoretically to student development theory. Student development theories encompass five domains: psycho-social, cognitive development, moral development, ego development, and career development (Winston & Anchors, 1993). The authors suggested that the term student development is also related to a set of goals or outcomes for higher education. These outcomes are based in the belief that students learn not only in the classroom but also in all facets of college life. Moos (1973)

stated that a person's behavior cannot be studied separately from his/her environment. Therefore, student development cannot be studied separate from a student's environment. An understanding of the attitudes, beliefs, and behaviors of the students that choose to live in either residence halls or Greek houses is needed to best develop strategies that focus on student leadership, student learning, and student development.

Higher education has sought to increase a student's ability to think critically, to reason, and to evaluate while coming to a decision (Pascarella, 1999). According to Pascarella, over the years, college students have consistently increased scores on standardized tests. Additionally, college students have also shown greater gains in vocabulary skills, math skills, knowledge of public affairs, history, and science than those that did not attend college. Pascarella reported that these gains remain consistent when background is controlled. It appears that college students have gains in the ability to reason critically while in college. Pascarella suggested that there is no single college experience that accounts for the gains in critical thinking, instead it is the total involvement of the individual that leads to these gains. While overall, college students showed gains in critical thinking there are some variations within the college experience. Males in Greek fraternities demonstrated the lowest gains in terms of critical thinking, while membership for women in Greek sororities resulted in a negative correlation to cognitive development (Pascarella, Whitt, Nora, Edison, Hagedorn, & Terenzini, 1996). According to the authors, out of class experiences are actually more important to the development of critical thinking than in class experiences. The authors suggested that there must be an intentional combined effort between in-class and out-of-class experiences to fully develop students. About 85% of a student's time, aside from sleep,

is spent outside of the classroom setting, therefore, the developmental impact of non-class experiences is potentially great (Pascarella & Terenzini, 1995). Overall, society wants higher education to show that it is preparing students to be productive citizens that are able to help deal with societal problems (Schroeder, 1996).

Student development theory focuses attention on the student as a whole and his/her overall “life development”. Student affairs professionals should continue to grow in their understanding of student development (Picklesimer & Miller, 1998). Life-skills, such as leadership development, are seldom recognized as important goals of higher education, yet few would argue that students are expected to exhibit successful life skills after they leave the university setting. Leadership and other life-skills provide students with the opportunity to become an educated citizen with abilities to plan, make decisions, lead, and communicate effectively.

Leaders create a culture (Schein, 1992). The environment that a student lives within is influenced by the leaders within the community. Leadership is a shared responsibility between the leader and the follower and should not be seen as a position but rather a process (Komives, Lucas, & McMahon, 1998). In higher education, one of the main outcomes sought is the development of leadership skills for a variety of settings. While leadership is a goal, there is still a great deal to learn to understand the development of leadership skills among students (Mouritsen & Quick, 1987). Participation in leadership development activities provides students with knowledge and skills that allows them to realize their potential (Fuertes & Sedlacek, 1993).

Pascarella and Terenzini (1992) identified two keys to the intellectual development of college students: 1) The quality and effort (involvement) by students and

faculty. 2) The quality of the student's interpersonal life. The authors further suggested that living on-campus also is a predictor of social and academic success. Developmental goals such as developing a purpose and a sense of competence are correlated with faculty interaction and the student's environment (Martin, 2000). For colleges and universities to meet the goal of enhancing student learning and personal development, students must be motivated and inspired to devote time and energy to educationally productive and purposeful activities both inside and outside of the classroom (Schroeder, 1996).

College students develop and change while in college. Through involvement in university programs that are designed to support and promote the university's mission, students can succeed in achieving developmental goals. Factors such as place of residence and type of involvement help define the type of development that a student experiences. Student development, both as a theory and as a set of goals, demands that we always strive to better understand the students of today.

Campus Ecology

College and university campuses are dynamic communities that are always in a state of transition. These communities are defined by the interaction between the physical environment and people that live on campus (Hallenbeck, 1991).

Background

Lewin (1936) stated that behavior is a function of the person and the environment. When studying college students, both the environment and the student must be taken into

account. Moos (1973) stated that you cannot study an individual's behavior separate from his/her environment. He observed that behavior settings have an environmental and behavioral component.

Schroeder and Jackson (1987) defined student development in terms of an ecological approach as student development being a function of the person-environment interaction mediated by challenge and support. Placing student affairs staff in the role of providing a proper level of challenge and support, Rodgers (1990) suggested that intentional ecological interventions have great potential to increase student satisfaction and meet organizational goals.

Where a student lives plays a role in who s/he is, so it is an important factor to explore when attempting to better understand the students. When looking at place of residence on a college campus, it is important to look at the organizational structures in which these places of residence are a part. According to Moos (1973), when determining the differences in the organizational structure, one must look at the behavior and attitude of the individuals that make up the organization. He further mentioned that the character of an environment is determined by the typical characteristics of the individuals within the environment. He developed three basic dimensions that differentiate environments:

1. Relationships of individuals within the environment and how they support each other.
2. Personal development and self-enhancement of the members of the environment.
3. System maintenance and system change.

According to systems theory, organizations are made up of parts that are interdependent with one another (Fuqua & Kurpius, 1993). The authors suggested that the basic assumption of systems theory is that a human system has elements and that those elements are dynamically and complexly interconnected. Therefore, to understand an individual's behavior or attitudes within an organization, one must evaluate the system as a whole and as many of the interconnected elements as possible. Within a system there is an ongoing reciprocal relationship between the human component and the environment and/or organization. Therefore, optimal arrangement of an environment is powerful behavior modification (Moos, 1973). Environmental variables are very closely related to many physical, psychological, and emotional conditions. An understanding of the attitudes of the people who make up the environment will aid in arranging the environment to best support the mission of the university. Therefore, when examining the programmatic mission and goals of an institution one must have a systematic approach to the entire environment, as well as to each specific environment (Moos, 1973).

Within a college and /or university there are many sub-environments (Moos, 1978). Each sub-environment has the potential to determine a student's behavior. It is the student's living environment that exposes a student to a strong peer influence. Therefore, Moos suggested that a student's living unit has the potential to have a powerful impact on the student, especially freshman. Students who live on campus show greater developmental gains than those that commute (Astin, 1977, 1993a). These gains are most closely associated with leaving home (Astin, 1993a). Moos (1978) examined the impact of the social environment on the student. He observed that there are several

environmental factors that influence a student. These factors include size of the living group, privacy in the living group, availability of a snack bar, proximity of the living unit to the center of campus, amount of study space in the living unit, and amount of activities such as intramural sports. Schuh and Allen (1978) supported this in terms of the importance of environmental factors such as meal service, ability to decorate their living space, ability to study, special living units, and security. Moos' (1978) research indicated that a student's total environment plays a role in their satisfaction at college. The social environment that is created plays as important of a role, if not more, as the architectural design. Therefore, Moos suggests that, when studying student residences, one must look at both the organizational structure of the living unit as well as the architectural structure. One drawback to Moos' research is that while it did focus on different living groups, all of the living groups were in campus residence halls. There has been little, if any, research comparing the environment in residence halls to the environment in Greek houses.

Banning and Kaiser (1974) outlined the importance of an ecological model for university planning. They observed that the mission of student affairs programs should be to help students adjust to the educational environment. However, if student affairs administrators do not understand the educational environment, it is difficult to help students adjust. The ecological perspective takes into account the fact that people have an impact on the environment and the environment has an impact on the individual. Therefore, the focus is not just on the environment or the individual, but instead on the interaction between the two. According to Banning and Kaiser (1974), the ecological approach can be looked at as it relates to the campus as a whole, individual student

groups, and/or the individual. The authors believed that colleges and universities should design the environments to optimize the relationship between the institution and the individual to foster educational development. They also pointed out that groups can be characterized by factors such as class standing, ethnic origin, special interests, and countless other factors. Banning and Kaiser's (1974) ecological approach is based on the belief that people respond differently in different environments and that there is a potential for an optimal fit between person and environment. This perspective provides a basis for the importance to review the different environments on a campus including different living groups and organizations.

The Ecosystem Model was outlined by the Western Interstate Commission for Higher Education (1972, p.7). There are seven steps in the ecosystem model; they are as follows:

1. Designers, in conjunction with community members select educational values.
2. Values are then translated into specific goals.
3. Environments are designed that contain mechanisms to reach the stated goals.
4. Environments are fitted to students.
5. Student perceptions of the environments are measured.
6. Student behavior resulting from environmental perceptions are monitored.
7. Data on the environmental design's successes and failures, as indicated by student perceptions and behavior, are fed back to the designers in order that they may continue to learn about student/environment fit and design better environments.

This model indicates the importance of organizational goals and values. Additionally, this model is designed to help administrators determine success of an environment and whether they are meeting the educational goals and mission of a university and the organization. To be able to effect change within an organization you must understand the environment.

Each environment is a system and any change in one part of the environment affects other parts of the environment (Banning, 1979). Hurst (1987) emphasized the systems approach to the college and university setting. He stated that because students are impacted by the skills and abilities they bring to the campus, the campus environment, the interaction of the student and the environment, and the sum total of the student's thoughts, feelings, and behaviors, college administrators must be concerned with how these factors interact. He further stated that the majority of campuses have ignored ecology when designing the environment. Hurst indicated that, for the most part, campuses have not intentionally designed environments geared toward accomplishing their mission of teaching and student development. Campus ecology is not value neutral (Banning 1979; Huebner & Banning, 1987). The university community must first identify the values that the campus wants to embrace and then design an environment that meets the value goals (Sorenson, 1987).

Environmental Impact

While universities should intentionally develop an environment that passes on the values of the institution, the university must understand that there are many sub-environments within a university setting. The sub-environments impact student behavior

and should be studied. These sub-environments are distinguished by student behavior as well as the physical space (Huebner & Lawson, 1990). Leadership experiences are a sub-environment that can be studied as having its own tasks that must be mastered. Huebner and Lawson further stated that while we have a body of research on the in-class and residence hall settings of campus ecology, little is known about the influence of social clubs, volunteer experiences, and other extra-curricular environments. Environments can be heterogeneous or homogeneous depending on the diversity of the sub-environment. The diversity used by Huebner and Lawson included not only racial and ethnic diversity, but also more broad characteristics such as choice of major, age, and learning style. Students tend to select environments in which others share similar characteristics. Additionally, students will change themselves to remain congruent with the environment. According to Huebner and Lawson, the proper person-environment interaction is one that has an appropriate balance of challenge and support.

Simono, Wachowiak, and Furr (1984) concluded that when examining the academic success of students one should look at specific living arrangements. It is too simplistic to only examine on-campus residence versus commuter status. The type of residence impacts the differences found in academic achievement in terms of grade point average. (Clodfelter, Furr, & Wachowiak 1984; Simono, Wachowiak, & Furr, 1984). Berger (1997) found that residence hall living was positively correlated with strong peer relationships. The author also suggested that successful integration into a sub-environment leads to more successful integration into the entire environment. Persistence at the university is correlated with social integration. This supported Berger's (1997) belief that a student's community has an impact on their success at a university.

Involvement in student organizations can provide social integration into a sub-environment.

The campus environment is important not only for the gains in academic functioning of students but also in terms of emotional pathology (Hurst & McKinley, 1988). Hurst and McKinley argued that dissonance between an environment and the person can cause emotional stress and pathology. In addition to the environmental influence on pathology that is suggested by Hurst and McKinley, there is also potential for the environment to affect development. The authors concluded that care should be taken when evaluating a problem to be sure to include the environment as an equal factor. This care seems all the more critical in light of the additional developmental dimensions. The authors also argued that this dissonance could help explain student attrition.

Incoming students should be concerned with the type of sub-environments that are available. Prospective students should be encouraged to consider the environmental factors and determine whether they fit with their needs and desires (Schuh & Kuh, 1991). Schuh and Kuh stated that environmental issues such as the physical setting, policies and practices, and institutional agents should be considered. Living on-campus has been reported to have the most positive effect on student development and learning than any other single factor (Hernandez, Hogan, Hathaway, & Lovell, 1999). Schuh and Kuh (1991) supported the importance of living in a residence hall. The authors proposed that living in a residence hall provides the greatest potential for success in college, especially for first year students. The authors also cautioned prospective students to carefully consider whether or not Greek life is a good fit. The authors did suggest that for some

students, fraternities and sororities provide important opportunities to get involved on campus and strong peer interaction.

Fraternities and sororities have shown positive characteristics such as the opportunity to become involved on campus, a sense of community, lasting friendships, development of leadership and social skills, encouragement of high academic standards, involvement in community service, and a network of contacts (Neuberger & Hanson, 1997). In examining the relationship between Greek life membership and scores on the Student Development Task and Life-skill Inventory (SDTLI), Hunt and Rentz (1994) found that being a member of a Greek letter organization was significantly related to the following psychosocial developmental tasks: establishing and clarifying purpose, developing mature interpersonal relationships, establishing an intimate relationship based on trust, reciprocal caring, and honesty. They concluded that Greek life involvement does provide some positive outcomes.

Schuh and Kuh (1991) stated that the most important item for prospective students to consider is whether or not the college or university provides opportunities for the students to become involved within the campus. Schroeder and Hurst (1996) proposed that intentionally structuring campus environments to focus on student learning should be the goal of all institutions. The authors proposed seven key conditions that should be considered when designing a campus environment. These seven conditions are: involvement, challenge, support, structure, feedback, application, and integration. The authors placed the student at the center of the learning environment and challenged campus administrators to design an environment that promotes student learning.

Student Involvement Theory

Attending college can have a tremendous effect on a person's life (Astin, 1977). Colleges and universities have a strong desire to create more effective learning environments (Astin, 1984). Based on these facts, Alexander Astin has spent the last 30 or so years developing a theory of student development based on the premise of getting student's *involved* in their college experience.

Background

Astin (1975) first proposed the concept of involvement as a result of a study looking at college student retention. He further expanded this concept to include the impact that college has on students (Astin, 1977). In Astin's (1975, 1977, & 1984) work, involvement was presented as a multi-dimensional element, where a student may have differing levels of involvement in several aspects of the college experience. Astin (1984) used involvement as the cornerstone of a new theory of student development.

"Involvement is the amount of physical and psychological energy that a student devotes to the academic process" (Astin, 1984 p.297). According to Astin, the most precious resource on a college or university campus is student time, therefore, the amount of time a student devotes to the academic process is critical. Student involvement theory focuses on behaviors that can be measurable and easily tracked. This allows for more measurable results and programs that are easier to design, implement, and evaluate. Student involvement theory proposes that the amount of time a student spends engaged in school related activities increases his/her satisfaction and overall success in college.

According to this perspective, activities such as studying, going to class, living on campus, being active in a university related organization, discussing a class project with another student, and interacting with faculty members would all be considered being *involved*. This theory does not eliminate other theories, in fact it helps tie student development theories and other education theories together to determine effectiveness. Student development is made up of several families of theories.

Student development theories encompass five domains: psycho-social, cognitive development, moral development, ego development, and career development (Winston & Anchors, 1993). In addition to those five domains, Rodgers (1990) included person-environment interaction theories. Cognitive development, moral development, and ego development are concerned with how students learn (Miller & Winston, 1991). Miller and Winston define psycho-social theories as concerned with what a student learns. Person-environment interaction theories focus on the relationship of the student and the environment. The student cannot be studied outside of his/her environment (Moos, 1973). Student involvement theory works in conjunction with other theories by focusing on the level of energy a student extends to an activity. Therefore, regardless of theoretical context it is still useful to examine the amount of energy and time a student dedicates to the learning processes.

Student involvement theory is concerned with the amount of time and effort a student extends to accomplish a goal. The more time and effort the greater the success of the student. Student's time, energy, and effort are not limitless. Educators are constantly struggling with other forces in attempts to capture student's time. Therefore, decisions that a student makes about issues such as place of residence, membership in

organizations, and leadership opportunities can significantly affect how they spend their time (Astin, 1984).

Astin's theory of involvement resembles what learning theorists have called vigilance or time-on-task, as well as effort.

Involvement theory has five major components (p. 298):

1. Involvement refers to the amount of physical and psychological time and energy that is invested in various objects. These can be general or specific depending on the individual and the situation.
2. Involvement occurs on a continuum. The degree of involvement in an object depends on the individual involved. Also, the same student may manifest different degrees of involvement with a particular object at different times.
3. Involvement has both quantitative and qualitative parts.
4. The amount of student development and learning that is associated with any educational program is directly proportional to the amount and quality of student involvement in that program.
5. The effectiveness of an educational policy is directly related to the capacity of that policy to increase student involvement.

These last two components are key in the development of this theory. In fact, it is these two components in which most research on student involvement has been focused and the key for implementation. Astin (1984) believes that student involvement theory links other educational theories together. How well educational theories capture students time and energy can determine their effectiveness.

Involvement is a tool to determine what behavioral mechanisms and processes facilitate student development.

Impact of Involvement

Astin (1975) found that students that dropped out of college were not involved in the academic experience at their chosen institution. All the factors that led to persistence at an institution pointed to involvement and all the factors that led to dropping out pointed to non-involvement. This research further indicated that place of residence has a significant relationship with persistence, that living on-campus was a significant factor in the level of involvement, and that being a member of a Greek organization also contributed to persistence in college. These findings were supported by additional research (Astin, 1977). In this research, Astin reported that students residing on campus were more likely to achieve in areas such as leadership and are more satisfied with their college experience. Astin (1993b) supported his previous findings that living on-campus and being a member of a Greek organization have positive effects in terms of involvement. The level of satisfaction was also higher for on campus residents as it related to student friendships, faculty interactions, institutional reputation, and social life (Astin, 1977). Overall, Astin reported that involvement has a positive correlation with persistence and institutional satisfaction.

Student involvement theory is applicable to all students, the overachiever and the boarder line student. Student involvement theory has the potential to help students succeed because it focuses on the student and what the student can do to increase their success. The focus should be on what the students are doing, how motivated they are,

how they are spending their physical and psychological time. One of the key elements of student involvement theory is finding a way to get students involved in the college experience (Astin, 1984). This, Astin believed, is a unifying goal that should assist in bridging the gap between academic affairs and student affairs perceptions of the college experience.

For Student Affairs administrators, the level of involvement that a student has outside of the formal classroom is important. Kuh (1995) found that there were several gains that can be expected by participating in out-of-classroom experiences and that student learning and personal development are positively affected by involvement in co-curricular activities. Out of class experiences helped to clarify vocational goals, increased interpersonal competence, humanitarianism, cognitive complexity, knowledge, and academic skills. Tinto (1998) supported Astin's (1975) earlier research, in finding that involvement does affect persistence. Milem and Berger (1999) examined the role of student involvement and the perception of integration as it relates to persistence. Their research supported student involvement theory and Tinto's (1998) previous research in that involvement is positively related to persistence. According to Milem and Berger (1999) this is especially true for first year students.

Beil, Reisen, Zea, and Caplan (1999) concluded that the level of academic and social integration that a student experiences leads to a greater commitment to stay at an institution. Thus, the level of involvement that a student has can impact his/her academic and social integration and increase persistence. In fact, these findings suggest that social integration into the university is a stronger predictor of retention than academic integration. This supports the need for student affairs administrators to help students find

avenues for involvement. Twale and Sanders (1999) provided further support for the importance of student involvement. The authors were examining the effect of out of class experiences on critical thinking ability. They found that out of class peer interactions that are related to the university provide increases in critical thinking.

Cooper, Healy, and Simpson (1994) examined the relationship of organizational membership and holding a leadership position on scores on the Student Development Task and Life-skill Inventory (Winston, Miller, & Prince 1987). They concluded that being a member of a campus organization had a positive effect on student change in terms of the SDTLI. They also found that holding a leadership position within a campus organization had a positive effect on change in terms of the SDTLI. Cooper, et al. (1994) found evidence that supported the idea that involvement is a key to development while in college. They also suggested that leadership positions enhanced a person's development. Cooper, Healy, and Simpson used the results of their study to infer the importance of community on a college campus. They went on to say that there is ample evidence that demonstrates that involvement in campus life has positive effects on student learning both in and out of the classroom.

Blimling and Whit (1999) identified getting students involved in the academic experiences as one of the "principles of good practice" for student affairs administrators. Student involvement theory is a strong theoretical base for the importance of student membership in residence life and Greek life and the leadership opportunities that both living areas provide.

Astin (1993a) expanded his student involvement theory to include a student typology or set of traits. Pascarella et al. (1996) found evidence that college influences

are somewhat specific to student subgroups. They suggested that colleges and universities need to understand the typology of the students to be able to better understand their development. Typologies of students have been developed to help faculty and administrators better understand the role of peer groups on student performance (Kuh, Hu, & Vesper 2000). These typologies can be used to better understand the student and should also be used to assess outcomes of the college experience. Students can be defined by how they spend their time. They develop skills and competencies in areas in which they devote energy. Kuh, Hu, and Vesper's research supported the need for student affairs administrators and faculty members to encourage behaviors that are in line with being a successful student. Outcomes are related to how a student spends his/her time. Spending an unbalanced amount of time in one area can have detrimental effects on other areas. This research further supported the need for an integrated approach to student development that encompasses the student as a whole. Peers have a direct and significant impact on how students chose to spend their time. A student's typology does not appear to be affected by their ethnicity or gender. Kuh, Hu, and Vesper found that students could move from one type to another while in college. This movement is could be affected by many factors, one specifically being a leader within a student organization.

Astin (1993a) has proposed an empirical typology for college students. It is this typology that will be examined in this study. A student's typology is not based on a developmental stage. The types are not hierarchical or linear, no one type is better or worse than another. The types are based on the individual's values, attitudes, beliefs, self-concept, and behavior. A student can move from one type to another, however, each

type is unique. Astin used the typologies he developed to place people into peer groups. This knowledge then allows researchers to study the differing effects of college and other programs on the different types of students. This allows researchers to look at the interaction effects between the individual and the environment. Astin developed his typologies using data from the Cooperative Institutional Research Program (CIRP) (Astin, 1993a). Therefore, the data were collected from a national study using a large number of participants.

In developing the typologies, Astin included the values, self-concept, behaviors, attitudes, and expectation measures from the CIRP freshman survey. The CIRP freshman survey is administered to 250,000 students annually. No historical or demographic information was used in developing the typologies. This allows for all students to theoretically have the potential to assume any type at a given point in time.

Astin (1993a) identified seven types that label college students. The types are the Scholar, the Social Activist, the Artist, the Hedonist, the Leader, the Status Striver, and the Uncommitted Student. Astin did describe an additional group called the “no type” group. These people failed to reach the cutoff point for any group. They tend to come from less educated families with lower incomes. They tend to be less involved in leadership and campus activities and have low degree aspirations.

The seven types can be used to determine the types of students that participate in specific programs. This information can aid administrators in determining whether programs are meeting their intended purpose and goals. Depending on the goals of the program, one or all the scales can be used to see if the program is having the desired effect. Additionally, the types can be used to simply describe a group to indicate the

impact that a program is having on the development of the students. The student/program interaction is an important outcome of research using these typologies. How a hedonist responds to a leadership position may be very different than how a scholar would respond. So knowing the types helps better select a programmatic strategy (Astin, 1993a).

Leadership

Kouzes and Posner (1990) have outlined five characteristics displayed by leaders in industry. These five characteristics are: challenged the process, inspired a shared vision, enabled others to act, modeled the way, and encouraged the heart. The authors believed that these characteristics were transferable to the university setting. Based on Kouzes and Posner's research, leadership is a set of learnable, observable practices. Leadership is a concept that anyone can learn and that can be studied and understood. Within organizations there is a culture, that culture is defined and determined by its leadership (Schein, 1992).

Leadership experiences while in college can be powerful tools in the development of the individual. Involvement in student organizations has positive effects on student development and student learning (Hernandez, Hogan, Hathaway, & Lovell, 1999). Student organizations provide a valuable tool in promoting student learning through involvement and application (Winston, Bledsoe, Goldstien, Wisbey, Street, Brown, Goyen, & Rounds, 1997). Winston and associates proposed that those holding positions in student organizations have higher levels of social self-concept, peer interaction, and

faculty interaction. They concluded that being involved in student organizations has a powerful impact on a student's life. Student organizations such as residence hall governments and Greek life provide a venue for the development of skills and enhancement of talents.

Students that are involved in leadership positions within a student organization demonstrated a positive correlation between level of involvement and measures of student development (Stanford, 1992). Student leaders have the opportunity to gain information about campus events. Student leaders are more likely to be involved in campus activities regardless of whether the activities are related to their own organization. Stanford also reported that, regardless of the organization, there were similarities among student leaders in terms of their involvement and measures on student development scales.

Leadership is a socially constructed concept that is used to maintain order and to effect change (Komives, Lucas, & McMahon, 1998). Since leadership is a socially constructed concept it can be both beneficial and detrimental. Therefore, leadership and leadership development are a concern to all people, both inside and outside of the academy. These authors stated that leadership development can be best viewed as a function of knowing, being, and doing. Leadership is a relational process of people together attempting to accomplish change or make a difference for the common good (Komives, Lucas, & McMahon, 1998). The authors additionally stated that leadership is a shared responsibility between the leader and the follower and should not be seen as a position but rather a process.

In higher education, leadership is often mentioned in the mission statements of universities, however, it is seldom part of the curriculum (Cress, et al., 2001). While leadership is a stated goal of many institutions, there is still a great deal to learn to understand the development of leadership skills among students (Mouritsen & Quick, 1987). Not only is student leadership development important because of its inclusion in university mission statements, it also provides positive student development outcomes. Participation in leadership development activities provides students with knowledge and skills that facilitate the realization of their potential (Fuentes & Sedlacek, 1993).

Schuh and Laverty (1983) found that former student leaders reported that their leadership position had the greatest effect on their leadership skill development. Schuh and Laverty examined former student leaders from three diverse colleges and found that the student leaders were similar across the sample. The authors concluded that the experience of holding a leadership position has similar effects regardless of setting. Therefore, according to the authors, it is the experience that is important, not the location of the experience.

Students that are leaders while in college have greater gains in academic attainment and personal values than non-leaders (Astin, 1993a). Being involved in campus organizations enhances educational outcomes. Student leaders have a greater potential to become community and civic leaders (Eklund-Leen & Young, 1996). Therefore, it is the process of holding a leadership position and being involved in leadership development that has an impact on the development of the individual.

Cress, Astin, Zimmerman-Oster, and Burkhardt (2001) reported that student leaders have a stronger understanding of self than non-student leaders. The authors also

reported that students who participated in leadership training activities had more positive gains in terms of leadership understanding, civic responsibility, multicultural awareness, and leadership skills. The authors further indicated that gender was not a predictor of leadership capabilities or gains. Students that are involved in leadership activities such as volunteer work are more likely to develop their leadership potential than those that do not. This was a significant finding in terms of student leaders in campus organizations. The authors concluded that being involved in leadership development activities, regardless of position, provides significant positive gains for students. The authors further concluded that all students have the potential to be leaders and that universities should provide opportunities for leadership development.

Student leaders are important to the university, however, little is known about how to best develop their leadership skills (Posner & Brodsky, 1992). Although a great deal of literature and self-help books have recently focused on leadership in the world outside of academia, these models are not appropriate for student leaders on a college campus. Instead of corporate organizations and subordinates, student leaders deal primarily with volunteers, their own peers, and are involved in social and service oriented organizations, not product based, according to Posner and Brodsky. A better understanding is needed of the leadership characteristics and effectiveness of student leaders. In the development of an assessment tool for leadership, both Greek life leaders and residence life leaders were used to develop the tool (Posner & Brodsky, 1992, 1993). In developing this assessment tool, Posner and Brodsky (1992) used their research on business and industry leaders and applied that to college student leaders in residence life and Greek life. The authors used the five leadership characteristics: challenging the

process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart are perceived by their constituents as being more effective leaders than those that do not exhibit these traits to assess student leadership behaviors (Posner & Brodsky, 1993, 1994).

Student leaders can be defined by what they do, that is, student government officer, fraternity or sorority officer, and residence hall government officer; however, there is little research to show if the organizations that support these positions produce leaders (Kimbrough & Hutcheson, 1998). In reviewing the literature, Kimbrough and Hutcheson concluded that the key to understanding student leadership is through student involvement theory. While most research has focused on what student leaders do, it is important not only to understand what leaders do, but also what leaders believe. The most recent research on student leadership places a moral responsibility on both the leader and follower to help each other strive to improve (Outcalt, Faris, McMahon, Tahtakran, & Noll, 2001). According to the authors, leadership skills such as values clarification, public speaking, teamwork development, and the value of respect and responsibility, can be developed while in college and are useful for a lifetime. Since a great deal of time and effort go into the training of leaders in Greek life and residence life, it is important to determine whether these organizations produce leaders.

Research also indicates that students of color view leadership differently than white students (Armino, Carter, Jones, Kruger, Lucas, Washington, Young, & Scott, 2000). Students of color often do not view themselves as leaders and choose leadership positions out of a sense of responsibility to the community, not for self-gain. This follows a more systemic approach to leadership than many traditional models of leadership.

While leaders and followers are moving towards a more relational model of leadership, most student organizations are still operated in a traditional hierarchical manner (Armino, et. al., 2000). For African-American males, being involved in a black Greek organization is a significant predictor of campus involvement and holding a leadership position on campus (Kimbrough & Hutcheson, 1998). Kimbrough and Hutcheson concluded that involvement in black Greek organizations is a positive predictor of leadership development and involvement among African-American students. Leadership opportunities are also seen as being beneficial for Hispanic students in terms of retention, involvement on campus and in the community after graduation, and increased skill development (Fuentes & Sedlacek, 1993).

Involvement is an important predictor of leadership development across racial and gender groups (Kezar & Moriarty, 2000). The authors concluded that different types of involvement were influential for different groups. However, holding a student office, being active in an organization, and doing volunteer work all emerged as being predictors of leadership development.

Leaders are expected to be enablers, servants, collaborators, facilitators, and meaning makers (Rogers, 1992). Based on the emphasis and growing focus on leadership development as a process in which all students are capable of participating, it is fair to say that the entire college experience is a laboratory for leadership development. Colleges and universities must develop plans to assess whether or not their leadership development programs are meeting their intended goals. More should be done to assess the leadership development of college students (Mouritsen & Quick, 1987). Therefore,

colleges and universities need to identify and evaluate leadership opportunities that exist on campuses (Boatman, 1999).

Motivation

Motivation has been studied as it relates to the causes of goal oriented behavior. Achievement motivation is divided into two types of goals that reflect competence. These goals are learning goals and performance goals (Dweck, 1986). According to Dweck (1986, 1998), learning goals are goals in which individuals seek to increase their knowledge and competence in order to gain mastery. Performance goals are goals in which individuals desire to gain favorable judgements of their competence and avoid negative judgements. People with a performance goal orientation are concerned with the impression that others have of their competence and ability. Therefore, people will avoid challenging tasks where they risk failure. People with a learning goal orientation want to gain mastery of new skills and knowledge and, therefore, welcome challenging tasks because of the potential to learn something. The motivation to behave in a certain fashion is dependent on the goal orientation of an individual. Performance goals are more extrinsically motivated and learning goals are more intrinsically motivated. In dealing with individuals with a performance orientation, one must focus on their ability and the issues they have with their ability. The higher they perceive their ability the more tasks they will attempt. In dealing with individuals with a learning orientation, one should focus on their effort. This means that the amount of effort they put into a task will determine the amount of knowledge they gain. Interestingly, factors such as actual

intelligence do not seem to be good predictors of confidence in ability. Motivational patterns seem to be better predictors of confidence levels (Dweck, 1986, 1998). People who focus on performance goals are more likely not to persist in the face of obstacles for fear of failure and are more likely to make decisions based on their perception of others reactions (Dweck, 1998).

Dweck's (1986) achievement goal theory is based on research involving school aged children. There have been studies that have shown the usefulness of Dweck's theory in working with college aged students (Archer, 1994; Miller, Behrens, Greene, & Newman, 1993). Miller, et al. examined the effects of Dweck's achievement goal theory and perceived ability in math skills. The authors found that there were differences in students in terms of their goal orientation and their perceived ability and their behavior. The authors classified students into four categories: high learning-high ability, high learning-low ability, high performance-high ability, and high performance-low ability. Students were classified in this fashion because of the influence that perceived ability has on avoidance behaviors of those with performance goal orientations. The authors reported that a learning goal orientation was positively correlated with persistence, while performance goal orientation was not. This finding is consistent with Dweck's (1986) theory. Miller et al.(1993), did caution that they could only provide qualified support for Dweck's theory because of the lack of interaction between the dominant goal orientation and perceived ability. This could be the result of working with an older population that has already made some adjustments to their behavior patterns based on their experience.

Archer (1994) examined achievement goals as a measure of motivation in college students. Archer explored the relationship between achievement goals and enjoyment of

task, preference for challenging tasks, attributions of success or failure, perception of task as relevant, the use of metacognitive strategies, and perceived ability. Archer concluded that Dweck's (1986) achievement goal theory was a useful way to categorize college student motivation. A student's achievement goal orientation showed a logical pattern of predicting the difficulty of a task chosen, attitude toward a task (positive or negative), and effective strategies for performance. Students perceived ability was less of a factor in terms of attitude and strategies and an equal factor in terms of difficulty in task selection as compared to achievement goal orientation. Having a learning goal orientation was positively correlated with choosing more difficult tasks, having a positive attitude about the task, enjoyment of the task, using effective, and metacognitive strategies. Those that have a learning goal orientation are less concerned with protecting self-worth and more concerned with understanding and improvement (Archer 1994).

Eppler and Harju (1997) used Dweck's (1986) model to examine differences in achievement goal orientations on academic achievement between traditional and non-traditional college aged students. The authors hypothesized that college students use both learning and performance goals and that success is contingent on a balance between the two. The authors reported that both traditional and non-traditional students use a learning goal orientation more strongly than a performance goal orientation. Students that have a learning goal orientation or a mixed orientation had significantly higher GPA's, and studied more often than those with performance goal orientations. Eppler and Harju (1997) concluded that Dweck's (1986) achievement goal theory was a useful theory in examining the motivation and behaviors of college students, both traditional and non-traditional. However, the concept of what motivates college students to learn and become

involved in volunteer activities has been an under researched area (Stage, 1996; Winniford, Carpenter, & Grider, 1997).

A volunteer is a person who provides services without a personal financial benefit (Henderson, 1985). This is an appropriate definition for the majority of student leaders within organizations. Student leaders volunteer a great amount of time and provide the university with a vital service and do not receive compensation for their efforts.

Therefore, by definition student leaders are volunteers. Henderson stated that volunteers typically perform one or more of the three following functions: administrative, service, and/or leadership. There has been an increasing need and demand for human resources and a reduction in funds. Therefore, it is increasingly important for colleges and universities to utilize student volunteers to provide leadership for campus traditions, activities, and organizations (Henderson, 1985). Sargent and Sedlacek (1990) found that student volunteers in student organizations differed from non-student volunteers in terms of Holland Career codes. However, they also found that volunteers vary from organization to organization. Students who differ from those in an organization are likely not to become involved as a student leader because there is not a good fit. Therefore, understanding the type of a typical student within an organization can help administrators and advisors recruit individuals that are better fits and provide opportunities for those who might otherwise miss an opportunity.

Summary

Research has supported the idea that students that are involved in the academic environment are more successful (Astin, 1993b). While this is a generally accepted statement (Astin, 1977, 1984, 1993a; Bell, et. al. 1999; Kuh, 1995; Milem & Berger, 1999; Pascarella, et. al. 1996; Twale & Sanders, 1999), little research has been done on the specific types of involvement that initiates the greatest success. Campus residence has been shown to be a valuable predictor of student involvement (Astin, 1977: 1984: 1993b; Hernandez, et al., 1999; Moos, 1978; Schuh & Kuh, 1991). Holding a leadership position in a campus organization is one aspect of involvement. There has been some initial research that suggests that holding a leadership position does aid in the overall development of a student (Cooper, Healy, & Simpson, 1994; Cress, et. al., 2001; Mouritsen & Quick, 1987; Schuh & Laverty, 1983; Stanford, 1992; Winston, et. al., 1997). However, little research has been done on the differences between leadership position in different organizations and/or settings. There has also been little research on the differences comparing residential life environment and the Greek life environment. Additionally, there has also been little research on what motivates students to volunteer their time for student leadership positions. For university administrators to have a better understanding of how to meet the needs of students in terms of leadership development and to make sure that campus organizations are meeting the academic mission of the university, university administrators must understand who the students are and why they are involved. It would be useful to be able to identify the differences in terms of

leadership and motivation of students that live in residence halls or Greek houses. This would allow university administrators to develop strategies to promote greater development among students. It would also be useful to identify the relationship of achievement motivation and leadership factors. This would help university administrators have a better understanding of the relationship and impact that residential setting has on a student's leadership development. By examining the leadership factors and motivational goals of students, student affairs practitioners can uncover valuable information on how to best assist students, both in terms of their success, and the institution's.

Chapter Three

Methodology

This study explored relations of leadership and motivational factors and residential setting of college students. This study addressed whether residential setting is a factor in predicting leadership type and motivation goal orientation. Astin's (1993a) typologies were used as a leadership inventory. The motivational factors that influence a person's desire to seek out leadership positions within these groups was determined by using the *Goals Inventory* (Roedel, Schraw, & Plake, 1994). The *Goals Inventory* is based on Dweck's (1986) achievement goal orientations.

Research Design

The present study is a correlation study. The data for this study were collected during the Spring 2002 semester. The purpose of this study was to explore the relationship between leadership and motivational factors to the residential setting of college students. Specifically, this study was designed to explore the relationship between the leadership characteristics and achievement goal orientations, as well as the differences based on residential setting in terms of leadership and motivation. The differences in leaders and non-leaders were also explored. The residential setting was determined by whether the participant lived in a residence hall or a Greek house. Leadership factors were determined by 34 questions adapted from Astin's (1993a) work on college student typologies. The achievement goal motivation orientations was

determined by the 25 item *Goals Inventory* (Roedel, Schraw, & Plake, 1994). The *Goals Inventory* measures learning and performance goals as separate dependent variables. The learning and performance goal scores are independent of one another. This was a quantitative study using the results of a two-part questionnaire.

Research Questions

This study was designed to answer the following questions.

1. What are the structural dimensions of the leadership inventory?
2. Is there a linear relationship of the factor scores (leadership dimension) to the learning subscale on the *Goals Inventory*?
3. Is there a linear relationship of the factor scores (leadership dimension) to the performance subscale on the *Goals Inventory*?
4. Is there a difference in scores on the *Goals Inventory* (motivation factors) based on place of residence?
5. Are students living in residence halls significantly different from students living in Greek houses in terms of leadership dimensions?
6. Is there a difference in scores on the *Goals Inventory* (motivation factors) for those in a leadership position and those who are not?

Participants

The university's Institutional Review Board granted approval for the study (see Appendix A). The sample consisted of students in residential life and Greek life at a

medium sized land grant institution in the southwest. Residential setting was determined by whether the student lived in a fraternity or sorority or in university operated residential life single student housing. The participants were chosen on a random basis and the questionnaires were administered to students in their place of residence. The Greek houses and residence hall floors were randomly selected by pulling the names out of a hat. Additionally, only traditional single gender residence hall floors were used in this study. This was done to control for the effects of a co-ed living environment and apartment living. Fraternity and Sorority houses are single gender and more closely resemble a traditional double loaded corridor (long hallway with rooms on both sides) residence hall with a community bathroom. Participation in this study was voluntary. Participant instruction sheets (see Appendix B) were provided to the questionnaire administrators to ensure all participants had the same instructions.

One hundred and ninety seven questionnaires were distributed and 172 were returned, a response rate of 87%. The present study had 172 participants. The subjects were classified by place of residence. There were 99 (58%) participants in the residence hall group, 71 (41%) in the Greek life group, and two (.01%) in the off-campus group. The two identified in the off-campus group were surveyed with the Greek life group, as a member of the Greek organization, therefore they were included in the Greek group. The gender was evenly distributed with 86 (50%) in each group. Of the participants 142 (83%) identified themselves as Caucasian, seven (4%) identified themselves as Native American, six (3.5%) identified themselves as African-American, six (3.5%) identified themselves as Asian, one (.6%) identified him/herself as Hispanic, and 10 (6%) did not identify an ethnic category. The ages of the subjects ranged from 18 years old to 37 years

old with a mean age of 20 years old. While there appears to be a wide range, 94% of the subjects were between 18 and 21 years old. There are 89 (52%) subjects who identified themselves as being in a leadership position. Of the subjects in the Greek Life, there were 62 (87%) who identified themselves as being in a leadership position. Of the residence hall group, there were 27 (27%) who identified themselves as being in a leadership position.

Instrumentation

A two-part questionnaire was administered during an existing living group meeting. The student questionnaire (see Appendix C) was developed by the researcher to measure leadership characteristics and achievement goal motivation. The leadership characteristics were measured by questions based on Astin's (1993a) typologies. Permission was granted to use Astin's research and questions (See Appendix D). Astin's (1993a) typologies were used in this study because the typologies focus on behaviors and attitudes of students and the scales are designed to measure each type independently, so a person has a measurable score on each typology subscale. The achievement goal motivation was measured by using the *Goals Inventory* (Roedel, Schraw, & Plake, 1994). Permission was granted to use the *Goals Inventory* (see Appendix E). The *Goals Inventory* was used because it measures learning and performance goals independently, so each participant has a measurable score for both learning and performance goals. Participants were also asked to fill out a demographics sheet (see Appendix F).

Astin's (1993a) typologies were developed from the factor loading scores from the *Cooperative Institutional Research Program (CIRP)* that was developed and is

administered by the Higher Education Research Institute based at UCLA. The typologies are: The Scholar. The scholar has high expectations, has a strong academic and intellectual self-esteem, believes that s/he will obtain a high level of academic success, and has high academic aspirations. Scholars tend to come from well-educated families. They tend to major in mathematics, science, and engineering. The Social Activist. High activity, assertiveness and social involvement define the social activist. They report that they feel that participating, helping and being socially and politically active is important. In the social activist group there is a disproportional amount of students from underrepresented groups. They tend to be more concerned with how to finance their education than any other type. Social activists tend to major in psychology, social sciences, education, and theology. Social activists are likely to be involved in political and social issues, participate in campus protests, attend a cultural workshop, and do volunteer work. The Artist. The artist has a high rating in terms of artistic ability and values, creating artistic work, writing, and/or accomplished in the performing arts. For a person to be placed in the artist group they must have interest in more than one artistic area. Artists tend to come from well-educated families. Women are disproportionately represented in the artist group. Artists tend to have had artistic accomplishments in high school and have been involved in artistic endeavors such as plays. They tend to major in fine arts, music, speech, theater, journalism, and English.

The Hedonist. The hedonist is mainly concerned with self-gratification. Students who drink, smoke, stay up all night, and advocate for the legalization of marijuana are classified as a hedonist. Not surprisingly hedonists have lower high school grades than any other type. They come from average homes in terms of income and educational

levels. African-American students are underrepresented in this type. Hedonists tend to major in business, nursing, health technology and secretarial studies. Hedonists tend to seek out professional careers and not academic careers. Hedonists do not have very high aspirations and show no pattern of career choices. Hedonists tend to spend a great deal of time socializing and partying, and they tend to receive poor grades. The Leader. Leaders tend to perceive themselves as being popular, sociable and outgoing. In general leaders have a strong competence in interpersonal skills. Leaders tend to come from affluent, well-educated families. Men and African-Americans are disproportionately represented in this type. Leaders tend to major in pre-law, clergy, or military service. Leaders tend to spend a great deal of time involved in athletic activities, student organizations, and partying. They are the least likely group to feel depressed or contemplate leaving the university. The Status Striver. Being committed to being successful in his or her own business, having supervisory responsibility over others in the workforce, being well-off financially, obtaining recognition from peers, and becoming an expert in his/her field defines a status striver. African-American and Chicano students are well represented in this type. Status strivers tend to come from somewhat less educated backgrounds and have had poor academic performance in high school. Status strivers tend to be materialistic, they tend to major in accounting and business, physical education, agriculture, and architecture. They tend to receive poor grades, join a fraternity or sorority, and watch television. The Uncommitted Student. The uncommitted student is defined by his/her expectations concerning anticipating changing majors and career choice, dropping out of college, and/or transferring institutions. The uncommitted student's relationship with the university is not stable. Uncommitted students tend to be

undecided about their major. They typically perform academically as would be expected in relation to the general population, they report a lower achievement than other types (Astin, 1993a).

According to Astin, the *CIRP* freshman survey has been administered through UCLA since 1966. The survey is administered annually to approximately 250,000 students from all over the country. Astin chose 60 items from the *CIRP* survey to develop the typology based on the results from the 1971 survey and the follow up study nine years later. Astin used a sample of 2,595 to conduct a factor analysis using principle components. Based on the results Astin developed the typologies.

Astin (1993a) used a Cronbach alpha to measure the reliability of the typologies. He used the 1985 *CIRP* survey results to test for reliability, the results are as follows: scholar (.75), social activists (.66), artist (.59), hedonist (.58), leader (.73), status striver (.69), and uncommitted (.66) (p. 40). For the present study, the internal consistency were found to be as follows: scholar (.65), social activists (.79), artist (.82), hedonist (.66), leader (.44), status striver (.81), and uncommitted (.79).

Concurrent and predictive validity for Astin's typologies have been explored. The concurrent validity was determined by using the 1971 and 1986 *CIRP* survey results. Predictive validity was determined by using the longitudinal data from the 1971 *CIRP* survey results and the 1980 follow-up study, and the 1986 *CIRP* study and the 1989 follow-up study. Astin (1993a) did not indicate whether the typologies were consistent over time. The data were used to compare each of the seven types with major field choices and actual careers. For the concurrent validity, correlation between preference

for majors based on typology and actual career was significant at the .01 alpha level. The results for the concurrent validity are as follows (Astin, 1993a p. 41):

Type	Major
Scholar	engineering, mathematics, all natural scientists
Social Activist	social sciences, psychology, education, theology
Artist	fine arts, music, speech, theater, journalism, English
Hedonist	business, nursing, health technology, secretarial studies
Leader	pre-law, military sciences, communications
Status Striver	accounting, business, physical education, architecture, agriculture
Uncommitted	undecided, English

There are several significant correlations found between types and specific items on the CIRP Survey. *The Scholar* is significantly correlated at the $p < .01$ level with GPA (.34), discussing political/social issues (.17), hours spent working with student clubs (.15), assisting faculty in teaching a class (.10), and critical thinking ability (.10). *The Social Activist* had positive correlations with discussions of political/social issues (.18), participation in campus (.17), attending racial/cultural workshops (.17), and participating in volunteer work (.17). *The Artist* had positive correlations with discussing political/social issues (.19), honors program (.16), number of language courses (.16). *Hedonist* had positive correlations with hours a week spent partying (.34), hours spent socializing (.15), and participating in campus protests (.10). *The Leader* had positive correlations with hours/week in sports (.18), hours/week spent partying (.15), and

hours/week spent in student organizations (.13). *The Status Striver* had positive correlations with hours spent partying (.14), hours/week spent watching TV (.10), and joined a fraternity or sorority (.09). *The Uncommitted* student had positive correlations with study abroad program (.10), number of foreign language courses (.10), and discussing political/social issues (.10). According to Astin (1993a) the above represents construct and predictive validity for the typology scales. While the validity reported by Astin is statistically significant, there is little practical significance because of the low correlation coefficients. Therefore, for the present study, the structural dimensions of the typologies were examined.

The *Goals Inventory* (Roedel, Schraw, & Plake, 1994) was developed using motivational factors based on Dweck's (1986) work on achievement motivation and motivation goals. The instrument measures two achievement goal orientations; learning and performance. The Goals Inventory was selected for this study because it measures these two orientations independently from each other. Individuals with learning goal orientation seek to increase his/her knowledge and competence in order to gain mastery. Individuals with performance goal orientation seek to gain favorable judgements of his/her competence and avoid negative judgements.

Based on a principal components analysis with a varimax rotation, Roedel, Schraw, and Plake (1994) found twelve items that loaded on the learning factor (.80) and five items that loaded on the performance factor (.76). The test-retest correlations were $r = .73$ and $r = .76$ respectively. These results show this instrument to be as reliable over time as it is at one time. The internal consistencies for the present study were found to be learning (.86) and performance (.75).

The student questionnaire (see Appendix C) first identified leadership characteristics based on questions from the CIRP survey that Astin (1993a) used to develop his typologies. The questions were taken directly from the *CIRP* survey, however the likert scoring was modified so all questions fit into a five point likert scale. The answers were self-reports of the participant's beliefs about himself or herself. The leadership characteristics are scored on a five point likert scale, with one being low and five being high. The typology subscales were determined by answers to sets of questions with each type having a different amount of questions associated with the overall score. Each participant had a score for each subscale. Participants were not classified into types, instead the total score for each subscale was examined.

The second part of the student questionnaire was *The Goals Inventory* (see Appendix C). *The Goals Inventory* was scored on five point likert scale. As with the leadership scales the number of questions differs between the scales. The learning scale has twelve questions, while the performance scale has five questions. The participants were asked in the *Goals Inventory* to self report their beliefs about their behavior. It is possible to score high on more than scale.

Procedures

Residential life and campus life representatives agreed to allow their areas to be surveyed. The questionnaires and demographics sheets were administered to students during a living group meeting or to students in his/her place of residence. All students that were members of the living group were eligible to fill out the questionnaires. Those students that chose to participate were asked to sign a consent form (see Appendix G)

prior to data collection. Students completed the questionnaire and returned it to the researcher or his designee. An instruction sheet was read to all participants so that all participants had consistent instructions. Completion time for the questionnaire was about 15 minutes. The questionnaires were administered and collected during the last three weeks of the Spring 2002 semester. This time period was selected due to timing of approval from the IRB, as well as for the desire to use participants that had at least one full semester in his/her place of residence.

For the purposes of this study, leadership position was determined by whether or not the participant had ever been in an elected or appointed leadership position by an elected official within a campus organization. All leadership positions were treated equally for this study. For example; there was no distinction made between being president of a fraternity and a chair of a committee. Leadership position and numbers of semesters in a leadership position was determined by self-report items on the demographics sheet (see Appendix F).

Data Analysis

Several analyses were conducted to consider the possible relationships between leadership, motivation, place of residence, and leadership position. To determine the structure of the leadership inventory and to reduce the number of variables for additional analyses, a principal components analysis was performed.

Multiple regression analyses were conducted to examine the relationship between the factor scores that represent the leadership dimensions (predictor variable) and the

learning and performance motivation orientations (criterion variables). The zero order correlations between the predictor and criterion variables were also examined.

Multivariate analyses of variance were conducted to examine the differences in scores on the *Goals Inventory* between students that live in residence halls and those that live in Greek houses. A series of one-way ANOVAs were performed to explore the differences between residence hall students and Greek house students and the scores on the leadership factor scores. One-way ANOVAs were also used to explore the differences between leaders and non-leaders in terms of the *Goals Inventory* scores.

Chapter Four

Results

The purpose of this study was to explore relations of leadership and motivational factors and residential setting of college students. Interest in this study was based on observations of students in both Greek life and residential life. It was observed that students that live in different types of student housing (Greek life or residential life) behave in differing ways. If there are measurable differences based on place of residence, then one could conduct further research to explore the nature of such differences. This study was designed to first answer the question of whether there are measurable differences based on place of residence in terms of leadership and motivational factors. The results presented in this chapter are the analyses related to the research questions.

Research Questions

Research Question 1

“What are the structural dimensions of the leadership instrument?”

To address Research Question 1, a principal components analysis was performed on the leadership instrument. Prior to running the principal components analysis, the adequacy of running a principal components analysis on the subscales was assessed in two ways. First, a correlation matrix (see Appendix H) was run and was visually inspected to check the size of the correlation coefficients. Correlations for the subscales ranged from low to medium. The visual inspection indicated that principal components

analysis was appropriate. Then, the Barlett's Test of Sphericity was performed. The chi-square value obtained was 152.345. The score was significant at the .001 level. The visual inspection of the correlation matrix and the results of Bartlett's Test showed that the matrix was a good candidate for principal components analysis. The analysis was performed using SPSS.

The analysis was used to identify the structural dimensions of the instrument and to reduce the number of variables for subsequent data analysis. Initially, two factors were extracted by using principal components with a varimax rotation. Varimax rotation was selected after determining that the factors were not substantially correlated. Both factors had eigenvalues over 1.0 (see Table 1). The Kaiser (1960) rule recommends that factors with eigenvalues of greater than one be retained. However, these two factors accounted for only 51% of the variance. A third factor with an eigenvalue approaching 1.0 (.96) was then examined.

Table 1

Variance Associated with the Astin's Typologies Initial Factors N= 172

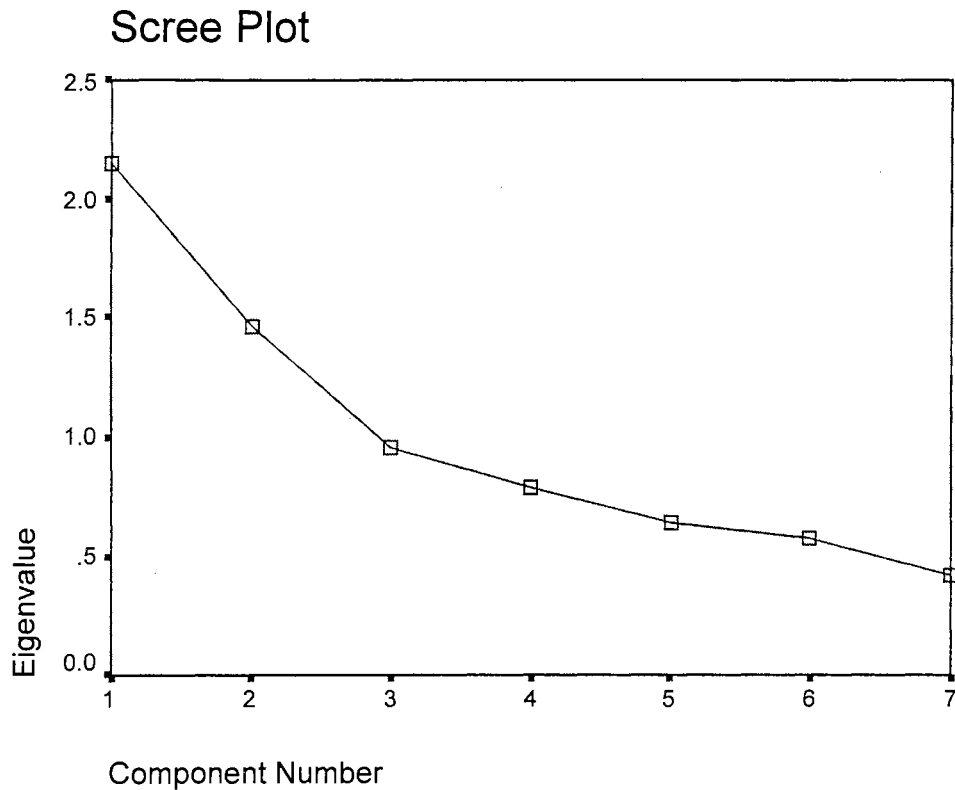
Factor	Eigenvalue	% of Variance	Cum %
1	2.147	30.674	30.674
2	1.462	20.880	51.554
3	.956	13.655	65.209
4	.786	11.231	76.440
5	.646	9.233	85.673
6	.580	8.286	93.959
7	.423	6.041	100.00

A visual inspection of the scree plot (see Figure 1) showed the first two factors to be well above the scree line. The third factor was very near the scree line. However, the theoretical nature of factor three was more compelling. For this study, including the factor of Hedonist makes theoretical sense because the study is designed to evaluate differences between two groups of college students based on their place of residence. The inclusion of this factor was believed to have potential for providing unique information

useful in interpreting the results. Therefore, the decision was made to rotate and interpret the third factor, as well as factors one and two.

Figure1

Factor Scree Plot of Leadership Dimension Initial Factors



The results of the principal components analysis are reported in Table 2. The factors that represent the structural dimensions of the leadership inventory scales were labeled as: The Go Getter (GG) factor, this factor includes the following subscales: scholar, social activists, leader, and status striver. The term Go Getter was used because students in this factor are categorized as being high achievement and outcome focused. The Go Getter factor score accounted for 30.67 % of the variance. The second factor was

the Artistic (A) factor. The term Artistic was used because students are categorized as free thinking, non-committal, and less concerned with money and recognition. This factor consists of the artistic and uncommitted subscales. The Artistic factor accounted for 20.88% of the variance. The third factor is the Hedonist (H) factor. The term Hedonist was used because the students in this factor are categorized as being partiers, staying up all night and using alcohol and drugs. This factor consists of the hedonist subscale. The Hedonist factor accounted for 13.65% of the variance. A summary of the three factors is reported in table 3.

Table 2

Structure Matrix for Leadership Instrument

	Component		
	1	2	3
Subscale*			
Scholar	.66		
Social Activist	.67		
Artist		.82	
Hedonists			.91
Leader	.81		
Status Striver	.71		
Uncommitted		.68	

*only those loading at .40 or higher were reported.

Table 3Variance Associated with Leadership Inventory Rotated Factors (N=172)

Factor	Sum of Squared Loadings	% of Variance	Cum %
Go Getter	2.142	30.599	30.599
Artistic	1.297	18.526	49.126
Hedonist	1.126	16.083	65.209

Research Question 2

“Is there a linear relationship between the leadership dimensions and the learning subscale on the *Goals Inventory*?”

A forward regression equation was used to determine the linear relationship between the leadership dimensions as measured by Astin’s (1993a) typologies that were converted into factor scores and the learning subscale on the *Goals Inventory*. All three leadership factors were forced to enter the equation so all could be evaluated. The factor scores were the predictor variables with the learning subscale on the *Goals Inventory* serving as the criterion variable. The GG factor had the highest correlation with the $r=.63$ (see Table 4). The GG factor also is the only factor that had a positive correlation with the learning scores.

The regression equation with all three factors entered was statistically significant ($F= 39.48, p< .001$) (see Table 4). Therefore, there is an overall relationship between the leadership dimensions and the goals inventory. The Go Getter factor ($R^2= .39$) entered

the equation first and had a significant relationship with the learning scores ($F= 107.17$ $p<.001$)(see Table 4). The addition of the Hedonist factor second (R^2 change =.03) produced a significant increment in variance shared with the learning scores (F change = 7.31, $p<.01$). The addition of the Artistic factor did not produce a significant increment (F change = .34, $p>.05$) in the R^2 scores. The Go Getter and Hedonist factor accounted for 41% of the variance.

Table 4

Factor Scores Predicting Learning

Model	R	Adj. R	R^2	R^2 Change	Std Error	F	F Change	Zero Order r
1	.63	.39	.40	.39	5.79	107.17*	107.17*	.63
2	.65	.03	.42	.41	5.68	59.28*	7.31**	-.17
3	.65	.00	.42	.41	5.69	39.48*	.34	-.04

Model 1 – Go Getter

Model 2 – Go Getter and Hedonist

Model 3 – Go Getter, Hedonist and Artistic

* $p<.001$

** $P<.01$

Research Question 3

“Is there a linear relationship between the leadership dimension and the performance subscale on the Goals Inventory?”

A forward regression equation was used to determine the linear relationship between the leadership dimensions as measured by Astin's (1993a) typologies that were converted into factor scores and the performance subscale on the *Goals Inventory*. All three factors were forced to enter the equation so all three could be evaluated. The factor scores were the predictor variables with the performance subscale scores on the *Goals Inventory* serving as the criterion variables. The GG factor had the strongest correlation score with $r = .33$ (see Table 5). All three of the factor scores are correlated positively with performance scores.

The regression equation with all three factors entered was statistically significant ($F = 8.37, p < .001$). Therefore, there is a significant relationship between the leadership dimensions and the performance subscale of the Goals Inventory. The Go Getter factor entered the equation first ($R^2 = .11$) and had a significant relationship with the performance scores ($F = 20.16, p < .001$) (see Table 5). The artistic factor entered the equation second ($R^2 = .01$), but did not produce a statistically significant increment ($F \text{ change} = 2.42$). The Go Getter function alone accounted for 10% of the variance.

Table 5

Factor Scores Predicting Performance

Model	R	Adj. R	R ²	R ² Change	Std Error	F	F Change	Zero Order
1	.327	.10	.11	.11	3.91	20.16*	20.16*	.33
2	.346	.11	.12	.01	3.9	11.38*	2.42	.17
3	.362	.12	.13	.01	3.88	8.37*	2.18	.11

Model 1 – Go Getter

Model 2 – Go Getter and Artistic

Model 3 –Go Getter, Artistic and Hedonist

*p<.001

Research Question 4

“Is there a difference in scores on the Goals Inventory (motivation factors) based on place of residence?”

A two-group MANOVA was performed to determine if mean vectors for the motivation factors were significantly different for students living in residence halls compared to those living in Greek Houses. Differences were found to be non-significant ($F_{\text{exact}} = 2.74, p > .05$).

Research Question 5

“Are students living in residence halls significantly different from students living in Greek houses in terms of leadership dimensions?”

In order to answer this question, three one-way ANOVAs were performed with type of residence as the grouping variable and each of the three leadership factors as the criterion variables. The means and standard deviations for both groups on all three dimensions are represented in Table 6.

Table 6

ANOVAs for Leadership Dimensions and Residence

Factor		Residence Hall	Greek House	F	sig.	Effect size
1	Mean	-.19	.27	9.30	.00	-.46
	SD	1.15	.68			
2	Mean	.20	-.28	9.22	.00	.46
	SD	1.05	.875			
3	Mean	-.03	.05	.28	.565	
	SD	1.11	.81			

Factor 1 – Go Getter

Factor 2 – Artistic

Factor 3 – Hedonist

There were significant differences between those that live in Residence Halls and those that live in Greek Houses in terms of the Go Getter factor ($F=9.30, p<.01$). The students that live in Greek Houses had a higher mean factor score (.27) than those that live in Residence Halls (-.19). The effect size for the Go Getter factor was in the moderate range at .46. Cohen (1977) stated that effects sizes between .5 and .8 are in the moderate range. Small to medium effect sizes are common in social science research (Stevens, 1996). The Artistic factor score also produced significant differences between the two groups ($F= 9.22, p<.01$). The residence hall students had a higher mean factor score (.20) than did the Greek House students (-.28). The effect size for the Artistic factor also in the moderate range.

Research Question 6

“Is there a difference in scores on the Goals Inventory (motivation factors) for those in a leadership position and those who are not?”

A 2X2 ANOVA was performed to test for significance between the mean scale of those in leadership positions and those who are not and residential setting (see Table 7). There was no significant interaction between being in a leadership position and residential setting. There was a significant difference in terms of the learning subscale based on whether a student holds a leadership position ($F= 10.63, p<.001$). Those in leadership positions had higher mean learning score (46.84) than did the non-leaders (43.18). The effect size was very close to the moderate range (.49). No significant differences were found in terms of the performance subscale. An observation made by the

researcher was that the percentage of leaders in the Greek houses (87%) was much larger than the percentage of leaders in the residence halls (27%).

Table 7

ANOVA for Goals Inventory and Leadership Position: All

Learning					
	Leader	Non-Leader	F	sig.	Effect size
Mean	46.84	43.18	10.63	.001	.49
SD	6.65	7.73			

Residential Setting – Learning			
		Mean	SD
Residence Halls			
	Leader	47.85	6.54
	Non-Leader	42.96	7.87
Greek Houses			
	Leader	46.41	6.86
	Non-Leader	44.41	7.13

Summary

Several analyses were conducted to explore the relationship of the leadership dimension as determined by Astin’s (1993a) typology scales, motivational factors as

determined by the *Goals Inventory*, and place of residence of college students. A factor analysis was performed to determine the structural dimensions and to reduce the number of variables. Three factors were extrapolated from the principal component analysis and retained. These factors were labeled to reflect the resulting structural dimensions of the instrument.

Two multiple regression analysis were performed to determine the relationship between the leadership dimensions and the motivation factors. Significant relationships were found in both analyses. However, in predicting the learning motivational factor two of the leadership factor scores produced significant results, while on the performance motivation factor only one leadership factor score produced significant results.

A multivariate analysis was used to determine the relationship between the motivation scores and place of residence. The analysis produced no significant results. Three ANOVA's were run examine whether there were significant differences on the leadership dimensions based on residence. The Go-Getter factor and the Artistic factor provided significant differences between residences.

An ANOVA was then run to determine the relationship of the motivation factors and whether a person is in a leadership position. The results showed significant findings on the learning subscale, with those in a leadership position having higher scores. No significant difference was found on the performance subscale.

Chapter 5

Summary, Conclusions and Recommendations

Summary

The purpose of this study was to explore relations of leadership and motivational factors and residential setting of college students. This study assumed that Greek houses and residence halls have unique features that would distinguish them from each other. This study also assumed that there are differences between students that live in a Greek house and those that live in a residence hall. To consider these differences, this study focused on leadership traits as determined by Astin's (1993a) typologies of college students and motivational factors as determined by Rodel, Schraw, and Plake's (1994) *Goals Inventory* that is based on Dweck's (1986) achievement goal theory.

Upon a visual inspection of students that live in the two places of residence, there are differences. The differences between the two groups are not easy identifiable, only that there are differences. Astin (1993a) identified seven types that can classify students. Although the classification of students may present some theoretical and philosophical issues, it does provide the opportunity to identify where students might differ from one another. Dweck's (1986) theory of achievement goals identifies what motivates students in an academic setting. Dweck identifies two motivational types: learning and performance. Rodel, Schraw and Plake (1994) developed a *Goals Inventory* that measures the two types of motivation individually. This provided the opportunity to identify where individuals score on both motivational goal factors. Since college

students are in college to learn, using an instrument that measures how a student is motivated to perform in an academic setting is a useful tool in determining differences in motivation between groups. This study explored whether being in a leadership position had an effect on leadership and motivational factors. Therefore, this study examined whether there are differences not only based on residence but also in terms of being in a leadership position.

The research questions addressed in this study were:

1. What are the structural dimensions of the leadership inventory.
2. Is there a linear relationship of the factor scores (leadership dimension) to the learning subscale on the *Goals Inventory*?
3. Is there a linear relationship of the factor scores (leadership dimension) to the performance subscale on the *Goals Inventory*?
4. Is there a difference in scores on the *Goals Inventory* (motivation factors) based on place of residence?
5. Are students living in residence halls significantly different from students living in Greek houses in terms of leadership dimensions?
6. Is there a difference in scores on the *Goals Inventory* (motivation factors) for those in a leadership position and those who are not?

Several analyses were conducted to determine the relationship of the leadership and motivational factors to each other, to type of residence, and to leadership participation. To respond to the first research question, a principle components factor analysis was performed to identify the structural dimensions of Astin's typologies. Three

factors were retained and labeled to reflect the apparent structural dimensions of the instrument. The factors were labeled: Go Getter, Artistic, and Hedonist.

A series of two multiple regression equations were performed to address research questions two and three. Two of the factors showed a significant relationship to the learning subscale of the Goals Inventory (Go Getter and Hedonist). The Artistic group did not show a significant relationship. The Go Getter group showed a significant relationship with the Performance subscale on the Goals Inventory. Neither of the other two factors showed a significant relationship with the Performance subscale.

A MANOVA was run to address research question four. The MANOVA revealed that scores on the Goals Inventory were not influenced by type of residence. Three ANOVA's were run examine whether there were significant differences on the leadership dimensions based on residence. The Go-Getter factor and the Artistic factor provided significant differences between residences. Greek house students scored higher on the Go-Getter factor and Residence Hall students scored higher on the Artistic factor.

A series of ANOVAs were run to determine whether there were differences in the motivation factors between those in leadership positions and those that were not in leadership positions. The ANOVAs were run for all participants and then separated by type of residence. There were significant differences on the learning subscale for the overall group and for the residence hall participants. There were no significant differences in terms of the performance subscale.

Research Question 1

A solution to the research question 1 “What are the structural dimensions of the leadership instrument”, was found by performing a principal components analysis with a varimax rotation. The leadership instrument was developed using Astin’s (1993a) research on empirical typologies of college students. In Astin’s original research, he presented seven typologies in which college students can be categorized. The principal components analysis in this study revealed three factors that account for a majority of the variance (65%). Four subscales (scholar, social activist, leader, and status striver) were represented in the first factor labeled the Go Getter factor. Two subscales (artist and uncommitted) were represented in the second factor labeled the Artistic factor. Finally, one subscale (hedonist) represented the last factor labeled the Hedonist factor. For the purposes of this study individual participants were not classified into types, instead the factors were viewed as continuous variables in which each participant received a score for each factor.

The Go Getter factor was labeled as such because of the subscales that were included in this factor. The four subscales that make up the Go Getter facer can be categorized as being high achievement and outcome focused. According to Astin (1993a), the scholar can be defined by a high academic self-concept and high academic aspirations. The social activist can be defined as being assertive and highly active in social causes that revolve around helping others and making a difference. The leader can be defined as believing in his/her own popularity, having high social self-confidence, and having high leadership ratings. Leaders expect to be elected to student leadership positions. Finally, the status striver can be defined as being committed to success in own

career, being well off financially, and desires recognition from peers. The term Go Getter fits nicely with the definitions for the subscales that are include in this factor.

The Artistic factor was labeled as such because of the subscales included in this factor. The two subscales that are represented in the artistic factor represent a freethinking, non-committal mindset, less concerned with monetary success and recognition. The artist subscale is defined as having high rating in artistic ability and creative ability. The uncommitted subscale is defined as not having a strong connection to the university and unsure about major and career choice. Based on the factor loadings, it is clear that the artistic subscale accounts for the majority of variance in this factor and, therefore, it was logical to label the factor after the artist subscale.

The Hedonist factor was labeled as such because the hedonist subscale was the only subscale represented in this factor. The hedonist subscale is defined as partying, staying up all night, and using alcohol and drugs. While this factor was not as strong as the other two factors, it made theoretical sense to include this factor in the analysis. College students regardless of residential setting are often tempted with behaviors that fit into the hedonist subscale, so separating out this factor from the other two factors provides useful information.

The structure of the leadership instrument used in this study allowed the researcher to focus on attitudes and beliefs of the participants. Astin (1993a) used attitudes and beliefs to categorize students, for the purpose of this study, the dimensions of leadership were used as continuous variables. Therefore, allowing the researcher was able to extract more meaningful information about the two groups involved in this study.

Research Question 2

To answer research question 2, “Is there a linear relationship between the leadership dimensions and the learning subscale on the *Goals Inventory*?”, a regression equation was used. The regression equation revealed that there is a relationship between the leadership factors and the learning subscale ($F=39.48$, $p<.001$). The *Goals Inventory* was used to measure achievement goal motivation of college students as it relates to an academic setting. The learning subscale measures the amount of a learning goal motivation orientation a student expresses. A person high in learning goal orientation would desire to learn for learning sake, unconcerned with external rewards (grades) associated with learning (Dweck, 1986). Since the regression equation revealed a strong relationship, it was then important to attempt to identify the nature of the relationship. Upon examining each individual factor, two factors accounted for the significant relationship. The Go Getter factor accounted for the a majority of the relationship ($F=107.17$, $p<.001$). The Hedonist factor was the other factor that was significant ($p<.01$). Upon review of the zero order correlations it is apparent that the Go Getter factor had a moderately strong positive correlation ($r= .63$) with the learning subscale. The Hedonist factor had a weak negative correlation ($-.17$) with the learning subscale. This finding makes logical sense. The Go Getter factor is categorized by high academic aspirations and a desire for success, while the Hedonist factor is categorized by behaviors that are contrary to academic success (Astin, 1993a).

Research Question 3

To answer research question three, “Is there a linear relationship between the leadership dimension and the performance subscale on the *Goals Inventory*?”, a regression equation was used. The regression equation revealed that there is a relationship between the leadership factors and the performance subscale ($F= 8.37$, $p<.001$). The *Goals Inventory* is used to measure achievement goal motivation of college students as it relates to an academic setting. The performance subscale measures the amount of a performance goal motivation orientation a student expresses. A person high in performance goal orientation would desire to appear to be “smart” regardless of actual learning (Dweck, 1986). Since the regression equation revealed a significant relationship between the leadership factors and the performance subscale, it was then important to identify the nature of the relationship. Each individual factor was then examined. The Go Getter was the only factor to have a significant relationship with the performance subscale ($F= 20.16$, $p<.001$). The zero order correlation for the Go Getter factor was moderately low and positive ($r= .33$). Since the performance and learning subscales on the *Goals Inventory* are independent from each other, it is not surprising that the Go Getter factor had a significant relationship with both subscales. The positive correlations show that the higher the Go Getter scores the higher the learning and performance goal orientations. The Go Getter factor does have an element of “appearance counts”, in that how one appears is more important than reality. So it is logical that the Go Getter factor would have a significant relationship with the performance subscale as well.

Research Question 4

Research question 4, “Is there a difference in scores on the *Goals Inventory* (motivation factors) based on place of residence?”, was answered by using a two-group MANOVA. The results of the MANOVA revealed no significant differences between students that live in Residence Halls and those that live in Greek houses in terms of achievement goal motivation. While no significant differences were revealed between the groups, this finding is interesting. One might assume that students that are involved in Greek houses are motivated differently than those that live in residence halls. The results of this study would dispute that assumption. This finding is important because it suggests that students that live in a Greek house and those that live in a residence hall either are similar in how they are motivated, or that students in either environment can not be characterized by one achievement goal motivation.

Research Question 5

The answer to research question 5 “Are students living in residence halls significantly different from students living in Greek houses in terms of the leadership dimensions?”, was answered by a series of three one-way ANOVAs. The ANOVA’s revealed that the participants are significantly different on the Go Getter factor ($F= 9.30$, $p<.01$). Upon reviewing the mean scores it appears that the students that live in the Greek houses have higher Go Getter scores, than those that live in the residence halls. This is somewhat predictable since being in a fraternity or sorority could indicate one’s desire to be actively involved. The effect score (-.46) is moderate and in social research,

small and moderate effect sizes are typical (Stevens, 1996). This result has both statistical and practical significance in terms of determining whether those that live in different residence environments (Greek houses and residence halls) are different. This finding indicates that there are differences between students in the two residential environments. Also, this finding does have some implications for determining what occurs in the Greek houses that helps facilitate the high Go-Getter scores and how residence hall students might be able to benefit from similar experiences.

The two groups were also significantly different on the Artistic factor ($F= 9.22$, $p<.01$). Upon reviewing the mean scores, the participants that live in the residence halls scored higher on this function than those that live in a Greek house. Again, this is somewhat predictable in that the freedom to be creative, a free thinker, and a lack of overall direction is more probable in a diverse setting of a residence hall, than the more homogeneous setting of a Greek house. The effect size of (.46) was in the moderate range. This finding does have both statistical and practical significance in determining whether there are differences between the groups.

Interestingly for this researcher, the two groups did not show any significant differences on the Hedonist factor. While Greek students often are stereotyped as displaying behaviors associated with the hedonist factor (alcohol and drug use), it is apparent in this study that there are no differences between type of residence and the hedonist behaviors. It could be possible that the high percentage of students in leadership positions in the Greek houses affect the results. Additionally, because the responses were self-reported, the participants may have answered in a socially desirable way, not based on their true behaviors or opinions.

Research Question 6

The answer to the research question 6, “Is there a difference in scores on the *Goals Inventory* for those in a leadership position and those who are not?”, was determined by a one-way ANOVA. The ANOVA revealed that there were significant differences in terms of the learning subscale scores of those that are in leadership positions and those that are non-leaders ($F=10.63$, $p<.001$). The effect size was in the moderate range (.49). Based on the mean scores, those that are in leadership positions score higher on the learning subscale than those who are non-leaders. This finding has both statistical and practical significance because of the nature of the motivation scores. The learning subscale represents a motivation orientation that is based on learning for learning’s sake, intrinsic motivation. No significant difference was revealed in terms of the performance subscale.

Discussion

The literature suggests that college students can be better understood based on their characteristics and behaviors (Astin, 1993a; Kuh, Hu, Vesper, 2000). Furthermore, students that are involved in campus organizations have typically a more positive college experience (Astin, 1977; Kuh, 1995; Tinto, 1998; Milem & Berger, 1999). One cannot examine a person’s behavior separate from his/her environment (Moos, 1973). Each element of the system of a college student impacts the behavior of the individual (Fuqua & Kurpius, 1993; Hurst, 1987; Moos, 1978). There has not been a great deal of research on the effects of organizational involvement on the developmental process of college students (Huebner & Lawson, 1990). Additionally, universities have not designed the campus environment to facilitate the developmental process of the students (Hurst, 1987).

University administrators should strive to identify the goals and values that they want to pass on to students and develop environments accordingly (Sorenson, 1987). Therefore, it is appropriate and necessary to examine the leadership and motivational characteristics of college students based on the type of environment the students reside.

College graduates are expected to be leaders once they have matriculated. So it is important to understand the leadership development of students regardless of whether they are in student leaders positions on a college campus. Leadership development is often mentioned in mission statements, but largely ignored as a whole at a university (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001). Leadership as an ideal is an important aspect of the college experience, however little is known about the best way to develop leadership qualities among college students (Posner & Brodsky, 1992). Therefore, the relationship to leadership dimensions and motivational factors is a compelling connection. This study reinforced previous research (Archer, 1994; Eppler & Harju, 1997) that states that college students have a higher incidence of learning goal orientation than performance goal orientation. That should be reinforcing to those in the university community, that students are more intrinsically motivated to learn as a whole, than extrinsically motivated to appear to learn.

The learning goal orientation having a strong positive relationship to the Go Getter factor makes strong theoretical sense. The Go Getter factor incorporates the behaviors and beliefs of students that are consistent with the learning goal orientation, with the possible exception of the status striver subscale, which is more concerned with attainment and recognition. The negative relationship of the Hedonist factor to the learning subscale is further proof that the behaviors and beliefs that define this factor are

detrimental to the educational experience. The lack of significance in terms of the Artistic factor also makes theoretical sense in that the artistic factor is defined as being less committal and free thinking, therefore the range of diversity in this factor allows for a wide range of motivation scores.

The relationship of the factors to the performance subscale was significant, yet not as strong as the learning subscale. The Go Getter factor was the only factor to have a significant relationship with the performance subscale. The two motivation subscales are independent of each other and the Go Getter factor encompasses a range of subscales, therefore, this finding is not surprising. The status striver and potentially the leader subscale would include attitudes consistent with the performance goal orientation. This relationship between leadership dimensions and motivation is important in that little research has been conducted on the motivation of students to learn and the relationship to student leadership (Stage, 1996). This study establishes that there is a relationship between the leadership dimensions used in this study and achievement goal motivation.

It was interesting to note that place of residence did not affect the achievement goal orientation. It could have been hypothesized that those that live in a Greek house would be more likely to have a performance goal orientation. This hypothesis would have been based on the stereotypes of students in the Greek system as being materialistic and concerned with appearance over substance. However, that was not the case in this study. Students in Greek houses, while not significant, did have higher mean scores on the learning subscale than did residence hall students. Therefore, that stereotype of Greek students was not supported by this study. This finding could be due to the large percentage of student leaders in the Greek house group, or that participants answer how

they thought was appropriate, instead of how they truly feel, or perhaps the stereotypes of Greek students are inaccurate.

One of the main reasons for choosing this study was to determine whether there are differences between students that live in a Greek house and students that live in a residence hall. Little research has been done exploring the differences, if any, between these two prominent student groupings. Therefore, the first step in exploring the differences between the two types of residence was to determine if there were statistical differences between the groups and not just subjective differences based on casual observation. The results of this study did find that students that live in Greek houses are different than students that live in residence halls. The residence hall students differ from Greek house students in terms of the leadership dimensions used in this study. The Greek students had higher levels of academic and personal self-confidence, a stronger leadership self-efficacy, higher need for recognition, and a desire to help others and make a difference. The residence hall students had higher levels of creativity, are less committed to the institution and are unsure about the future.

These results could be due to the greater diversity that is present in the residence halls. In terms of the leadership dimensions the standard deviation for the Go-Getter factor for residence hall students (1.15) was almost two times that of Greek students (.68). Additionally, as you can see in Table 6, the residence hall students had higher standard deviations on all three factors. This supports the idea that there is greater diversity in the residence hall group than in the Greek house group. Selection into a residence hall is not a peer selection process; students cannot determine who lives in the

residence hall community. However, being a member of a Greek house is a peer review process and lends itself to greater homogeneity.

Additionally, it does fit the stereotype that Greek students tend to be motivated to succeed. Residence hall students may not feel the same peer pressure to attain personal status symbols and academic goals. Greek houses tend to have regulations that relate to membership that require and/or encourage members to get involved in campus organizations and campus leadership positions. It is interesting to note that there was not a significant difference between these two groups on the hedonist factor. While neither group scored high on this factor the results still reinforces the need to include all students in education and prevention efforts as it relates to alcohol and drug issues.

Another premise of this study was the importance of student leadership positions. The researcher chose to evaluate the differences between leaders and non-leaders in terms of the motivation scores. Student leaders overall showed that they have significantly higher learning scores than did non-leaders. This might indicate that being in a leadership position provides valuable experiences and training that reinforce the learning goal orientation. On the other hand, one could argue that students with a higher learning goal orientation seek out leadership positions. It is interesting to note that students in leadership positions did not have significant differences in terms of performance goal orientation. This is interesting because being in a leadership position is characterized as being public and in a position to be recognized, which is typically associated more closely with the performance goal orientation. It is possible that leadership opportunities and types differ in the different environments. However, because type of leadership

positions were not distinguished, it is not possible to determine if level of leadership position affects motivation.

This study showed that there are differences between students that reside in Greek houses and those that live in residence halls. The results are not surprising when one takes into account that students that are not motivated to do well in school are often not retained in the Greek houses. Greek houses typically have grade requirements for pledges and members. Students that do not make the grades are never admitted into membership. Therefore, we restrict the range of membership and the group is more homogeneous. Residence halls serve all students that desire to live in the halls. As long as a student is admitted into the university they can live in a residence hall. It is this open acceptance of all students that helps define the residence hall environments. Now that differences have been found in terms of leadership and motivation between residence hall students and Greek house students, more research can determine the reasons for the differences.

Conclusions

This study identified that students that live in residence halls are different than students that live in Greek houses. As Schroeder and Jackson (1987) point out a student's development is a function of his/her environment. Additionally, the organizational structure is determined by the attitudes and beliefs of the members of the organization (Moos, 1973). So one could argue that it is the environment of the Greek houses and the residence halls that is responsible for the differences. However, how student's self-select into the different environments might also explain the differences.

Systems theory reminds us that all parts of a human system are interconnected (Fuqua & Kurpius, 1993). Therefore, it is likely that it is a combination of factors that explain the differences. Further research is needed to explore the selection process into the separate environments, as well as the environments themselves.

This study also identified the relationship between the leadership dimensions of Astin's (1993a) typologies and the achievement goal orientations measured in Rodel, Schraw, and Plake's (1994) Goal Inventory. This study is an important first step in identifying the differences in students in residence halls and Greek houses, as well as the student leaders within these environments.

Recommendations and Limitations

It is important to the practice of student affairs to understand the differences between students that choose to live in different environments. By understanding these differences, student affairs administrators can design developmental interventions that effectively impact each population. Students that do not feel connected to an organization will not pursue leadership opportunities within that organization (Sergent & Sedlacek, 1990). Student affairs administrators should attempt to provide leadership training that helps students connect with the campus environment and the student's organization. Leadership is not solely a function of people in leadership positions, all students benefit from leadership development and training.

The first step was to identify whether there were differences in the students that live in the residence halls and Greek houses. The current study indicated that there are differences so further research is needed to determine the nature of these differences. An

exploration of the residential setting selection process from a systemic perspective, as well as, further exploration of individual characteristics would be useful. A systems approach is also needed in determining the best methods of leadership development and overall student development for each population.

A longitudinal study, that tracks students before college and through the first year, to explore the impact of the environment of the residential setting on the student would be useful. Additional research is needed to determine if the use of the leadership inventory based on Astin's (1993a) typologies is a reliable tool in measuring leadership. Examining the role of gender and the differences between fraternity and sororities would be an interesting research topic. Continued examination of the role of motivational factors and leadership is needed to determine what is the best tool in determining a person's motivation to become a leader and whether a leader's motivation is the reason s/he seek leadership positions. Additional research is needed to explore how the leadership position has affected students' motivation.

How leadership is defined should also be addressed. There is no common understanding of what leadership is and what it encompasses. Leadership is still treated in a hierarchical fashion on many college campuses and in many student organizations. The tools used to evaluate leadership should be designed in a fashion to explore the relational aspect of leadership. Leadership should be trained as a relational process and not a position. The administrative model of leadership on most campuses is still hierarchal, so if the university is going to train students in leadership as a relational process, the university should model that behavior for students and make leadership more inclusive on campuses.

Additionally, the cultural aspects of leadership should be further explored.

Ethnic groups such as African Americans, view leadership differently than the dominant European culture (Arminio et al., 2000). Using the term “leader”, for African American males is a negative title. The authors attribute this to cultural differences in which leadership is much more of a collaborative and relational process. Student Affairs professionals should explore several leadership theories of other cultures to develop leadership models that best serves all students. A great deal can be learned from other cultures in terms of leadership and leadership development.

Stages of leadership development may also need to be explored to indicate what types of leadership experiences are needed to help students grow developmentally in their leadership attributes. Different leadership positions may require different leadership traits. To fully develop students leadership potential differences in leadership experiences need to be explored. Finally, the term “leadership development” may not be broad enough and may not be seen as a positive term by all cultures therefore, the term “citizenship development” may be more appropriate.

Limitations

There are a few limitations of this study:

1. The results in this study are based on students from the same university, so the generalizability is unknown.
2. The percentage of students in leadership positions in the Greek house group was far greater than the residence hall group. That may account for the differences in research question six, as well as other results.

3. This study looked at only one aspect of each student's environment. A more complex study of the entire system would be beneficial.
4. This study grouped genders in each group, additional research should be conducted to determine if gender has an effect on the results.
5. The Greek houses in this study were historically Caucasian organizations. Further research with a greater diversity pool is needed.
6. A limitation of this study is that it is a correlation study, therefore, relationships not causality can be determined.

References

- Archer, J. (1994). Achievement goals as a measure of motivation in university students. *Contemporary Educational Psychology, 19*, 430-446.
- Arminio, J.L., Carter, S., Jones, S.E., Kruger, K., Lucas, N., Washington, J., Young, N., & Scott, A. (2000). Leadership experiences of students of color. *NASPA Journal, 37*, 498-507.
- Astin, A.W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A.W. (1977). *Four critical years*. San Francisco: Jossey-Bass.
- Astin, A.W. (1984). Student involvement: A developmental theory for higher education. *The Journal of College Student Development, 25*, 297-308.
- Astin, A.W. (1993a). An empirical typology of college students. *Journal of College Student Development, 34*, 36-46.
- Astin, A.W. (1993a). *What matters in college?: four critical years revisited*. San Francisco: Jossey-Bass.
- Banning, J.H. (1979). Consultation for environmental change: an administrator's view. In Hamilton, M.K., & Meade, C.J. (Eds.) *New directions for student services*. (pp. 47-56). Jossey-Bass.
- Banning, J.H., & Kaiser, L. (1974). An ecological perspective and model for campus design. *Personnel and Guidance Journal, 52*, 371-375.
- Berger, J.B. (1997). Student's sense of community in residence halls social integration, and first-year persistence. *Journal of College Student Development, 38*. 441-452

- Beil, C., Reisen, C.A., Zea, M.C., & Caplan, R.C. (1999). A longitudinal study of the effects of academic and social integration and commitment on retention. *NASPA Journal*, 37, 376-385.
- Blimling, G.S., Whitt, E.J. (1999) *Good practices in student affairs: Principles to foster student learning*. San Francisco: Jossey-Bass.
- Boatman, S.A. (1999). The leadership audit: A process to enhance the development of student leadership. *NASPA Journal*, 37, 325-335.
- ✓ Clodfelter, I., Furr, S., & Wachowiak, D. (1984). Student living environments and their perceived impact on academic performance. *The Journal of College and University Student Housing*, 14, 18-21.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.
- Cooper, D.L., Healy, M.A., & Simpson, J. (1994). Student Development through involvement: Specific changes over time. *Journal of College Student Development* 35, 98-102.
- Creamer, D.G. (1990). Progress toward intentional student development. In D.G. Creamer (Ed), *College student development: theory and practice for the 1990's* (pp. 3-8). Lanham, MD: ACPA media publications.
- Cress, C.M., Astin, H.S., Zimmerman-Oster, K., & Burkhardt, J.C. (2001). Developmental outcomes of college students' involvement in leadership activities. *Journal of College Student Development*, 42, 15-27.
- Dweck, C.S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.

- Dweck, C.S. (1998). The development of early self-conceptions: Their relevance for motivational processes. In Heckhausen & Dweck (Eds.) *Motivation and self-regulation across the life span*, (pp. 257-280). Cambridge: Cambridge University Press.
- Eklund-Leen, S.J., & Young, R.B. (1996). Attitudes of student organization members and nonmembers about campus and community involvement. *Community College Review*, 24, 74-81.
- Eppler, M.A., & Harju, B.L. (1997) Achievement motivation goals in relation to academic performance in traditional and nontraditional college students. *Research in Higher Education*, 38, 557-573.
- Fuertes, J.N., & Sedlacek, W.E. (1993). Barriers to the development of Hispanics in higher education. *NASPA Journal*, 30, 277-283.
- Fuqua, D.R., & Kurpius, D.J. (1993) Conceptual models in organizational consultation. *Journal of Counseling and Development*, 71, 607-618.
- Henderson, K.A. (1985). Issues and trends in volunteerism. *Journal of Physical Education, Recreation, and Dance*. 56, 30-37.
- Hallenbeck, D.A. (1991). Managing physical facilities. In Miller, T.K., & Winston, R.B., (Eds.) *Administration in student affairs: Actualizing student development in higher education (2nd Edition)* pp. 642-667. Muncie, In, Accelerated Development Inc.
- Hernandez, K., Hogan, S., Hathaway, & C., Lovell, C.D. (1999). Analysis of the literature on the impact of student involvement on student development and learning: more questions than answers? *NASPA Journal*, 36, 184-197.

- Huebner, L.A., & Banning, J.H. (1987). Ethics of intentional campus design. *NASPA Journal*, 25, 28-37.
- Huebner, L.A., & Lawson, J.M. (1990). Understanding and assessing college environments. In D.G. Creamer (Ed), *College student development: Theory and practice for the 1990's*, (pp. 127-149). Lanham, MD: ACPA media publications.
- Hunt, S., & Rentz, A.L. (1994). Greek letter social group members' involvement and psychosocial development. *Journal of College Student Development*, 35, 289-295.
- Hurst, J.C. (1987). Student development and campus ecology: a rapprochement. *NASPA Journal*, 25, 5-17.
- Hurst, J.C., McKinley, D.L. (1988). An ecological diagnostic classification plan. *Journal of Counseling and Development*, 66, 228-232.
- Kaiser, H.F. (1960). The application of electric computers to factor analysis. *Educational and Psychological Measurement*, 20, 141-151.
- Kezar, A., & Moriarty, D., (2000). Expanding our understanding of student leadership development: a study exploring gender and ethnic identity. *Journal of College Student Development*, 41, 55-69.
- Kimbrough, W.M., & Hutcheson, P.A. (1998). The impact of membership in black greek-letter organizations on black students' involvement in collegiate activities and their development of leadership skills. *Journal of Negro Education*, 67, 96-104.
- Komives, S.R., Lucas, N., & McMahon, T.R. (1998). *Exploring Leadership: For college students who want to make a difference*. San Francisco, Jossey-Bass.
- Kouzes, J.M., & Posner, B.Z. (1990). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco: Jossey-Bass.

- ✗ Kuh, G.D. (1995). The other curriculum: out of class experiences associated with student learning and personal development. *Journal of Higher Education*, 66, 123-155.
- ✓ Kuh, G.D., Hu, S., & Vesper, N. (2000). "They shall be known by what they do": An activities based typology of college students. *Journal of College Student Development*, 41, 228-244.
- Lewin, K. (1936). *Principles of topological psychology*. New York: McGraw-Hill.
- Martin, L.M. (2000). The relationship of college experiences to psychological outcomes in students. *Journal of College Student Development*, 41, 292-301.
- Milem, J.F. & Berger, J.B. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence. *Research in Higher Education*, 40, 641-664.
- Miller, R.B., Behrens, J.T., Greene, B.A., & Newman, D. (1993). Goals and perceived ability: Impact on student valuing, self-regulation, and persistence. *Contemporary Educational Psychology*, 18, 2-14.
- Moos, R.H. (1973). Conceptualizations of human environments. *American Psychologists*, 28, 652-665.
- Moos, R.H. (1978). Social environments of university student living groups architectural and organizational correlates. *Environment and Behavior*, 10, 109-126.
- Mouritsen, M.M., & Quick, T.M. (1987). A curricular approach to ethical issues in student leadership development. *NASPA Journal*, 25, 62-69.
- Neuberger, C.G., Hansen, G.S. (1997). The greek life self study: A powerful process for change on campus. *NASPA Journal*, 34, 91-100.

Outcalt, C.L., Faris, S.K., McMahon, K.N., Tahtakran, P.M., Noll, C.B. (2001). A leadership approach for the new millennium: A case study of UCLA's bruin leaders project. *NASPA Journal*, 38, 178-188.

Pascarella, E. (1999). The development of critical thinking: does college make a difference? *Journal of College Student Development*, 40, 562-569.

Pascarella, E., & Terezini, P. (1992). Designing colleges for greater learning. *Planning for Higher Education*, 20, 1-6.

Pascarella, E., & Terenzini, P. (1995). The impact of college on students: myths, rational myths, and some other things that might not be true. *NACADA Journal* 15, 26-33.

Pascarella, E., & Terezini, P. (1998). Studying college students in the 21st century: meeting new challenges. *Review of Higher Education*, 21, 151-165.

3/13 ✓ Pascarella, E., Whitt, E.J., Nora, A., Edison, M., Hagedorn, L.S., & Terenzini, P.T. (1996). What have we learned from the first year of the national study of student learning? *Journal of College Student Development*, 37, 182-191.

3/13 ✓ Picklesimer, B.K. & Miller, T.K. (1998). Life-skills development inventory – college form: an assessment measure. *Journal of College Student Development*, 39, 100-110.

Posner, B.Z., & Brodsky, B. (1992). A leadership development instrument for college students. *Journal of College Student Development*, 33, 231-237.

3/13 ✓ Posner, B.Z., & Brodsky, B. (1993). The leadership practices of effective RA's. *Journal of College Student Development*, 34, 300-305.

Posner, B.Z., Brodsky, B. (1994). Leadership practices of effective student leaders: gender makes no difference. *NASPA Journal*, 31, 113-120.

Roedel, T.D., Schraw, G., & Plake, B.S. (1994). Validation of a measure of learning and performance goal orientations. *Educational and Psychological Measurement*, 54, 1013-1021.

Rodgers, R.F. (1990). An integration of campus ecology and student development: the olentangy project. In D.G. Creamer (Ed.), *College Student Development: Theory and practice for the 1990's*, (pp. 155-179). Lanham, MD: ACPA media publications.

Rogers, J.L. (1992). Leadership development for the 90s: incorporating emergent paradigm perspectives. *NASPA Journal*, 29, 243-251.

Sanford, N. (1966). *Self and society*. New York: Atherton Press.

Schein, E.H. (1992). *Organizational culture and leadership; Second edition*. San Francisco: Jossey-Bass.

3/13

✓ Schroeder, C. (1996). The student learning imperative: Implications for student affairs. *Journal of College Student Development*, 37, 118-123.

3/13

✓ Schroeder, C., & Hurst, J.C. (1996). Designing learning environments that integrate curricular and cocurricular experiences. *Journal of College Student Development*, 37, 174-181.

✓ Schroeder, C., & Jackson, G.S. (1987), Creating conditions for student development in campus living environments. *NASPA Journal*, 25, 45-53.

3/13

✓ Schuh, J.H., & Allen, M.R. (1978). Implementing the ecosystem model. *Journal of College Student Personnel*, March, 119-122.

Schuh, J. H., & Kuh, G. (1991). Evaluating the quality of collegiate environments. *The Journal of College Admission*, Winter, 17-21.

Schuh, J. H., & Laverty, M. (1983). The perceived long-term influence of holding a significant student leadership position. *Journal of College Student Personnel*, January, 28-33.

Sergent, M.T. & Sedlacek, W.E. (1990). Volunteer Motivations across student organizations: a test of person-environment fit theory. *Journal of College Student Development*, 31, 255-261.

✓ Simono, R.B., Wachowiak, D., & Furr, S.R. (1984). Student living environments and their perceived impact on academic performance: a brief follow-up. *The Journal of College Student Housing*, 14, 22-24.

Sorenson, D.M. (1987). The journey is the reality: developmental-ecological programming at Brigham-Young university. *NASPA Journal*, 25, 38-44.

3/13 ✓ Stage, F.K. (1996) Setting the context: psychological theories of learning. *Journal of College Student Development*, 36, 227-235.

Stanford, S.W. (1992). Extracurricular involvement and the development among undergraduate student leaders. *College Student Affairs Journal*, 12, 17-23.

Stevens, J. (1996). *Applied multivariate statistics for the social sciences: third edition*. Mahwah, NJ: Lawrence Erlbaum Associates.

Tinto, V. (1998). Colleges as communities: taking research on student persistence seriously. *The Review of Higher Education*, 21, 167- 177.

3/13 ✓ Twale, D. & Sanders, C.S. (1999). Impact of non-classroom experiences on critical thinking ability. *NASPA Journal*, 36, 133-146.

Weilkiewicz, R.M. (2000) The leadership attitudes and beliefs scale: an instrument for evaluating college students' thinking about leadership and organizations. *Journal of College Student Development*, 41, 335-346.

3/13 ✓ Western Interstate Commission for Higher Education (1972). *The ecosystem model: designing campus environments*. Boulder, Col.: WICHE.

Winniford, J.C., Carpenter, D.S., & Grinder, C. (1997). Motivations of college student volunteers: A review. *NASPA Journal*, 34, 134-145.

Winston, R.B. & Anchors, S. (1993). Student development in the residential environment. In Winston, R.B. & Anchors, S. (Eds.) *Student housing and residential life: A handbook for professionals committed to student development goals*. San Francisco: Jossey-Bass.

Winston, R.B., Bledsoe, T., Goldstein, A.R., Wisbey, M.E., Street, J.L., Brown, S.R., Goyen, K.D., & Rounds, L.E. (1997). Describing student organizations: The student organization environment scales. *Journal of College Student Development*, 38, 417-428.

Winston, R.B. & Miller, T.K. (1991). Human development and higher education. In Winston, R.B. & Miller T.K. (Eds.) *Administration and leadership in student affairs: Actualizing student development in higher education. Second Edition*. pp. 3-35. Muncie, In.: Accelerated Development, Inc.

Winston, R.B., Miller, T.K., & Prince, J.S. (1987). *Student development task and lifestyle inventory*. Athens, GA: Student Development Associates.

Appendix A

IRB Approval

Oklahoma State University
Institutional Review Board

Protocol Expires: 4/14/03

Date: Monday, April 15, 2002

IRB Application No: EDO2103

Proposal Title: THE RELATIONSHIP OF LEADERSHIP AND MOTIVATIONAL FACTORS TO THE
RESIDENTIAL SETTING OF STUDENT LEADERS

Principal
Investigator(s):

Doug Hallenbeck
435 Willard
Stillwater, OK 74076

Marcia Dickman
435 Willard
Stillwater, OK 74076

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Becher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbecher@okstate.edu).

Sincerely,


Carol Olson, Chair
Institutional Review Board

Appendix B

Participant Instruction Sheet

Participant Instructions

This is a research project that will be a part of my work toward a doctoral degree in Applied Behavioral Studies, with an emphasis in Student Personnel Administration. This study is entitled, “The Relationship of Leadership and Motivational Factors to the Residential Setting of Student Leaders”. The purpose of this research is to examine the relationship between leadership and motivational factors and place of residence of students both those in leadership positions and those not.

Participation is voluntary and anonymous. Each participant will be asked to complete a consent form, a brief demographic sheet, and a fifty-nine (59) item questionnaire. It is estimated that participation will take approximately 10-15 minutes. Each participant will be given two identical copies of the consent form. One copy is to keep. Please fill out the second copy and return it prior to completing the survey. Turning in the consent form separately from the questionnaire and demographic sheet is to ensure that answers remain anonymous. The identifying information on the consent form will not be entered into any database, and will always be stored separately from the survey and demographic information.

Your participation in this study would be greatly appreciated, and I thank you for your time and cooperation.

Appendix C

Student Questionnaire

Student Questionnaire

*Please answer the following questions as they relate to you at this moment in time.
Mark you answers clearly and return to Doug Hallenbeck at the Kerr-Drummond Mezzanine*

Highest academic degree you expect to earn in your lifetime:

- 1 None 2 Associate 3 Bachelor's 4 Master's 5
Ph.D,EdD,M.D.,J.D.

How important to you is each of the following?

	Essential 5	Very Important 4	Neutral 3	Somewhat Important 2	Not Important 1
1. Participating in a community action program	5	4	3	2	1
2. Helping others who are in difficulty	5	4	3	2	1
3. Influencing the political structure	5	4	3	2	1
4. Influencing social values	5	4	3	2	1
5. Creating artistic work	5	4	3	2	1
6. Writing original works	5	4	3	2	1
7. Becoming accomplished in the performing arts	5	4	3	2	1
8. Being successful in own business	5	4	3	2	1
9. Having administrative responsibility	5	4	3	2	1
10. Being very well off financially	5	4	3	2	1
11. Obtaining recognition from my colleagues for contributions in my own field	5	4	3	2	1
12. Becoming an authority in my field	5	4	3	2	1

How would you rank yourself in comparison to other students?

	Below Average 2					Poor 1
	Average 3					
	Above Average 4					
	Superior 5					
13. Academic Ability	5	4	3	2	1	
14. Mathematical Ability	5	4	3	2	1	
15. Artistic Ability	5	4	3	2	1	
16. Popularity with opposite sex	5	4	3	2	1	
17. Popularity	5	4	3	2	1	
18. Social Self-Confidence	5	4	3	2	1	
19. Leadership Ability	5	4	3	2	1	
20. Public Speaking Ability	5	4	3	2	1	
21. Intellectual Self-Confidence	5	4	3	2	1	

What is your opinion on the of the following item?

	Disagree Strongly 1				
	Neutral 3			Disagree 2	
	Agree 4				
	Agree Strongly 5				
22. Marijuana should be legalized.	5	4	3	2	1

How do the following questions relate to your behavior over the last three years?

	Seldom 2					Not at all 1
	Occasionally 3					
	Frequently 4					
	Daily 5					
23. Drank Beer	5	4	3	2	1	
24. Smoked Cigarettes	5	4	3	2	1	
25. Stayed up all night	5	4	3	2	1	

What are your expectations of the future?

	No Chance 1				
	Very Little Chance 2				
	Some Chance 3				
	Very Good Chance 4				
	Definitely 5				
26. To be elected to an honor society	5	4	3	2	1
27. To graduate with honors	5	4	3	2	1
28. To be elected to a student office	5	4	3	2	1
29. To change career choice	5	4	3	2	1
30. To change major field	5	4	3	2	1
31. To drop out of this college temporarily	5	4	3	2	1
32. To drop out permanently	5	4	3	2	1
33. To transfer to another college before graduating	5	4	3	2	1

					Not like me 1
				Rarely like me 2	
		Not sure if like me 3			
		Like me 4			
	Very much like me 5				
17. I prefer challenging tasks even if I do not do as well at them	5	4	3	2	1
18. Every student can learn to be a successful learner	5	4	3	2	1
19. Learning can be judged best by the grade one gets	5	4	3	2	1
20. My grades do not necessarily reflect how much I learn	5	4	3	2	1
21. Mistakes are a healthy part of learning	5	4	3	2	1
22. I feel most satisfied when I work hard to achieve something	5	4	3	2	1
23. I would rather have people think I am lazy than stupid	5	4	3	2	1
24. It is important to me to always do better than others	5	4	3	2	1
25. I give up too easily when faced with a difficult task	5	4	3	2	1

Appendix D

Astin's Permission to use Research



HIGHER EDUCATION RESEARCH INSTITUTE

September 9, 2002

GRADUATE SCHOOL OF EDUCATION
& INFORMATION STUDIES
3800 MOORE HALL
BOX 951551
LOS ANGELES, CALIFORNIA 90095-1551
PHONE: (310) 825-3889
FAX: (310) 825-3889

www.gsei.ucla.edu/hert/hert.html

Mr. Doug Hallenbeck
Asst. Director of Residential Life
Oklahoma State University
201 Kerr-Drummond Mezzanine
Stillwater, OK 74078

Re: Permissions Request

Dear Mr. Hallenbeck:

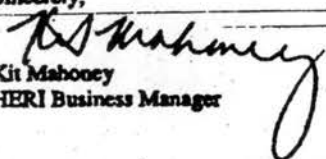
Professor Alexander W. Astin grants his permission to you to use the typology scales he presented in "An Empirical Typology of College Students" as part of your dissertation research. As you have described, you will use the typologies to help study differences in student leaders who have chosen to reside in residence halls and greek houses.

Please cite Professor Astin's article, as follows:

Astin, A. W. An Empirical Typology of College Students. Journal of College Student Development. January 1993, Vol 34, pp 36-46.

Good luck with your research project.

Sincerely,


Kit Mahoney
HERI Business Manager

Appendix E

Permission to use *Goals Inventory*



Terri DeBecker
<debecker@ou.edu>

04/13/02 01:12 PM

To: Douglas A Hallenbeck/rsalife/stusvc/Okstate
<hallenb@okstate.edu>
Subject: Re: Goals Inventory

I am happy to have you use the inventory.

Terri DeBecker

Teresa K. DeBecker, Ph. D.
Associate Professor, Educational Psychology
University of Oklahoma

820 Van Vleet Oval
Norman, OK 73019-2041

phone: (405)325-1068
fax: (405)325-0855

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

From: Douglas A Hallenbeck/rsalife/stusvc/Okstate
To: debecker@ou.edu
Sent: Monday, April 01, 2002 9:50 AM
Subject: Goals Inventory

My name is Doug Hallenbeck, I am a PhD. candidate in Counseling and Student Personnel at Oklahoma State University. I am working on my dissertation and would like permission to use the Goals Inventory that you developed and presented in the 1994 article "Validation of a measure of learning and performance goal orientations". I am studying the relationship of leadership and motivational factors to residential setting.

Thanks for your time and considerations of this request.

Thanks,
Doug Hallenbeck
hallenb@okstate.edu

Appendix F

Demographic Sheet

Demographic Information

Gender: _____ Female _____ Male

Age: _____

Ethnicity: _____ Asian/Pacific Islander _____ Hispanic/Latino _____ Caucasian
 _____ Black/African American _____ Native American/American Indian
 _____ Prefer not to respond _____ Other

Academic Classification: _____ Freshman _____ Sophomore _____ Junior
 _____ Senior _____ Graduate

Major: _____

Residence: _____ Residence Hall/Apartment/Suite _____ Greek House
 _____ Off Campus House/Apartment

Have you been elected or appointed by an elected official to a leadership position while in college: _____ Yes _____ No

If yes, Title and setting (Res. Life, Greek Life, Organization *specify*) of leadership position(s):

Title	Setting
_____	_____
_____	_____
_____	_____

If held a leadership position how many semesters (total) have you held a leadership position? _____

Appendix G

Informed Consent Form

INFORMED CONSENT

“I, _____ (print name), hereby authorize or direct Doug Hallenbeck, or associates or assistants of his choosing, to administer the following demographic questionnaire and survey.”

I am conducting research on the Oklahoma State University campus as a part of my work toward a doctoral degree in Applied Behavioral Studies, with an emphasis in Student Personnel Administration. This study is entitled, “The Relationship of Leadership and Motivational Factors to the Residential Setting of Student Leaders”, principal investigator Doug Hallenbeck, advisor Dr. Marcia Dickman. The purpose of this research is to examine the relationship between leadership and motivational factors and place of residence of a leader.

Participation in this study will require the completion of a sixty-three (59) item questionnaire and a brief demographic sheet.

If you choose to participate, please complete the demographic sheet and respond to the survey items. No other participation is required. There are no anticipated risks associated with participation in this study.

This consent form and the demographics sheet and questionnaire will be collected separately to ensure that your responses are anonymous. In addition the informed consent forms will be kept in a locked cabinet in the office of the principal investigator and the names of the participants will not be released.

Your participation in this study would be greatly appreciated. If you have any questions regarding this study please feel free to contact, Doug Hallenbeck M.S. at (405) 744-5596, or Marcia Dickman Ph.D. at (405) 744-9445. You may also contact Sharon Bacher, Institutional Review Board Executive Secretary, 203 Whitehurst, Oklahoma State University, (405) 744-5700. Thanks you for your time and cooperation.

I understand that participation is voluntary and that I will not be penalized if I choose not to participate I also understand that I am free to withdraw my consent and end my participation in this project at any time without penalty after notifying the project director.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: _____ Time: _____ (a.m./p.m.)

Name (Printed)

Signature

Please keep one copy, sign the other, and turn it in separately from the attached demographic sheet and questionnaire.

Appendix H

Correlation Matrix for Leadership Dimensions

	Scholar	Social A	Artist	Hedonist	Leader	Status	Uncommit
Scholar	1.00						
Social A	.261	1.00					
Artist	-.001	.178	1.00				
Hedonist	-.135	-.095	.196	1.00			
Leader	.430	.393	.007	.073	1.00		
Status	.291	.311	.102	.134	.448	1.00	
Uncommit	-.113	-.097	.233	.209	-.245	-.066	1.00

VITA

Douglas A. Hallenbeck Z

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE RELATIONS OF LEADERSHIP AND MOTIVATIONAL FACTORS AND RESIDENTIAL SETTING OF COLLEGE STUDENTS

Major Field: Applied Behavioral Studies

Emphasis: Student Personnel Administration

Biographical:

Personal Data: Born in Ames, Iowa, on July 31, 1969, son of Daniel A. and Carolyn M. Hallenbeck.

Education: Graduated from Cedar Shoals High School, Athens, Georgia in June 1987; Received Bachelor of Science degree in Psychology from Georgia College in August, 1991; received Master of Science degree in Counselor Education with an Emphasis in Student Development from Mississippi State University in May, 1993; Completed the requirements for a Doctor of Philosophy degree in Educational Psychology with an emphasis in Student Personnel Administration, from Oklahoma State University, December, 2002.

Experience: Hall Director, Mississippi State University, August 1991 to May 1993; Residence Director, University of Florida, July, 1993 to June, 1996; Residence Halls Coordinator, Oklahoma State University, June, 1996 to July, 1998; Assistant Director of Residential Life, Oklahoma State University, July, 1998 to Present.

Professional Membership: National Association of Student Personnel Administrators, Southwest Association of College and University Housing Officers, Association of College and University Housing Officers-International, National Association of College and University Food Service.