Characteristics of Persisting Students Utilizing the Retention Self-Study Framework: A Case Study

CHARACTERISTICS OF PERSISTING STUDENTS UTILIZING THE RETENTION SELF-STUDY FRAMEWORK: A CASE STUDY

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Ray Frederick Gasser

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Ray Gasser
entitled Characteristics of Persisting Students Utilizing the Retention Self –Study Framework: A Case Study
and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy

_____ Date: 4/5/06
Dudley B. Woodard, Jr.

_____ Date: 4/5/06
John Cheslock

_____ Date: 4/5/06
Jenny Lee

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.
I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

_____ Date: 4/5/06
Dissertation Director: Dudley B. Woodard, Jr.

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SIGNED: Ray Frederick Gasser

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I dedicate this work to my son,

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You can accomplish anything your heart desires.

TABLE OF CONTENTS

TABLE OF CONTENTS - *Continued*

TABLE OF CONTENTS - *Continued*

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Although retention has become a critical priority for most institutions, this interest has not yielded significantly increased retention rates over the past 30 years. Understanding how each individual institution could increase retention rates will help to avoid the critics of higher education who have grown wary over the increasing costs. In order to justify the increases in tuition, higher education must show that students can persist, graduate, and succeed in the 'real world'.

This exploratory study seeks to provide insight into persistence by focusing on understanding the common themes of students who persisted. In 2001, Woodard, Mallory, & DeLuca published a research article providing a comprehensive structure that incorporates an extensive body of student retention research along with the authors' own research. The framework provides institutions with a model to explore the areas that affect student retention. The authors describe four major components to retention: the student sphere, institutional sphere, academic affairs sphere, and student services sphere. Within each of these spheres is a number of characteristics that research indicates effects retention. The Retention Self-Study Framework (2001) draws heavily from the research of Vincent Tinto (1975, 1987, 1993), John Bean (1980, 1983), Alexander Astin (1984), and Ernest Pascarella (1980).

This study investigates the extent to gender, race, high school class rank, socio-economic status, institutional choice, financial aid package, and parents' education relate to the experiences within the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001).

Utilizing the Retention Self-Study Framework, the author created a survey that asked students about each of the various characteristics within the four spheres described in the framework. The research was conducted at a large Research-Extensive university in southwest United States of undeclared majors. Utilizing mixed methods, the research provides a fresh look at issues of retention and those experiences that are related to persistence and suggests implications for practice and future research.

CHAPTER ONE

INTRODUCTION

Student retention in higher education has been studied for over 70 years (Braxton, 2000). In that time, scholars have published seminal theories and research to assist institutions in helping students succeed. Over the past 30 years, researchers have learned of the various factors correlated with the reasons why students leave an institution, yet the retention rates have not significantly changed (Habley & McClanahan, 2004). Over half of all students who leave college do so before their second year (Consortium for Student Retention Data Exchange, 1999). Unfortunately for college administrators, student retention has not been an easy occurrence to effectively manage. This is true because of the sheer number of variables that affect any one student's decision to leave an institution. Additionally, it has been impossible to interview all of the students who leave institutions of higher education annually. Since each student has unique experiences and characteristics that shape their experience, understanding student departure is a complex process that is distinctively individualistic. Still, research has shown a variety of trends based on certain student characteristics. Furthermore, student variables dynamically interact with institutional variables such as institutional size, admission standards, and teacher-student ratio, which again may dictate a departure decision. For some students, leaving an institution does not mean leaving higher

education. In fact, 30 percent of students who begin their education in a four-year college or university will leave that institution for another within a four-year period (McCormick, 1997). The question that researchers and college administrators are most perplexed by is what causes certain students to leave higher education all together. At public four-year institutions, the average unadjusted rate of student persistence from the first to the second year ranges from 72 to 79 percent (Consortium for Student Retention Data Exchange, 2002) while the average individual rate of student persistence into the second year is 82.5 percent at public institutions (Horn, 1998). The unadjusted rate of student persistence describes persistence rates at any one specific institution while the individual rate of student persistence tracks an individual's persistence regardless of the institution that the student attends.

In an era of increasing government skepticism of higher education because of rising costs and diminished returns (Selingo, May, 7, 2004), colleges and universities are finding themselves having to address headlines and stories of undergraduates left behind.

> It is not an exaggeration to say that government is angrier today with higher education than it ever was with the schools. Words like arrogant and self-serving are commonly used in statehouses to describe colleges and universities. It is imperative that we do better. There really is no alternative. (Levine, 1997)

Often the picture that is painted is of an uncaring institution that only is looking to expand enrollment to help counter state cuts in funding (Farrell, October 31, 2003). In recent years, an emphasis has been placed on the cost to colleges of not meeting goals to provide the best social, academic, and other experiences for students. The costs to the institution of student attrition include, "loss of future tuition and fees, loss of faculty

lines, and increased recruitment costs" (Habley, 2004). Today's universities need to show a caring approach that does not treat students simply as numbers.

However, the prevailing myths of undergraduate education tend to catch the public's attention. Five myths have preoccupied the discourse on higher education reform (Terenzini & Pascarella, 1994). The first of these misconceptions is institutional prestige and reputation reflects educational quality. For example, often the public identify so strongly with a college or university's name that it fails to research the transformative education providers. This is particularly true with large public state institutions that make headlines for other successes (i.e. research, spending, or sports) yet fail to improve upon disappointing retention and/or graduation rates. Second, a common myth is traditional methods of instruction provide proven, effective ways of teaching undergraduates. Unfortunately, often it is the traditional lecture that is the biggest obstacle for students to succeed in large prerequisites courses. The third myth is that good teachers are also good researchers. This is not always the case, and with many institutions rewarding research versus teaching, finding faculty who can successfully accomplish both is not always as easy as one would think. A fourth myth is that faculty member's influence student learning only in the classroom. The public's image of higher education can be myopic. Sometimes the greatest influence a faculty member can have on a student is during out-of-the-class activities (i.e. laboratory, mentoring, office hours, advising). This point also supports findings (Astin, 1993) that establishing a relationship with a faculty or staff member early on in a student's collegiate career will often lead to higher retention and graduation rates for those students. Finally, the last myth that is

pervasive in the public eye is that students' academic and non-academic experiences are separate and unrelated areas of influence and learning. The reality is often learning in the classroom goes hand-in-hand with out-of-class learning and that they compliment each other. Student learning can often be supplemented through academic clubs, study groups, and peer-to-peer interaction (Astin, 1993).

A recent PBS documentary entitled "Declining by Degrees" attempts to describe the state of what is happening in higher education in the United States today. The two-hour documentary investigates four different institutions in the country including Southwest University and uses anecdotal evidence and interviews to highlight higher education as a whole. The documentary was criticized by those in higher education as painting an unfair picture mostly because it only highlighted a few examples from each institution. Whether or not the documentary was a fair representation of higher education in general today is not germane to the point. The reality is higher education has been heavily scrutinized over the past twenty years since the Reagan administration (Heller, November-December, 1997). It was during Reagan's administration that the federal government began to cut many of the programs that supported higher education including student grants. In the 1990s, higher education began to progressively move toward addressing the criticisms – one of which was that higher education was losing too many students. Another criticism was that the students that higher education was producing were not well equipped for the marketplace.

While the picture might look grim nationally in higher education, there are success stories that provide models for others to mimic and aspire to. Evergreen State

College, the University of Kansas, and the University of Texas, El Paso have all challenged the past and created a new future for the undergraduate experience on their campuses. They have achieved a student-centered model through developing a 'living' mission, establishing an unshakeable focus on student learning, provided environments adapted for educational enrichment, developed clear markers for student success, fostered an ethic of improvement, and shared the responsibility for educational quality and student success (Schroeder, 2005).

> Focusing on student learning turns our thinking about the future of our colleges and universities upside-down: from faculty productivity to student productivity, from faculty disciplinary interests to what students need to learn, from faculty teaching styles to student learning styles, from classroom teaching to student learning (Guskin, 1994).

Over the past twenty years, companies like Noel-Levitz consulting and various retention-driven conferences including the First-Year Experience and the National Symposium on Student Retention have emerged. The emergence of these conferences and consulting agencies has all come about as a result of the increasing pressure to promote student success and persistence. Additionally, research related to retention has grown tremendously (Woodard, Mallory, DeLuca, 2001). It has been in the past ten years that researchers have begun to question the paradigmatic status of original research theories like Tinto's (1975), which has been the cornerstone of retention research for years. It is during this time that higher education desperately seeks new ways to reconceptualize student departure. By further understanding what factors contribute to a student's decision to return, institutions should positively affect their retention rates.

Contextual Influences on Retention

In order to understand the context of retention it is critical to summarize the various sources of influence on the ways researchers and educators have considered, studied, and addressed student retention in higher education. These various influences on retention have evolved over time yet always provided a context for retention over the years. They include the student, the campus, and the roles of educators on campus, socioeconomic contexts, policies and interventions, the knowledge base, and conceptualizations of retention (Berger & Lyon, 2005).

Critical to any discussion of retention, researchers and educators must first consider the student. Over the course of United States history, higher education has evolved from a highly privileged system to one that has aspired for universal access. Today's student population represents a highly diversified student body with varying backgrounds, motivations, and preparation. Since the 1960s when higher education became a more open system for all to participate in, retention has become even more critical as the number of issues related to retention became more diversified and complex (Berger & Lyon, 2005).

In addition to the student, retention is also affected by the campus environment. Today, there are more than 3,600 institutions in the United States (Seidman, 2005) which also reflect a diverse collection of campuses with varied missions and purposes. These different institutions will attract varying students looking for a specific experience or outcome. Highly selective private institutions versus a community college will provide drastically differing opportunities to students just as a women's college or a historically

Black college or university would have a different student it would be hoping to attract. Differences in retention rates are not only a function of the types of students attracted by certain kinds of institutions, but also a function of the type of environment provided by the institution and how well that particular environment is designed to fit the needs of students enrolled at that institution (Astin, 1991).

In early United States higher education, faculty were considered generalists and were responsible for both instruction and student support/guidance (Thelin, 2003). Today's campuses have evolved so that faculty are more specialized into a field and student affairs administrators serve specific roles such as enrollment management or admissions counselor. A trend that is becoming increasingly apparent on campuses today is that all educators on campus, both faculty and staff, are responsible for improving retention on campus (Berger & Lyon, 2005).

Another consideration that plays into the retention efforts of colleges and universities is the economic realities of the time and the socioeconomic situations of each student and his/her family. Today's student finds a tremendous societal value placed obtaining a college degree (Geske & Cohn, 1998; Berger & Lyon, 2005). In order to compete in an increasingly competitive market, education is usually associated with higher pay. However, obtaining the education required of many positions today requires the student to have the means to pay for an education which is increasingly rising as a result of cutbacks in funding by government. These reductions result in colleges and universities increasing its tuition and fees. This sort of increase makes it increasingly

more difficult for all students to afford the education that they may have initially been pursuing.

As state and federal government have supported higher education expansion through policy initiatives and interventions, the importance of and access to higher education has increased. Specifically, the GI Bill, Civil Rights Act, and various Reauthorizations of the Higher Education Act, have led to students today not only wanting to attend college, but earning a degree. As mentioned previously, the importance of a college degree today becomes an economic reality in many senses. On the state level, many states today are creating accountability systems for higher education as to retention levels and graduation rates.

Today, researchers and educators have an excellent base of empirical and conceptual knowledge about retention. While retention has been studied as far back as the 1930s when student attrition was termed 'student mortality', it was the late 1960s when a more extensive knowledge base began to emerge. Debates over the best way to approach retention today persist. Some arguing that retention can only be understood by the differing socioeconomic strata (Berger, 2000) while other argue for institutional specific theories (Tinto, 1993).

Finally, understanding the context of the terminology of retention becomes necessary. The evolution of descriptors have included student mortality (Gekowski & Schwartz, 1961), college dropouts (Spady, 1971), student attrition (Astin & Panos, 1967), college retention (Tinto, 1990), and student persistence (Berger & Milem, 1999). In

order to continue, it is necessary to present some definitions of some of the terminology that will be used throughout this paper.

Retention. Retention refers to those students who remained at the same institution where they started until they completed a program. Students who transfer to other institutions before completing a degree usually are considered not to have been retained.

Attrition. Attrition is the term used to describe all who withdraw from an institution without formally completing a program. Student attrition is the cause for lower retention rates.

Persistence. Persistence in higher education refers to those who have continued anywhere in postsecondary education, including those who have transferred from one institution to another. Persistence can negatively effect individual institution's retention rates but maintain higher education's retention rate overall.

Attainment. Attainment means that the student completed a program and received a credential – a certificate in a vocational field, an associate degree, or a bachelor's degree. It is used interchangeably with graduating.

Freshmen (or First-Year Student). This term describes a student who is in their first year of college coursework (Upcraft & Gardner, 1989).

Research Extensive (or Doctoral/Research Universities—Extensive). These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. During the period studied, they awarded 50 or more doctoral degrees per year across at least 15 disciplines.

Purpose of the Study

The purpose of this study is to investigate the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001) and its potential value for assessing patterns of retention at an institution. By studying the factors that influence undeclared students' decisions to either leave or persist, this study will test the utilitarian nature of the Retention Self-Study Framework (2001). The Retention Self-Study Framework (2001) provides an interesting approach for institutions of higher education to study their retention efforts although the authors only offered it as a framework based on the extensive retention research. What is missing from the research is the application of the framework and how it might be utilized practically in the future. Further, while all of the research on which the Retention Self-Study Framework is based has shown statistical significance, researchers have not tested all of these retention factors in one study.

This study will be conducted at a large public institution of students who have not declared their majors. Undeclared students were specifically chosen as the target group as they are often mislabeled as the students who are most 'at risk' because of their indecision in choosing a major. The Framework (2001) offers a more comprehensive picture of the various factors influencing student retention at an individual institution. By testing its utilitarian nature, the Framework might serve as a tool in helping an institution determine what attributes it may want to focus on including student demographics, institutional characteristics, or academic or student service practices. It is the hope of the researcher that by applying knowledge to a "consequential problem" (Boyer, 1990, p. 21), one might fulfill one of Boyer's four roles for scholarship. Boyer describes one of

the critical roles for scholarship in the university setting is to help solve problems in the academe and in society that brings about wholesale change in the way knowledge is deciphered. In this case, the researcher hopes to bring about a better understanding as to why first-year undecided students choose to stay at a large, public, Research Extensive university and how their experiences differ by various student characteristics. Ultimately, this study is not driven by new discovery but rather by helping to understand how different students react to various characteristics described in the Retention Self-Study Framework.

Significance of the Study

While there has been considerable research on retention over the years, one area that has not been explored is practical use of the Retention Self-Study Framework. This research will utilize the Retention Self-Study Framework to develop a survey to explore characteristics of student persisters in order to increase retention rates. Most institutions underachieve when it comes to retention. They simply lose students who they would not necessarily have lost if they had implemented intentional interventions. In most retention research, the focus has been on understanding those students who leave and what makes their experiences different. Potentially, a more interesting question is what keeps students at an institution and what intentional interventions are working for the different types of students who are retained. Obviously, all institutions will lose a certain amount of students who leave for reasons beyond the control of the institution (i.e. major not available at the institution, concerns with family). Often, institutions administer exit surveys that typically yield minor insight into students' decisions. Exit surveys are

typically administered as a student is leaving an institution when the student is most dissatisfied with his/her experience thus lacking a just perspective. In many cases like at Southwest University, no consistent surveying of students has been done therefore leaving the institution only to guess at retention questions. Relying on one cohort group for long-term retention interventions could be described as short-sighted. Inversely, studying those who are retained annually could provide the best retention insight for an individual institution.

The aim of this study is to investigate the characteristics of the Retention Self-Study Framework and how they differ by seven student characteristics. By understanding the variables that will positively or negatively affect different types of students, universities and colleges will be able to increase their retention as a result of the findings that the Framework provides.

This exploratory study utilizes the Retention Self-Study Framework as a basis for a survey instrument. By modifying each of the Framework's four spheres of influence, and the specific characteristics into questions to which students respond, the study will test the measurable effectiveness of an instrument that might be utilized for institutional exit surveys. While this study will not test the survey to determine its reliability as an instrument, it will examine the potential usefulness of the Retention Self-Study Framework as a way for administrators to measure the experiences of students who are retained by institution.

Conceptual Framework

The Retention Self-Study Framework provides the conceptual framework for the

study however the Framework is extensively based on the work of Tinto (1975, 1987), Bean (1980, 1983), Astin (1984), and Pascarella (1980). Retention research is driven by investigators who hope both to understand student departure and to provide direction to help minimize student departure.

Tinto's Student Interactionalist Theory (1975, 1987) describes persistence as a function of a student's motivation and academic ability and the institution's social and academic identity. Therefore, students who have a stronger institutional commitment are more likely to persist and graduate.

Bean's Student Attrition Model (1980, 1983) emphasizes the importance of behavioral intentions as predictors of persistence behavior. Bean argues that beliefs shape attitudes, which in turn, shape intentions. Therefore, external factors to the institution can play a significant role in affecting student attitudes and intentions to persist. Bean's emphasis on external factors is a significant departure from Tinto's model, which focuses solely on the student and institution interaction.

Astin's involvement model (1985) states that learning evolves from involvement. Astin contends that the theory provides a means to understand the empirical knowledge about environmental influences on student development. In addition, the theory embraces concepts from widely divergent sources and is equally applicable to faculty. Finally, Astin's findings provide a useful tool that can guide researchers in designing more effective learning environments (Astin, 1985).

Finally, Pascarella's model (1980) states that persistence is a function of several interacting variables that affect a student's likelihood to persist and graduate. Student

background characteristics combine with an institution's environment to influence a student's interactions with staff, faculty and students. As a result, these interactions influence a student's effort. The greater the student's effort, the more likely they are to persist and graduate.

The authors of the Retention Self-Study Framework provided a comprehensive model of the factors that might influence retention by identifying not only institutional characteristics but also the influence of both academic and student affairs. The importance of collaboration today in higher education is critical since most research indicates that students do not learn only through traditional means of teaching (i.e. classroom lecture, laboratory). Learning occurs in and outside of the classroom (Astin, 1993) and the more willing higher education is to accepting this reality, the more likely we should find retention and graduation rates increase.

> Organizationally and operationally, we have lost sight of the forest. If undergraduate education is to be enhanced, faculty members, joined by academic and student affairs administrators, must derive ways to deliver undergraduate education that are as comprehensive and integrated as the ways students actually learn. A whole new mindset is needed to capitalize on the inter-relatedness of the in- and out-of-class influences on student learning and the functional interconnectedness of academic and student affairs divisions (Terenzini & Pascarella, 1994).

Research Question

This study was designed to further explore the development of the Retention Self-Study Framework to ascertain its potential use in retention work in the future. This study will seek to answer the question: to what extent do student characteristics relate to those experiences that the Retention Self-Study Framework suggest promote student retention? To fully understand the student experience, results will be disaggregated by the following

seven factors: race, gender, socio-economic status, high school class rank, institutional choice, financial aid package, and parental education. Based on the findings, the researcher hopes to provide a prescriptive approach for Southwest University to address those factors that affect retention and persistence for students based on their characteristics.

Limitations of the Study

While this study provides the first research as to the utilitarian nature of the Retention Self-Study Framework, it does have limitations as to its applicability on all campuses. First, the study is conducted at only one institution and so it offers only a case study of the Framework's applicability. Further the research is conducted at a large, public, Research Extensive institution, which is not comparable to all other Carnegie classifications. While the institution is large and diverse, the characteristics and experiences of the student body may be indicative of what one would expect to find at other institutions. Related to this point, the researcher chose to study first-year students who were academically undeclared. This may be a limitation, although the researcher strategically identified this group as representing a more inclusive student population as they might eventually represent most or all majors and/or colleges at the institution. At the same time, this might also be considered an additional limitation since the students may not have had an academic and/or vocational goal in mind prior to coming to the institution compared to the rest of the first-year population. Therefore, they may be more at risk of dropping out.

A second limitation of this research is the approach of the methodology. The researcher's aim was to understand how the Retention Self-Study Framework could explain students' persistence, yet the questions likely do not fully describe the student's experience to reflect the original research from which it was based. In fact, in order to develop a survey that would yield the highest return rates, the survey went through several revisions to shorten the amount of time it would take to complete the survey. Further, most of the survey is quantitative in nature with very few open-ended qualitative questions. This might also be short-sighted by the researcher should the quantitative questions not identify areas that impact the student's experience. If the quantitative questions fail to reflect the experience of the student and students neglect to fully respond to the qualitative portion of the survey, the results may not fully reflect all the potential variables impacting the student's experience. The aim of the questions was ultimately to give student input based on the years of retention research and then offer students with a space to provide feedback and insight that the research might not have identified in the past.

Either way, the survey should be considered a well-intended attempt to describe student experiences through the Retention Self-Study Framework and it is the hope of the researcher that the results will provide additional guidance to those who study student retention. This research appears to be among the first to study student persistence as a way to understand student attrition. As a result, this study promises to make a significant contribution to the literature by focusing on an issue that has not been examined from this unique perspective. Additionally, this study offers the opportunity for future scholarship

and hopefully will provide institutions another tool to help students succeed in higher education.

Summary

Although retention has become a critical priority for most institutions, this interest has not yielded significantly increased retention rates over the past 30 years. Understanding how each individual institution could increase retention rates will help to avoid the critics of higher education who have grown wary over the increasing costs. In order to justify the increases in tuition, higher education must show that students can persist, graduate, and succeed in the 'real world'.

This exploratory study is designed to provide insight in the potential usefulness of a self-study assessment for institutions to administer for retention. Additionally, it seeks to study the Retention Self-Study Framework's variables and their reliability in combination with other retention factors. The study draws upon the retention research of Vincent Tinto and John Bean as a foundational framework. It is the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001) that provides the conceptual guidance for posing the research question.

CHAPTER TWO

REVIEW OF RELEVANT LITERATURE

Tinto's (1975) interactionalist perspective and Bean's (1980) student attrition framework serve as the two main theoretical frameworks guiding this study. Additionally, there were several theorists whose research was influential in the works of Tinto and Bean and ultimately in the forming of the framework of this study. From these theories, the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001) evolved.

Spady's Sociological Model of Dropout

Spady (1970) was the first to propose a widely recognized model for college student departure. Drawing on Durkheim's (1950) suicide model, Spady proposed a sociological model of student attrition. Against a backdrop of family background, he proposed five variables that contribute directly to social integration: academic potential, normative congruence, grade performance, intellectual development, and friendship support. These variables were linked indirectly to the dependent variable, dropout decision, through two intervening variables (satisfaction and institutional commitment). Subsequently, Spady (1971) designed and executed an empirical study, the findings of which resulted in his addition of structural relations to the model and "a revision of the relationships among the components in the model" (Summers, 2003, p. 67). The results of the empirical study indicated, "over a four year period, formal academic performance

is clearly the dominant factor in accounting for attrition among both sexes" (Spady, 1971, p. 38).

Spady suggested a sociological approach whereby retention is viewed as dependent on the student's experiences within an institution, specifically the degree of social and academic integration (Spady, 1970, 1971; Tinto, 1975, 1987, 1993). Spady saw student attrition as the result of a student's withdrawal from a social system. Spady saw a parallel between student departure and Durkheim's theory of suicide as students withdrew because of the lack of shared values or normative support in their environment. He posited that the interaction of students with their college environments led to integration, which in turn, enhanced these students' persistence in college.

Student Interactionalist Theory

The interactionalist framework originated with the work of Spady (1970, 1971) as an alternative to the psychological, theory-based approaches that had been posited to explain student departure. Van Gennep's (1960) study, "The Rites of Passage," provided a psychological model that broke down college entry into three stages: separation, transition, and incorporation. The earlier work of Durkheim (1951) and his study of suicide also provide a psychological-based theory that was borrowed upon. Durkheim described four different types of suicide: altruistic, anomic, fatalistic, and egotistical. It is egotistical suicide that provides the comparison to institutional departure because it "highlights the ways in which the social and intellectual communities that make up a college come to influence the willingness of students to stay at that college" (p. 104).

Building on the work of Spady (1971), Vincent Tinto's model of student integration (1975, 1987, 1993) refined and reformulated the interactionalist perspective. Tinto focused on the longitudinal process of student attrition from college and clearly distinguished between the academic and social factors that influenced student retention. His model also highlighted the importance of background factors and their influence on student attrition.

Tinto's (1987) revised theory incorporated Van Gennep's rite of passage, "separation, transition, and incorporation" (p. 11), the stages that mark an individual's path in the process of moving from "youthful participation to full adult membership in society" (p. 92). Tinto extends these stages to the process through which college students establish membership in the communities of a college or university in general, and to the case of early student departure from college in particular" (Elkins, Braxton, & James, 2000, p. 252). According to Braxton & Mundy (2001-2002), the primary principles of Tinto's model included the following description of institutions with effective retention programs. First, the institution is committed to the students they serve. Second, the institution is committed first and foremost to the education of all, not just some, of their students. Finally, the institution is committed to the development of supportive social and educational communities in which all students are integrated as competent members (p. 94).

Further work by Tinto (1993) led to the development of a longitudinal, explanatory model of departure. The expanded work added "adjustment, difficulty, incongruence, isolation, finances, learning, and external obligations or commitments" (p.

112) to his original model. In sum, he proposed that "the stronger the individual's level of social and academic integration, the greater his or her subsequent commitment to the institution and to the goal of college graduation" (Pascarella, Terenzini, & Wolfe, 1986, pp. 155-156).

He found that the general demographics and characteristics of the student body affected the student departure puzzle. In this later work, Tinto (1993) recognized that different groups of students (i.e. at-risk, adult, honors, and transfer) had distinctly different circumstances requiring group-specific retention policies and programs. In addition, he reasoned that different types of post-secondary institutions (i.e. non-residential, two-year, urban, and large public) also required different types of retention policies and programs. He discovered that the goals and personality types of the individuals who withdrew tended to have some clear similarities. Tinto also discussed the effects of incongruence and isolation on a student's willingness to remain at the institution. Feelings of incongruence and isolation were impacted by faculty/student interaction, employment, involvement, and support for students of color on predominantly white campuses. In general, Tinto stated that the more involved students became with the institution and community, the more likely they were to overcome any obstacles they faced coming into or during college. After describing the various reasons why students depart, Tinto proposed his model of student departure (1987, 1993). His model drew upon various psychological theories as well as environmental and societal theories of departure including Van Gennep and Durkheim.

Tinto's model is broken into six different phases: pre-entry attributes (family background, skills and abilities, prior schooling), goals/commitments (intentions, goals and institutional commitments, external commitments), institutional experiences (academic system: academic performance and faculty/staff interactions; social system: extracurricular activities and peer group interactions), integration (academic and social integration), goals/commitments again (intentions, goals and institutional commitments, external commitments), and outcome (departure decision). Positive academic and social integration leads to students' commitment to their goals and ultimately to the institution. Without integration, the greater the likelihood a student will depart. Ultimately, without both social and academic integration, persistence becomes less likely. The nature of social and academic integration varies for each student but ultimately highlights the importance of individual integration.

After describing his model of student integration, Tinto proposed the actions that institutions should take to positively affect issues of retention. An institution interested in addressing retention should investigate its institutional commitment to students and its commitment to educational excellence, all while stressing the importance of the social and intellectual community. He then described the principles of effective implementation of retention programs. Tinto argued that institutions should provide resources and incentives for retention program development and participation and commit themselves to the long-term process of investigating, developing, and responding to issues of retention. Additionally, he stated that institutions should place ownership for institutional change in the hands of those who have the ability to implement that change. Institutions

should also ensure faculty and staff have the skills necessary to assist and educate students who are facing retention risk. Next, Tinto argued for institutions to create a coordinator of institutional actions for retention and that all institutional efforts for retention should be frontloaded. Finally, Tinto called for institutions to continually assess the effectiveness of their actions and programs. Tinto suggested that changing institutional retention, "likely requires major alterations in the very structure and functioning of the institution" (Tinto, 1993, p. 202). Ultimately, however Tinto cautioned institutions from thinking they could address all levels of retention on their campus through these programmatic efforts. Tinto recommended that institutions focus on certain groups of students rather than the whole population. Tinto concluded by charging all members of the campus community to focus on students and provide daily efforts towards positively affecting student retention.

Persistence Studies Using Interactionalist Theory

Tinto's interactionalist theory (1975, 1987) dominates the retention research and is one of the most widely tested theories in student development literature. In fact, his theory is indexed in more than 775 citations (Braxton, et al. 2004). His work has provided a framework for which retention research is developed today. However, critics of Tinto's work have shown several of his propositions to be limited to only residential campuses and others to fail to be substantiated by other research (Braxton, 1999).

Several studies over the past twenty-five years (Pascarella & Terenzini, 1983, 1991, 2005; Pascarella & Chapman 1983; Chapman & Pascarella, 1983) have helped to support many of the propositions of Tinto's theory. Chapman & Pascarella (1983) found

that institutional quality had a significant and positive influence on bachelor's degree attainment. Simply put, the more selective and prestigious an institution, the greater the likelihood of a student obtaining a bachelor's degree even when factoring in variables like SES, pre-college degree aspirations, and secondary school achievement. Private institutions had a positive influence on bachelor's degree attainment over publics because private institutions typically have a stronger emphasis on the individual student, and are better able to work individually with students to support their retention and eventual matriculation. In examining the effects of institutional size, the authors described that the number of students does not necessarily directly correlate with educational attainment because, based on 30 years of research, the influence of college size is either minimal or conditional on student characteristics of an individual institution.

An even more intricate piece of the puzzle is understanding the role of students' individual characteristics and their effects on persistence. By examining individual student characteristics like academic achievement, peer relationships, extracurricular involvement, interactions with faculty, academic major, place of residence, orientation and advising, and financial aid and work, Pascarella and Terenzini (1991) were able to show that student/peer interactions, student/faculty interactions, residential living, and participation in extracurricular activities are positively associated with persistence. Conversely, financial aid's impact on persistence and degree attainment is mixed, which might signify that financial aid is a barrier for initial enrollment.

Critiques of Interactionalist Theory

Attinasi (1989) and Tierney (1992) offer conceptual criticisms of Tinto's interactionalist theory despite its paradigmatic status. Further, empirical validity of the theory shows important differences between residential and commuter colleges and universities which is problematic. After an extensive review of the literature, Braxton, Sullivan, and Johnson (1997), reported that empirical tests generally provide only weak to moderate support for the propositions generated by Tinto's interactionalist theory, with only a few of the propositions receiving strong support.

The formulations of the theory yield thirteen testable propositions (Braxton, et al. 1997). These propositions are locally interrelated and as a set explain college student departure (Braxton, et al. 1997). Empirical tests of each of the thirteen propositions were used as a basis to determine the reliability of the knowledge of each proposition. The thirteen propositions are:

1. Student entry characteristics affect the level of initial commitment to the institution.
2. Student entry characteristics affect the level of initial commitment to the goal of graduation from college.
3. Student entry characteristics directly affect the student's likelihood of persistence in college.
4. Initial commitment to the goal of graduation from college affects the level of academic integration.
5. Initial commitment to the goal of graduation from college affects the level of social integration.
6. Initial commitment to the institution affects the level of social integration.
7. Initial commitment to the institution affects the level of academic integration.
8. The greater the degree of social integration, the greater the level of subsequent commitment to the goal of graduation from college.
9. The greater the degree of social integration, the greater the level of subsequent commitment to the institution.
10. The initial level of institutional commitment affects the subsequent level of institutional commitment.

11. The initial level of commitment to the goal of graduation from college affects the subsequent level of commitment to the goal of graduation from college.
12. The greater the level of subsequent commitment to the goal of graduation from college, the greater the likelihood of student persistence in college.
13. The greater the level of subsequent commitment to the institution, the greater the likelihood of student persistence in college.

Braxton et al. (1997) identified studies that tested one or more of these thirteen propositions which used multivariate statistical procedures. Only studies that were published in academic and professional journals or papers presented at professional conferences were utilized. Finally studies had to be conducted using single-institutional samples since Tinto's theory attempts to explain departure within a given institution and "is not a systems model of departure" (Tinto, 1993, p. 112). In order to confirm reliable knowledge of each of the propositions, Braxton et al. (1997) established the protocol that a minimum of ten tests be conducted on each proposition and that substantial support of the proposition be met.

Of the thirteen propositions, propositions nine, ten, and thirteen met this criteria. Weaker support for propositions five, eight, eleven, twelve where the criteria of ten tests was not met but they did seem to indicate some support for the proposition. The support that was shown through this research offers insight into Braxton, Hirschy, and McClendon (2004) research.

Additionally, of the two core constructs in Tinto's theory, only social integration, not academic integration, was found to be a strong influence on subsequent levels of commitment to the goal of graduation from college. This is an important finding because it puts into question the strength of Tinto's theory to actually predict a student's decision to remain at an institution. The authors recommend one of two courses of action. First,

the authors propose the abandonment of academic integration as part of Tinto's theory. The other option is rethinking its theoretical specification and measurement. According to Braxton and Lien (2000), the misspecification of the measurement of academic integration may account for the failure of most tests to yield strong empirical confirmation of the effect of academic integration on persistence. However, academic performance (i.e. college grades), which is often used as a proxy for academic integration, does independently influence degree completion.

In 2004, Braxton, Hirschy, and McClendon proposed a revision of Tinto's interactionalist theory. Braxton (2000) proposed that the revision should utilize reliable empirical relationships and inductive review of findings from several different theoretical perspectives including organizational, psychological, economic, and sociological. Last, the revision identified factors that influence social integration which was the main construct in Tinto's theory that was strongly supported (Braxton, et al. 1997).

Student entry characteristics shape student's initial commitment to the goal of obtaining a degree (GC-1) and the student's initial commitment to the institution (IC-1). Entry characteristics include the student's gender, racial, or ethnic background, socioeconomic status, academic ability, high school academic preparation, ability to pay for college, and parental education. The student's initial commitment to the institution (IC-1) then influences the student's perception of several institutional dimensions such as the institution's commitment to the welfare of students, the integrity of the institution, and the potential for social community with peers. Institutional commitment to the welfare of students is defined as an abiding concern for the growth and development of

students. Institutional integrity refers to the degree to which the actions of faculty, staff, and administrators are congruent with the stated mission, goals, and values of the institution. Communal potential is the extent to which a student believes that a subgroup of students exist within the college or university community with whom the student shares similar values, beliefs, and goals. The greater the student's level of initial commitment to the institution (IC-1), the more favorable his/her perceptions of the three institutional characteristics (Braxton & Hirschy, 2004).

The greater a student's initial commitment to the institution (IC-1) also affects two psychological dimensions positively: a student's proactive social adjustment and psychosocial engagement. A student's proactive social adjustment is described as a student's tendency to approach the demands and pressures of social interaction in a positive manner. Psychosocial engagement denotes the level of psychological energy a student devotes in his/her interactions with peers and to campus involvement in general (Braxton & Hirschy, 2004).

The theory revision offers seven qualifications to social integration. Social integration refers to the extent a student perceives a sense of normative congruence and social affiliation with members of the social communities of an institution (Tinto, 1975). The five constructs are shaped by a student's initial commitment to the institution (IC-1) serve as qualifiers for social integration. For example, a student's perception of each of the two organizational constructs – institutional commitment to student welfare and institutional integrity – affect the student's level of social integration. Consequently, student's who see faculty, staff, and administrators promoting student success and show

they value and respect students are more likely to affiliate with members of the institution. The next qualifier to social integration, communal potential, is a sociological perspective. It focuses on a student's assessment of how likely he/she will find meaningful relationships with peers on campus. This does not require students to feel a part of the dominant student culture, but it does mean students can find a small affinity group or cultural enclave (Kuh & Love, 2000).

Proactive social adjustment and psychosocial engagement also influence a student's level of social integration. Students who recognize their need for social affiliation and group membership by learning values, norms, and attitudes display proactive social adjustment. Students who invest time and psychological energy into interacting with others on campus are more likely to have greater levels of social integration (Astin, 1984, Berger & Milem, 1999). The greater level of each of these five constructs leads to higher levels of social integration.

The final two qualifiers to social integration are ability to pay and initial goal commitment (IC-2). A student who is more satisfied with the cost of attending his or her institution is more likely to persist (Cabrera et al. 1990). Students who struggle with ongoing financial concerns are less likely to be actively involved on campus as a result. Ability to pay reflects an economic theoretical perspective. Next, students who display high levels of commitment to earn a college education are more likely to immerse themselves in the social realm of the institution with other students and faculty. As a result, the higher a student's initial commitment to attain a degree (GC-1), the greater the student's level of social integration.

Both social integration and a student's initial commitment to the institution affect the student's subsequent institutional commitment (IC-2). The greater the subsequent commitment, the more likely the student will persist. Due to the central role of social integration on residential institutions, it has a direct effect on persistence.

Student Attrition Model

According to Bean (1980, 1982, 1983), the major limitation of the student interactionalist literature is the lack of attention to the role that external factors have in shaping perceptions and commitments. In addition, the student interactionalist approach emphasizes the student's perceptions of experiences rather than actual behavior as potential influences on the departure process (Tinto, 1993). Bean subsequently proposed an alternative model to help explain college persistence. Derived from studies of turnover in work organizations, Bean's model views student attrition in terms of measures of individual attitudes and behaviors (e.g. work and familial responsibilities, encouragement from others), as well as variables external to the individual (e.g. academic and social services, courses offered). Drawing from the work of Fishbein and Ajzen (1975), he later refined his model (1980) to include the role of intentions in student attrition (e.g. intent to transfer, intent to drop out).

Bean's model (1980) posited that the background characteristics of students must be taken into account in order to understand the student's interactions within the higher education environment. "The student interacts with the institution, perceiving objective measures, such as grade point average or belonging to campus organizations, as well as subjective measures, such as the practical value of the education and the quality of the

institution" (Bean, 1980, p. 159). These variables are expected to influence a student's satisfaction with the institution which affects the student's level of institutional commitment. A student with a strong institutional commitment is then said to be likely to persist and graduate, while students with a low institutional commitment are expected to drop out of school.

Two statistical procedures were used to analyze the data: multiple regressions and path analysis. An unexplained aspect of the data collection was that only Caucasians were studied which obviously created a bias toward higher ability students. The findings clearly showed that the primary variable influencing dropout decisions was institutional commitment for both men and women. For women, the second most important factor was performance by the individual although the influence was not direct. The third most important variable for women related to dropout was membership in campus organizations. For men, the second most important variable was university GPA followed by satisfaction. However contrary to expectation, men who were more satisfied were more likely to drop out. Bean proposed further research to determine intervening variables not identified in the model.

In an empirical study of his model, Bean (1985) proposed a revised model and found three major changes to his earlier work. First, a student's peers are more important as agents of socialization than is informal faculty contact. Second, students may play a more active role in their socialization than previously thought. Finally, college grades seem more the product of selection than socialization (Bean, 1985). Ultimately, Bean describes the type of students that the study indicated were more prone to withdraw. A

male is more likely to withdraw when he is not committed to the institution, did not have a high university grade point average (GPA), was satisfied being a student, did not believe that his education was leading to his development, found life repetitive, did not know the social and academic rules of the institution, and/or may have lived with his parents. Conversely, a female is more likely to withdraw who is not committed to the institution, did not perform well in high school, did not belong to a campus organization, did not believe that going to college would lead to future employment, perceived an opportunity to transfer, did not believe that education leads to self-development, did not find daily life college repetitive, was not committed to obtaining a bachelors degree, was not satisfied being a student at the institution, knew the social and academic rules, did not participate in decision making, did not feel she was being treated fairly, and/or did not meet with staff and faculty members informally.

Bean's (1990) student attrition model utilizes concepts from the student interactionalist perspective (academic integration, social integration, and goal and institutional commitment) as well as organizational variables, "environmental pull" variables, and intention variables. Individual college student attrition is viewed as resulting from the following chain of events: student background variables, organizational variables, academic integration, social integration, "environmental pull" variables, attitudes, college GPA, institutional fit, institutional commitments/loyalty, and intentions to leave or re-enroll in college. Simply put, this model assumes that behavior is a choice.

Bean describes student entry characteristics influencing a student's interactions with the institutional environment. A student's initial self-efficacy and locus of control contribute strongly to a student's ability to cope with the transition to college. Strong self-efficacy helps a student's confidence to adapt to a particular institution while locus of control describes how an individual might attribute their experiences either externally or internally. Students who would attribute things internally have more confidence in their own skills and abilities while as students who would attribute something externally would believe outcomes are outside of their influence or control. For students with a strong self-efficacy, reduced stress, and an internal locus of control, the outcome leads to institutional fit and loyalty for the student to the institution.

Bean also hypothesizes that student retention is positively influenced by satisfaction with college life, positive self-development, identification with the practical value of an education, self-confidence, and stress management. Bean's model offers a perspective that is driven by psychological theory yet integrates environmental influence that Tinto does not fully integrate into his model. And yet, Bean's model has not been studied nearly to the extent of Tinto's.

Persistence Studies Using Student Attrition Theory

Several of the constructs in Bean's (1990) student attrition model have been empirically validated in persistence studies (Bean, 1980, 1983; Berger & Braxton, 1998; Braxton, Brier, & Hosler, 1998; Cabrera, Castaneda, Nora & Hengstler, 1992; Cabrera, Nora, & Castaneda, 1993). Bean (1980), utilizing a data set of 1,171 students attending a research university, found that persistence decisions were positively influenced by

institutional commitment and satisfaction, and negatively influenced by having the opportunity to transfer. Bean (1983) subsequently demonstrated that the student's decision to stay in college is positively influenced by a sense of practical value of an education and satisfaction with available courses. Not surprisingly, intentions to re-enroll in the institution were positively associated with student persistence.

Berger and Braxton (1998) used the same data to explore organizational attributes in student persistence. The authors used three attributes to measure the organization: institutional communication, fairness in policy and rule enforcement, and participation in decision-making. They found that all three attributes significantly, if indirectly, affected persistence. This finding provided support for including organizational attributes as a potential source of social integration and that further study is warranted.

Student Involvement

In 1984, the Study Group on Conditions of Excellence in Higher Education released its final report, Involvement in Learning, suggesting that an excellent learning environment must be characterized by the following three conditions: "Student involvement, high expectations, and assessment and feedback" (Astin, 1985, p. 36). Alexander Astin, a member of the Study Group, expanded these findings the following year. He argued that involvement is the foundation of the findings because setting high expectations and providing feedback are the means for enhancing student involvement. Astin defines student involvement as the "amount of physical and psychological energy that the student devotes to the experience" (Astin, 1985, p. 134). Simply put, learning evolves from student involvement. However, Astin feels that involvement theory

supports more than the amount of knowledge people learn. Astin contends that the theory provides a means to understand the empirical knowledge about environmental influences on student development. In addition, the theory embraces concepts from widely divergent sources and is equally applicable to faculty. Finally, Astin's findings provide a useful tool that can guide researchers in designing more effective learning environments (Astin, 1985).

In 1975, Astin conducted a study on college dropouts in order to identify the college environments these students left. As a result of the data collected, Astin concluded that nearly every case could be explained by the students' non-involvement. Involvement, by definition, includes activities such as full-time attendance, participation in extracurricular activities, studying, living on campus, and interacting regularly with students and faculty. The study also showed that students had an easier time becoming involved when the college environment was comfortable and familiar (Astin, 1975). In 1977, Astin began a longitudinal study of more than 200,000 students and examined more than 80 types of involvement, including place of residence, participation in honors programs, undergraduate research participation, social fraternities and sororities, academic involvement, student-faculty interaction, athletic involvement, and involvement in student government (Astin, 1985). An important general conclusion from this study was that greater-than-average changes in the characteristics of first-year students were associated with nearly all forms of student involvement. Astin's study indicates that involvement had a strong relationship with student retention and social and intellectual development.

Astin's (1985) provides five postulates that comprise student Involvement Theory:

1. Involvement refers to the investment of physical and psychological energy in various objects that might be quite general or very specific.
2. Involvement occurs along a continuum.
3. Involvement has both qualitative and quantitative features.
4. The amount of student learning is directly proportional to the quality and quantity of student involvement.
5. The educational practice of instructors is directly related to the capacity of that practice to increase student involvement (pp. 135-136).

Student Involvement Theory offers a significant advantage over traditional pedagogical approaches because it focuses attention on student motivation and behavior rather than on subject matter and technique. Using this idea, higher education practitioners can judge an activity's success by student involvement.

Astin's (1985) developmental theory of student involvement was constructed as a "link between the variables emphasized in traditional pedagogical theories and the learning outcomes desired by the student and the professor" (p. 300). This theory was based on the findings of Astin's early work and was designed "to identify factors in the college environment that significantly affect the student's persistence in college" (Astin, 1984, p. 302).

Astin's (1993) later work was an empirical study of the model. Using longitudinal data collected by the Higher Education Research Institution at the University of California, Los Angeles in its annual survey of freshmen, he found that the three most important forms of student involvement were academic involvement, involvement with faculty, and involvement with student peer groups. A comparison of faculty, curriculum, institutional type, and peer group effects led to a primary finding of the study. "The

student's peer group is the single most potent source of influence on growth and development during the undergraduate years" (Astin, 1993, p. 398).

Astin (1993) argued that the implications for practice should be overarching, rather than singular in nature.

> Institutions need not look far afield to find the key to enhanced student retention. It is achievable within the confines of existing institutional resources. It springs from the ongoing commitment of an institution, of its faculty and staff, to the education of its students. But such commitment requires institutional change. It requires that institutions rethink traditional ways of structuring collegiate learning environments and find new ways of actively involving students, as well as faculty, in their intellectual life. It requires a deeper understanding of the importance of educational community to the goals of higher education (Astin, 1993, p. 212).

Pascarella's Causal Model

Pascarella (1985) developed a general causal model. In presenting the model, he noted, "causal modeling is an important methodological approach which should find increased use by those interested in the cognitive and other outcomes of college" (p. 49). He suggested that causal modeling could be used to "understand the pattern of influence involved in the impact of postsecondary education on learning and cognitive development" (p. 49).

In this model, student background/pre-college traits and structural/organizational characteristics of institutions directly impact the college environment. Quality of student effort, student background/pre-college traits, and interactions with agents of socialization directly influence learning and cognitive development. All other variables in the model indirectly affect learning and cognitive development. Findings from the empirical study indicated that residential facilities and the dominant peer group were strong influences on

academic achievement. Less strong, but nonetheless noticeable, was the effect of informal student/faculty interaction outside of the classroom.

Influences of Gender, Ethnicity, and Socioeconomic Status

Studies that focus on gender, ethnicity, and socioeconomic status, while limited, do provide important background. Smith (1995) found that female students were more likely to persist as compared to male students regardless of the academic year. DuBrock (1999) discovered females were more likely to persist for their second and fourth years in college, while male students were more likely to return for their third year.

Smith (1995) found that after the second year, only 59 percent of African Americans, 62 percent of Hispanics, and 54 percent of Native Americans were retained compared to 71 percent of other ethnic groups. Fenske, Porter, & DuBrock (1999) discovered that Native Americans were significantly less likely to persist to their second year compared to all other ethnic groups and that Hispanic students were more likely to persist to the fourth year.

Ishitani and DesJardins (2002) found that for students who come from low income families, a mother's educational attainment significantly impacts student persistence in returning for a third and fourth year. Specifically, at the end of the second year, students whose mothers had attained an undergraduate degree were 57 percent more likely to reenroll for a third year than students whose mothers did not complete a college education. Being raised in a low-income family was found to more negatively influence student persistence at the end of the second and third years than it was in the first year. This reality is largely associated with the pressures on the part of the student to withdraw

and help with family expenses. The stress associated with financing one's education was found to negatively impact the decision of a student to remain in college (Cabrera, Nora, & Castaneda, 1992; Nora & Cabrera, 1996). Specifically, financial pressures severely affect a student's ability to integrate fully into his/her academic and/or social environment, ability to engage in in-class and out-of-class experiences, and ability to maintain a high level of aspirations toward earning a degree.

Financial aid's effect on persistence beyond the first year has been researched extensively. Studies show that students are nearly twice as likely to persist between the second and third years if they receive financial aid (Fenske, Porter, & DuBrock, 1999; Ishitani & DesJardins, 2002). In contrast, students receiving Pell Grants were less likely to continue to the second year and were even less likely to return for the third year (DuBrock, 1999). In instances where research finds financial aid negatively related to persistence, the evidence suggests that the aid was not so much ineffective as insufficient (St John & Starkey, 1996).

Influences of Grades, Testing, and Parent's Education

There has been conflict in the literature with regard to the effect that high school has on subsequent college performance. High school grades have been found to positively influence subsequent college academic performance, as measured by cumulative college grade point average. Yet, academic performance in high school was also found to have very little influence on student persistence (Nora & Cabrera, 1996; Cabrera, Nora, & Castaneda, 1993). In contrast, Fenske, Porter, & DuBrock (1999) found that high school GPA exerted a significant effect on student persistence into the

second and third years of college. The study found that a student with a GPA of one-tenth of a point higher is eight percent more likely to persist to the second year. Similarly, the increased odds of persisting with a higher high school GPA are seven percent for the second to third year, eight percent for the third to fourth year, and six percent for the fourth to fifth year. This is why colleges and universities take into consideration high school GPAs.

Standardized test scores have been shown to influence the withdrawal decisions of students enrolled in college (Ishitani & DesJardins, 2002; Fenske, Porter, & DuBrock 1999). Students scoring in the highest quartile of the SAT had lower risks of attrition compared to students scoring in the lower three quartiles (Ishitani & DesJardins, 2002). Fenske, Porter, & DuBrock (1999) found that students with SAT scores of 1010 or less who persisted to the fourth year were significantly more likely to graduate or persist to the fifth year. Institutions that focus on students in the top quartile likely would see higher persistence rates.

Perhaps, the greatest indicator of student success is the educational level of their parents. Students whose parents have college experience or degrees persist over the effects of ethnicity, family income, college qualifications, and other educational attainment factors (Berkner & Chavez, 1997). A student with a college-educated parent who begins college at a four-year institution has a ten percent likelihood of withdrawing versus the 23 percent likelihood of first-generation students of withdrawing from that college before his/her second year (Horn, 1998).

Comparative Studies

Cabrera, Castaneda, Nora & Hengstler (1992) studied Bean's (1980) Student Attrition Model and Tinto's (1975) Student Integration Theory in their first attempt to understand the similarities between the two models and how they might best be utilized in combination. The results supported Bean's assertion that environmental, organizational, and personal variables of persistence were more likely to have an indirect impact. With respect to convergence between the two theories, the results indicated that they were not mutually exclusive but rather complementary to one another.

Theoretically, the findings supported the notion that issues of attainment and persistence can be best understood when the two theories are combined. Ultimately, the authors argued that institutional policy makers should consider the effect of institutional, personal, and external factors when developing programs directed toward persistence.

Cabrera, Nora & Castaneda (1993) again studied Bean's (1980) Student Attrition Model and Tinto's (1975) Student Integration Theory in the attempt that maybe the best model to study student persistence is to combine the models into a more comprehensive theory. The author's describe the two models in great depth and then explain that the Student Integration Model appears to be more supportive of the robust number of studies conducted but the Student Attrition model was found to explain more of the variance in past studies. The longitudinal research of the 1988 freshmen class from a large southern urban institution yielded several important findings. First, the effect of environmental factors was far more complex than what Tinto envisioned in his model. Additionally, the relationship between Encouragement from Friends and Family and Academic

Experiences should not represent the only effects of environmental factors. From a practical perspective, the authors disagree that there is an interplay between the different variables that point out that institutions should work toward bringing together different student support services in order to concentrate on student attrition in a more effective way.

It is this more integrative approach by these authors that offer the perspective that leads to a more comprehensive framework. In general, student retention research has two primary weaknesses. First, the research does not offer insight as to why some students persist to graduation and others do not. The lack of a clear explanation creates larger questions typically for those trying to increase student retention (Attinasi, 1989). Second, there has not been an adequate explanation of the variance that exists in students of student retention and graduation rates (Astin, 1993, Pascarella, 1986). By integrating the various perspectives of retention research and reframing the thinking to address these weaknesses, one might actually be able to more fully ascertain why students leave their institutions. Woodard, Mallory, DeLuca (2001) offer such a framework.

Retention Self-Study Framework

The Retention Self-Study Framework (Woodard, Mallory & DeLuca, 2001) provides a more comprehensive structure bringing together an extensive body of student retention research along with the authors' own research at 72 Land Grant, Research I, and AAU universities. The authors used hierarchical logistic regression and the background characteristics of first-time, full-time freshmen from 1988 and again in 1990 to develop predicted graduation rates for the 72 institutions they studied. The authors then added 22

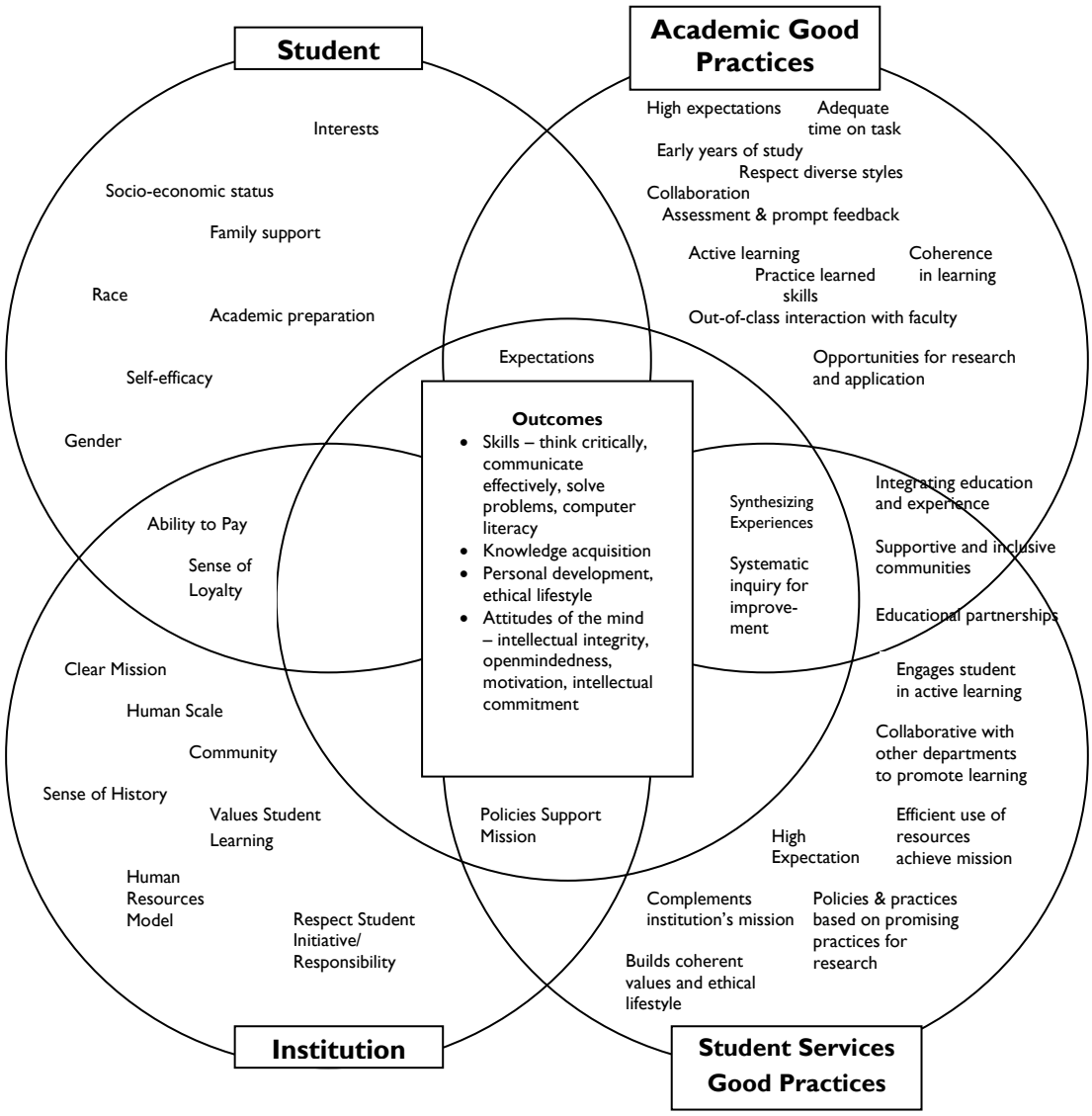
different institutional variables to develop a second regression, which they used to predict the graduation rates using both student and institutional characteristics. From this point the authors found that some institutions were graduating students at a higher rate than predicted while others rates were lower than predicted.

Next, Woodard et al. (2001) asked what was causing some institutions to graduate students at a higher level than predicted and vice versa. Focusing on the existing rich research, the authors accounted for this discrepancy to several interaction variables that might account for it. The authors then asked how an institution could better understand the interaction variables that might affect graduation performance. It is this question that led to the development of the Retention Self-Study Framework.

Woodard, et al. (2001) drew heavily from the research of Vincent Tinto (1975, 1987), John Bean (1980, 1983), Alexander Astin (1984), and Ernest Pascarella (1980). Their critiques of these researchers noted the linear nature of the models and the focus primarily on the student. One of the weaknesses of these various works is that they assume that the institution is "providing opportunities and a suitable environment for students" (Cabrera et al., 1992, p. 13). Additionally, it has only been in the last ten to fifteen years that researchers (Berger, 1998, Cabrera et al, 1992, Tinto, 1998) have begun to consider the role that an institution plays in enhancing or hindering student retention.

In developing the Retention Self-Study Framework (Figure 2.1), the authors drew on extensive research of student retention and graduation rates, as well as good practices in both higher education and student affairs. From this, they extrapolated four areas that

Figure 2.1 : Retention Self Study Framework



affect an institution's ability to retain and graduate its students. Those areas are characteristics of enrolled students, institutional characteristics, academic good practices used by the institution, and student services good practices. In order to understand all of these four areas of influence it is necessary to describe each in detail. The first sphere of

influence are characteristics of enrolled students, which include socioeconomic status, interests, family support, academic preparation, expectations, self-efficacy, ability to pay, sense of loyalty, commitment, identity, sense of responsibility, and purpose. The first characteristic of this sphere, socioeconomic status, highlights the student and his/her immediate family's socioeconomic status. In 1999, more than 73 percent of all undergraduates attending college full-time were receiving financial aid (Berkner, Berker, Rooney, & Peter, 2002). Astin (1993) and St. John (1990) found that financial aid enhances persistence, particularly among low-income students. Student interests include both their academic and social interests.

The level of student involvement in an institution's academic and social activities has shown to be positively correlated with student persistence (Braxton, Sullivan, and Johnson, 1997; Astin, 1993). There is even some evidence that academic and social integration are interrelated where they each reinforce one another (Braxton, Sullivan, and Johnson, 1997). Family support describes the amount of social, spiritual, emotional and/or financial support a student receives from his/her family. Families that provided support (either emotional or financial) tended to correlate positively with students who were retained by higher education (Bean & Metzner, 1985; St. John, Kirshtein, & Noell, 1991). Academic preparation includes the type of high school they attended, courses they completed, GPA, class rank, and test scores. A student's academic success in high school (class rank, advanced placement courses, honors status) has been shown to be positively correlated with persistence and graduation (Astin, 1993; Pascarella & Terenzini, 2005). Expectations are those that a student holds while in college and his/her

abilities, strengths, and weaknesses. Students that have higher expectations of college (i.e. desire to attend graduate school) have shown greater persistence rates than those with lesser expectations (Braxton, 1995; Adelman, 1998; Leppel, 2001).

Self-efficacy is a student's belief in his/her ability to accomplish a goal. A student's confidence in his/her ability to graduate from college was correlated with his/her ability to graduate from college (Pascarella & Terenzini, 2005). Ability to pay is the student's and/or his/her family's ability to afford the student's choice of institution. In instances where research showed that financial aid was negatively related to persistence, the evidence suggested that the aid was insufficient for the student's need (St. John, Paulsen, & Starkey, 1996; St. John, Andrieu, Oescher, & Starkey, 1994). Sense of loyalty is a student's commitment to an institution. Both Tinto (1975) and Bean (1980) address this point in their theories by stating that a student who is highly committed to an institution will likely persist at the institution. Commitment is the student's drive toward his/her educational purpose and goals. Much like loyalty, student's who have a clear vision of what they hope to achieve in college and then are committed to that goal tend to persist at a greater rate than those that do not (Tinto, 1975; Bean, 1980; Nora, Castaneda, & Cabrera, 1992). Identity is the way in which a student defines his/herself in a social, historical, and social context. Minority students often have a more difficult time overcoming the context of their identity (Astin, 1993; Astin, Tsui, & Avalos, 1996). Sense of responsibility is a student's sense to think and act rationally and be accountable for the choices he/she makes. Student's who take their responsibility of good citizenship and accountability tended to be retained in greater numbers than

students who did not (Kuh, 1995; Astin, 1993; Pascarella & Terenzini, 2005). Finally, purpose is a student's sense of his/her goals, plans, or intentions. Students with a clear vision of their educational goals and aspirations are positively correlated with retention and persistence (Tinto, 1987; Pascarella & Terenzini, 2005, Astin, 1993).

The second sphere of influence is institutional characteristics, which include clear mission, policies support mission, human scale, sense of history, human resources model, community, respect for student initiative/responsibility, and value of student learning. A clear mission defines what an institution aspires to be and provides stakeholders clarity and distinction. Institutional policies should then support the institutional mission with a sense of consistency that reinforces the learning environment. Students should feel welcome on campus and should be taught responsibility. Human scale describes the feel of the campus to students, where it is comfortable and manageable and where the goal is to address the social and psychological needs of students. Students will feel a sense of institutional history through messages they receive regarding tradition and historical precedent. Human resource models help students to reach their full potential through messages of caring and belonging on campus. Community is an atmosphere where all students feel welcome and comfortable either through minimizing or accentuating differences. Respect for student initiative/responsibility describes an institution providing a degree of structure in order for their students to develop a sense of autonomy and responsibility. Finally, value of student learning describes institutions that value what students bring to campus but encourage students to grow both inside and outside of the classroom.

Many administrators and educators in higher education wrongly assume that leaving an institution is a negative reflection on the institution when in fact there are often other realities for students as to why they transfer out of the institution including financial reasons and not having the appropriate majors. Twenty-nine percent of the students who begin their education at a four-year college or university will leave for either another four-year institution (16 percent) or a two-year institution (13 percent) within four years (McCormick, 1997). While student persistence into their second year at four-year institutions ranges from 72 to 79 percent at public institutions and from 75 to 79 percent at private institutions (Consortium for Student Retention Data Exchange, 2002), students who transfer between institutions between the first and second year actually reflect an 82.5 percent retention rate at publics and a 87.5 percent rate at privates (Horn, 1998). However, recent studies over the last decade reflect that institutional type may have little net effect on whether students persist. Controlling for student characteristics seems to erase any advantage that privates appear to have over publics (Lee, Mackie-Lewis, & Marks, 1993).

Research related to institutional size is somewhat limited as often institutional size is used as a control variable however it does appear that it does appear to influence other variables that do provide variance in a student's college experience (Pascarella & Terenzini, 2005). Admissions selectivity is often used as a proxy for institutional quality and several studies (Pascarella & Terenzini, 1991; Astin, Tsui, & Avalos, 1996; Stoecker & Pascarella, 1991) confirm that institutional quality correlates positively with retention and ultimate persistence.

In general, while the impact of various institutional characteristics on retention is statistically significant the significance tends to be small and indicate that other forces are likely to be more influential to the retention puzzle. These forces highlight the uniqueness of the collegiate experience at each institution which leads students to make the decisions that will either lead them toward degree attainment or to leave the institution. Woodard, et al. (2001) highlights these forces as academic good practices and student services good practices.

The third sphere of influence is academic good practices including high expectations, early years of study, opportunities for research and application, respect diverse styles, adequate time on task, out-of-class interaction with faculty, collaboration, active learning, opportunities to practice learned skills, assessment and prompt feedback, synthesizing experiences, and integrating education and experiences. High expectations are described as faculty setting and communicating high, yet attainable, goals for students. Early years of study are a faculty member's ability to recognize the first-year of college as critical to a student's success. Opportunities for research and application include the faculty offering students the chance to test and/or apply theories and principles through hands-on experiences. Respecting diverse styles involves a faculty member recognizing the diversity of the students in his/her classroom and making an effort to use a variety of teaching styles to foster each student's learning. Adequate time on task is a faculty member helping students effectively manage their time by highlighting steady pacing and scheduling. Out-of-class interaction with faculty highlights the ability of faculty to engage in formal and informal interactions with

students outside of the classroom. Faculty members who encourage collaboration offer students opportunities to work in peer groups to learn from one another. Faculty members who encourage active learning offer students opportunities to learn through activity and involvement. Next, faculty gives students the opportunity to practice learned skills through the use of multiple opportunities to exercise problem-solving and critical thinking. Assessment and prompt feedback entails a faculty member providing students with frequent, immediate, and supportive feedback on their performance. Synthesizing experiences involves a faculty member giving students the opportunity to synthesize knowledge and skills learned within different contexts. Finally, integrating education and experience entails a faculty member giving students the chance to integrate their education and experiences through the use of hands-on and experiential opportunities and applications.

Reports of grade inflation in higher education over the last twenty years (Astin, 1998) might be somewhat related to the reality that student grades are positively correlated to student retention (Cabrera, Nora, & Castaneda, 1993; Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Nora & Cabrera, 1996). Institutions that strive for higher retention rates might only look toward increasing high performing students through admission standards and/or reward faculty that can produce students with high marks in their classes. This in fact is a reality at Southwest University as the President has sought to increase academic standards by 2006 (Arizona Board of Regents, 2002).

Supplemental instructions are academic interventions open to help all students in historically difficult courses. The limited research related to this academic intervention

seems to show positive effects on student retention for those students who take advantage of this opportunity (Center for Supplemental Instruction, 1997). The first-year seminar also appears to benefit student retention (Boudreau & Kromrey, 1994; Glass & Garrett, 1995). The first-year seminar started at the University of South Carolina in 1972 to help orient first-year students to college while providing them an opportunity to interact with an instructor in a small class setting. One unknown related to first-year seminars is whether the effects on retention are either direct or indirect since these seminars provide student socialization, improved study and time management skills, higher grades, and stronger relationships with faculty, staff, and peers (Pascarella & Terenzini, 2005). Each of these points is all known to promote retention themselves. At the same time, students who participate in first-year seminars show other effects including more frequent and positive interactions with faculty (Keup & Barefoot, 2002; Fidler, 1991) and other students (Keup & Barefoot, 2002), involvement with extracurricular activities (Fidler, 1991, Barefoot et al., 1998), and satisfaction with the college experience (Barefoot, 1993). All of these effects also are related to retention but it ultimately requires more research to determine the effect of whether first-year seminars are directly or indirectly affecting retention.

The final influence is good practices in student services adapted from the ACPA & NASPA document entitled 'Principles of Good Practice for Student Affairs' (1998). This sphere included engaging students in active learning, collaborating with other departments to promote learning, basing policies and practices on promising directions for research, promoting efficient use of resources to achieve institutional mission, helping

students build coherent values and ethical lifestyles, setting high expectations for students, building supportive and inclusive communities, and complementing the institution's mission. The first characteristic of this sphere is engaging students in active learning. Students are encouraged to engage in various learning experiences by drawing on their personal experience. Collaborating with other departments to promote learning is defined as partnering in the learning process where the core commitment is to students and their learning. Student affairs educators who base their policies and practices on research would analyze and promote effective programs and services to foster student learning. Student affairs educators who promote efficient use of resources would focus resources on creating and improving learning environments. Student affairs educators who challenge students to embrace values such as honesty, equality, justice, dignity, freedom, and civic responsibility would represent the process of helping student build coherent values and ethics. Another characteristic of setting high expectations for students can be promoted by those who set high expectations for student performance both inside and outside of the classroom. Good student affairs practice promotes building supportive and inclusive communities where individuals feel a sense of belonging to the institutional community. Finally, student affairs work should not compete but instead complement the academic mission of the institution.

While not a predictive model, the Retention Self-Study Framework does provide institutions with strategies to improve student retention. It is this Framework that warrants further research in order to determine the utility for administrators on campuses

today. In order to determine its usefulness, each of the four spheres must be developed into descriptive questions to which a student could respond.

Conclusion

The extensive amount of research of student retention and persistence continues to grow and provide administrators with more insight and guidance on how to effectively address trends on their campuses. Even the most noted theories on student retention recently have been questioned as to the model's predictability of student behavior. Only with further research of retention will models improve student behavior predictability. Researchers today need to look at retention from varied perspectives and settings including different types of institution, diverse groups of students varied by characteristics and major, and based from various theoretical frameworks. It is the hope of this researcher that this study will frame retention differently than other retention studies. By utilizing both the Retention Self-Study Framework and by focusing on the experiences of students who choose to return to Southwest University for a second year, this study will add to the extensive research base.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

In order to research the impact the university's efforts made on student retention, the researcher relied heavily on the Retention Self-Study Framework (Woodard, et al., 2001). While the Retention Self-Study Framework provides a comprehensive look at student retention and provides a framework for understanding the university's role in retention, it fails to provide any sort of quantifiable test of measurement. Ultimately, it was this reality that prompted the researcher to work towards quantifying the spheres of influence on undergraduate retention.

Background

In order to understand the factors that contribute to a student's decision to return, the researcher plans to study the experiences of first-year students at Southwest University, a large, public, Research-Extensive institution in the southwest United States. It enrolls an average of 36,000 students each year; of these approximately three-fourths (28,000) are undergraduate and one-fourth (8,000) are graduate and professional school students. The university has a total of seventeen colleges and, at the undergraduate level, offers degrees in 123 fields of study.

According to the annual Fact Book (2004), produced by the Office of Institutional Research and Evaluation at Southwest University, fifty-three percent of the

undergraduates enrolled at Southwest University are women. Sixty-five percent of the undergraduates are White/Caucasian. The next largest ethnicity is Hispanic, representing fifteen percent, followed by Asian/Pacific Islander (six percent), unknown ethnicity (six percent), Black/African American (three percent), international student (three percent), and American Indian/Alaskan Native (2 percent). The average profile of all entering freshmen for fall 2004 was a 3.4 high school grade point average and an 1118 SAT score.

Southwest University provides an excellent case study to highlight the questions that are being raised in retention research today because of its diverse student body and on-going university-wide retention efforts. The retention rate for entering freshmen at Southwest University between 1993 and 2003 has ranged between 75 and 79 percent. The graduation rate six years after entry has ranged from 52 to 57 percent. One study indicated that graduation rates are the most frequently used indicator in state-level assessment of public institutions followed closely by retention rates (Strategic Retention Master Plan 2005-2011, April 2005). In March 1999, the Federal government began requiring every higher education institution receiving federal funding to disclose graduation rates annually (Strategic Retention Master Plan 2005-2011, April 2005). Southwest University ranks last in first-year retention and near the bottom in six-year graduation rates compared to its cohort of 31 “aspirational peers” (University Fact Book, 2004). One contributing factor of Southwest University’s rank is that the state Board of Regents has imposed a rather broad admission criterion. The state Board of Regents requires the institution to enhance access to higher education. Highlighting this broad admissions standard, only one other institution of the 31 cohort institutions had a lower

SAT entry mean. Over the course of the past few years, Southwest University has worked with the state Board of Regents to raise its admissions standards so that it only guarantees access to the top 25 percent of the state's high school graduates versus the previous 50 percent. By increasing admissions standards, the institution hopes to admit students who are more equipped to succeed at a Research-Extensive institution. Currently, 20 percent of all freshmen do not earn a 2.0 grade point average. Of those students who leave before their second year, half fail to achieve a 2.0.

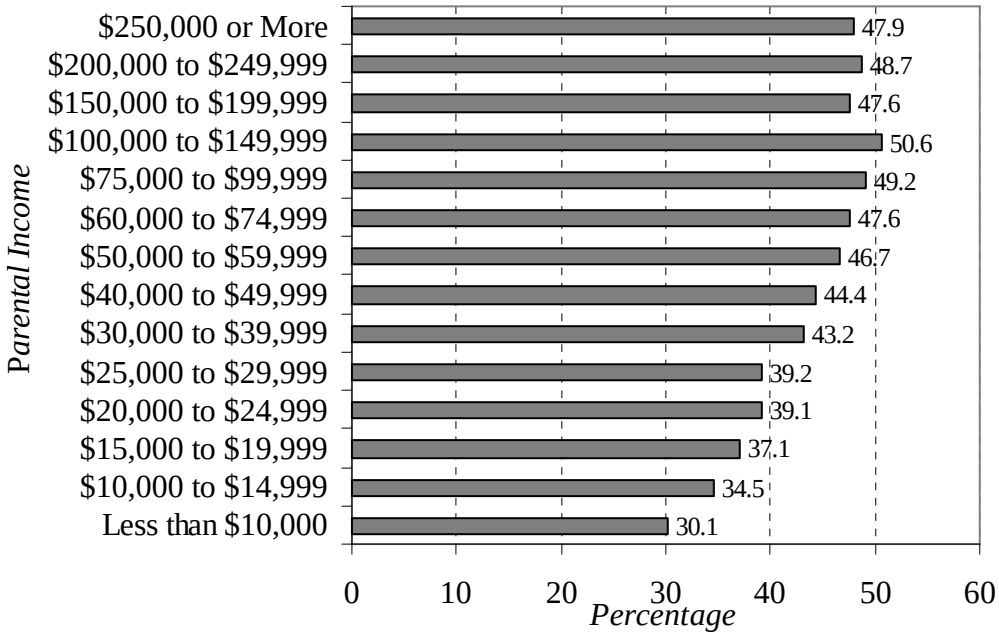
In addition to the current trends and institutional efforts occurring at Southwest University, it is essential to note trends occurring among the most recent full-time, first-year students at the institution. Currently, students who achieve a grade point average below 2.0 after the first semester (and are subsequently placed on academic probation) have a one-year retention rate 23 percentage points below and a six-year graduation rate 27 percentage points less than those students not on academic probation. First time, full-time freshman males have had a moderately consistent one year retention rate of 75 percent and a six-year graduation rate of 50 percent since 1992 at Southwest University. Women have been more highly consistent in their retention rates with an average of 78 percent and a 57 percent six-year graduation rate. Over the course of four years (1999-2002), one-year retention rates for minority students (African Americans, 74 percent; Hispanic, 75 percent; Native Americans, 62 percent) generally are lower than Whites (77 percent), with the exception of Asian Americans (83 percent). Six-year graduation rates show that minority students (African Americans, 39 percent; Hispanic, 46 percent; Native American, 28 percent) also under perform compared to Whites (58 percent), with the

exceptions of Asian Americans (58 percent). Honors students have a one-year retention rate 13 percentage points higher than all other full-time freshmen. Freshmen with late applications to the institution have nearly equal one-year retention rates and slightly lower six-year graduation rates compared to all full-time freshmen. Undecided first-year students have slightly lower one-year retention rates. Their graduation rates after four years are four percentage points lower than all full-time freshmen but their six-year graduation rate is just one percentage point lower (Strategic Retention Master Plan 2005-2011, April 2005).

In 1998, Southwest University released a white paper entitled "Student Retention – Toward a Culture of Responsibility". The report called for "a campus wide culture of responsibility in which everyone at the University – faculty, staff, and students – accepts responsibility for student retention" (Strategic Master Plan 2005-2011, April 2005, p. 4). The report described the realities at that time that the institution faced related to retention and graduation rates and put forth fourteen recommendations for the future to combat these disheartening trends. The paper described the institution's study of students who had left the institution during the 1995 academic year. Not surprisingly, the research found that those who left the institution "were fundamentally less attached to the student role than are persisters" (Strategic Retention Master Plan 2005-2011, April 2005). The institution began a retention strategy that acted upon the 14 recommendations. The recommendations are included in APPENDIX A. Further the institution worked toward achieving a cultural shift where everyone at Southwest University would accept responsibility for student retention.

When comparing Southwest University with its aspirational peers, it becomes apparent as to why Southwest University struggles with freshmen retention. First, the institution is not very selective. Selectivity can be seen through many lenses. Students' grades at Southwest University correlate with parental income (Figure 3.1). Higher grade point averages correlate with students from higher socio-economic backgrounds (McClure, Raphael, Callahan, and Zhou, 2003). Postsecondary Education Opportunity

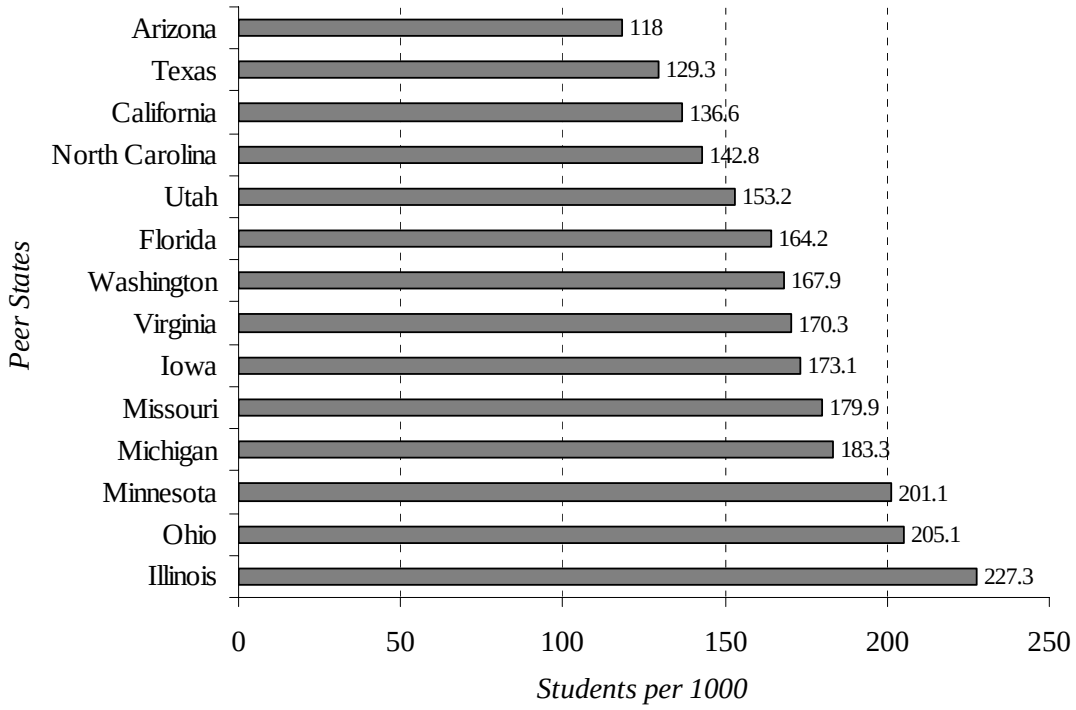
Figure 3.1: Four-Year College Freshman with High School Grade Averages of A- or Better by Parental Income, 2002



reports, "a student's chance of earning a bachelors degree by age 24 doubled with each increase in family income quartile. A student born into the top family income quartile was more than eight times more likely to have a bachelors degree by age 24 than a student born into the bottom quartile of family income" (Mortensen, Apr. 2004, p. 146). This point has remained consistent for over thirty-five years and is irrespective of race or

ethnicity. Socioeconomic class is a variable that should not be discounted when studying retention rates because of its powerful influence on the many predictors of retention. Next, Southwest University has a low endowment compared to its aspirational peers. This low endowment does not allow for the institution to be more selective in its student admission population by offering scholarships to students with higher ACT and SAT scores (Figure 3.2).

Figure 3.2: High ACT (26 or above) and SAT (combined 1200 or above) Scores Per 1,000 High School Graduates - Southwest University Peer States, 2003



In early 2004, Southwest University formed the Retention Coordinating Group consisting of 45 individuals representing enrollment management, campus life, the provost's office, the graduate college, faculty, students, and the college academic administrator's council. This group was charged with developing a vision and implementing policy toward improving the university's retention rates. From the larger

Retention Coordinating Group, a smaller Retention Working Group was formed to achieve much of the detailed work such as data analysis and pilots/projects.

In the spring of 2004, Southwest University began to work with a consulting group that specializes in college retention strategies. Over the course of the next year and a half, the consultants visited the Southwest University campus on six separate occasions to meet with key personnel, conduct focus groups, make presentations, and help with the strategic planning process. After each visit, the consultants would offer recommendations to the institution. By utilizing the services of a consulting firm, Southwest University was hoping to use proven methods to affect change involving student retention rates.

One of the key aspects of developing of a strategic plan for Southwest University was soliciting input from students through three data-gathering methods: focus groups conducted by the retention consultants, the Student Satisfaction Inventory, and the Institutional Priorities Survey. The outcomes identified several institutional strengths. Students described course content within their major valuable, faculty knowledgeable in their fields, and academic advisors well-informed about major requirements. Students also described experiencing intellectual growth at Southwest University. Faculty availability to students after class and during office hours was also seen as a strength. Students described a convenient and aesthetically pleasing campus environment. The people at Southwest University, in general, were seen as strengths on campus whether it was other students, staff, faculty or administrators. Improvements to advising were acknowledged as a positive as well as the wide range of services available to students.

Student diversity was mentioned consistently as a strength as were the numerous opportunities for student involvement in clubs and interest groups. Learning communities were seen as a way of making a larger, impersonal institution into smaller, more personal populations. The overall campus environment was characterized by enthusiasm and momentum for positive and progressive change. Both students and faculty acknowledged the variety of community service projects. Finally, the Honors College was seen as an important 'showcase' program and Residence Life was praised for providing quality housing (Strategic Retention Master Plan 2005-2011, April 2005). Although the institution could celebrate these positive attributes, the larger concern about changing the institutional culture to one concerned about retention as a whole was not met.

The consultant's surveys identified many factors that might be contributing to the low student retention, persistence, and graduation rates. Students acknowledged several concerns about the cost of higher education including tuition costs and the value of activity fees. Several issues arose regarding financial aid, including getting financial aid assistance, the helpfulness of financial aid counselors, and the timeliness of communications by the financial aid office. Related to these financial concerns was the adequacy of billing policies. Registering for classes also was seen as a challenge facing the students at the institution. Students also shared concerns about the level of instruction in some areas and the teaching competence of graduate teaching assistants. Facility concerns included availability of parking and lighting and security concerns in parking lots. Students also acknowledged that they were not always treated as individuals, that

they often got the 'run-around' when seeking information on campus and that there were perceived limited channels for expressing student complaints.

In spring 2005, the Retention Coordinating Group produced the Strategic Retention Master Plan 2005-2011, which included 30 action plans to increase first-year retention at Southwest University to 85 percent by 2010. The plan called for very specific actions that the university must take in order to achieve Southwest University's goals. However, in analyzing the 30 action plans (APPENDIX B), one can gain a sense of how the institution can be easily framed within the larger context of retention, and additionally, how simply Southwest University could affect the success of college freshmen. Framing all retention work and goals are a series of contextual influences that are important to understand in order to determine a university's best course of action. With this background in mind, the researcher developed a survey utilizing the Retention Self-Study Framework as a model. Categorizing Southwest University's 30 action plans into one of the Retention Self-Study Framework's four spheres of influence it is interesting to note that only one seems primarily focused on the student as part of the retention equation. The action plan is broken up into 13 institutional strategies, nine academic strategies, and seven student services strategies. This illustrates what the institution has identified as needing the most attention to increasing freshmen retention.

Research Question

Southwest University represents a typical public, Research-Extensive institution today struggling with the issues of how to increase student retention and persistence. Yet over the past several years, Southwest University has been actively working to improve

these areas. Most research has looked at the experiences and common attributes of those students who have left the institution. This research will utilize the Retention Self-Study Framework to examine students who were retained into their second year of college through disaggregating their experiences to account for gender, race, high school class rank, socio-economic status, institutional choice, aid package, and parent's education. Hence, the overall research question is:

To what extent do student characteristics relate to those experiences that the Retention Self-Study Framework suggest promote student retention?

Developing the Survey

In order to design the instrument, the researcher methodically studied each characteristic of the four spheres of influence of the Retention Self-Study Framework: student characteristics, institution-wide characteristics, academic good practices, and student services good practices. The Framework offers 40 different researched characteristics within the four spheres of influence. In addition to collecting data that operationalized most of these characteristics, the researcher also sought to collect some additional demographic information that would expand on the student characteristics. Ultimately five sections of the survey were established to represent the four spheres of influence as well as student demographics for comparative purposes. The researcher specifically chose to pursue developing a survey rather than conducting focus groups or individual interviews because of the sheer volume of characteristics within the Retention Self-Study Framework.

The final survey (APPENDIX D) contained 53 quantitative questions and four qualitative questions, taking students typically between 15-20 minutes to complete. In order to produce a survey that students would be willing to take, the researcher tested several drafts that included more than 80 quantitative questions and seven qualitative questions. Questions were analyzed for repetition. The instrument was field-tested in March 2005 with six undergraduate students to ascertain whether the instrument would measure the intended information, while clarifying any problems with language and clarity. After completing the field test, the researcher worked with both faculty and colleagues to streamline the survey and further clarify the language.

In developing section one of the survey, the researcher reviewed several retention and persistence instruments (reference) to review the types of demographic information that would be most important in analyzing the differences between students. Seven of the questions were quantitative while the final question was qualitative in order to understand the reason why a student chose to leave the institution. Some of the demographic questions would also be critical in section two as they helped to describe student characteristics. While the survey is predominantly quantitative, there were a few questions that allowed the student to describe his/her experience in his/her own words - this was critical to enhance the researcher's understanding as to why he/she was choosing to stay or leave.

Section two provided students the opportunity to describe those characteristics that the Retention Self-Study Framework described as critical components to student retention in higher education. Some of the questions provided a Likert scale from which

students were to choose to what degree they agreed with the question. In most instances, the Likert scales in this survey provided no middle ground, asking for students to side either positively or negatively on a question. For example, several dozen questions that asked students to strongly agree, agree, disagree, or strongly disagree. Other questions asked the student to provide specific input such as grade point average or ACT/SAT test scores. Answers to these questions helped to interpret a student's academic preparation for college. For example, a question asked the student to estimate how many hours a week he/she typically spend on specific activities beyond academics. This question was critical in understanding student interests and how time spent on activities might influence a student's ability to remain at the institution. Finally, two questions asked the student to rank his/her goals and expectations of attending college from a detailed list of possible answers. These questions were used to solicit answers that did not have to be interpreted by the researcher.

Section three of the survey asked students about institutional characteristics. This section of the survey ultimately was the most difficult for which to develop effective questions and solicit student response. Typically, the characteristics of this sphere required a more comparative analysis between various institutions and longer term exposure to institution-wide characteristics. For example, it was not reasonable to expect first-year students to be able to answer whether or not they thought university policies supported the institutional mission. First, the researcher was not certain whether or not a student would be familiar with the institution's mission. Second, even if a student happened to know the institution's mission, understanding how policies support the

mission was likely beyond the scope of an average student. This section of the survey truly requires some insight from administration as to the characteristics of the institution as a whole.

The fourth and fifth sections were somewhat similar in style and types of questions. The fourth section operationalized the academic good services sphere while the fifth section described the student good services sphere. Each section had a series of Likert scale questions for students to score to what degree they agreed or disagreed with statements regarding academic and student service practices. Each section concluded with a qualitative question that solicited specific examples to best characterize a student's experiences with either faculty or student services professionals. Section five included a rather extensive definition of student services so that students could recognize different professionals on campus and how the various services might fit into the broad category.

After final review of the survey, the researcher converted the survey into Microsoft FrontPage. The researcher then met with a technology support staff member in the College of Education in order to publish the survey onto a website. The website would allow for the data to be collected into a database after each student successfully completed the survey.

The researcher submitted his research proposal to the Institutional Review Board in late April 2005 and was approved to begin collecting data on May 13, 2005.

Selecting Participants for Inclusion in the Study

The researcher chose to investigate first-year students because Southwest University had a persistence rate between the first-year and sophomore year of 79 percent

in 2003 (Fact Book, 2004). Further, extensive writings published on the first-year experience document this time as the most critical to student retention (Upcraft, Gardner, & Associates, 1989; Pascarella & Terenzini, 2005). To further narrow the field of investigation, students with undeclared majors were chosen, as there has been little research on this population's retention. Most of the current research focuses on specific degree programs; for example, students majoring in the sciences, mathematics, and engineering and/or business and health related professions are more likely to persist and earn bachelors degrees than students who major in the social sciences, humanities, or education (Adelman, 1998; DesJardins, Kim & Rzonca, 2002-03; Leppel, 2001).

With the support and assistance of the Assistant Vice President for Student Retention and Director of the University College (Southwest University's college for undeclared students), the instrument was distributed to undeclared, undergraduate students at a large public Research-Extensive University in the southwest. All students who were registered as undeclared as of the fall census date and who were still attending the institution were solicited to be involved in the study. At the time of the fall census, 1,477 freshmen met these criteria.

Collecting the Data

The survey was offered to participants through a series of emails. Participants logged onto a website to complete the instrument. The survey was developed with the technical assistance of staff in the School of Education's Instructional Technology Facility and all data was collected in a database for future analysis. The survey was emailed to students on the last day of finals week during the spring semester of 2005.

The delay was due to obtaining final approval from Human Subjects. A limitation of this research was that the timing likely resulted in fewer surveys being completed as students were leaving or had already left for the summer and might not be as likely to check their university email accounts until the fall. To account for this possibility, the researcher left the survey online through early fall semester. After the initial email, two email reminders were sent to individuals inviting them to participate in the survey. The text of the emails were sent on May 13th, 27th, and August 25th, 2005. The emails are included in APPENDIX E and F.

Of the 1,477 participants, three percent (n = 52) email addresses were no longer valid indicating that the student had either left the university during or at the end of fall semester. The website was closed on September 8th, 2005 and generated a response rate of 21 percent (n = 320) which included seventeen percent (n = 248) complete surveys for analysis. The remaining 72 surveys were found to be incomplete.

Most of the quantitative questions utilized a Likert scale, which measured the extent to which the participant agrees with the statement. The survey included three styles of quantitative questions. The first type of question was represented mostly throughout sections one and two which asked students to identify themselves into one of several categories (i.e. gender: male or female). The second type of question in section two provided further demographics of the student participating in the survey. These questions asked respondents to identify either the number of hours they spend weekly on certain identified activities or to rank the importance of certain activities, expectations, and stressors. The final quantitative questions were asked in sections three, four, and

five. These questions utilized a four-point scale to rate the level of agree with various statements were mostly coded “Strongly Agree,” “Agree,” “Disagree,” “Strongly Disagree.” Qualitative data, consisting mostly of open-ended questions, allowed participants to expand their answers about their experiences at the institution in greater detail.

Administration of the web survey required the operationalization of many procedural protocols. Prior to beginning the survey, students were asked to provide consent. While the survey did not require students to provide any identifiable information, every effort to guarantee anonymity was made. All quantitative data collected was coded so that it could be easily transferred into SPSS 11.5 for data analysis. Responses to open-ended items were then separated and organized into a spreadsheet, utilizing Microsoft Excel. Once all the data had been collected and separated, the researcher began the process of analyzing it.

Data Analysis Strategies and Techniques

The study was designed utilizing mixed methods. As described earlier, the survey relies on both qualitative and quantitative research. The goal in developing a survey with both qualitative and quantitative research was to allow for descriptive and inferential analysis of student retention at Southwest University and then to develop a fuller and richer understanding of the data generated.

Descriptive statistics (including mean, range, and standard deviation) were used to develop an initial understanding of the data. While the descriptive analysis provided interesting information, it was deficient for the purposes of investigating the relationships

between the various questions. Exploratory factor analysis was employed to better understand those relationships within six separate sections. Specific survey questions related to expectations of college, stressors of college, and goals of attending college were each analyzed separately accounting for three of the different factor analyses.

First, the seven independent dummy variables for gender, race, high school class rank, socio-economic status, institutional choice, aid package, and parent's education will be analyzed against the factors of students' expectations of college. This category represented 16 different responses on the survey. Those responses are to prepare for a good career, find a job while at school, find a significant other, get involved in clubs/student organizations, meet with faculty, meet with staff, fit in, stand out, make good friends, go to good parties, enjoy school spirit, participate in activities, be a student leader, be challenged academically, participate in athletics/recreation, and learn about opinions/beliefs different from their own. This analysis will provide insight as to the types of students attending Southwest University and what expectations the students had of the university.

Next, the independent variables will be analyzed against the components that caused students stress or concern about their abilities to succeed in college. The survey provided 18 different responses for students to identify. Responses a student could identify included accessibility on campus, balancing academics with job, being academically unprepared, being discriminated against because of their identity, choosing a major, college affordability, difficulty making friends, distance from home, finding a job, finding others like themselves, getting the classes they want, getting involved on

campus, learning style accommodations, leaving friends from high school, living situation, long distance relationship, parental pressures/concerns, and roommate conflicts. This analysis will provide a picture as to the concerns that students are facing at Southwest University.

The independent variables will then be analyzed against the components that participants could identify as goals for attending college. Among the ten goals students could identify were to graduate from college, help find jobs, parents wanted the student to attend college, make friends, attend graduate school, socialize/party, wanted to get away from home, be able to make more money, find purpose in their lives, and they had no goals in attending college. This analysis will illustrate the goals and motivations of different students who attended Southwest University.

The final three factor analyses were the quantitative questions in section 3, 4, and 5 of the survey (institutional sphere, academic sphere, and student services sphere). In the fourth set of regressions, the independent variables will be scrutinized against section three of the survey. This section asked respondents to describe institutional characteristics. This section included six different quantitative questions to measure institutional characteristics. Specifically, students were asked what they had learned and experienced about being a student at Southwest University. For example, participants were asked what role if any did they participate in campus decision-making.

Next, the independent variables will be examined against section four of the survey. This section asked respondents about their first-hand experiences with faculty

and academic support services at Southwest University. There were 11 specific quantitative questions to measure academic/faculty efforts.

Finally, the independent variables will be analyzed against section five of the survey. Section five asked respondents about their experiences with student services staff at Southwest University. Student services staff were defined as professionals who offer services that help students succeed at Southwest University. An extensive list of examples of student services staff were included in the survey. Respondents were asked to answer 14 different quantitative questions to measure the efforts of student services staff.

The factors in each of the six sections were labeled and saved as new variables. The criteria used to decide the number of factors to be extracted included the eigenvalues (greater than 1) and the percentage of variance for which the potential factor accounted. Eigenvalues corresponds to the equivalent number of variables which the factor represents. Dividing 100 percent by the number of variables and then multiplying by the eigenvalue would equal the total variance for that factor analysis (Kachigan, 1986).

A seventh section provided for the final set of regressions. In this section, the independent variables will be analyzed against the three different categories of how a student could spend their time. In the survey, the question represented 12 different responses (studying/homework, socializing with friends, talking with faculty, exercising or participating in sports, partying/drinking alcohol, working (for pay), volunteer work, participating in student organizations, watching television, reading for pleasure, playing video/computer games, praying or meditating). The responses were coded as academic,

extracurricular, and unproductive time and these served as the dependent variables. Regressions were run against each of these three categories with the first two tied closely to the literature on useful activities that promote retention (Astin, 1991; Pascarella & Terenzini, 1991). This analysis will hopefully provide some insight into the way various students spend their time during their first-year at Southwest University.

Separate Ordinary Least Squared (OLS) regressions were conducted for each of the new variables generated through the factor analyses. OLS regressions were also conducted on the new variables computed for hours per week spent on activities. These regressions were compared against seven different independent variables simultaneously: gender, race, high school class rank, socio-economic status, institutional choice, aid package, and parent's education. Each of the variables was developed into a dummy variable. For example, gender was analyzed to compare the experiences of women versus men while a race variable compared the experiences of White/Caucasian students versus Students of Color. High school rank was disaggregated into two categories: students who were in the top 10 percent of their class and those below that top tier. Socio-economic status was disaggregated by students identifying their families in the upper or upper middle class versus those in the lower or lower middle class. Next, a dummy variable was created for those who had Southwestern University as their top choice and compared against those with it less than first. Students receiving no financial aid were compared to those students receiving some degree of financial aid. Finally, first generation college students' experiences were compared to those who had at least one parent who attended college.

Twenty-five separate OLS regressions were administered. Only data with a P-value no greater than .1 was considered in the analysis as this would represent a confidence at a ten percent level of significance that there is a real difference between the dependent and independent variables. APPENDIX G and H show the 25 OLS regressions and which variables served as the dependent and independent variables. Finally, in order to address concerns regarding multicollinearity with the independent variables, a two-tailed Pearson correlation matrix was conducted on the seven independent variables.

This study involved descriptive and multivariate analyses. First, a series of descriptive level analyses were run to examine the size of various student populations. It is important to examine what the sample looks like before any other analyses have been performed. Again, this provided a portrait of what percentage of the sample study were students of color, female, from a lower socio-economic-status, did not choose Southwestern University as their first choice, parent's education, and high school class rank.

The quantitative data will be studied using various student characteristics described above as the dependent variables. The various questions will be analyzed using both OLS regressions as well as logistic regressions in order to provide some level of confidence for the resulting conclusions. Ultimately, the researcher hopes to determine what occurrences shape the experience of students who are retained by Southwest University into their sophomore year. For example, how are the experiences of White/Caucasian students different from or similar to students of color?

The qualitative data will be studied utilizing open coding and then through axial coding where categories will be identified to their subcategories. Finally, to help identify any findings, selective coding will be used.

For the qualitative analysis, responses to open-ended survey questions were separated and organized into spreadsheets, using Microsoft Excel. Four spreadsheets were created – one for each of the four open-ended questions in the survey. The researcher read each response meticulously, paying attention to emerging patterns and developing themes. In analyzing the spreadsheets, I used a process set forth by Miles and Huberman (1994) called pattern coding. According to Miles and Huberman (1994), pattern coding is a way of grouping segments of data into smaller themes or constructs by looking for recurring phrases and common threads.

As the researcher read through the responses, recurring phrases were noted on a set of theme lists that the researcher created. Four theme lists were compiled for each qualitative question. After completing the theme lists, the researcher began to read through them. Common patterns were identified during the analysis.

With the quantitative and qualitative analysis completed, the researcher began to look for common themes between the two sets of data paying specific attention to the experiences of different groups of freshmen and how any identified theme impacts their experience. The researcher utilized a technique that Miles and Huberman (1994) refer to as “making contrasts/comparisons” (p. 254). Theme lists were further developed, and compiled comparison lists for each of my seven independent variables.

Summary

Understanding the factors that contribute to first-year retention is critical to understanding student retention. By understanding the experiences that influence students' decisions to stay and examining the factors that contribute to the decisions of each group of students, one would anticipate being able to increase student retention on individual campuses by addressing the specific criteria in question. Inspired by the work of Woodard, Mallory, and DeLuca (2001), the researcher undertook this exploratory study to determine the operationalization of the Retention Self-Study Framework as an instrument that could be used to measure the salient experiences of students who return for their second year in college. Using a self-administered survey that was developed out of the Retention Self-Study Framework, the researcher sought to gather both quantitative and qualitative data about the experiences of undeclared freshmen at Southwest University. A number of quantitative and qualitative strategies and techniques were used to gather and analyze the data. By utilizing multiple methodologies, the researcher was able to illustrate a more complete picture of the factors that contribute to a student's desire to return for a second year than would have been possible utilizing a single methodology.

CHAPTER FOUR

RESULTS

This chapter presents the results of the study analyses and is divided into three sections. The first section discusses the descriptive analyses, including the completion rates for both the overall sample as well as various student characteristics. This section will provide the reader descriptive details of the population studied and how they compare to Southwest University's total freshman population. The second section describes the six different factor analyses that were conducted. A separate factor analysis was conducted on the institution sphere (section 3), academic sphere (section 4), and student services sphere (section 5). Each of the three spheres consisted of between four and fourteen questions. The questions asked students to respond on a four-point Likert-scale as to the extent that they agreed with the statement. The remaining three factor analyses were conducted on the three specific questions from the student sphere (section 2). The first of these asked student to rank their top five expectations of college. Students were given 16 different responses to choose from. The second asked students to rank their top five goals in attending college from ten responses. The final question asked students to rank the top five things that cause them stress or concern about their abilities to succeed in college. Students had to choose from 18 different answers. Each of the six factor analyses provided components representing multiple answers that were

to some degree linked together. Only components with eigenvalues of at least 1 were used.

The third section describes the 25 Ordinary Least Squared (OLS) regressions that were conducted based on the results from the six factor analyses and the data manipulation of how students utilize their time. Each regression was analyzed against seven independent variables which go to directly answering the research question. This third section will provide further detail by presenting the themes from the qualitative data. Four qualitative questions were asked of students. The first question, "Please describe the reason(s) why you left the Southwest University?" will not be used in this paper because it yielded only seven results providing no themes. The remaining three questions dealing with student experiences with the institution, faculty, and student services will be thoroughly discussed.

It is through these three sections that the research question was answered. Analysis and implications of the results are provided in the final chapter.

Descriptive Results

According to Cabrera, Burkum, and La Nasa (2005) factors associated with four-year degree completion include background characteristics, encouragement received in high school, college preparation, degree aspirations, college path patterns, academic involvement and success, college curriculum, collegiate experiences, financial aid, and parental responsibilities. This study attempted to understand as many of these factors as possible (see APPENDIX I).

As this research utilizes seven different independent variables, it is essential to understand the demographics of the 248 respondents (see Figure 3.1). The average age of the respondents was 18.77 years old and represented a range between 17 and 21 years of age. Caucasian students responded at a higher rate (73 percent) than the average of the 2004 freshman class (66.3 percent). Accounting for the remaining 27 percent of respondents, 12.5 percent were Hispanic, 6.0 percent were Asian American, 2 percent were multiracial, 1.6 percent were Black, and .4 percent were Native American. Eleven respondents decided to answer this question leaving 4.4 percent unknown. Compared to the 2004 freshman class, which consists of 14.2 percent Hispanic, 6.5 percent Asian American, 3.2 percent Black, 2.1 percent Native American, and 6.5 percent unknown, the results were representative of the greater university freshman population. Because Southwest University does not currently collect multiracial information, it is impossible to compare, although multiracial response rate might be accounted for in the higher unknown population for the university freshman enrollment. In terms of gender, women responded to this survey in a much greater proportion of the 2004 freshman population then men. Women account for 53.9 percent of Southwest University's freshman population, yet 77 percent of the respondents of the survey were women. Neither Southwest University nor the survey collected transgender data.

In terms of the respondents' parents' highest educational achievement, 67.7 percent of the students had at least one parent with at least a Bachelors degree. By including parents who had attended a community college or technical degree program, 85.2 percent of the respondents likely had some degree of cultural capital coming to

Southwest University with which to navigate the university. Almost all of the respondents categorized their family's socio-economic status as either upper-middle class (66.5 percent) or lower-middle class (29 percent). Both parental education and income have proven to affect college completion directly and indirectly (Oseguera, 2004; Astin & Oseguera, 2003; Astin, 1993) as it positively correlates with cultural capital (Bourdieu, 1973).

When it came to a respondents' choice of attending Southwest University, 69.4 percent indicated that Southwest University was their top choice. Additionally, 52.4 percent of the students had been in the top ten percent of their high school class. In comparison to Southwest University's 2004 freshman class, the entire freshman population averaged a 3.4 grade point average. Broken down further, students representing the top 25 percent of the class averaged a 3.81 and the top 50 percent a 3.46 (University Fact Book, 2004-05).

Approximately a quarter of the respondents indicated that they received no financial aid (27 percent) while 44.4 percent indicated that they were receiving nearly all of their funding through financial aid (between 76 and 100 percent). In 2003, 3149 freshmen were awarded some level of financial aid at Southwest University representing 54.5 percent (Financial Aid Report for 2003-04). Data from 2004 was unavailable but data from 2003 should inform one as to what 2004 likely would have indicated. Making this assumption, it appears that the sample respondents embody a higher proportion of students who received some degree of financial aid. However students receiving

Table 4.1: Descriptive Statistics

Family Socio-Economic Status		
Upper Class	10	4%
Upper Middle Class	165	66.5%
Lower Middle Class	72	29%
Lower Class	1	.4%
Race		
African American/Black	4	1.6%
Alaska Native or American Indian	1	.4%
Asian American	15	6%
Mexican American/Chicano/Hispanic	31	12.5%
Multiracial	5	2%
White	181	73%
Unknown	11	4.4%
Choice of Southwest University		
Top Choice	172	69.4%
Less than Top Choice	76	30.6%
Rank of High School Class		
Top 10 Percent	118	47.6%
Less Than Top 10 Percent	74	52.4%
Financial Aid		
No Financial Aid	67	27%
1-25%	18	7.3%
26-50%	20	8.1%
51-75%	33	13.3%
76-100%	110	44.4%
Parents Highest Level of Education		
Between Less than High School and High School Graduate/GED	16	6.4 %
Some Community College, Technical or Associates Degree	33	13.3%
Some College	22	8.9%
Bachelors, Masters or Doctoral Degree	157	63.3%
Unknown	20	8.1%
Gender		
Female	191	77%
Male	57	23%

n=248

scholarships from sources other than the university may have responded to this question in the positive therefore biasing the results.

By studying students within the University School, this population differed from the general population at Southwest University because of their undecided status. However throughout the general demographics of the population, these students were not entirely dissimilar from the greater student body. As outlined above, the population was fairly representative although there were a greater number of women responding to the survey. Ultimately, this population was chosen because of greater potential for a variety of career and academic fields.

Factor Analysis of Variables

When developing the survey of the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001), the author developed questions based on the many characteristics described about each of the four spheres. The various characteristics were based on over thirty years of previous research. Each of the characteristics was written into questions, some of which might have been repeated or linked to one another. Because of this and the need to reduce the number of dependent variables for the Ordinary Least Squared (OLS) Regressions, factor analyses were used. Each of the factor analyses resulted in some number of components which accounted for a percentage of the total variance among the variables. Only components with an eigenvalue of at least 1 were reported.

Student Goals of Attending College

The first factor analysis was based on the responses from the question, “what are the student’s goals in attending college?” Respondents were instructed to rank their top five out of a possible ten responses. The responses included: graduate from college; help me find a job; had no goals in attending college; parents wanted me to go; make friends; attend graduate school; socialize/party; wanted to get away from home; be able to make more money; and find purpose in my life. The responses represent the ten variables that were used in the factor analysis. Response rates shown in APPENDIX J, are broken down by the student’s top five goals. The results are displayed in descending order of the frequency based on the response for their top goal in attending college.

Three out of every four respondents indicated the goals to graduate, to help me find a job, and to make friends were important. Nearly every respondent (93.9 percent) indicated that graduating from college was a goal of theirs. The least cited goals were that a student had no goals (4.4 percent) and the student’s parents wanted them to attend college (16.5 percent).

Factor analysis of the ten variables yielded five components with initial eigenvalues greater than 1 (see Table 4.2). A complete factor analysis can be found in APPENDIX K. The component labeled Lack of Purpose included the variables for three goals: no goals, parents wanted me to, and graduate (negative association). Since the component described a student who would not be concerned about graduating, they likely would lack educational goals and might have been forced by parents to attend college. Not surprisingly, low educational aspirations were found to have the strongest negative effect on student retention in the first year (Ishitani & DesJardins, 2002). The second

Table 4.2: Factor Analysis - Goals for College

	Lack of Purpose	Financially Driven	Indepen-dence	Vocationally Driven	Graduate School
Graduate from College	-0.541				
Parents Wanted Me to Go	0.754				
Had No Goals in Attending College	0.738				
Be Able to Make More Money		0.747			
Socialize/Party		-0.746			
Make Friends			-0.755		
Wanted to Get Away from Home			0.693		
Help Me Find a Job				0.526	
Find Purpose in my Life				-0.852	
Attend Graduate School					0.882

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Lack of Purpose	1.629	16.291	16.291
Financially Driven	1.316	13.156	29.447
Independence	1.19	11.903	41.351
Vocationally Driven	1.15	11.502	52.852
Graduate School	1.059	10.587	63.439

component labeled Financially Driven included two goals: make more money and party/socialize (negative association). A student who is concerned about making more money likely would be less interested in partying or socializing since these activities would not necessarily be beneficial to succeeding financially. The third component labeled Independence included two goals: make friends (negative association) and get away from home. In this case, the component was labeled Independence as a student who wanted to get away from home probably was not worried about friendships as much since they were leaving relationships behind. Next, a Vocationally Driven component

included the variables for two goals: find a job and find purpose in life (negative association). A student who is interested in finding a job and who is not interested in finding a larger, overriding purpose in life is likely interested in college more as a vocational endeavor. Finally, the fifth component consisted of a single variable – Graduate School. Research shows that the higher the level a student's educational or occupational goals, the greater the likelihood of college completion (Tinto, 1987).

The five components accounted for nearly two-thirds of the total variance among the placement of the variables. The internal cohesion of the five factors is evidenced by the significant extent to which the variables load onto them.

Student Expectations of College

The second factor analysis was run based on the responses from the question, "what are the student's expectations by attending college?" Respondents were asked to rank their top five out of a possible 16 responses. The responses included: good career; good friends; find job while at school; go to parties; find significant other; school spirit; get involved with clubs; participate in activities; meet with faculty; be a student leader; meet with staff; be challenged academically; to fit in; to stand out; participate in athletics; and learn about differences. These responses account for the 16 variables used in the factor analysis. Response rates are shown in APPENDIX L which is broken down by the student's top five expectations and are displayed by overall frequency.

Three goals were cited by at least three out of every four respondents: good career, good friends, and be challenged academically. In fact, all but 19 respondents indicated preparing for a good career was important. The least selected expectations by

respondents were to stand out (12.9 percent), to fit in (10.1 percent), meet with faculty (12.5 percent), and meet with staff (7.7 percent).

Factor analysis of the data in the structure of college expectations yielded six components with initial eigenvalues greater than 1 (see Table 4.3). A complete factor

Table 4.3 Factor Analysis - Expectations of College

	Make A Name for Self	Career Driven	Find Significant Other	Extracurricular Motivations	Individual Differences	Social Expectations
School Spirit	0.615					
Meet with Staff	0.807					
To Stand Out	0.714					
To fit In	0.738					
Good Career		0.821				
Meet with Faculty		0.704				
Find Significant Other			0.741			
Get Involved with Clubs				0.696		
Challenged Academically				-0.768		
Participate in Activities					-0.643	
Learn about Differences					0.783	
Go to Parties						0.515
Good Friends						0.792

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Make a Name for Self	3.418	21.361	21.361
Career Driven	1.455	9.091	30.452
Family Oriented	1.329	8.307	38.758
Extracurricular Motivations	1.186	7.414	46.172
Individual Differences	1.109	6.933	53.105
Social Expectations	1.045	6.534	59.639

analysis can be found in APPENDIX M. The component labeled Make a Name For Myself included the variables for four expectations: school spirit, meet with staff, to fit in, and to stand out. A possible explanation for this component is that students hoping to fit in, yet stand out would be interested in making a name for him/her particularly if he/she was staying connected with staff and motivated by school spirit. The second component labeled Career Driven included two expectations: good career and meet with faculty. A student who was seeking a good career likely would want to succeed academically and this would best be accomplished through seeking support from faculty. The third component consisted of a single variable – Find a Significant Other. The component labeled Extracurricular Motivations consisted of two variables: get involved with clubs and be challenged academically (negative association). A student who was interested in getting involved with clubs and organizations but not interested in being academically challenged seems to be motivated by his/her extracurricular activities. The fifth component labeled Individual Differences consisted of two variables: participate in activities (negative association) and learn about differences. This was a more difficult factor to label. One possible explanation is that a student, who is interested in learning about differences, yet not interested in participating in activities, is motivated by individual differences rather than group differences. Finally, the sixth component labeled Social Expectations consisted of two variables: good friends and attending parties. A student who is interested in developing strong relationships and attending parties would appear to be focused on social expectations. However, a student's chances of persisting

toward a degree are often negatively affected by engaging in partying (Astin & Oseguera, 2003; Astin, 1993).

The six components accounted for nearly three-fifths of the total variance among the placement of the variables. The internal cohesion of the six factors is evidenced by the significant extent to which the variables load onto them.

Student Stressors of College

The third factor analysis was based on the responses to the question, "what caused students stress or concern about their abilities to succeed in college?" Respondents were to rank their top five stressors out of 18 possible responses. The responses included: accessibility on campus; balancing academics with job; being academically unprepared; being discriminated against; choosing a major; college affordability; difficulty making friends; distance from home; finding a job; finding others like me; getting the classes that I want; getting involved on campus; learning style accommodations; leaving friends from high school; living situation; long distance relationship; parental pressures/concerns; and roommate conflicts. The 18 responses were used as the variables for the factor analysis. Response rates are shown in APPENDIX N, which is broken down by the total responses of the top five stressors for students. The results are displayed in descending order of frequency.

The most commonly selected stressors for respondents were: choosing a major (69.4 percent); being academically unprepared (56.9 percent); and getting the classes that a student wants (50.8 percent). The least common stressors cited by the respondents were

being discriminated against (10.5 percent), accessibility (13.3 percent), and finding a job (15.7 percent).

Factor analysis of the data from the stressor question yielded six components with initial eigenvalues greater than 1 (see Table 4.4). A complete factor analysis can be found in APPENDIX O. The component labeled Cultural Barriers included four stressors variables: being discriminated against, being academically unprepared, living situation, and parental pressures/concerns. The component was labeled Cultural Barriers as each of the four variables had a cultural component as to how they might affect a student. "The higher education system thus acts as a 'relay' in that it reproduces the principles of social class and other forms of domination under the cloak of academic neutrality. It also acts as a 'screen' that permits the realization of social classification to happen without recognition" (Bourdieu, 1996). While the research indicates that Caucasian students who have strong high school performance succeed in college (Tinto, 1987; Astin, 1975); this is not the case for ethnic minorities who have to overcome cultural barriers and academic unpreparedness (Hurtado, Carter, & Spuler, 1996; Rendon & Nora, 1988). Second, the component labeled Social Connections included two variables: leaving friends from high school and finding others like me. One possible explanation of this factor is that a student concerned about leaving friends from high school and finding people that he/she can relate to at Southwest University would prioritize social concerns over other concerns. The literature shows that students who experienced friendsickness had a more difficult transition to college and reported feeling more lonely in their first semester (Paul

Table 4.4: Factor Analysis - Stressors of College

	Cultural Barriers	Social Connec-tions	Balancing Academics with Job	College Afforda-bility	Course Scheduling	Getting Involved on Campus
Being Discriminated Against Because of My Identity	0.508					
Being Academically Unprepared	0.601					
Living Situation	0.592					
Parental Pressures/Concerns	0.608					
Leaving Friends From High School		0.666				
Finding Others Like Me		0.649				
Balancing Academics with Job			0.74			
College Affordability				0.775		
Getting the Classes That I Want					-0.761	
Choosing a Major					0.526	
Getting Involved on Campus						0.834

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Cultural Barriers	3.566	19.813	19.813
Social Connections	1.456	8.091	27.904
Balancing Academics with Job	1.224	6.8	34.704
College Affordability	1.09	6.055	40.759
Course Scheduling	1.06	5.888	46.647
Getting Involved on Campus	1.047	5.814	52.462

& Brier, 2001). By developing social networks which are shown to be essential (Tinto, 1993), students can have a better chance of succeeding academically.

The next two components, Balancing Academics With Job and College Affordability, each consisted of a single variable. Working full-time impedes persistence

among traditional age students (Astin, 1975), yet part-time work does not appear to have produce the same negative results (Astin & Oseguera, 2003; Astin & Oseguera, 2004). Evidence has emerged to suggest that ability to pay is especially influential in eventual degree attainment for students of color. College aid packages in the form of grants and scholarships positively influence degree attainment, but loans have a negative effect on persistence among students of color when compared to Caucasians (St. John, 1990, 1991). The fifth component labeled Course Scheduling consisted of two variables: getting the classes that I want (negative association) and choosing a major. One possible explanation is that a student who would be stressed by choosing a major might prioritize that much higher than getting specific classes. An undeclared student might not be as aware of the classes that they would want since degree requirements for majors are even further delineated than they would be for an undeclared student. The final component Getting Involved on Campus consisted of a single variable.

The six components accounted for more than half of the total variance among the placement of the variables. Seven of the stress variables did not load into any of the six factors with eigenvalues of more than 1.

Institution Sphere

Section three of the survey asked respondents to answer six quantitative questions regarding Southwest University's characteristics. Unlike other sections of the survey, a few of the quantitative questions did not utilize the same four-point Likert scale as to the degree with which the respondent agreed with the statement. One of the questions utilized a three-point Likert scale with the responses: yes, no, or maybe. The other

question asks respondents for a categorical response to how the university has fostered a sense of community. By including these two questions, the factor analysis results would be skewed because of the inconsistency of the answers. Therefore, only four of the six questions from this section were used in the factor analysis. The four questions and their response rates are shown in APPENDIX P. The results are displayed in descending order of frequency. The institution can positively affect outcomes for students by being clear and coherent in their mission (Kuh, Schuh, Whitt, & Associates, 1991). By understanding the importance of the institution, one would hope that Southwest University would be actively seeking out the student voice. In the same way, institutions that over-emphasize bureaucratic processes or that treat students as a 'number' can dishearten the student's experience (Bean, 2005).

Factor analysis of the four quantitative questions making up section three yielded only one component with an initial eigenvalues greater than 1. The component labeled Institutional Characteristics consisted of all four of the variables (see Table 4.5). The component accounted for 62 percent of the variance and had an eigenvalue of 2.480.

Academic Sphere

A factor analysis was run on the eleven quantitative questions that accounted for section four of the survey. This section focused on a students experience with faculty and academic support services. Respondents were to answer each question along a four point Likert scale indicating the degree to which they agreed or disagreed with the statement. The eleven questions and their response rates are shown in APPENDIX Q, which is broken down by the four different responses in descending order of frequency.

Table 4.5: Factor Analysis - Institution

	Institution Characteristics
I am encouraged to grow beyond my experiences and past knowledge that I brought to the institution.	0.783
Southwest University has made me feel like I belong here.	0.758
I have been valued by the institution for the experiences and knowledge I brought to the institution.	0.838
I feel that the institution invited and valued my input in campus decision-making.	0.767

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Institution	2.493	62.331	62.331

The three highest response rates were: My professors set high goals for me in the classroom (92.3 percent responded agree or strongly agree); My professors clearly communicate classroom goals and expectations to me (90.3 percent responded agree or strongly agree); and My professors encourage learning through the use of activities that require critical thinking and/or problem solving skills (90.3 percent responded agree or strongly agree). Questions cited the fewest were: I engage in out-of-class interaction with my professor (44.8 percent responded disagree or strongly disagree); My professors help me to effectively manage my time in class and on assignments over the course of the term (39.5 percent responded disagree or strongly disagree); and My professors offer experiential opportunities to test/apply theories, principles, or knowledge (37.1 percent responded disagree or strongly disagree).

Factor analysis of the eleven quantitative questions making up section four yielded two components with initial eigenvalues greater than 1 (see Table 4.6). A

Table 4.6: Factor Analysis - Academic

	Faculty Goals for Students	Teaching Style
My professors/instructors set high goals for me in the classroom.	0.786	
My professors/instructors clearly communicate classroom goals and expectations to me.	0.809	
My professors/instructors offer experiential opportunities (laboratories, field trips, case-studies, non-lecture) to test/apply theories, principles, or knowledge.		0.551
My professors/instructors recognize different learning styles (verbal, visual, kinesthetic) of students in the classroom and provide a variety of teaching methods (verbal, visual, kinesthetic).		0.719
My professors/instructors help me to effectively manage my time in class and on assignments over the course of the term.		0.616
My professors/instructors encourage working collaboratively with other students from class.		0.626
My professors/instructors encourage active participation in class through the use of interactive teaching methods (non-lecture).		0.752
My professors/instructors encourage learning through the use of activities that require critical thinking and/or problem-solving skills (case study, essay).		0.507
My professors/instructors offer supportive feedback on my performance in class and on assignments/tests.		0.529
My professors/instructors encourage me to bring skills and knowledge outside of the classroom into classroom learning/discussion.		0.512

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Faculty Goals For Class	3.793	34.484	34.484
Teaching Style	1.216	11.053	45.537

complete factor analysis can be found in APPENDIX R. The component labeled Faculty Goals For Students consisted of two variables: my professors set high goals for me in the

classroom, and my professors clearly communicate classroom goals and expectations to me. Since these two questions both involved the goals and expectations faculty would have of the student, it seemed appropriate to label the component as such. This component echoes previous research that expectations for performance that are clearly communicated and set at reasonably high levels are important to student learning (Kuh, 2001; Pacarella, 2001). The second component labeled Teaching Style consisted of eight variables. Those variables included; My professors offer experiential opportunities, My professors recognize different learning styles, My professors help me to effectively manage my time, My professors encourage working collaboratively with other students, My professors encourage active participation in class, My professors encourage learning through the use of activities that require critical thinking, my professors offer supportive feedback, and My professors encourage me to bring skills and knowledge outside of the classroom into classroom learning.

The two components accounted for 45.5 percent of the total variance among the placement of the variables. One question did not fall into either of the two components with eigenvalues of at least 1: I engage in out-of-class interaction with my professors.

Student Services Sphere

The final factor analysis run was on the 14 quantitative questions which focused on a student's experience with student services. A four point Likert scale was used to indicate the degree to which the respondent agreed or disagreed with the statement. The 14 questions and their response rates are shown in APPENDIX S, which is broken down by the four different responses in descending order of frequency.

The three questions that received the most highest response were; I believe that student services staff actively support student equality (88.7 percent responded either agree or strongly agree), I am encouraged by student services staff to consider others' perspectives (83.9 percent responded either agree or strongly agree), and I believe that university financial resources and staff are focused on learning environments throughout the campus (83.5 percent responded either agree or strongly agree). The three questions that received the fewest responses were; I am encouraged by student services staff to bring my personal experiences into the classroom (38.3 percent responded either disagree or strongly disagree), I am challenged by student services staff to be honest on and off campus (29 percent responded either disagree or strongly disagree), and I am challenged by student services staff to be fair or just in my decision-making on and off campus (28.6 percent responded either disagree or strongly disagree).

Factor analysis of the quantitative questions from section five yielded two components with eigenvalues greater than 1 (see Table 4.7). A complete factor analysis is included in APPENDIX T. The component labeled Challenge consisted of eight variables. Each of the variables described how student services staff actively sought to challenge the thinking of students. The eight variables included: I am encouraged by student services staff to bring my personal experiences into the classroom; I am encouraged by student services staff to consider others' perspectives; I am encouraged by student services staff to apply new ways of thinking about my life; student services staff develop partnerships with others on campus to promote student learning; I am challenged by student services staff to be honest; I am challenged by student services staff to be fair

Table 4.7: Factor Analysis - Student Services

	Challenge	Support
I am encouraged by student services staff to bring my personal experiences into the classroom.	0.743	
I am encouraged by student services staff to consider others' perspectives.	0.755	
I am encouraged by student services staff to apply new ways of thinking about my life.	0.702	
From my perspective, student services staff develop partnerships with others on campus to promote student learning.	0.648	
I am challenged by student services staff to be honest on and off campus.	0.771	
I am challenged by student services staff to be fair or just in my decision-making on and off campus.	0.81	
I am challenged by student services staff to show dignity to those around me on and off campus.	0.813	
I believe, from my experience, that student services staff actively support student equality.	0.577	
I feel supported by student services staff.		0.568
I feel supported by other students at the institution.		0.802
The values of the institution reflect who I am.		0.705
My academic and out-of-class experiences make me feel part of a campus community.		0.808

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Challenge	6.707	47.91	47.91
Support	1.249	8.922	56.833

or just in my decision-making; I am challenged by student services staff to show dignity to those around me; and I believe that student services staff actively support student equality. The second component labeled Support consisted of four variables. Each of these variables described ways in which students feel supported at the institution. Those

variables included: I feel supported by student services staff, I feel supported by other students at the institution, the values of the institution reflect who I am, and my academic and out-of-class experiences make me feel part of a campus community. Sanford (1962) described the concept of 'challenge and support' that is used today by many in the student services area of higher education.

The two components accounted for 56.8 percent of the total variance among the placement of the variables. Two questions failed to have a strong loading into either of the two components: expectations for student performance are high and I believe that university financial resources and staff are focused on learning environments throughout the campus.

Ordinary Least Squared Regressions & Qualitative Analysis

In order to answer the research question, the 22 components from the six factor analyses were used as dependent variables in separate OLS regressions. The results from the regressions would provide evidence of any trends for the seven independent variables (gender, race, high school class rank, socio-economic status, institutional choice, aid package, and parent's education) as they relate to the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001). Specifically, OLS regressions offer whether there is evidence of a relationship between the dependent and independent variable by drawing a line through the data. A two-tailed Pearson correlation matrix was conducted in order to rule out multicollinearity in the results (Table 4.8). Three qualitative questions provide further description of themes between students at Southwest University and the Framework. While the qualitative questions only provide detail for the institution sphere,

Table 4.8: Correlation Matrix of Independent Variables

		Top 10 Percent of High School Class	Some Degree of Financial Aid	Parents with Bachelors	Upper or Upper-Middle Class	Caucasian	Southwest University as Top Choice	Female
Top 10 Percent of High School Class	*Pearson Correlation*	1.000	0.220	-0.071	-0.058	-0.034	-0.003	0.036
	Sig. (2-tailed)	.	0.000	0.269	0.364	0.592	0.965	0.572
	N	248	248	248	248	248	248	248
Some Degree of Financial Aid	*Pearson Correlation*	0.220	1.000	-0.166	0.214	-0.145	0.009	0.056
	Sig. (2-tailed)	0.000	.	0.009	0.001	0.022	0.885	0.379
	N	248	248	248	248	248	248	248
Parents with Bachelors	*Pearson Correlation*	-0.071	-0.166	1.000	-0.284	0.141	-0.050	-0.160
	Sig. (2-tailed)	0.269	0.009	.	0.000	0.026	0.434	0.012
	N	248	248	248	248	248	248	248
Upper or Upper-Middle Class	*Pearson Correlation*	-0.058	0.214	-0.284	1.000	-0.145	0.122	0.100
	Sig. (2-tailed)	0.364	0.001	0.000	.	0.022	0.054	0.114
	N	248	248	248	248	248	248	248
Caucasian	*Pearson Correlation*	-0.034	-0.145	0.141	-0.145	1.000	0.049	-0.095
	Sig. (2-tailed)	0.592	0.022	0.026	0.022	.	0.446	0.136
	N	248	248	248	248	248	248	248
Southwest University as Top Choice	*Pearson Correlation*	-0.003	0.009	-0.050	0.122	0.049	1.000	-0.031
	Sig. (2-tailed)	0.965	0.885	0.434	0.054	0.446	.	0.633
	N	248	248	248	248	248	248	248
Female	*Pearson Correlation*	0.036	0.056	-0.160	0.100	-0.095	-0.031	1.000
	Sig. (2-tailed)	0.572	0.379	0.012	0.114	0.136	0.633	.
	N	248	248	248	248	248	248	248

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

academic sphere, and student services sphere, the data is useful in extrapolating from the quantitative findings for these three spheres which were largely insignificant, statistically speaking. Qualitative questions were not asked in relation to the goals for college, college stressors, and expectations of college as the quantitative data was designed to be more descriptive than the other sections.

Institution Sphere

In studying student characteristics against the institution sphere, both quantitative and qualitative findings offer insight into those factors that affect persistence at Southwest University.

Quantitative Findings

The institution section consisted of six quantitative questions and one qualitative question asking students to describe the institution and its mission. Because two of the quantitative questions offered answers that were either categorical or on a three point Likert scale, they were not included in the factor analysis. They were omitted because they would not yield comparable results against the other four questions to provide a factor analysis that would be interpretable. As a result of the small data field, a single OLS regression of the component, Institution, was conducted with the four variables described earlier in the chapter. The regression (Table 4.9) resulted in no statistically significant outcomes.

Qualitative Findings

Within section three of the survey, respondents were asked to describe how Southwest University had fostered and/or hindered their sense of belonging at the

Table 4.9: Regression - Institution, Academic and Student Services Spheres

	Institution Sphere	Academic Sphere		Student Services Sphere	
	Dependent Variables				
	Institution	Faculty Goals for Students	Teaching Style	Challenge	Support
Caucasian	-.006 (.233)	-.051 (.105)	-.004 (.288)	-.140 (.433)	-.021 (.220)
Southwest University as Top Choice	-.340 (.221)	-.138 (.099)	-.411 (.272)	-.287 (.411)	-.313 (.209)
Top 10 Percent of High School Class	-.094 (.209)	-.275*** (.094)	-.082 (.258)	-.220 (.388)	-.096 (.197)
Some Degree of Financial Aid	.199 (.242)	.063 (.108)	.259 (.298)	-.018 (.449)	.240 (.228)
Parents with Bachelors	.150 (.242)	.043 (.109)	.485 (.298)	.476 (.449)	.336 (.228)
Female	.147 (.244)	-.290*** (.110)	-.180 (.302)	.224 (.453)	-.044 (.230)
Upper or Upper-Middle Class	.245 (.239)	-.050 (.107)	.352 (.295)	-.152 (.445)	.154 (.226)
Adjusted R-square	0.02	0.074	0.029	0.011	0.024
N	247	247	247	247	247

* p < .10; ** p < .05; *** p < .01.

institution. Four clear themes emerged from the responses: faculty, activities on campus and student organizations, a diverse campus fostering a sense of inclusivity, and that the institution had not fostered a sense of community.

Faculty's role. The first theme of faculty fostering and sometimes hindering a sense of belonging at Southwest University was often focused on the faculty member's sense of care for the student. In 2001, 77 percent of Southwest University students scored the respect faculty members show students as excellent (Campus Climate Study, 2001). Student connections to faculty and other campus administrators have shown to be a reasonably strong predictor of student retention and academic achievement (Astin,

1993; Pascarella & Terenzini, 1991). Faculty were either categorized by their willingness to help and often times go beyond students' expectations of their encounter:

> I am very impressed with the faculty. All of my professors were always there to help during or outside of class. They took an interest in the success of their students. (19 year old, White male)

> All of the teachers at [Southwest University] have in some small or large way expanded my own view of the world and me. With this interaction I have felt personally involved and motivated to excel at this institution. (19 year old, White male)

> The professors are very respectful and made me feel welcomed. (19 year old, Hispanic female)

While many respondents indicated the faculty's sense of care about student success, there were some students who did not share this view and categorized faculty as hindering their sense of belonging at Southwest University. The response from these participants seemed to indicate that they felt like a burden when they approached faculty for help:

> The professors that I have had make it sound as if they are there to help you however when you go to their office hours they make it seem like you are hassling them. (19 year old, Hispanic male)

> It is so big and the teachers just seem like they could care less about you. In fact some of the departments particularly the math department seems like they want you to fail and they don't really provide you with any real ways to succeed. (19 year old, White male)

> I feel that some professors, like in sciences, do not respect me as a student and only care about the research that professor is doing that semester. (19 year old, White female)

While the sense of care was part of the problem for some students at Southwest University, another sentiment was echoed among a few students. For some students, their identity was important to how they felt like they should be seen by faculty.

> The staff and faculty and students are great in that there's always an effort to include everyone. However, it's hard for me because I'm a multi-racial minority, and there are very, very few staff and faculty that are minorities. It's hard to have a teacher who doesn't really understand my situation, or can't relate to my experiences, because I get treated like all of the other kids even though I'm not like all of the other kids. (18 year old, multiracial female)

Not surprisingly, the importance that faculty has with fostering a sense of belonging on campus since they are critical to a student's academic success. Students who have experiences with faculty who treat them as individuals feel a stronger sense of connection to the institution as a whole (Pascarella & Terenzini, 2005).

Student organizations/activities. A second theme that emerged was that the activities and student organizations on campus also provide a positive sense of belonging to Southwest University. This supports previous research that indicated co-curricular involvement (including student organization membership) had important positive effects including encouragement of educational persistence and attainment (Pascarella & Terenzini, 1991; Astin, 1993). Overwhelmingly the sentiment from respondents was that the University encourages student involvement (Tinto, 1993; Astin, 1984) and that the shear variety of activities and student organizations offers something for everyone. In 2001, 57 percent of students indicated that they were very or somewhat involved in on-campus organizations and activities (Campus Climate Study, 2001). Many students seemed to indicate that the variety of activities provided a sense of connection for anyone on campus:

> There are many different activities at [Southwest University] and I feel that with all of these activities it would be hard for someone not to have a sense of belonging. (19 year old, White female)

> I like the way that there are so many different groups and activities to become involved with. Everyone should be able to find something that they enjoy doing, and with that comes a group of people that enjoy the same things. They are always promoting student involvement. (19 year old, African American female)

> I love [Southwest University] and feel as though they do a great job providing a huge range of activities and opportunities to encompass the entire student body. (18 year old, White female)

For some students, it was finding a niche where they could really express themselves and find like-minded individuals who gave them that sense of connection and community on campus. Some students even acknowledged that even if a student did not find something that fit them, they could establish a club for just that purpose.

For first-year students living off-campus, a sense of connection was harder to establish. This supports previous research (Jacoby & Garland, 2004-05). Commuter students often described that knowing what activities were going on on-campus was the largest barrier.

> When you live off-campus you never know what activities are happening on-campus making it hard to get involved. (19 year old, White female)

> I feel like the school could put some more effort into advertising clubs, programs, etc. to help students get involved on other levels besides academic. (19 year old, White female)

> I like the fact that there are Commuter Assistants; because even though I don't live on-campus, there are still some activities that I can participate in. (19 year old, White female)

This last statement seems to indicate how the university is reaching out to its off-campus, first-year students, but for many this message is not reaching everyone. The sense of belonging during the first-year is of utmost importance and it is through out-of-class

experiences that students can best foster their connection (Astin, 1993; Upcraft, Gardner, & Associates, 1989).

Campus diversity. The third theme was how diversity and inclusivity shaped a student's sense of belonging at Southwest University. For some students, the diversity of Southwest University provided again a sense of belonging as many felt that they could find people who looked like them on campus that they could relate to. In a previous study, 70 percent of Southwest University students indicated that diversity had a positive impact on the overall campus environment (Campus Climate Study, 2001).

> During in-class discussions teachers and/or TAs would take time to listen to my opinion. Also, one of the first things that the professors would talk about on the first day of class would be about taking on a sense of open-mindedness and to take into account everyone's opinion. (18 year old, multiracial female)
>
> I feel as though I belong at [Southwest University] because of all the diverse people that attend school with me, and also meeting several friends that are just like me made it easier to adjust and feel like I belonged. (19 year old, Hispanic female)
>
> [Southwest University] has a very good multi-cultural outreach that is visible on campus. (19 year old, multiracial female)
>
> [Southwest University] has fostered my sense of belonging by creating multi-cultural centers for students of various ethnicities, which I enjoy. (19 year old, Native American female)

A significant proportion of responses related to diversity and inclusivity came from students of color, which highlights some of the differences that students of color face versus their White counterparts. Without acceptance and celebration of individuality, students of color tend to struggle in succeeding on predominantly White campuses because of the lack of institutional support (Kuh, et al, 2005). While there were many who felt accepted, there were instances when respondents indicated that they were treated

differently because of their race. The literature indicates students of color may find it especially difficult to settle and become a member of a supportive community within a college environment (Tinto, 1993). The quote from the 18 year old, multi-racial female describing her experience with faculty highlights this point. Because the campus and the faculty are predominantly White, the student felt it was hard for faculty to relate to her experiences. These students struggled in feeling like Southwest University was really a welcoming place that cared about their transition (Bean, 2005).

> Many people at the [Southwest University] act like they are better than other people and that makes it very hard to feel like you belong. (18 year old, White female)

A positive result of this is that few students indicated in the qualitative portion of the survey that they were not welcomed because of their race. Mostly, students felt that the university had done much to intentionally make all students feel that they mattered. Examples that were highlighted were: changing building names to reflect persons of Hispanic origin; creating multi-cultural centers for students of various ethnicities; and providing an accessible campus to mobility-impaired students.

Lack of care. A fourth theme that emerged from the responses was a strong feeling that either Southwest University did nothing to show that it cared or did nothing deliberate to foster the students' sense of belonging. This was an interesting response to emerge as dominant because it indicates that a portion of the student population felt that the support needed to succeed would not be found from the institution as a whole. Just over half of Southwest University students (52 percent) in previous research had

indicated that there is a strong feeling of 'community' among students (Campus Climate Survey, 2001).

> During orientation, there was little input or advice about what classes I should take or future academic planning. Because of this, I felt lost before I actually got to school here. It gave me the impression that I wasn't actually important to the university. (19 year old, White male)
>
> [Southwest University] is not interested in helping their students in any way whatsoever. Another student is simply a number. (19 year old, White female)
>
> There is no individual emphasis at [Southwest University] which makes it incredibly challenging at times, it makes learning not as fun as it should be. (19 year old, White male)

Simply, some of the respondents described Southwest University as not recognizing them as individuals but instead operated as a business where they were treated as a 'number' (Bean, 2005). While not all of the students in this survey felt this way, an alarming number did feel a lack of personal attention.

Academic Sphere

The connection between the classroom and a student's integration to the institution as a whole is essential. Involvement in the classroom becomes a vehicle for involvement outside the classroom (Tinto, Russo, and Kadel, 1994). A key to unlocking this connection is the extensive research that has been conducted on learning communities, which are continually showing important benefits (Tinto, 1997; Tinto, Goodsell, & Russo, 1993; Matthews, 1996). Students who are able to connect learning to non-academic experiences persist and succeed at higher rates (Tinto, 1997). Recognizing the academic sphere's influence to the retention puzzle, Southwest University has just begun to explore learning communities on its campus.

Quantitative Findings

The academic section asked respondents to describe their experiences with faculty and academic support services. Eleven quantitative questions were asked. The factor analysis described earlier yielded two components: Faculty Goals for Students and Teaching Style. These two components served as the dependent variables. OLS regressions were run on each component against the seven independent variables. The component, Teaching Style, yielded no outcomes that were statistically significant.

The second OLS regression of the factor, Faculty Goals for Students, resulted in two significant findings. First, students from the top ten percent of their high school class scored .275 lower on their perception of faculty goals for class than other students ($p > .01$). Second, female students scored .290 lower on their perception of faculty goals than males ($p > .01$). This finding differs from previous research which indicated the clarity of expectations the faculty gives to students to be scored by 64 percent of the Southwest University student body as excellent (Campus Climate Study, 2001). The results can be seen in Table 4.8.

Qualitative Findings

At the conclusion of section four of the survey, respondents were asked to describe two or three examples that best characterize his/her experience with faculty. Three clear themes emerged from the responses: the helpfulness and caring of faculty, attending faculty office hours, and the quality of teaching. There was some overlap between these responses and what students described in the qualitative question in section three, yet the detail of their experiences with faculty were far greater in this instance.

Helpfulness of faculty. As described in the last section, students' experiences with faculty were varied. In most instances, respondents felt they had positive interactions with their faculty, but in some instances, their negative experiences with faculty shaped their opinion of teaching at Southwest University. The first theme describes the extent that students identified faculty as helpful or not. Previous research has found 67 percent of students at Southwest University to score the support from faculty as excellent. Again, students who identified faculty as helpful acknowledged that the teachers were often concerned about them as individuals:

> The faculty at [Southwest University] has been extremely helpful, however you have to reach out to them and then they will help you as much as you need. (19 year old, White female)
>
> Whenever I need to make an appointment with any faculty member, they are always more than willing to work around my school schedule so that we can find a time to meet. I think they are very helpful if you take the time to go in and show an interest in the course. (18 year old, unknown female)
>
> Some were really great because they were open to any questions and very friendly, so you felt like it was normal and comfortable to come with questions any time. I also had teachers that would help me with specific questions so I would be prepared for tests and I could tell they wanted me to do as well as possible on [the tests]. Also in my indiv class, he made the classes really interesting and he had a great sense of humor, so it made it easier to absorb the material. (19 year old, White female)

Part of what the students often conveyed is that a student's academic success is measured by his/her willingness to seek out faculty. For those students who felt faculty were not helpful, they either felt that they were unwilling to help or simply because the faculty did not seek the student out.

> My Spanish teacher was very rude and would not answer any questions I had on the material even outside of class, so I ended up dropping the class (19 year old, unknown female)
>
> My English teacher this semester was a disaster. He made me cry, was pompous, rude, cruel and frankly a horrible teacher. (19 year old, White female)
>
> There are an odd few [faculty] that I've met that don't seem really interested in helping students. (18 year old, multiracial female)

Often a students' willingness to remain in a course can be measured by the approach of the faculty member (Gainen, 1995). For the instances where students had a negative experience with faculty at Southwest University, there were at least three other experiences that were positive.

Office hours. The second theme to emerge from the survey was related to student's experience with faculty during their office hours. The literature strongly supports the positive impact of faculty-student interactions including contact with faculty outside the classroom with persistence, higher achievement, and higher satisfaction with college (Schuh & Kuh, 1984). Only 24.9 percent of freshman at four-year institutions across the country indicated that they interacted with faculty after class (CIRP Freshman Survey, 2004). The theme of the responses from students was that attending office hours was both helpful academically and in succeeding at Southwest University. This supports previous research which found that 70 percent of Southwest University students found faculty member's availability for office hours as excellent (Campus Climate Study, 2001). The only instance of negativity about faculty office hours was a few instances where availability was difficult because of other students scheduling with them as well.

> My past faculty members have been very helpful during their office hours, helping me to solve whatever problems I was having without directly giving away any answers. (19 year old, White male)
>
> When seeking help from professors and TAs, I have found office hours to be very helpful. I have received help with chemistry problems I did not understand, constructive review of gen. ed. Papers, and clearer explanations of what is to be expected from the class. (19 year old, White female)
>
> Office hours with faculty have proven to be very effective. I have enjoyed discussing my issues with my instructors during this time as well as getting help that I am not able to receive during class time. (18 year old, White female)

The message that was continually reiterated through the question was that students who attend faculty office hours receive tremendous support and encouragement for success in the class. Yet many students are not taking advantage of this opportunity.

Quality of teaching. The third theme to emerge through the qualitative question related to student's experience with faculty was in regard to the quality of teaching. According to responses, the most effective teachers seemed to do two things. First, the faculty worked to relate and know their students as individuals. In 2001, 63 percent of Southwest University students indicated faculty was flexible to individual student needs (Campus Climate Study, 2001). Second, faculty used a variety of teaching methodologies to transfer knowledge rather than solely relying on the lecture.

> Trip to observatory for astronomy class was one the many activities that my astronomy teacher made available. It was very fun and made learning about astronomy more fun. I also had a few teachers who did a lot of in-class activities to break up the lecture time and get everyone involved in the class, which was nice. (20 year old, White male)
>
> Many of my professors have been very personable and laid back in their teaching style, rather than acting superior to the students, which makes me feel more comfortable and is a good learning environment. (19 year old, White male)

> Faculty that relates to the students and the course instead of just boring lectures makes the class interesting and relatable. (19 year old, White female)

While many students indicated that they experienced positive teaching in the classroom, others commented on how some faculty could not connect material in relatable ways to the students. In other instances, faculty did not seem interested in anything other than lecturing.

> I don't like lecture classes because it is always the same thing; my professors have never tried to make the material interesting to learn. (19 year old, Hispanic female)

> In the majority of my lecture classes, I sit and listen to the instructor, write my paper and that's it. I did okay in the classes but I don't feel I learned much. (18 year old, White female)

With only a few exceptions, most students did not indicate that all of their instructors were ineffective in teaching the course material. Most of the qualitative data indicated that certain programs and/or faculty were ineffective in teaching the materials. However, there was some trend in the type of teaching that was most ineffective – large lecture courses.

These three themes are indicative of the experience of students on a large Research-Extensive campus, yet they also provide some insight as to how an institution like Southwest University might overcome this issue in the future. Recommendations will be made in chapter five for research.

Student Services Sphere

In studying student characteristics against the student services sphere, both quantitative and qualitative findings offer insight into those factors that affect persistence at Southwest University.

Quantitative Findings

The student services section asked respondents to describe their experiences with student services at Southwest University. The section included 14 quantitative questions and one qualitative question. The factor analysis described earlier yielded two components: Support and Challenge. These two components served as the dependent variables. OLS regressions were run on each component against the seven independent variables. Neither of the regressions yielded any statistically significant findings (see Table 4.8).

Qualitative Findings

At the conclusion of the section, respondents were asked to describe two or three examples that best characterize their experiences with student services at Southwest University. Four themes emerged from the responses: the role of academic advisors, general helpfulness of student services staff, the role of residence life staff, and limited or no experience with student services staff.

Academic advising. The first theme that emerged was that a large number of students discussed their experience with their academic advisors as an important experience with student services at Southwest University. For most respondents, they indicated that their experience with their academic advisor was positive. This theme supports a study conducted at Southwest University in 2001 in which students indicated that the academic advising they received was good at a rate of 52 percent agree to 25 percent disagree (Campus Climate Study, 2001). Those with a positive opinion of the

academic advisor categorized that experience based on the advisors helpfulness and resourcefulness.

> The advisor I have been speaking with at University School is amazing and he has helped me more than he will ever know. (19 year old, White female)

> My academic advisor from the University School is amazing! He knows who I am, he talks to me like I am his peer and not his 'student' or 'advisee' and he is just undeniably friendly, which makes the atmosphere comfortable. I am not afraid to tell him anything and he is my lifesaver because he informs me about things and pushes me into the right direction that I need to be going, since I have an undecided major. (19 year old, White female)

> I was very glad to have my pre-health advisor as one of my teachers. She was so informative and easy to talk to. I would sometimes talk to her after class and was very comfortable speaking to her about personal things. She has been a big help in giving me direction and advice. She helped me see where my interest's lie which enabled me to choose a major, and I trust her opinion of me as both a student and as an individual. (18 year old, Hispanic female)

Based on the responses, an academic advisor was categorized positively when he/she assisted a student with class choices and major. Academic advising is an area where there is much blame and is often cited as an excuse for leaving. Research shows that advising helps retention (Metzner, 1989). Students at Southwest University scored advising services a 3.6 on a 5 point scale (Campus Climate Study, 2001). Academic advisors who were categorized negatively when they failed to help students with their plan of study, provided bad advice, or directed students in ways they were not interested.

> My experiences with academic advisors have been unpleasant; I am undecided as it stands and they have always tried to push me arbitrarily in directions I do not want to go. I would like to cautiously test the waters, keep an open mind, and feel out which major I would like to choose. They have repeatedly tried to change my schedule, adding and dropping classes that they feel are best with a good degree of disregard for my own will. (18 year old, White female)

> The advisors and counselors are nice people but they sometimes leave you hanging when you ask them for help or ask them a question they don't know the

> answer to. They don't always show you where to find the answer. (19 year old, White male)
>
> My advisor mis-advised me on classes I needed to take and on the classes I was taking causing my schedule to not reflect what I needed so I could graduate on-time making it so I will probably have to either take summer school to graduate on-time. (19 year old, White female)

While the great majority of the students who discussed academic advising commented on the genuine helpfulness and support their advisor provided, some of the experiences were not as helpful. It does illustrate that one of the first areas that students identify student services with is academic advising. The irony is that on Southwest University's campus, academic advisors report through the Provost's office. It should be noted that in the survey, academic advisors were noted as a possible group under the student services section since this is true on some campuses.

Helpfulness of staff. The second theme to emerge was the general helpfulness of student services staff regardless of what area of student services they worked. A great variety of areas were described including academic advisors, residence life, financial aid, the student union, the library, the bookstore, counseling center, and career services. Nearly all of the respondents who described student services as being helpful were positive:

> Student services have provided me with substantial amounts of help for my learning disability. They have helped me every time I have needed help with school. (19 year old, White male)
>
> Very, very helpful. They're always happy to help, you don't feel embarrassed to ask questions, as stupid as they may seem. All the types I go to career services, or financial aid, etc. I'm always satisfied with the treatment given and the services provided. (19 year old, Hispanic female)

> Student services are always very understanding and helpful. They are available and do their best to answer any questions and solve any problems we might have. (18 year old, White female)

In a few instances, respondents did not always find student services staff to be helpful. Most of these comments were vague and non-specific, describing all of student services as unhelpful. Only in a few instances did respondents describe a particular office or individual that led to their opinion that student services was not helpful.

> Well every time I went to receive help I talked to a new person. It is frustrating because there is not just one person whom I consult with. I also do not feel like they are welcoming. I feel there is a lot of room for improvement. (19 year old, White female)

> The student services staff seemed somewhat unorganized. When I went to ask a question I would be referred to another place and then from that place they would send me back to the place I originally went to for help. It was a back and forth process. The responses some of the staff gave me were incorrect or incomplete. (19 year old, Hispanic female)

The vagueness of some of the responses about the helpfulness of student services might lend more credibility of the fourth theme, which will be explored later in this paper. Overall, respondents found student services to be helpful in their various concerns and questions.

Housing/residence life. The third theme to emerge of two or three examples that best characterize the respondent's experience with student services was the housing/residence life staff. Often the answers focused on their relationship with their resident assistant (RA), a roommate conflict, or getting involved with leadership positions within the halls. Most of the responses described a positive experience living in the halls but for a few students they described staff particularly resident assistants who were not around or not interested in helping them.

> The best contact I had with staff was through hall council where I was able to interact with a hall director and an RA every week. These staff members were always around to help whenever I needed it. (19 year old, White male)

> I feel that living in the dorms was one of the best experiences I have ever had. My RA was great and always came around to see how I was doing, and to find out what was going on in my life. (19 year old, White female)

> All of my experiences with student services staff comes from my interaction with my RA. I think she's done a great job to promote respect and courtesy and other basic human values. (18 year old, multiracial female)

The few respondents that had a negative experience with housing/residence life staff either indicated that they had limited interaction with their resident assistant or did not feel the staff addressed their roommate concern.

> I have only had a few fleeting conversations with my RA, and it wasn't very sincere. (19 year old, White female)

> I needed a roommate transfer and at first the experience was horrible because the hall director in [Saguaro Hall] was no help and made things worse. But after going higher up they were really interested in helping me and making my situation better. (19 year old, White female)

Overall since the approximately three out of every four freshmen at Southwest University live on campus, the impact of housing staff on freshmen can be significant.

Limited experience with staff. The fourth theme was the most troubling finding from the qualitative data as there was a significant number of students who indicated that they either had limited or no experience with student services staff. Initially, one might ask if students understand the term student services and all of the different offices that might encompass this area of the university. Prior to asking the questions in section five, the survey offered an extensive definition and examples of student services. Assuming

one read this statement, this would indicate that a portion of the students at Southwest University are not interacting significantly with student services staff.

> I'm an undeclared. That means I'm either getting harassed or ignored by student services. I have the vague feeling that it's my fault, but what can I say? I haven't had much interaction with student services besides things that I 'should' be going to or things that I 'should' be paying attention to- I just lose track of them when I'm trying to figure out my own world. It doesn't seem prudent to step into a stranger's office and expect them to care, but that's just me. I don't like to ask for help most of the time. (19 year old, White female)
>
> I have never had experiences with student services staff and I never intend to. (19 year old, multiracial female)
>
> The only encounter I've really had is with my adviser, and she wasn't all that helpful. (18 year old, White female)
>
> I can't exactly think of many interactions with student services, other than the posters up all over the dorms about drinking and sex. They are always an interesting read and kind of fun to quote, but my advisors were pretty lousy, so I don't have much to say about them, it took them a month and a half to return my last call.

As Southwest University misses some opportunities to connect with its freshman class, there are many instances where the respondents indicated that they had positive and significant interactions with student services staff. It just becomes important to identify that there does appear to be a concern that some portion of the population feels untouched by student services, or at least they are avoiding student services altogether.

Student Goals of Attending College

Ordinary Least Squared (OLS) regressions were conducted on each of the five components that resulted from the factor analysis of student's goals by attending college (Table 4.10). The first regression analyzed the dependent variable Lack of Purpose against the seven independent variables described in chapter three (Caucasian, female,

upper or upper-middle class, parents with bachelors, some degree of financial aid, top ten percent of high school class, and Southwest University as top choice). Students with some degree of financial aid scored .537 higher on the Lack of Purpose component than students receiving no financial aid, after controlling for the other independent variables ($p < .10$). This was the only result with statistical significance. In the CIRP Freshman Survey (2004), four percent of students indicated that they had nothing better to do which is why they decided to attend college.

The OLS regression on the second component of goals for college, Financially Driven, yielded one statistically significant result. Females score .643 higher on Financially Driven compared to men, after controlling for other identified independent variables ($p < .10$). This result was slightly different than the 2004 CIRP Freshman Survey at four year institutions which indicated men were responded at a slightly higher rate (72.9 percent versus 68.2 percent) that they were attending college to make more money (CIRP Freshman Survey, 2004). An OLS regression on the third component of goals for college labeled Independence also yielded one statistically significant result. Students in the top ten percent of their high school classes scored .473 lower than other students on seeking Independence ($p < .10$). Approximately one in five freshmen at four year institutions (21.5 percent) indicated that they wanted to get away from home (CIRP Freshman Survey, 2004).

The regression on the fourth component, Vocationally Driven, yielded one statistically significant result. Students with a parent who has at least a Bachelors degree, score .482 lower other students on the factor Vocationally Driven, after controlling for

other independent variables ($p < .10$). Seven in ten freshmen (71.8 percent) at four-year institutions indicated that they decided to go to college to be able to get a better job (CIRP Freshman Survey, 2004). In the final OLS regression on the component, Graduate School, yielded three significant results. First, Caucasian students scored .434 lower than students of color on the goal to attend graduate school ($p < .10$). Second, students in the top ten percent of their high school class scored .434 lower than all others students on having the goal to attend graduate school ($p < .10$). Finally, students who had received some degree of financial aid scored .453 higher than students with no financial aid on having the goal to attend graduate school ($p < .10$). In 2004, 56.7 percent of freshman at

Table 4.10: OLS Regression - Goal for College

	Dependent Variables				
	Lack of Purpose	Financially Driven	Independence	Vocationally Driven	Graduate School
Caucasian	-.346 (.271)	.254 (.328)	-.164 (.304)	.346 (.275)	-.434* (.248)
Southwestern University as Top Choice	.349 (.257)	.141 (.311)	-.351 (.289)	-.381 (.261)	.105 (.235)
Top 10 Percent of High School Class	-.393 (.242)	.170 (.294)	-.473* (.272)	-.264 (.247)	-.434* (.222)
Some Degree of Financial Aid	.537* (.281)	.139 (.340)	-.369 (.315)	.335 (.285)	.453* (.257)
Parents with Bachelors	.249 (.281)	-.339 (.340)	-.385 (.316)	-.482* (.286)	-.130 (.257)
Female	.195 (.283)	.643* (.343)	-.004 (.318)	-.072 (.288)	-.056 (.259)
Upper or Upper-Middle Class	-.143 (.278)	.370 (.336)	-.018 (.318)	-.038 (.283)	-.165 (.254)
Adjusted R-square	0.038	0.037	0.033	0.032	0.04
N	247	247	247	247	247

* $p < .10$; ** $p < .05$; *** $p < .01$.

four-year institutions nationally indicated that the reason they decided to go to college was to prepare themselves for graduate or professional school (CIRP Freshman Survey, 2004).

Student Expectations of College

Next, Ordinary Least Squared (OLS) regressions were conducted on each of the six components that resulted from the factor analysis of students' expectations of college. Separate OLS regressions on the first two components, To Make a Name For Myself and Career Driven, yielded no significant results.

The OLS regression on the third component of expectations for college, To Find a Significant Other, yielded one statistically significant result. Students with a parent with a Bachelors degree scored .480 higher than all other students ($p < .10$). The results can be seen in Table 4.11. Next, an OLS regression on the fourth component, Extracurricular Motivations, resulted in one finding that was statistically significant ($p < .05$). Students with a parent with a Bachelors degree scored .628 points lower than all other students on having the expectation to participate in extracurricular activities. An OLS regression on the fifth component, Individual Differences, resulted in one statistically significant finding. Caucasian students scored .676 higher than students of color on the component ($p < .05$). The last OLS regression on the component, Social Expectations, resulted in one statistically significant outcome. Students that had chosen Southwest University as their top choice scored .367 lower than all other students ($p < .10$). Southwest University students had indicated that 29 percent felt their favorite activity was to spend time with friends (Campus Climate Study, 2001).

Table 4.11: OLS Regression - Expectations for College

	Dependent Variables					
	Make A Name for Self	Career Driven	Find Significant Other	Extracurricular Motivations	Individual Differences	Social Expectations
Caucasian	-.274 (.382)	.334 (.390)	.043 (.268)	.043 (.298)	.676** (.292)	.253 (.234)
Southwest University as Top Choice	-.267 (.363)	-.057 (.370)	-.012 (.254)	.294 (.283)	.015 (.284)	-.367* (.222)
Top 10 Percent of High School Class	-.440 (.342)	-.240 (.349)	.166 (.240)	.230 (.267)	.022 (.268)	-.156 (.210)
Some Degree of Financial Aid	.263 (.396)	.012 (.404)	-.243 (.278)	.268 (.309)	-.130 (.310)	-116 (.243)
Parents with Bachelors	.147 (.397)	.109 (.405)	.480* (.278)	-.628** (.309)	-.062 (.311)	.135 (.243)
Female	.166 (.400)	-.572 (.408)	.125 (.280)	-.428 (.312)	-.221 (.313)	.150 (.245)
Upper or Upper-Middle Class	.443 (.392)	.256 (.401)	.277 (.275)	-.305 (.306)	-.140 (.307)	.189 (.241)
Adjusted R-square	0.021	0.016	0.018	0.011	0.029	.031
N	247	247	247	247	247	247

* p < .10; ** p < .05; *** p < .01.

Student Stressors of College

Next, college stress was studied to inform trends in student behavior. OLS regressions were conducted on each of the six components that resulted from the factor analysis of students' stressors or concerns of succeeding in college. The first two OLS regressions analyzed the components Cultural Barriers and Social Connections against the seven independent variables. These two OLS regressions yielded no significant results.

The third OLS regression on the component of stressors for college, Balancing Academics with Job, yielded one statistically significant result. Students who had at least

one parent with a Bachelors degree scored .401 lower than all other students ($p < .05$). Research suggests that students who come from well-educated families have an advantage when it comes to completing college (Astin, 1993). Research indicates this primarily because of cultural capital (Bourdieu, 1996). A Southwest University questionnaire indicated that 30 percent of students did not work where 21 percent worked more than 20 hours a week (Student Experiences Questionnaire, 2004). The regression results for student stressors can be found in Table 4.12.

Next, an OLS regression on the component of stressors for college, College Affordability, resulted in four findings that were statistically significant. Students in the top ten percent of their high school class scored .309 lower than other students ($p < .10$). Second, students whose families were from the upper or upper-middle class scored .341 higher than students from a lower socio-economic status ($p < .10$). Women scored .419 lower than men on college affordability as a stressor ($p < .05$). Finally, students who had received some degree of financial aid scored .784 higher on College Affordability being a stressor than students receiving no financial aid ($p < .01$). College affordability and tuition increases were the most important issue (28 percent) identified by students in a Southwest University study (Campus Climate Study, 2001). In 2004, 34.5 percent of freshman at 4-year colleges across the country indicated that they had no concerns about finances for college (CIRP Freshman Survey, 2004).

Next, an OLS regression was conducted on the component, Course Scheduling, which yielded one statistically significant result. Students whose families would be categorized as upper or upper-middle class scored .521 higher on Course Scheduling as a

Table 4.12: OLS Regression - Stressors of College

	Dependent Variables					
	Cultural Barriers	Social Connections	Balancing Academics with Job	College Affordability	Course Scheduling	Getting Involved on Campus
Caucasian	-.324 (.327)	-.279 (.259)	.004 (.172)	.158 (.176)	.274 (.238)	.065 (.222)
Southwestern University as Top Choice	-.081 (.310)	-.244 (.246)	.158 (.163)	-.064 (.167)	-.358 (.225)	.106 (.210)
Top 10 Percent of High School Class	-.322 (.293)	.202 (.232)	.037 (.154)	-.309* (.157)	-.101 (.213)	.075 (.198)
Some Degree of Financial Aid	.028 (.339)	-.390 (.268)	.008 (.178)	.784*** (.182)	.251 (.246)	.188 (.230)
Parents with Bachelors	-.118 (.339)	.203 (.269)	-.401** (.178)	-.003 (.182)	.057 (.247)	.078 (.230)
Female	-.121 (.342)	-.089 (.271)	.028 (.180)	-.419** (.184)	-.204 (.249)	-.065 (.232)
Upper or Upper-Middle Class	.121 (.335)	-.187 (.266)	-.242 (.176)	.341* (.180)	.521** (.244)	-.016 (.227)
Adjusted R-square	0.012	0.028	0.029	0.12	0.039	.006
N	247	247	247	247	247	247

* p < .10; ** p < .05; *** p < .01.

stressor than students from a lower socio-economic status (p < .05). A study from 2001 found that 37 percent of students at Southwest University were unable to get some of the classes that they needed (Campus Climate Study, 2001). Finally, the component, Getting Involved on Campus, was studied. The regression yielded no results with any degree of statistical significance.

All of these findings lead us to understand better the students who were part of the University School at Southwest University. It is important to also understand the characteristics of the institution as the students described them. To further enhance the

findings of the institution, faculty, and student services spheres, both quantitative and qualitative results are reported.

Hours Students Spent on Activities

In section two, respondents were asked to describe the number of hours they spend during a typical week on the following activities: studying/homework, socializing with friends, talking with faculty, exercising or participating in sports, partying/drinking alcohol, working (for pay), volunteer work, participating in student organizations, watching television, reading for pleasure, playing video/computer games, and praying/meditating. Rather than running twelve separate regressions, three categories were created to sort these twelve activities. The three categories were created based on whether or not they were academic in nature, extracurricular in nature and there had been some research showing that they were positively correlated with retention, or that they were neither academic or extracurricular in nature and shown to be negatively correlated with retention. In a sense, this was a seventh factor analysis. However, because respondents were able to enter a specific variable rather than identify an amount of time from a Likert scale, it was not possible to run a factor analysis like the previous six sections.

The responses were categorized as academic time (studying/homework, talking with faculty), extracurricular time (socializing with friends, exercising or participating in sports, working for pay, volunteer work, participating in student organizations, praying/meditating), and non-productive time (partying/drinking alcohol, watching television, reading for pleasure, playing video/computer games). Research shows

students who are more involved academically are more likely to persist (Pascarella & Terenzini, 2005; Mallette & Cabrera, 1991). Involvement in academic initiatives includes both in-class and out-of-class activities. For example, visiting faculty office hours (Pascarella & Terenzini, 2005) and participation in learning communities (Tinto, 1997) both have positive effects on persistence. In fact, the time students devote to educationally purposeful activities is the single best predictor of their learning and personal development (Astin, 1993; Pascarella & Terenzini, 1991). Descriptive statistics of the mean, standard deviation, and range of each grouping are included in APPENDIX U.

At this point, OLS regressions were conducted on each of the three dependent variables – academic, extracurricular, and non-productive hours spent per week. An OLS regression describes the relationship between two variables by drawing a line through the data. The characteristics of that line can then be used to describe a relationship between the two variables. In the first regression on academic time spent per week, students who were in the top ten percent of their high school class spend 3.845 hours more per week on academic initiatives. This result was statistically significant, $p < .01$, and supports previous research that the best predictor of graduation is academic preparation and motivation (Adelman, 2004; Pascarella & Terenzini, 1991). In relation to the six remaining independent variables, no evidence of a relationship existed between the amount of time a student spends outside the classroom academically and the characteristics of that student. Southwest University freshmen indicated in previous studies that 52 percent spent between zero and ten hours per week preparing for class,

while 13 percent spent over 20 hours per week preparing for class (Student Experiences Questionnaire, 2004). The relationships are outlined in Table 4.13.

Table 4.13: OLS Regression - Time Spent Per Week

	Dependent Variables		
	Academic Time	Extracurricular Time	Unconstructive Time
Caucasian	-2.047 (1.484)	1.309 (3.040)	-.487 (2.090)
Southwest University as Top Choice	.542 (1.400)	-3.006 (2.833)	-.592 (1.982)
Top 10 Percent of High School Class	3.845*** (1.324)	-5.982** (2.722)	-7.366*** (1.872)
Some Degree of Financial Aid	-1.467 (1.543)	1.338 (3.152)	-3.899* (2.167)
Parents with Bachelors	1.256 (1.540)	-4.256 (3.155)	2.893 (2.169)
Female	2.043 (1.544)	4.527 (3.182)	2.641 (2.188)
Upper or Upper-Middle Class	-.761 (1.516)	-6.525** (3.121)	-.339 (2.145)
Adjusted R-square	0.053	0.028	0.104
N	247	247	247

* p < .10; ** p < .05; *** p < .01.

Students who interact with other students through extracurricular activities persist at greater rates than students who do not find social networks (Pascarella & Terenzini, 2005; Astin, 1984). In the second OLS regression, extracurricular time was compared against the seven independent variables. Extracurricular time was any activity that either has been shown to contribute to retention or would be critical to a student being able to afford college. Attending religious services and volunteer work both have shown to be positively correlated with degree completion (Astin, 1993). The research regarding work

for pay to help finance one's education has shown mixed results (Astin, 1993; Pascarella & Terenzini, 2005). Since little can be extrapolated from the data as it was collected, work for pay will be considered to be a positive correlation. In this regression, two independent variables showed a relationship with the amount of time students spent with extracurricular activities. First, students from the top ten percent of their high school class, spent on average 5.982 hours less per week on extracurricular activities then did students from the remaining 90 percent of high school classes. Second, students from upper or upper-middle class families spend 6.525 hours less per week on extracurricular activities then students from lower or lower-middle class families. In both instances the results were statistically significant, $p < .05$. These first two regressions on time spent are significant as research has shown academic and social integration is critical to persistence in four-year institutions (Braxton, Sullivan, & Johnson, 1997).

Finally, the third regression used non-productive time as its dependent variable. Non-productive time is defined as any activity described in the survey question as either negatively associated with retention or financial sustainability. For example, research shows that reading for pleasure to be negatively associated with degree completion as well as partying (Astin, 1993). Two independent variables shared relationships with student's non-productive time. First, students from the top ten percent of their class spent 7.366 hours less per week on activities that would be described as non-productive then students from the remaining 90 percent of high school classes ($p < .01$). Second, students who had received some degree of financial aid spent 3.899 hours less per week on activities that would be considered non-productive than student who had received no

financial aid ($p < .10$). Research shows that financial aid may not affect retention for some students because often students receive insufficient funding rather than the funding being ineffective. Often the student just needs more money (Pascarella, Pierson, Wolniak, and Terenzini, 2004).

Conclusion

While some of the results support previous findings, other results provide a continued evolution in the retention literature. The final chapter will begin to describe these results and their implications for the field. Further, the qualitative data will go to provide an illustrative understanding of the quantitative data and go further to describe the students at Southwest University and how these findings connect with the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001). Beyond qualitative data, the academic, institution, and student services spheres provided little in the way of conclusive evidence of relationships. However, understanding the differences in students and why they are persisting into a second year are more apparent through the rich data from the student sphere of the survey. Chapter five will analyze these results and offer implications for faculty, staff, and research.

CHAPTER FIVE

SUMMARY & CONCLUSIONS

In the previous four chapters, the rationale, methodology, qualitative and quantitative findings were presented to understand the research question. This chapter will explore the conclusions that can be drawn from the data and the implications these findings hold for practice and further research. To begin, a brief synopsis of the background to this research is prudent.

Purpose

At the beginning of this research, the study sought to investigate the differences between students who had left Southwest University and those who had returned for their sophomore year. However, during the course of the data collection, a far more interesting question emerged. Researchers have often studied retention through the lens of comparing those students who had left with those who had stayed, however by instead focusing on understanding the common themes of students who persisted, educators might begin to better understand and positively affect retention. This study looked at the following seven student characteristics of persisters within the University School at Southwest University: gender, race, high school class rank, socio-economic status, institutional choice, financial aid package, and parents' education. The research question was: To what extent do these student characteristics relate to those experiences that the

Retention Self-Study Framework suggest promote student retention (Woodard, Mallory, & DeLuca, 2001)?

The theoretical framework included extensive research on retention and persistence over the past forty years. The foundation of the research question was the Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001), which provided a comprehensive structure that incorporates an extensive body of student retention research along with the authors' own research. The framework provides institutions with a model to explore the areas that affect student retention. The authors described four major components to retention: the student sphere, institutional sphere, academic affairs sphere, and student services sphere. Within each of these spheres were a number of characteristics that research indicates affect retention. The characteristics can be seen in Figure 2.1. The Retention Self-Study Framework (2001) drew heavily from the research of Vincent Tinto (1975, 1987, 1993), John Bean (1980, 1983), Alexander Astin (1984), and Ernest Pascarella (1980).

Utilizing the Retention Self-Study Framework, the author created a survey that asked students about each of the various characteristics (within the four spheres) described in the framework (APPENDIX D). The survey was distributed electronically to all 1,477 freshmen within the University School at Southwest University. With a response rate of 21 percent, 248 surveys were found to be complete and usable.

The methodology employed to answer the research question included two major statistical elements. First, separate factor analyses were conducted on the institution sphere (section 3), academic sphere (section 4), and student services sphere (section 5).

Three additional factor analyses were conducted on three specific questions from the student sphere (section 2). The first of these asked the student to rank his/her top five expectations of college. The second asked the student to rank his/her top five goals in attending college. The final question asked the student to rank the top five things that caused them stress or concern about their abilities to succeed in college.

The second statistical treatment involved 25 Ordinary Least Squared (OLS) regressions that were conducted based on the results from the six factor analyses and the data manipulation of how students utilize their time. Each regression was analyzed against seven independent variables that related directly to answering the research question. The remaining data scrutiny was conducted utilizing qualitative analysis in which themes were presented based on respondents' answers to three open-ended questions. The three questions dealt with student experiences with the institution, faculty, and student services.

Building on this background, this chapter will begin by analyzing the significant findings from each of the four spheres. Each finding will be compared against previous research in order to offer a greater understanding of the significance of the finding. Next, trends among each of the independent variables will be explored. A discussion will ensue to explore how the results support or do not support the Retention Self-Study Framework. Finally, the author will offer implications from this study for future retention and persistence research.

Major Findings

The findings are presented as they were presented in chapter four by the four

spheres of influence. Results from the factor analyses as well as the regressions are discussed and in the instances where qualitative data was available, those are analyzed as well.

Student Sphere

The student sphere was studied by investigating four specific questions from the survey. Students were asked to rank their top five responses to goals of attending college, expectations of college, and stressors of college. The final question asked students to respond to a series of out-of-class activities and how much time they spend with each during a typical week. This section will analyze the findings from these four questions of the student sphere.

Student Goals of Attending College

Students come to college for a variety of reasons, some seeking a specific educational path and expectations of their college experience, while others come with no specific goals in mind for their college education (CIRP Freshman Survey, 2004). Within the second section of the survey that posed questions related to the student sphere, students were asked to identify the goals with which they most readily identified in attending college. The question yielded five components from the factor analysis: Lack of Purpose, Graduate School, Financially Driven, Vocationally Driven, and Independence. Each of these five components described how the ten possible responses to student goals would load onto one another. These loadings could be either positive or negative as related to the original response. The five components then served as dependent variables in separate OLS regressions against the seven independent variables

describing student characteristics. This section will offer some conclusions as to the results of the OLS regressions (Figure 5.1).

An initially surprising result of the regressions was that Caucasians had a -.434 lower value than students of color on Graduate School being a goal. This result was significant at ten percent. One possible explanation of this result is that students of color

Figure 5.1: Regression - Goal for College

	Lack of Purpose	Financially Driven	Independence	Vocationally Driven	Graduate School
Caucasian					-.434* (.248)
Top 10 Percent of High School Class			-.473* (.272)		-.434* (.222)
Some Degree of Financial Aid	.537* (.281)				.453* (.257)
Parents with Bachelors				-.482* (.286)	
Female		.643* (.343)			
Adjusted R-square	0.038	0.037	0.033	0.032	0.04
N	247	247	247	247	247

* p < .10; ** p < .05; *** p < .01.

might feel that in order to overcome inherent barriers based on race, they should pursue an advanced degree. Therefore, students of color may have simply been more intentional by indicating that graduate school was a goal for them where Caucasians might simply assume that they would be attending graduate school. Another possible explanation is that Caucasians might be pursuing degrees in technical fields and therefore would not categorize themselves in the Graduate School component. Finally, since these students are all undecided it might also be reasonable to conclude that they might not be envision graduate college because they have yet to determine their undergraduate course. A

concern from the data was that the survey did not specify between types of advanced degrees so it might be possible that Caucasians interpreted this element differently than students of color.

The same result was true of students in the top ten percent of their high school classes who had a -.434 lower value than their counterparts on Graduate School being a goal. It is possible that because the correlation for these two results was identical that the students who represented the top ten percent of their class were also likely to be Caucasian in this study. This also could represent students in the top ten percent of their high school classes who were planning on choosing a technical field. It should be noted however that this finding differs from other research that reflected grades as being one of the best predictors of students attending graduate or professional school (Pascarella & Terenzini, 1991).

Students in the top ten percent of their high school classes also had a -.473 lower value on Independence. This result was significant at ten percent. An explanation of this is that students in the top ten percent of their high school class have depended on their families to help them succeed and seeking Independence might not be desirable or necessary at this stage in their lives. These students have relied on their relationships with their families in order to achieve academically and severing that relationship might jeopardize their ability to succeed in college. Further, students who excel academically might have better relationships with their parents. While research has shown parental education, income, and remaining married has positively impacted persistence and matriculation rates (Astin & Oseguera, 2005), little research has been conducted solely on

the role of parents prior to college. Students in the top ten percent of their high school class might also have a stronger desire to develop friendships in college. Research has shown that students who develop close friendships at college that are based on care, empathy, concern, affect, and spending time with each other is positively correlated with student persistence (Braxton, Hirschy, and McClendon, 2004). Potentially each of these possible conclusions could be playing a factor in the results.

Students with some degree of financial aid had a .537 higher value on Lack of Purpose than students without financial aid. This result was significant at ten percent. One explanation of this result is that students with some degree of financial aid are prompted by parents to attend college in order to improve the student's potential earnings. Research has shown that a Bachelors degree has tremendous economic value (U.S. Department of Education, 2003). Therefore, it could be as simple as students are encouraged by parents based on a cost-benefit analysis and in order to afford college they seek loans recognizing that their future earnings will outweigh their initial debt. It could also be argued that students who receive no financial aid have more specific goals and a stronger desire to graduate. Students who receive no financial aid are likely to represent higher class families that have been shown to be highly correlated with persistence and degree attainment (Velez, 1985; Carroll, 1989). Therefore, Southwest University needs to recognize not only incoming freshmen demographics, but also how these can adversely affect its ability to help the student succeed.

Interestingly, this same group had a .453 higher value on Graduate School as a goal, which was significant at ten percent. One possible explanation of this is that 30.2

percent of the respondents in this survey had at least one parent with a Masters degree and therefore are seeking a similar course. There is some modest evidence that a college-educated parent enhances a student's educational goals (Pascarella & Terenzini, 1991; Astin, 1993). It might also be the case that students receiving no financial aid might be more likely to pursue technical fields and hence not pursue graduate school. Because the survey did not delineate between types of post-Bachelors education, it becomes difficult to understand the students' desires at Southwest University accurately. Finally, students with some degree of financial aid may see a need to pursue graduate school as a means to pay for their student loans. In 2002, each student who took out loans through the federal government accumulated on average a total debt of $11,000 (U.S. Department of Education, 2003). By pursuing graduate school, students are typically able to delay their repayment of federal loans and ultimately achieve greater earning potential by obtaining a post-secondary degree. If the survey instrument had reflected the type of financial aid students were receiving, it might be possible to more accurately understand the students who make up this finding.

Students who have at least one parent with a Bachelors degree had a -.482 lower value on Vocationally Driven as a goal for college. One possible explanation of this is that students with at least one parent with a Bachelors degree might be more concerned about finding purpose in their life, whereas first-generation college students might see college more as job training. If first-generation college students do see college as job training, they likely would be more Vocationally Driven. Bean (2005) described students assessing their education via two different attitudes. The first is thinking that one's

education will lead to employment. The second is the "degree to which being a student at a given school is perceived as stressful" (Bean, 2005, p. 222). Bean explained that students who made no connection between what they study and their future employment plans are less likely to fit in or be loyal to the school. Bean explained that a more sophisticated student might engage in a cost-benefit analysis, but this was probably rare. Ultimately, students need to balance their drive for employment with the recognition to fully engage in the learning process and not solely seeing it as a vocational school. Further, students with at least one parent with a Bachelors degree might understand the value of a college education beyond just the preparation for a career than first-generation students. Having been raised by parents who were college educated, they would have benefited from attaining cultural capital (Bordieu, 1973) that first-generation students might not have. Another possible conclusion that can be drawn is that students who have at least one parent with a Bachelors degree might be more likely to expect that a college education will guarantee them a job after completion, whereas first-generation students might believe they still need to indicate obtaining a job as a goal of college. Studies have shown that a student's initial aspirations and goals have been shown to be significant predictors of college matriculation (Astin, 1975; Bean, 1982). Therefore, students who have higher goals are often likely to succeed at a higher rate than students who do not have the same goals of college.

Another interesting finding in contradiction to other studies (CIRP Freshman Survey, 2004) is that females had a .643 higher value on Financially Driven than did males. One possible explanation for this is that the sample was not truly representative of

Southwest University since 77 percent of the respondents were women, significantly higher than the 53.9 percent of women in the freshman population. However, if this is true of the female population as a whole, it might be as a result of women at Southwest University seeking to be financially independent after college. With retention and matriculation rates for women now outpacing men (Seidman, 2005), Nora, Barlow, & Crisp assert, "that these specific patterns may reflect differences in the forces that drive students to enroll in higher education or attend a particular institution, forces such as financial status" (2005, p. 145). In order to overcome gender inequity in pay (Bellas, 1997), women seem to be placing higher priority on higher education than men. This finding might also represent that women are significantly less inclined to 'party' than men during their collegiate experience. This finding would be consistent with previous research indicating that men have higher rates of alcohol use and abuse than women (Pascarella & Terenzini, 2005).

No other correlations with significance were made through the regressions on goals for college including any for the independent variables: Southwest University as Top Choice or Students Who Come From Upper or Upper-middle Class Families.

Student Expectations of College

Students' expectations of college can vary greatly depending on the goals with which they come to college. In the second section of the survey, which posed questions related to the student sphere, students were asked to identify five expectations with which they most readily identified in attending Southwest University. This question yielded six components from the factor analysis: Make A Name For Self, Career Driven, Find a

Significant Other, Extracurricular Motivations, Individual Differences, and Social Expectations. Each of these six components described how the sixteen possible responses to student expectations would load. The loadings were both positive and negative to the original response. Three of the original responses did not load onto any of the six factors and therefore they were not considered in the OLS regressions. This section will provide some analysis of the OLS regressions (Figure 5.2) on student expectation of college.

Figure 5.2: Regression - Expectations for College

	Find Significant Other	Extracurricular Motivations	Individual Differences	Social Expectations
Caucasian			.676** (.292)	
Southwest University as Top Choice				-.367* (.222)
Parents with Bachelors	.480* (.278)	-.628** (.309)		
Adjusted R-square	0.018	0.011	0.029	.031
N	247	247	247	247

* p < .10; ** p < .05; *** p < .01.

Caucasian students had a .676 higher value on Individual Differences than students of color, which might appear interesting but it is not necessarily surprising on a predominantly White campus. One possible explanation for this is that Caucasians might be more interested in learning about differences since they are the majority and maybe experiencing diversity to a greater extent than ever before in their lives. Students of color may be less likely to identify this response because they might feel that they have interacted with Caucasians throughout their lives growing up in a predominantly White

culture. Several studies have shown college to positively influence student attitudes toward racial tolerance and increase awareness of people of different racial backgrounds (Kuh, 1993; Milem 1999, Kuh et al., 2001). Another possible explanation is that students of color might be inclined to participate in activities in order to find others like them on a predominantly White campus. Research has shown extracurricular activities to be positively correlated with persistence as they provide opportunities for students to interact with one another (Astin, 1993).

Students who ranked Southwest University as their top choice had a -.367 lower value on Social Expectations. One possible explanation for this is that students who attended Southwest University as their top choice were more committed to succeeding and thus less interested in partying and social activities unrelated to the institution's mission. This notion is supported by previous institutional research that indicates that students who chose Southwest University as their second or third choice for attendance were not succeeding academically to the degree of students who chose it as their top choice (Student Satisfaction Inventory, 2004). Students who attended Southwest University as their top choice may have been more drawn to the institution because of specific programs rather than the 'party scene' on campus. By choosing to come to Southwest University, these students may feel some specific aspect of the institution is a reason to succeed. One final explanation of this finding is that students with Southwest University as their top choice might have friends who also are attending the institution and therefore do not have the expectation of needing to find friends. Students who have friends at the institution upon admission to Southwest University would likely be more

adept to integrating socially into the institution, which is positively correlated with their persistence (Astin, 1993; Astin & Oseguera, 2004).

Students who had at least one parent with a Bachelors degree had a .480 higher value on the component Find Significant Other. Research on students seeking a partner is limited, but one possible explanation for this is that students with college-educated parents would be looking for college-educated partners. It might be further extrapolated that with the anticipation of obtaining a Bachelors degree, they also seek to find a significant other by graduation so that they can establish a family after graduation. This same group of students also had a -.628 lower value on Extracurricular Motivations. This result is somewhat surprising as one might expect that students who have parents who attended college might understand the importance of extracurricular activities. However, students with at least one parent with a Bachelors degree likely would have higher expectations to be challenged academically and therefore would score lower on this component thinking that they would not have the time. Research supports students with college-educated parents are more likely to matriculate than first-generation students (Seidman, 2005; Pascarella & Terenzini, 2005). These same students might also be less interested in getting involved with clubs as they might see that interfering with their academic pursuits. One additional conclusion is that first-generation students might be more inclined to get involved with clubs as the clubs offer opportunities to find connections on campus for students with little cultural capital (Bordieu, 1973). As Astin postulated in his involvement theory, students who are involved on campus are more

likely to succeed (1985). An involved student is able to make connections on campus and feel more supported in his/her endeavors.

Student Stressors of College

All students are presented with different challenges throughout their collegiate careers. The variety and impact that these challenges might make on students' experiences can affect their ability to cope in college. The third question asked within the second section of the survey related to the student sphere was regarding things that cause students the most stress or concern about attending college. Respondents could choose up to five different responses from 18 different answers. The factor analysis yielded six components: Cultural Barriers, Social Connections, Balancing Academics with Job, College Affordability, Course Scheduling, and Getting Involved on Campus. Ultimately, the six components only had 11 of the 18 responses load onto the components. This section will provide some interpretation of the OLS regression (Figure 5.3) results that emerged regarding student stressors.

Students in the top ten percent of their high school classes had a -.309 lower value on College Affordability being a stressor. This was not a surprising result as the highest academic performers from high school often receive merit-based scholarships and other financial support. In contrast, students with some degree of financial aid had a .784 higher value on college affordability being a stressor. This result would be expected since these students relied on financial aid to support their education. An important question to consider in analyzing these results is regarding the mix of types of financial aid that students were receiving. Students could receive loans that they would need to

pay back, work study that they would need to work for, or grants or scholarships that they would need to neither pay back nor work for. According to Southwest University students, 54 percent considered their finances to be either a *big problem* or *considerable*

Figure 5.3: Regression - Stressors of College

	Balancing Academics with Job	College Affordability	Course Scheduling
Top 10 Percent of High School Class		-.309* (.157)	
Some Degree of Financial Aid		.784*** (.182)	
Parents with Bachelors	-.401** (.178)		
Female		-.419** (.184)	
Upper or Upper-Middle Class		.341* (.180)	.521** (.244)
Adjusted R-square	0.029	0.12	0.039
N	247	247	247

* p < .10; ** p < .05; *** p < .01.

problem (Student Experiences Questionnaire, 2004). In another study conducted at Southwest University, students indicated that the Financial Aid Office was not meeting their expectations particularly for availability of financial aid, assistance from the financial aid staff, and the timeliness of awards (Student Satisfaction Inventory, 2004). In fact, the Financial Aid Office received one of the lowest scores for a student service at Southwest University (Campus Climate Study, 2001). This finding might offer another possible conclusion that the Financial Aid Office might be the cause of the stress rather than the money or lack of.

Students with at least one parent with a Bachelors degree had a -.401 lower value on Balancing Academics With Job as a stressor. Students who came from families who attended college would likely have greater financial means to support their college students. According to the U.S. Census Bureau, a worker with a Bachelors degree earned an average of $51,568 annually compared to someone with only a high school diploma who would earn on average $28,631 annually (U.S. Census Bureau, 2005). First-generation students would likely have less means to pay for their education and would likely need to work. This supports the point that students would likely be more concerned by balancing job and academics if working was critical to their ability to afford college. Working full-time clearly appears to impede persistence among traditional-age students (Astin, 1975). However, part-time work does not appear to produce similarly negative effects, and employment on campus can positively influence degree completion (Astin & Oseguera, 2003). Students who are able to successfully balance their academics and work are often able to succeed at a higher rate.

Females had a -.419 lower value on college affordability being a stressor. This was an interesting finding because according to the U.S. Census Bureau, a woman with a Bachelors degree earns on average of $38,766 annually where a man with the same academic credentials earns an astounding $63,753 annually (U.S. Census Bureau, 2005). It would seem logical then that women would be more concerned about college affordability since their income potential is not nearly as great as a man's today. One possible explanation is that women are entering more male-dominated fields today, which in turn pay more and therefore are less concerned about college affordability as related to

their potential earnings (Bellas, 1997). Women who maximize their benefits versus costs could therefore overcome the stressor. Inversely, men would see more women entering male-dominated fields, which in turn, would create more competition for them and potentially reduce their earning potential. If men are concerned about this sort of inverse relationship, they might be more concerned about college affordability as a result.

Finally, students from upper or upper-middle class families had a .341 higher value on college affordability as a stressor. This was an interesting finding as well as it would seem like the opposite would be more logical. One possible interpretation might be that students from wealthier families would be more adverse to tuition increases at Southwest University. Since 2002, tuition at Southwest University has increased 58 percent at Southwest University to $4,087 a year (Fact Book, 2004). While increases in tuition were mirrored with increases in financial aid at Southwest University, an upper or upper-middle class family would be less likely to benefit from financial aid and therefore the increases would impact them potentially the greatest. Further, students receiving financial aid would likely still be obligated to pay back the aid as it likely would be loans rather than grants. Therefore, college affordability would indeed be a stressor.

This same group had a .521 higher value on course scheduling being a stressor. If students from wealthier families are more concerned by college affordability, they might also be more concerned about graduating within four years. By graduating in four years, students are able to enter the work force sooner and thus begin to make wages at an earlier age. Since the 1995 freshman cohort, students at Southwest University have graduated in four years at a rate between 33 and 40 percent (Strategic Retention Master

Plan, 2005). In 2001, 37 percent indicated that they had been unable to get some of the classes that they needed at Southwest University (Campus Climate Study, 2001). A challenge facing Southwest University over the past several years has been to remain student-centered in the face of budget cuts from the state (Strategic Retention Master Plan, 2005). As cuts have been made, some class sections have had to be eliminated leaving students with fewer choices from which to choose. Students from higher socio-economic families might also be more likely to be Honors students, and scheduling Honors classes might be even more difficult as they tend to have smaller class sizes and could be in more jeopardy because of the sheer number of students who can take the class. Another possible explanation for students from higher socio-economic families being more concerned about course scheduling is related to their needs to choose majors. Since the cohort was all undeclared, these students might feel more pressure from their families. Finally, the students might just have higher expectations of what they should be receiving as consumers particularly in the face of tuition increases (Fact Book, 2004). This could reflect the growing phenomenon of students' sense of entitlement on college campuses (Levine & Cureton, 1998).

Hours Students Spent on Activities

Because students only spend an average of 15 hours a week in the classroom, they have over 150 hours a week outside of the classroom. How students spend those 150 hours per week can indicate a great deal about their ability to succeed at an institution. The fourth question, drawn from section two of the survey, which asked students to describe the amount of time they spent on various activities outside of the classroom.

Student responses to the question, “how many hours did you spend during a typical week on the following activities?” were split into three categories since it was not possible to run a factor analysis because of the variance in response. The three categories were Academic, Extracurricular, and Unconstructive Time. The first two categories were supported by research that indicated that they had been shown to positively correlate with student retention (Astin, 1985; Astin, 1993; Mallette & Cabrera, 1991; Pascarella & Terenzini, 1991; Tinto, 1993; Braxton, Sullivan, & Johnson, 1997; Tinto 1997; Adelman, 2004; Pascarella & Terenzini, 2005). The latter category consisted of activities that had been shown to be negatively correlated with student retention and success (Astin, 1993; Tinto, 1993; Pascarella, Pierson, Wolniak, and Terenzini, 2004; Pascarella & Terenzini, 2005). This section will provide analysis of the three OLS regressions (Figure 5.4) that were conducted on the way students spend time outside of the classroom.

Students in the top ten percent of their high school classes spent 3.8 hours more on academic endeavors. This is hardly surprising since they likely learned through high school that academic success takes time, effort, and dedication. According to an institutional survey, 57 percent of Southwest University freshmen anticipate their grade point average to be between a 3.5 and 4.0 by the end of their freshman year (Survey of New Freshmen, 2004). In order to meet this challenge, students need to spend more time dedicated to academics. The freshman class at Southwest University averaged a 3.4 grade point average in high school and an 1118 SAT score. In comparison, the top 25 percent of all students admitted to Southwest University averaged a 3.78 grade point average and a 1220 SAT (Fact Book, 2004). What is apparent is that students’

expectations of themselves are high and may be unreasonable based on their high school performance. Since the average student had a 3.4 and more than half expected between a 3.5 and 4.0, it seems some students may expect to succeed academically without truly

Figure 5.4: Regression - Time Spent Per Week

	Academic Time	Extracurricular Time	Unconstructive Time
Top 10 Percent of High School Class	3.845*** (1.324)	-5.982** (2.722)	-7.366*** (1.872)
Some Degree of Financial Aid			-3.899* (2.167)
Upper or Upper-Middle Class		-6.525** (3.121)	
Adjusted R-square	0.053	0.028	0.104
N	247	247	247

* p < .10; ** p < .05; *** p < .01.

understanding the higher standards in college. Student in the top ten percent of their high school class also spend -5.9 hours less with extracurricular activities and -7.3 hours less with unconstructive activities. It is not surprising that the most successful students in high school might participate less with unconstructive activities, it is a bit more surprising that they spend less time with extracurricular activities since these are linked to student retention and persistence research. Although students who were successful in high school likely bring confidence and cultural capital to overcome the need to be highly involved in extracurricular activities. In addition, when studying the activities that the researcher placed in the extracurricular category, one might question including work-for-pay. Originally, work-for-pay was included as it related to the positive studies showing

working *on-campus* was positively related to retention (Astin, 1993). If we believe the top ten percent of high school students would be more likely to receive scholarships and other financial support, then it is not difficult to conclude that they would be also less likely to be working part-time either on or off-campus to support their education. As a result, they would likely score significantly lower on the number of hours they participate in extracurricular activities when it includes work-for-pay.

Students from upper or upper-middle class families spend -6.525 hours less per week with extracurricular activities. Similar to the previous case, since extracurricular activities include work for pay, students from higher socio-economic families would be less likely to work at all or at least work not as much as students from a lower socio-economic statuses. Therefore, this result likely tells us about who is working and who is not working at Southwest University.

Students who received some degree of financial aid spent -3.899 fewer hours per week on unconstructive activities. One possible explanation is that students with some degree of financial aid simply do not have as much time to spend on unconstructive activities because of two time-consuming activities. First, students with some degree of financial aid would likely be working, which would affect how much time they have to commit to unconstructive activities. Second, students would not have as much money to spend on unconstructive activities, which could become rather costly to a student (i.e. drinking alcohol, partying, spring break trips). While this is only speculative since there is no research to this end, it does provide a likely explanation of the finding.

Institution Sphere

The efforts of Southwest University to make each student feel like a member of a larger community are critical to its retention efforts. This section will analyze the results of the qualitative themes that emerged regarding the institution's sense of belonging. The OLS regressions for the Institution Sphere yielded no significant results yet there are some general themes that will be discussed later that might offer some further understanding of the effect of the Institution Sphere.

Students were asked to describe how Southwest University had fostered and/or hindered their sense of belonging to the institution. The first theme was faculty's effect on fostering/hindering students' Sense of Belonging. Faculty's role in shaping student experiences is by no means surprising. Since 76.8 percent of freshmen nationwide indicate that they attend college to learn more (CIRP Freshman Survey, 2004), it would therefore indicate that faculty have a significant obligation to fulfill student expectations of their collegiate experience. Respondents described the role of faculty in some instances fostered a sense of belonging, while in other instances hindered a sense of belonging. In previous research, Southwest University students indicated that 54 percent of them felt the involvement of faculty with students was excellent (Campus Climate Study, 2001). Further, 85 percent of students scored their interactions with faculty as either very satisfied or somewhat satisfied (Student Experiences Questionnaire, 2004). What emerged through the qualitative data was that there were many faculty who did an excellent job of providing a sense of belonging, but there were some instances that negatively affected the students' overall opinion of faculty. In many instances, specific

faculty members' names were identified and in other instances specific departments were named. Since faculty interaction outside of the classroom is positively correlated with retention (Pascarella & Terenzini, 2005), it is critical that Southwest University reward excellence in teaching and find mechanisms to improve faculty interaction where it is failing to meet student expectations. It should be noted that teaching should occur both inside and outside of the classroom.

A wholly positive qualitative theme was that students appreciated the wide variety of activities on campus. Respondents discussed the ability to find many different activities that met a wide variety of interests. This theme was supported by previous research that indicated that 40.2 percent of freshmen nationally estimated the chances were very good that they would be participating in student organizations on campus (CIRP Freshman Survey, 2004). Students at Southwest University reported that they were involved in on-campus activities (57 percent) and non-University activities (62 percent) (Campus Climate Study, 2001). The students who indicated they were less likely to be involved with on-campus activities were commuter students. Both distance from campus and lack of knowledge of what was going on on-campus were described as the most significant barriers. Freshmen who live off-campus account for approximately 25 percent of all freshmen at Southwest University each year (Commuter Student Affairs website, 2006). If they do feel less connected to the university, this might signify a significant lapse for Southwest University in their retention strategy. Previous research (Astin, 1985; Tinto, 1993) as well as the findings of this study indicate a need to help students become involved on campus therefore create a sense of connection should they

stumble academically. One specifically cited program that commuter students did describe that helped them to connect to campus was the Commuter Assistant program run through Commuter Student Affairs at Southwest University.

The third aspect students described in which Southwest University was fostering a sense of belonging was the diversity and inclusivity of the campus. Respondents describe the diverse student body and the predominantly inclusive campus as positive attributes of Southwest University. This theme supported previous research at Southwest University where 70 percent of students felt that the diversity of the campus had a positive impact on the overall university environment (Campus Climate Study, 2001). Further, 76 percent indicated that students are generally tolerant of ethnic or racial differences (Campus Climate Study, 2001). Nationally, 63.1 percent of freshmen in 2004 indicated that they would likely socialize with someone of another racial or ethnic group during their first year in college (CIRP Freshman Survey, 2004). While the theme was mostly positive, there were some students who felt that Southwest University was not welcoming to everyone. Some students described the lack of diversity among the faculty. In 2004, 80.2 percent of all faculty were White while 74.2 percent of all students were White and only 66.3 percent of freshmen were White (Fact Book, 2004). The largest gap existed between the 4.6 percent of Hispanic faculty and the 14.3 percent of Hispanic freshmen (Fact Book, 2004). Therefore, the student-body may be described as diverse by students, but faculty diversity seems to be an area in which Southwest University must find ways to deliberately improve.

The fourth theme that was reported was that a group of students felt that Southwest University did nothing deliberate to foster a sense of belonging or, even worse, the institution did not care about fostering a sense of belonging. Southwest University students indicated that 12 percent of them probably or definitely would not choose to attend Southwest University if they could start college over again (Student Experiences Questionnaire, 2004). Only 6 percent of those same students indicated that their overall experience at Southwest University was poor or very poor (Student Experiences Questionnaire, 2004). This theme seems to be consistent with other research in representing a small portion of the freshman population who are dissatisfied with their experience at Southwest University. The reasons for their dissatisfaction seem to vary, but ultimately the other themes that have emerged seem to illustrate the complexity of the role that Southwest University needs to take in order to increase student persistence.

Faculty Sphere

While students might only spend on average 15 hours per week in the classroom, students' experiences in the classroom are critical to student retention. Most students came to Southwest University with some intent to learn and without excellent teaching in the classroom, this expectation is in jeopardy. This section will analyze the results of the OLS regressions and finally the qualitative themes that emerged.

The first significant finding from the OLS regression (Figure 5.5) was that students from the top ten percent of their High School class had a -.275 lower value than their counterparts on the component Faculty Goals For Students. One possible explanation of this finding is that these students would have the highest expectations of

classes because of their academic prowess. These students might not have felt challenged in the classroom with the goals that faculty shared. While 64 percent of Southwest University students believe faculty provide clear expectations (Campus Climate Study, 2001), there is obviously a portion who do not feel as strongly about that. Another possible explanation of this finding is that students in the top ten percent of their high school classes did not feel that faculty clearly communicated in the classroom. For some students who attend college, they learn that the expectations between high school and college change and as a result their grades can suffer (Bean, 2005). Interestingly, another significant finding was similar in that women had a -.290 lower value than men on the component Faculty Goals for Students. If applying the same explanation to women that they have higher expectations then men, then one must question why this would be the

Figure 5.5: Regression - Academic Sphere

	Faculty Goals for Students	Teaching Style
Top 10 Percent of High School Class	-.275*** (.094)	
Female	-.290*** (.110)	
Adjusted R-square	0.074	0.029
N	247	247

* p < .10; ** p < .05; *** p < .01.

case. Nationally, women indicated at a rate 8.3 percent higher than men (60.4 percent for women) that they chose the institution that they are attending because of the institution's academic reputation (CIRP Freshman Survey, 2004). Therefore, it might be the case that these two groups of students have higher expectations of the curriculum in the classroom

than their counterparts. Another argument might be that women found classes to be less welcoming then men did. If women did not feel that faculty members were communicating clearly to them, they might be more inclined to evaluate this component more harshly then men.

Qualitative Themes

The first theme that emerged from the question asking students to describe two or three instances that best reflect their experiences with faculty at Southwest University was the level of helpfulness of faculty. This theme yielded both positive and negative critiques of the helpfulness of faculty. Those who indicated that faculty members were helpful typically described those who made themselves both readily accessible to students and easy to talk with. This seems to be the predominant opinion as 85 percent of students at Southwest University were either *very* or *somewhat satisfied* with their interactions with faculty (Student Experiences Questionnaire, 2004). Potentially, the students who were dissatisfied with the level of helpfulness of faculty felt like they were not treated as individuals. This explanation has been supported by previous research at Southwest University, where a significant gap exists between students' expectations and actual experiences of faculty treating them as individuals (Student Satisfaction Inventory, 2004). Needless to say, Southwest University must find ways to encourage faculty to help individual students succeed.

The second theme described students' experiences with faculty office hours. While only 24.9 percent of freshmen nationally indicated that they had attended a faculty member's office hours (CIRP Freshman Survey, 2004), the respondents who had

attended faculty office hours were very satisfied with the ability of the faculty member to help them. At Southwest University, 19 percent of students indicated that finding opportunities to meet with faculty one-on-one was either a *big problem* or a *considerable problem* (Student Experiences Questionnaire, 2004). The same study indicated that 44 percent of students had discussed course work with a faculty member outside of class at least every few weeks (Student Experiences Questionnaire, 2004). Therefore, not only does faculty need to be encouraged to meet with students and assist them outside of the class, but students need to be encouraged to make attempts to meet with their faculty. Research indicates that students who make connections with faculty either in or out of the classroom are more likely to persist (Pascarella & Terenzini, 1991), yet both faculty and students at Southwest University seem to not understand the necessity for the interaction.

The final theme to emerge was the quality of faculty teaching at Southwest University. As discussed earlier, teaching is an essential component of students' impressions of the institution. If students experience deficient teaching, they likely will have a poor experience at the university or, at least minimally, obtain less benefit from the degree itself. Students typically described good teaching as something beyond the traditional lecture class. Students who found engagement and personable teaching styles often described their experiences as positive. Students who do not feel a part of the class to the extent that they could be watching the lecture from home on a television described being less engaged in the course. As described by Boyer (1990), the university (specifically Research-Extensive) must find ways to promote good teaching in the classroom so as to provide every incentive for students to persist.

Student Services Sphere

Student services should epitomize the institution's attempt to reach out to students and help them succeed. In some instances this is the case, while in other instances this, unfortunately, is not the case. This section will analyze both the results of the quantitative findings and then the qualitative themes regarding student services initiatives.

After conducting the OLS regressions against these two dependent variables, no findings with significance resulted. This is likely a result of students' lack of understanding of where they experience 'student services' at Southwest University. Several students indicated through the qualitative question that they would have preferred to have an unknown or unable to answer category for many of the student services questions. This is even after a lengthy description of student services was provided prior to the questions.

Four themes emerged after asking respondents to describe two or three examples of their interactions with student services. The first was the level of helpfulness that they received from their academic advisor. Considering that the respondents were all initially undeclared majors, they all likely would have received advising through the same office at least until they declared their majors. For the most part, their interactions with advisors were largely positive, but in some instances, students describe their advisors misadvising them or just showing a general lack of care. In 2001, 52 percent of Southwest University students indicated that the academic advising that they had received was good (Campus Climate Study, 2001). Further, 84 percent of students

indicated that academic advisors at Southwest University were knowledgeable more often than not about general education requirements and 83 percent knowledgeable about degree requirements (Student Experiences Questionnaire, 2004). The same survey indicated that 72 percent were either somewhat or very satisfied with the advising that they had received (Student Experiences Questionnaire, 2004). Since advising is so intricately tied with persistence, students' satisfaction levels with advising are important for Southwest University to monitor. Good advising will lead students to take the appropriate courses necessary to matriculate, while bad advising could influence a student to leave the institution altogether.

The second theme described the general helpfulness of student services staff at Southwest University. Students who were satisfied with their experiences with student services staff described an understanding and general helpfulness of the staff regardless of the question or concern. In the few instances where students were not satisfied with the service provided, they described being constantly referred to new people and the lack of organization of the staff with which they had contact. Generally, student services were seen as a strength at Southwest University (Student Satisfaction Inventory, 2004). Many of the student services areas received satisfaction scores of at least 4 out of 5 points from students including the Disability Resource Center, Student Programs, Campus Recreation Center, Multicultural Programs and Services, Sexual Assault Center, and Campus Health (Campus Climate Study, 2001). By providing a positive experience outside of the classroom, Southwest University can help support students when they are presented with challenges that they are not able to easily overcome.

The third theme to emerge was students' experience with Residence Life. A significant number of respondents were able to describe the positive interactions that they had with Residence Life staff, and more specifically with their Resident Assistants. They described that a Resident Assistant helped them to feel connected to the campus by providing a sense of belonging particularly during their first few months on campus. Instances where respondents indicated negative interactions with Residence Life staff was either where the Resident Assistant was absent from the community or staff in the hall did not help the student by addressing roommate concerns. Research supports these findings as Southwest University students rated their overall experience with their Resident Assistant as a 5.86 out of 7 (ACUHO/EBI survey, 2005). As research supports the role of on-campus housing in student grade point average, persistence, and matriculation compared to off-campus living (Pascarella & Terenzini, 1991), Southwest University must continue to find ways to provide similar experiences to off-campus freshmen in order for them to persist. Without the support of staff in their living environment, off-campus students are likely to feel a sense of disconnection.

The final theme that emerged was that a portion of the respondents had limited or no experience with student services. Most of the students who responded this way did have some experience with student services but they described it as mostly negative. Because of a limited negative encounter, several students described not seeking out further support from student services staff. One possible explanation for students indicating that they had had no experience with student services is that they did not understand all the different offices that would be considered student services on campus.

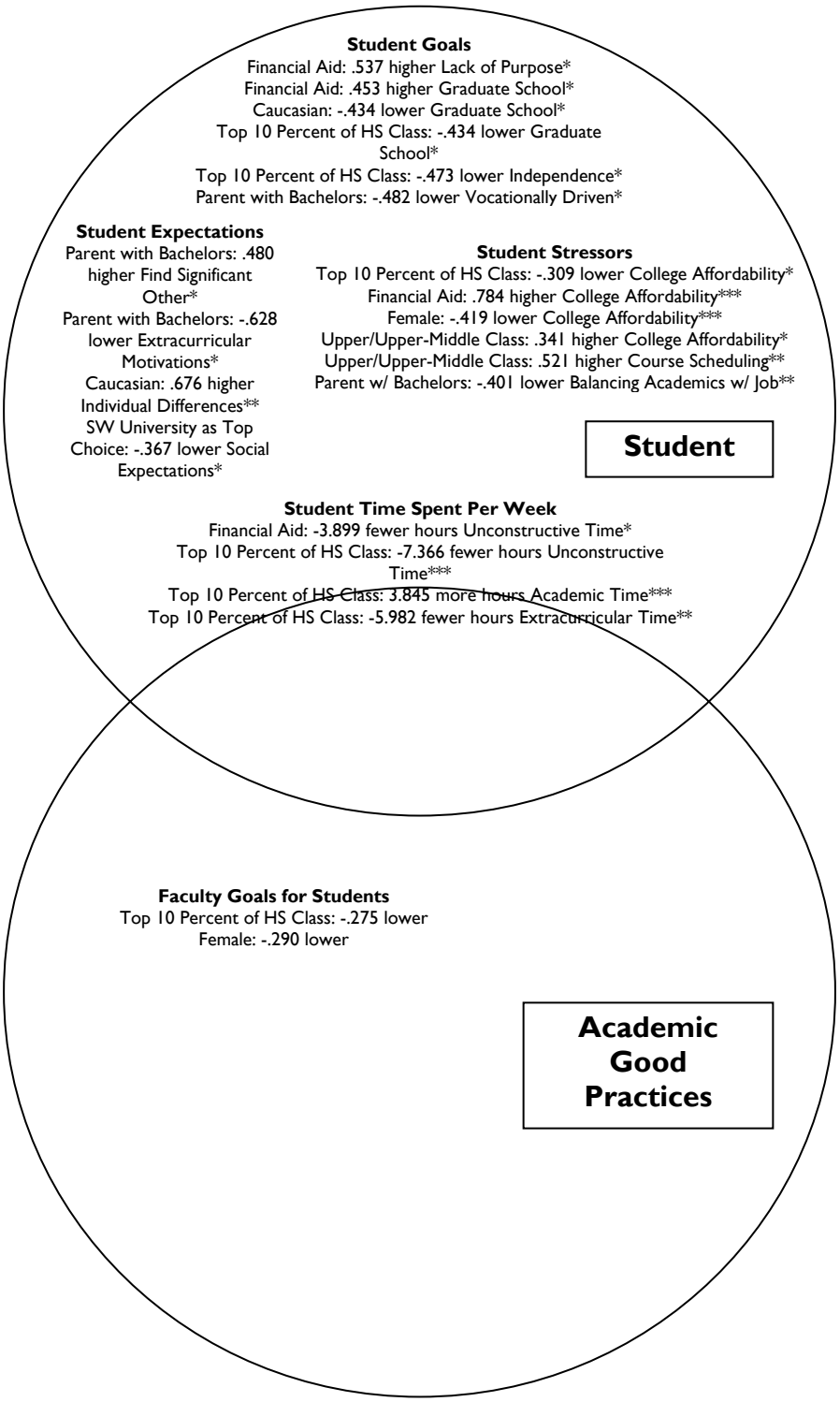
There is little previous research to support this finding, but it is one that must be considered important. If some students are not seeking out student services, they likely are going to have a difficult time navigating Southwest University. These students would epitomize the group that would be at risk of not persisting. Student services staff at Southwest University must find ways to reach out to all students, advertise services, and make students feel like they matter.

Discussion

The findings from this study offer mixed results as related to the research question: To what extent do student characteristics relate to those experiences that the Retention Self-Study Framework suggest promote retention (Woodard, Mallory, & DeLuca, 2001)? From a statistical standpoint, only 22 of the 140 coefficients were significant within the student sphere and only two of fourteen were significant within the academic sphere. The seven coefficients within the institution sphere and the 14 within the student services sphere yielded no significant results. However there were several themes that should be noted that will be analyzed in this discussion. Figure 5.6 illustrates the statistically significant results of the Retention Self-Study Framework.

The findings from this study beg the question: what do the results indicate about the Retention Self-Study Framework? It is impossible to speak to the effectiveness of the Retention Self-Study Framework since this study did not study the effectiveness of the model for student retention. This study does suggest the value of the Retention Self-Study Framework as a model to measure student retention. Each sphere of influence effectively described various factors of influence on retention and the results of the

Figure 5.1: Retention Self Study Framework Results



survey showed that each sphere did have some degree of impact on the experiences of students at Southwest University. For each student characteristic, there were various effects on the different characteristics and spheres of influence of the Retention Self-Study Framework. Although the institution and student services spheres did not yield any significant quantitative results, this might indicate that these questions simply did not accurately reflect students' experience. Certainly the qualitative results did indicate some trends about which students clearly had opinions.

It might be valuable to consider whether or not the Retention Self-Study Framework appropriately illustrates the influence of the four spheres. When studying retention, there are two critical factors relevant prior to a student entering higher education. One is the student. The second is the institution that the student ultimately attends. The first is accurately described by the Retention Self-Study Framework's student sphere. Various student characteristics impact their ability to persist. Woodard, Mallory, & DeLuca (2001) described those characteristics in detail and this study analyzed those characteristics based on a population of undeclared students at Southwest University. The other factor is the institution itself, which includes the institution, academic, and student services' spheres. Each of these spheres is, in a sense, independent, yet also interdependent of one another as is illustrated by the overlapping spheres of the Retention Self-Study Framework.

It might be useful in the future to expand upon the Retention Self-Study Framework to understand the type of influence each sphere has on a single student's persistence and retention. The three spheres (institution, academic, and student services)

describe things that only the university control – characteristics that are external to the student. The student sphere describes things that can be influenced both externally by the institution and internally by the student. For example, take two possible characteristics: a student from a lower socio-economic status and a student who has no goals in attending college. The first characteristic, socio-economic status, is one that the institution can help to influence by offering the student increased financial aid. The second characteristic, having no goals in attending college, is one that ultimately can only be affected by the student. The institution can provide career counseling and academic advising to help the student identify his/her interests, but if the student truly determines that he/she has no goals in attending college, this may not change. Therefore, it needs to be understood that with the student sphere, there are really two types of influence: external and internal. The institution can do things to influence the student's characteristics, but the student also has a role in influencing his/her desire to persist.

Knowing that students play a role in their own persistence, institutions like Southwest University have only one way to control for the characteristics that are negatively correlated with persistence: admissions. Depending on how much institutions want to influence the student sphere, they could potentially deny admission to students who would be considered 'at risk' for persistence. While it would be nearly impossible to ensure 100 percent accuracy in identifying these students, one can look to highly selective institutions and understand how they ensure such high persistence. Granted, the drawback to controlling admissions is that certain populations of students would be increasingly less likely to join the ranks of higher education and these often times are

minority students. This study does provide evidence that institutions like Southwest University must target certain populations as each population has very specific outcomes and effects based on the institution, student services and academic spheres. For each specific student group, this study has found factors that influence student's experience at Southwest University. It is critical that Southwest University look at addressing these concerns in order to retain each specific group into the future.

Among the findings with significance there were some larger themes that should be noted. For example, students with some degree of financial aid had both a higher value on Lack of Purpose and Graduate School. This was interesting since the same group seemed to be doing two different things. These two divergent paths represented two different groups of students among the same identity. Students who came to Southwest University with some degree of financial aid either did not have specific goals in attending college or anticipated pursuing education beyond their Bachelors degree. These two paths represented students who chose a course of action based on a cost-benefit analysis. Graduate school was also significant for both Caucasians and students in the top ten percent of their high school classes. For both groups, they had a lower value than their counterparts, which seemed to be a surprising outcome. Understanding students' goals in attending college must be further studied in order to understand how Southwest University might be influential on student outcomes.

Another statistically significant theme from the research was the groups that did not identify College Affordability as a stressor. Both females and students from the top ten percent of their high school class identified a negative correlation whereas students

with some degree of financial aid and upper or upper middle class students had a positive correlation. Therefore, females and students from the top ten percent of their high school class were not as concerned by college affordability as their counterparts. As indicated previously, this might be a reflection of their anticipated earnings compared to the price of education. For students with some degree of financial aid and students from upper or upper-middle class families they were more concerned about the cost-benefit analysis of their education. It is therefore necessary for officials at Southwest University to help students to see the benefits of an education compared to their ability to afford it now in order for them to persist.

In analyzing 25 OLS regressions together (APPENDIX G & H), there were a few themes that suggest a general trend although they are not statistically significant. It is important to look at these trends in order to further understand the findings and determine if there are additional implications for future research and practice.

First, when analyzing each of the seven independent variables and the 25 coefficients that they each generated, it is noticeable that both the students who had chosen Southwest University as their top choice and students from the top ten percent of their high school class yielded a significantly higher number of negative correlations than positive. In fact, each independent variable yielded only eight positive correlations out of 25. There are several different possible reasons for this finding. First, both groups of students might not feel that Southwest University is meeting their needs. By generally having negative correlations to the dependent variables, these students might feel that Southwest University is failing to meet the expectations that they came with. Second,

these negative correlations might reflect that students feel that they made a bad choice in attending Southwest University. Twelve percent of Southwest University students had indicated they would probably or definitely choose not to attend the institution if they could start college over again (Student Experiences Questionnaire, 2004). If these students reflect this percentage of students, than Southwest University needs to determine how they are failing these students' expectations. Finally, Southwest University may be failing to cater to the top students and are too focused on the students who would be considered at greater risk. Potentially by not focusing on all of the students, Southwest University might be unintentionally driving some of its top students to leave.

Another interesting trend to come from the 25 OLS regressions was related to women. Women had indicated that they were spending more time on all three of the categories: academic, extracurricular, and unconstructive time. It is not surprising that women spend more time on academic activities, as they out-graduated men 4026 to 3465 in 2004 (Fact Book, 2004). Nor is it surprising that women were spending more time on extracurricular activities. However, it was surprising that women were spending more time on unconstructive activities. Since the research indicates that men spend more time in many of the activities that make up this category (Astin & Oseguera, 2003), it would seem counterintuitive unless this population were uncharacteristic of national trends. Examining the coefficients that made up the 25 regressions for women, it is interesting that both of the academic sphere components were negative (one that was significant at one percent). If women's experiences in the classroom are both negatively correlated compared to men's experiences, it would be likely that women might not be matriculating

at a higher rate than men at Southwest University. However, this is not the case. One might notice the positive correlations for women related to the institution sphere that might be making up the difference in women's responses regarding the academic sphere. Regardless, the study of gender and how that influences retention might be something Southwest University would want to consider for future research.

Another theme was that Caucasian students, students who chose Southwest University as their top choice, and students from the top ten percent of their high school class all had negative coefficients related to the two components that made up the academic sphere. This might reflect these groups of students' lower satisfaction with their classroom experiences. Based on both the quantitative and qualitative data, it does seem to indicate a need for consistently higher levels of quality teaching at Southwest University in order to help students succeed.

A final interesting trend is that Caucasians had positive coefficients for five of the six expectation components. The one coefficient that was negative was Make A Name For Self, which described being a good citizen. The other five coefficients were each related to a student's social expectations or expectations after college. It could be argued that many of these expectations would be considered 'hedonistic' by Astin (1993). Many of these coefficients might negatively interfere with a student's ability to succeed and persist.

Implications for Practice

Based on the findings of this study, several implications should be considered by higher education faculty, staff, and administrators in the future for each of the four

spheres.

Institution Implications

Institutions have many obligations to help increase retention rates. The first suggestion is that learning communities need to continue to expand. Learning communities offer students opportunities to learn outside of the classroom in a variety of settings. The literature offers evidence as to the strengths of developing learning communities (Kuh, et al., 2005; Pascarella & Terenzini, 2005) whether through course clusterings or through living learning communities in residence halls. Students who are able to intentionally interact with one another are able to problem-solve and learn more effectively as a result.

Examining how to best reach commuter students, particularly during the first year is also important. Recognizing Southwest University is not different from previous research on the persistence rates of on-campus versus off-campus students, examining the need for mandatory live-in requirements might be something the institution would want to investigate.

Next, Research-Extensive institutions must become more deliberately engaged with students. Engagement needs to occur with all types of students since some of the findings of this study indicated the students who would be less 'at risk' are not satisfied with the university's role. This requires the institution to spend more resources on providing students more personal attention. Students through this study indicated their frustrations with either being treated as a 'number' or being 'shuffled' to various offices without being provided any assistance or answers. The institution must find a way to

focus on each student as they enter an office and make them the first and only priority until the student's question is resolved.

Building on that point, Research-Extensive institutions have an opportunity, by their shear size, to use their great diversity to their advantage by helping students understand the opportunities that exist on a large campus to interact with others with dissimilar backgrounds. Research-Extensive universities likely have hundreds of student organizations to get involved with as well as lots of resources and support offices to help address all sorts of student needs.

Finally, institutions must help first-generation college students overcome cultural capital (Bordieu, 1973). Students who do not have mentors in their lives who also attended college may struggle to navigate the complexities of a large institution. In fact, just the complexities of applying for financial aid can become too much for some students to navigate. Institutions that outreach to first-generation college students likely will see their retention rates rise as a result of helping a population that is most at risk.

Faculty Implications

Research-Extensive institutions must find ways to create incentives for faculty who spend time with students outside of the classroom and even outside office hours. Research (Astin, 1985; Tinto, 1993; Pascarella & Terenzini, 2005) has shown that students are more likely to persist when they become engaged with faculty outside of the classroom. Further research (Upcraft, et al., 1989; Kuh, et al., 2005) has also shown instances of faculty interacting with students through living-learning communities and student organizations to be positively correlated with persistence and matriculation. It is

imperative that institutions begin to recognize the need to encourage faculty to engage with students outside of the classroom in the truest form of higher education.

Research-Extensive institutions must find ways to encourage excellence in teaching. This is a challenge when it is readily understood in Research-Extensive institutions that faculty are rewarded for dollars generated through research grants. However, it must be recognized that undergraduate education suffers as a result. Faculty must find ways to take traditional lectures and evolve them into classes that provide more interactive experiential learning opportunities for students. It is in these instances that students are most engaged and, as a result, better able to succeed in the classroom. Further, faculty must find ways to meet the expectations of all students as some of the findings of this research indicated that some students were not feeling that their expectations were being met.

The makeup of the faculty should be reflective of the greater student body. If an institution chooses to become more diverse, such as Southwest University who aspires to be a Hispanic Serving Institution, it needs to work to have faculty who reflect a similar diversity to its student body.

Finally, faculty needs to develop courses that are intentional and that challenge all students. They need to articulate clear learning outcomes and be able to effectively assess whether or not those outcomes were met. Only when faculty understands what their audience is experiencing will they truly be meeting students' expectations for course design. Through deliberate trial and error, faculty can develop a higher-quality curriculum.

Student Services Implications

Student services staff will be an increasingly important component of the outreach efforts that any institution makes regarding retention. One example would be student services staff providing information to students early in their collegiate experience about graduate school. If a student starts to see graduate school as an option that they want to pursue, they will be that much more driven to succeed with their undergraduate education.

Staff needs to understand the influence of their interactions with students. If they begin to see that each interaction is part of the larger retention efforts of the university then the results should begin to reflect that change in thinking. Staff should understand that their roles go beyond just providing good customer service, but are also part of the larger retention strategy of the institution. If they understand their roles, then their impact can be greatest.

Next, student services offices need to be more proactive with students. As staff notice concerns in students' abilities to succeed at the institution, they need to be willing to intervene and help assist the student. Student services staff often interact with students in environments that often faculty do not. Waiting for the student to initiate and seek help is not an option and needs to be avoided. Too often, student services staff will only wait until students come to them; rather than proactively seeking out students when they know issues exist that they could help to resolve.

Finally, student services staff can help students begin to prepare for their career by assisting them through career self-assessments and developing electronic portfolios.

By working with students to prepare them for a career, student services can help to promote retention by getting the student to see themselves in a career that requires the degree that they are pursuing.

Student Implications

Students play a key role in their own retention. Students need to understand how they can effectively connect with other students and the campus community without adversely affecting their persistence. Students need to understand what activities might hinder their success, such as consuming alcohol and attending parties. At the same time, students need to understand that getting involved in learning communities and student organizations offer better connections to staff and faculty, each which have been positively correlated with retention and matriculation (Pascarella & Terenzini, 2005). If students begin to recognize just how much they are putting their college careers in jeopardy they might be more apprehensive about certain activities, particularly if there are positive alternatives.

Students also need to understand the benefits of connecting with staff and faculty. Most understand that meeting with staff and faculty is encouraged but students do not connect it to how these meetings can actually affect their persistence and sense of connection to the institution. If students are informed of the extensive research that has been conducted on retention and persistence (Astin, 1985; Tinto, 1993; Pascarella & Terenzini, 2005), they might begin to take advantage of the opportunities to interact with staff and faculty.

Implications for Future Research

This study offers insight as to the various student characteristics that correlate with factors from the Retention Self-Study Framework. While the study succeeded in achieving its goal, and in adding to the existing gaps in the literature on student persistence, the results are somewhat limited by the fact that the study focused on only a single institution. Replicating this study at other institutions and with specific declared students, would be useful and provide a more complete picture of the factors and/or conditions that play a role in freshman persistence. It also raises several other intriguing questions for future research.

This study provides description of the motivations students have for attending college but further research is needed. Understanding students' motivations will help institutions determine how to retain the students that they are admitting today. Research should explore what motivations are linked with persistence and which are not.

One conclusion this study yielded was that institutional impact on students might not always occur within the first year. Therefore, a longitudinal study exploring where impact is most likely to occur for various students would be highly enlightening to administrators in higher education. For example, if the impact of faculty is not felt until the junior year when many students are in their degree program, then institutions might want to reconsider how to deliver more intentional interactions between faculty and students at an earlier time in the students' career.

The qualitative portion of this study provided several intriguing themes and yet it was not primarily a qualitative study. An extensive qualitative study researching the

Retention Self-Study Framework (Woodard, Mallory, & DeLuca, 2001) might provide a more complete understanding of the retention efforts of an institution. It also might be useful in determining the extent to which the Retention Self-Study Framework might be used in the future.

Further study of the Retention Self-Study Framework utilizing the survey might ultimately prove useful to administrators. In the development of a tool in the future, the survey would need to be rewritten to draw out more data points and ultimately get to some of the experiences that were only drawn out through qualitative questioning.

Finally, it would be very interesting to conduct this same research on students who do and do not persist in order to understand the differences that exist between persistence and dropping out. Ironically, this study began with this question in mind but because studying students who leave an institution can be a challenge to gain access – gaining access those students who had left proved to be impossible with the limited responses. Nonetheless, a survey that helps institutions understand the variables that affect persistence by studying those who do not stay would be extremely valuable.

Conclusion

Over the past forty years, many researchers have looked at various models to understand why some students persist through college and others do not. This study looked at one of the most recent propositions to the literature that helps to explain retention. The Retention Self-Study Framework used as its basis an extensive history of retention literature and research. By studying which student characteristics correlate with which factors on the Retention Self-Study Framework, this research offered new insight

to persistence efforts. It is the hope of the researcher that this study helped to illuminate new avenues from research for future scholarship on student persistence and how the Retention Self-Study Framework might one day prove to be a useful tool for institutions to understand their efforts to retain students.

APPENDIX A

STRATEGIC MASTER PLAN RECOMMENDATIONS, 1998

1. Comprehensive, standardized evaluation of all retention programs.
2. Assign each entering freshman a faculty advisor and assess the quality of faculty advising.
3. Double the number of both Faculty Fellows and University Partners Advisors.
4. Add sufficient residence hall space to meet freshman demand; consider requiring all freshmen to live on campus.
5. Finish Gatekeeping Course Study.
6. Increase preparation of incoming students: SAT of 1150, GPA of 3.50.
7. Increase both merit and need-based student financial aid substantially.
8. Expand Early Outreach with feeder schools in low-income areas.
9. Expand transition programs with Pima and Maricopa Community Colleges.
10. Enhance and expand New Start program.
11. Provide academic tutoring for mathematics, languages, writing skills, and T1 courses, setting as a goal the availability of tutoring for any student from 8 a.m. to 12 p.m.
12. Complete the Integrated Learning Center (ILC) project.
13. Expand efforts to meet the needs of minority students by enhancing retention-focused activities of colleges and support units.
14. Convene “University Conversation on Retention” for spring 1999.

APPENDIX B

SUMMARY OF RETENTION GOALS, STRATEGIES AND ACTION PLANS

Goal 1: Increase the retention rate for all first-time, full-time freshmen to 85 percent by 2010.

A. Reduce number of students on academic probation after their first year to 15 percent by 2007 and 10 percent by 2010.
    a. Use a pre-enrollment instrument to identify potentially at-risk students prior to their enrollment at Southwest University.
    b. Distribute a mid-semester survey to 'gauge' the academic and social integration of students.
    c. Develop a student success course to be made mandatory for probationary students.
    d. Develop a contractual obligation with specific corrective actions for students on academic probation after the first semester.
    e. Develop an early alert on-line system to identify students who are struggling at any time during the semester.
    f. Contact students who have failed to register during their priority registration period.
B. Increase engagement of new students.
    a. Send 'Welcome' postcard from University President and Student Body President.
    b. Link University Welcome website to New Students tab on University home page.
    c. Create University specific common book: How to be Successful at Southwest University.
    d. Coordinate notification of existing/new events through Finish in Four calendar.
    e. Expand Student Link to become the central means of dispersing information to students by 2007.
        i. Implement an archive of messages to students which is accessible on-line to all staff and faculty.
    f. Develop Meet Your Faculty program.
    g. Expand the use of learning communities at Southwest University.
    h. Increase student participation in academic support services.
    i. Establish a tutoring advisory committee consisting of representatives from Southwest University tutoring centers/programs.
    j. Increase the frequency and quality of on-going non-alcoholic late-night social activities for students living on-campus.
    k. Engage students in out-of-class social activities and opportunities.
C. Improve student satisfaction with Southwest administrative processes.
    a. Continue to increase availability of seats in high demand courses.

b. Provide better training to staff so gaps in ‘run around’ dissatisfaction decreases.
c. Establish a competitive grants program to fund quality improvement initiatives campus-wide.
d. Provide prompt decisions and communications in matters of Financial Aid.
e. Revise and modify, as needed, existing student surveys. Increase the dissemination and availability of results for program evaluation and research purposes.

D. Assist the Southwest University community in understanding the importance of student retention and to have all make significant contributions to it.
   a. Create the “IMJ Difference: It’s My Job to Make a Difference” permanent campaign.
   b. Introduce a presentation on retention in both new faculty and new staff orientations.
   c. Create and maintain the ‘Southwest University Retention Guide’.
   d. Develop the ‘This College Makes a Difference’ campaign.
   e. Develop the ‘Why is Retention Important and How Do You Contribute’ presentation.

E. Expand number of students placing at pre-college level Mathematics.
   a. Expand early math readiness assessment.
   b. Provide non-credit alternatives for students to sharpen their basic mathematical skills.
   c. Continue to develop innovative ways of teaching entry-level mathematics at Southwest University.

APPENDIX C

SUBJECT'S DISCLAIMER FORM

Institutional Assessment of Student Retention

I am being invited to participate voluntarily in the above-titled research project. The purpose of this project is to determine the factors that lead to students' decisions to ether stay or to leave the University of Arizona during the course of their first-year.

I am being invited to participate because I am a first-year college student who was or still is enrolled with the University School and am 18 years of age or older. Approximately 1800 subjects will be enrolled in this study. If I agree to participate, I will be asked to consent to the following: a standardized 15 minute web-based survey.

I will not be asked to enter identifying information (name, student ID number, etc) on the survey website itself. Data from individual surveys will be stored in a secure server in the School of Education. Only the Principal Investigator, Ray Gasser, will have access to the information. Aggregate data only will be shared with University of Arizona Administrators in an effort to affect retention trends at the University of Arizona.

There are no known risks involved in this survey. The potential broader benefit being that the larger University will benefit from this knowledge and perhaps student retention will be improved.

At the conclusion of the survey, I may enter my name, phone number, email on a separate server in order to become eligible for several drawings for a $20 gift card or an iPod Shuffle.

I can obtain further information from the principal investigator, Ray Gasser (Ph.D Candidate) at (520) 626-3047. If I have questions concerning my rights as a research subject, I may call the Human Subjects Protection Program office at (520) 626-6721.

Please Click this Button if You Consent to this Survey

Please Click this Button if You Do Not Consent to participate in this Survey

APPENDIX D

RETENTION SELF-STUDY SURVEY

Please complete the survey to the best of your ability. The survey should take approximately 15 minutes to complete.

Section 1
Demographic Information

1. Age
- ☐ 16 or younger
- ☐ 17
- ☐ 18
- ☐ 19
- ☐ 20
- ☒ 21 or older

2. Race/Ethnicity
- ☐ African American or Black
- ☐ Alaska Native or American Indian
- ☐ Asian American
- ☐ Cuban
- ☐ Mexican American/Chicano
- ☐ Multiracial
- ☐ Other Hispanic/Latino
- ☐ Pacific Islander
- ☐ Puerto Rican
- ☐ White
- ☐ Choose Not to Respond

3. Gender ☐ Male ☐ Female

4. Is English your native language? ☐ Yes ☐ No

5. Family's Level of Education (Please indicate the highest level of education achieved)

	Father	*Mother*	*Sibling (with highest education)*
Less than High School	☐	☐	☐
Some High School	☐	☐	☐
Completed High	☐	☐	☐

School			
Received GED	☐	☐	☐
Some Community College	☐	☐	☐
Received Associates Degree	☐	☐	☐
Some College	☐	☐	☐
Received Bachelors Degree	☐	☐	☐
Masters or Professional Degree	☐	☐	☐
Doctoral Degree	☐	☐	☐
Technical Degree	☐	☐	☐
N/A	☐	☐	☐

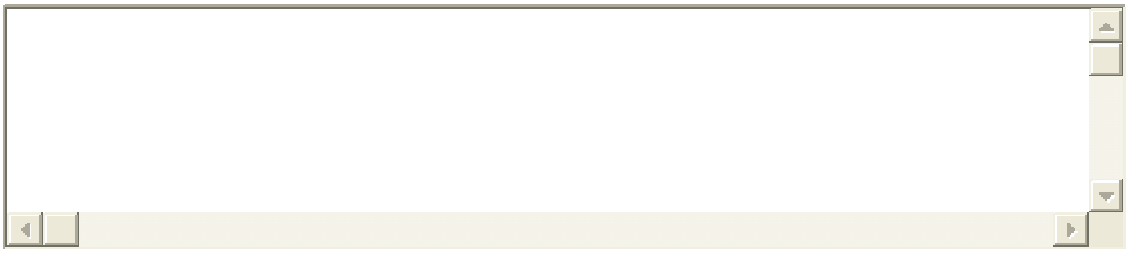
6. Was Southwest University your:

☐ 1st Choice ☐ 2nd Choice ☐ 3rd Choice ☐ Less than 3rd Choice

7. Are you still attending Southwest University?

☐ Yes ☐ No

8. If you answered NO to question 8, please describe below the reason(s) why you left Southwest University?



20% Complete

Please Hit Return to Continue to Section 2

Section 2

The following section will ask you to describe the experiences and characteristics that you brought to Southwest University.

1. I would describe my immediate family's socioeconomic status as:

☐ Upper Class ☐ Upper Middle Class ☐ Lower Middle Class ☐ Lower Class

2. During your experience in college, how many **hours** did you spend during a typical week doing the following activities? (If not applicable, please signify with 0 hours)

0 Studying/Homework
0 Volunteer Work
0 Socializing with Friends
0 Participating in student organizations
0 Talking with Faculty
0 Watching television
0 Exercising or participating in sports
0 Reading for pleasure
0 Partying/Drinking alcohol
0 Playing video/computer games
0 Working (for pay)
0 Praying or meditating

3. My family supports me both financially and emotionally.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐ N/A

4. Type of high school attended:

☐ Public
☐ Public (Charter or Magnet School)
☐ Private (Non-Religiously Affiliated)
☐ Private (Religiously Affiliated)
☐ Home-school

5. At high school graduation, my grade point average (GPA) was: ____

6. Standardized test score(s):

ACT ☐ (if applicable)

SAT ☐ (if applicable)

7. My class rank at high school graduation was:

- ☐ Top 10 Percent
- ☐ Between Top 10 and 30 Percent
- ☐ Between Top 30 and 70 Percent
- ☐ Between Top 70 and 90 Percent
- ☐ Bottom 10 Percent
- ☐ Unknown

8. My goals in attending college are (rank top 5; 1 being most important- leave remaining 5 goals unranked using NR) to:

- ☐ Graduate from College
- ☐ I had no goals in attending college
- ☐ Help me find a job
- ☐ Parents wanted me to go
- ☐ Make friends
- ☐ Wanted to get away from home
- ☐ Attend graduate school
- ☐ Be able to make more money
- ☐ Socialize/party
- ☐ Find purpose in my life

9. Prior to attending, what were your expectations of college? (rank top 5; 1 being most important)

- ☐ To prepare me for a good career
- ☐ To make good friends
- ☐ To find a job while at school
- ☐ To go to good parties
- ☐ To find a significant other
- ☐ School spirit
- ☐ To get involved in clubs/student organizations
- ☐ To participate in activities
- ☐ To meet with faculty
- ☐ To be a student leader
- ☐ To meet with staff
- ☐ To be challenged academically
- ☐ To fit in
- ☐ To participate in athletics/recreation
- ☐ To stand out
- ☐ To learn about opinions/beliefs different from my own

10. Prior to attending college, were there any things that caused you stress or concern about your abilities to succeed in college? (rank top 5; 1 being most important)

0 Accessibility on campus	0 Finding others like me
0 Balancing academics with job	0 Getting the classes that I want
0 Being academically unprepared	0 Getting involved on campus
0 Being discriminated against because of my identity	0 Learning style accommodations
0 Choosing a major	0 Leaving friends from high school
0 College affordability	0 Living situation
0 Difficulty making friends	0 Long distance relationship
0 Distance from home	0 Parental pressures/concerns
0 Finding a job	0 Roommate conflicts

11. What percentage of your ability to pay for college was subsidized by loans or other financial aid?

- 0%
- 1-25%
- 26-50%
- 51-75%
- 76-100%

	Strongly Agree	Agree	Disagree	Strongly Disagree
12. I accomplish any goals that I set for myself.				
13. I take responsibility and am usually happy with the choices that I make.				

	Not committed at all	Some sense of commitment	Committed	Very Committed
14. How would you describe your sense of loyalty/commitment to the Southwest University?				
15. How committed are you to achieving your education goals (independent of your commitment to the Southwest University)?				

40% Complete

Please Hit Return to Continue to Section 3

Section 3
The following section will ask you to describe the institution's characteristics. Specifically, what have you learned and experienced about being a student at the Southwest University.

1. I can describe the institution's mission.

☐ Yes ☐ To Some Degree ☐ No

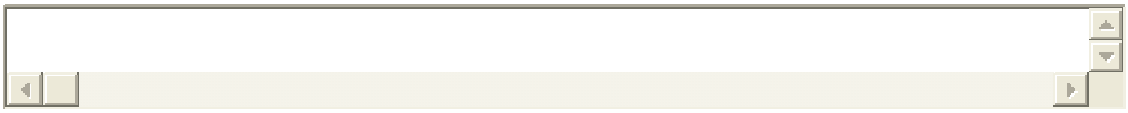
2. I feel that the institution invited and valued my input in campus decision-making.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

3. Southwest University has made me feel like I belong here.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

4. Describe how Southwest University has fostered and/or hindered your sense of belong at the institution.



5. The institution has fostered a sense of community by:

☐ Accentuating differences among students ☐ Neither

☐ Minimizing differences among students ☐ Both accentuating and minimizing differences among students

	Strongly Agree	Agree	Disagree	Strongly Disagree
6. I have been valued by the institution for the experiences and knowledge I brought to the institution.	☐	☐	☐	☐
7. I am encouraged to grow beyond my experiences and past knowledge that I brought to the institution.	☐	☐	☐	☐

60% Complete
Please Hit Return to Continue to Section 4

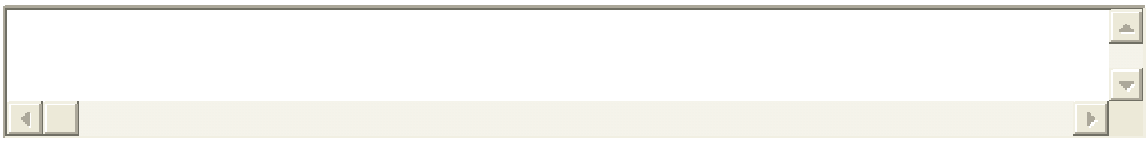
Section 4

The following section will ask you about your experiences with your faculty and academic support services that you have experienced first-hand at Southwest University.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. My professors/instructors set high goals for me in the classroom.	☐	☐	☐	☐
2. My professors/instructors clearly communicate classroom goals and expectations to me.	☐	☐	☐	☐
3. My professors/instructors offer experiential opportunities (laboratories, field trips, case-studies, non-lecture) to test/apply theories, principles, or knowledge.	☐	☐	☐	☐
4. My professors/instructors recognize different learning styles (verbal, visual, kinesthetic) of students in the classroom and provide a variety of teaching methods (verbal, visual, kinesthetic).	☐	☐	☐	☐
5. My professors/instructors help me to effectively manage my time in class and on assignments over the course of the term (semester, quarter).	☐	☐	☐	☐
6. I engage in out-of-class interaction with my professors/instructors.	☐	☐	☐	☐
7. My professors/instructors encourage working collaboratively with others students from class.	☐	☐	☐	☐
8. My professors/instructors encourage active participation in class through the use of interactive teaching methods (non-lecture).	☐	☐	☐	☐
9. My professors/instructors encourage learning through the use of activities that require critical thinking and/or problem-solving skills (case study, essay).	☐	☐	☐	☐
10. My professors/instructors offer supportive feedback on my performance in class and on assignments/tests.	☐	☐	☐	☐

11. My professors/instructors encourage me to bring skills and knowledge outside of the classroom into classroom learning/discussion.	☐	☐	☐	☐

12. Please describe 2 or 3 examples that best characterize your experiences with faculty.



80% Complete
Please Hit Return to Continue to Section 5

Section 5

The following section will ask about your experiences with student services staff at Southwest University. Student services staff are professionals who offer services that help you succeed at Southwest University. For example, a Resident Advisor, a Financial Aid Officer, an Admissions Counselor, an Orientation Leader, or an Academic Advisor would be the types of staff that meet this criteria. Examples of student services offices are Admissions, Campus Recreation, Career Services, Commuter Student Affairs/Off-Campus Housing, Counseling Center, Dean of Students, Financial Aid, Housing & Residence Life, Multicultural Programs and Services, Orientation, Student Health Center, and Student Union and Leadership Programming.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
1. I am encouraged by student services staff to bring my personal experiences into the classroom.	☐	☐	☐	☐
2. I am encouraged by student services staff to consider others' perspectives.	☐	☐	☐	☐
3. I am encouraged by student services staff to apply new ways of thinking about my life.	☐	☐	☐	☐
4. From my perspective, student services staff develop partnerships with others on campus to promote student learning.	☐	☐	☐	☐
5. I believe, from my experience, that university financial resources and staff are focused on learning environments (i.e. computer labs, libraries, websites, student services) throughout the campus.	☐	☐	☐	☐
6. I am challenged by student services staff to be honest on and off campus.	☐	☐	☐	☐
7. I am challenged by student services staff to be fair or just in my decision-making on and off campus.	☐	☐	☐	☐
8. I am challenged by student services staff to show dignity to those around me on and off campus.	☐	☐	☐	☐
9. I believe, from my experience, that student services staff actively support student equality.	☐	☐	☐	☐
10. At Southwest University, expectations for student performance are high.	☐	☐	☐	☐

11. I feel supported by student services staff.	☐	☐	☐	☐
12. I feel supported by other students at the institution.	☐	☐	☐	☐
13. The values of the institution reflect who I am.	☐	☐	☐	☐
14. My academic and out-of-class experiences make me feel part of a campus community.	☐	☐	☐	☐

15. Please describe 2 or 3 examples that best characterize your experiences with student services staff.

100% Complete
Please Hit Return to Submit All Materials.

APPENDIX E

INITIAL E-MAIL COMMUNICATION TO STUDENTS

May 2005

Dear student,

You have been contacted because of your affiliation (at some point during the 2004-2005 academic year) with the University School at Southwest University. I am a Doctoral student in the Higher Education program at Southwest University and am soliciting your help. I am conducting a study of factors that affect students' overall experiences at Southwest University and which variables contribute to s student wanting to stay or leave an academic institution. I am interested in your experiences as a first-year student. My goal would be to share the results of this study with University administrators in an effort to explain student satisfaction with their SU experience.

Please participate in this important study by visiting the website link below to complete a 15-minute survey.

(insert link here).

Participants who complete the survey within 3 days of this email will be entered into a drawing to win a gift certificate for an iPod Shuffle.

I appreciate your support in this research.

Ray Gasser
Doctoral Student

APPENDIX F

FOLLOW-UP E-MAIL/LETTER TO STUDENTS

May 2005

Dear student,

Two weeks ago, I solicited you for your help with research that I am currently conducting regarding student satisfaction with their SU experience and which variables contribute to a student's wanting to stay or leave an academic institution. You were contacted because of your affiliation (at some point during the 2004-2005 academic year) with the University School at the Southwest University.

I am conducting a study of factors that affect students' overall experiences at the Southwest University. I am interested in your experiences as a first-year student. As a fellow student, your help is critical to providing the most complete picture of first-year students that are or were in the University School. My goal would be to share the results of this study with University administrators in an effort to explain student satisfaction with their SU experience.

Please take 15 minutes to participate in this important study by visiting the website link below.

(insert link here).

Participants who complete the survey within 3 days of this letter will be entered into a drawing to win a gift certificate for $10.

I appreciate your support in this research.

Ray Gasser
Doctoral Student

APPENDIX G

COMPLETE OLS REGRESSIONS RESULTS

				Independent Variables								
				Caucasian	Southwestern University as Top Choice	Top 10 Percent of High School Class	Some Degree of Financial Aid	Parents with Bachelors	Female	Upper or Upper-Middle Class	Adjusted R-square	N
Dependent Variables	**Student Sphere**	**Goals**	Lack of Purpose	-.346 (.271)	.349 (.257)	-.393 (.242)	.537* (.281)	.249 (.281)	.195 (.283)	-.143 (.278)	0.038	247
			Financially Driven	.254 (.328)	.141 (.311)	.170 (.294)	.139 (.340)	-.339 (.340)	.643* (.343)	.370 (.336)	0.037	247
			Independence	-.164 (.304)	-.351 (.289)	-.473* (.272)	-.369 (.315)	-.385 (.316)	-.004 (.318)	-.018 (.318)	0.033	247
			Vocationally Driven	.346 (.275)	-.381 (.261)	-.264 (.247)	.335 (.285)	-.482* (.286)	-.072 (.288)	-.038 (.283)	0.032	247
			Graduate School	-.434* (.248)	.105 (.235)	-.434* (.222)	.453* (.257)	-.130 (.257)	-.056 (.259)	-.165 (.254)	0.04	247
		Expectations	Make A Name for Self	-.274 (.382)	-.267 (.363)	-.440 (.342)	.263 (.396)	.147 (.397)	.166 (.400)	.443 (.392)	0.021	247
			Career Driven	.334 (.390)	-.057 (.370)	-.240 (.349)	.012 (.404)	.109 (.405)	-.572 (.408)	.256 (.401)	0.016	247
			Find Significant Other	.043 (.268)	-.012 (.254)	.166 (.240)	-.243 (.278)	.480* (.278)	.125 (.280)	.277 (.275)	0.018	247
			Extracurricular Motivations	.043 (.298)	.294 (.283)	.230 (.267)	.268 (.309)	-.628** (.309)	-.428 (.312)	-.305 (.306)	0.011	247
			Individual Differences	.676** (.292)	.015 (.284)	.022 (.268)	-.130 (.310)	-.062 (.311)	-.221 (.313)	-.140 (.307)	0.029	247
			Social Expectations	.253 (.234)	-.367* (.222)	-.156 (.210)	-116 (.243)	.135 (.243)	.150 (.245)	.189 (.241)	.031	247
		Stressors	Cultural Barriers	-.324 (.327)	-.081 (.310)	-.322 (.293)	.028 (.339)	-.118 (.339)	-.121 (.342)	.121 (.335)	0.012	247
			Social Connections	-.279 (.259)	-.244 (.246)	.202 (.232)	-.390 (.268)	.203 (.269)	-.089 (.271)	-.187 (.266)	0.028	247
			Balancing Academics with Job	.004 (.172)	.158 (.163)	.037 (.154)	.008 (.178)	-.401** (.178)	.028 (.180)	-.242 (.176)	0.029	247
			College Affordability	.158 (.176)	-.064 (.167)	-.309* (.157)	.784*** (.182)	-.003 (.182)	-.419** (.184)	.341* (.180)	0.12	247
			Course Scheduling	.274 (.238)	-.358 (.225)	-.101 (.213)	.251 (.246)	.057 (.247)	-.204 (.249)	.521** (.244)	0.039	247
			Getting Involved on Campus	.065 (.222)	.106 (.210)	.075 (.198)	.188 (.230)	.078 (.230)	-.065 (.232)	-.016 (.227)	.006	247
		Time Spent	Academic Time	-2.047 (1.484)	.542 (1.400)	3.845*** (1.324)	-1.467 (1.543)	1.256 (1.540)	2.043 (1.544)	-.761 (1.516)	0.053	247
			Extracurricular Time	1.309 (3.040)	-3.006 (2.833)	-5.982** (2.722)	1.338 (3.152)	-4.256 (3.155)	4.527 (3.182)	-6.525** (3.121)	0.028	247
			Unconstructive Time	-.487 (2.090)	-.592 (1.982)	-7.366*** (1.872)	-3.899* (2.167)	2.893 (2.169)	2.641 (2.188)	-.339 (2.145)	0.104	247
	Inst. Sphere		Institution	-.006 (.233)	-.340 (.221)	-.094 (.209)	.199 (.242)	.150 (.242)	.147 (.244)	.245 (.239)	0.02	247
	Academic Sphere		Faculty Goals for Students	-.051 (.105)	-.138 (.099)	-.275*** (.094)	.063 (.108)	.043 (.109)	-.290*** (.110)	-.050 (.107)	0.074	247
			Teaching Style	-.004 (.288)	-.411 (.272)	-.082 (.258)	.259 (.298)	.485 (.298)	-.180 (.302)	.352 (.295)	0.029	247
	Student Services Sphere		Challenge	-.140 (.433)	-.287 (.411)	-.220 (.388)	-.018 (.449)	.476 (.449)	.224 (.453)	-.152 (.445)	0.011	247
			Support	-.021 (.220)	-.313 (.209)	-.096 (.197)	.240 (.228)	.336 (.228)	-.044 (.230)	.154 (.226)	0.024	247

* p < .10; ** p < .05; *** p < .01.

APPENDIX H

COMPLETE OLS REGRESSION RESULTS WITH SIGNIFICANCE

				Independent Variables									
				Caucasian	Southwestern University as Top Choice	Top 10 Percent of High School Class	Some Degree of Financial Aid	Parents with Bachelors	Female	Upper or Upper-Middle Class		Adjusted R-square	N
Dependent Variables	**Student Sphere**	**Goals**	Lack of Purpose				.537* (.281)					0.038	247
			Financially Driven						.643* (.343)			0.037	247
			Independence			-.473* (.272)						0.033	247
			Vocationally Driven					-.482* (.286)				0.032	247
			Graduate School	-.434* (.248)		-.434* (.222)	.453* (.257)					0.04	247
		Expectations	Find Significant Other					.480* (.278)				0.018	247
			Extracurricular Motivations					-.628** (.309)				0.011	247
			Individual Differences	.676** (.292)								0.029	247
			Social Expectations		-.367* (.222)							.031	247
		Stressors	Balancing Academics with Job					-.401** (.178)				0.029	247
			College Affordability			-.309* (.157)	.784*** (.182)		-.419** (.184)	.341* (.180)		0.12	247
			Course Scheduling							.521** (.244)		0.039	247
		Time Spent	Academic Time			3.845*** (1.324)						0.053	247
			Extracurricular Time			-5.982** (2.722)				-6.525** (3.121)		0.028	247
			Unconstructive Time			-7.366*** (1.872)	-3.899* (2.167)					0.104	247
	Academic Sphere		Faculty Goals for Students			-.275*** (.094)			-.290*** (.110)			0.074	247

* p < .10; ** p < .05; *** p < .01.

APPENDIX I

DESCRIPTIVE STATISTICS

Variable	Mean	Std. Dev.	Min.	Max.
Age	18.77	0.52	17	21
Race	9.43	2.83	1	11
Female	0.77	0.42	0	1
Highest Parent Education	7.91	2.01	1	15
U of A as Choice?	1.46	0.82	1	4
SES	2.26	0.53	1	4
High School Rank	12.33	30.71	1	100
Hours Studying	13.36	9.63	0	50
Hours Volunteer Work	1.09	1.95	0	12
Hours Socializing	14.95	13.56	0	75
Hours Student Organizations	2.52	5.59	0	50
Hours Talking with Faculty	1.24	1.59	0	10
Hours Watching TV	6.25	8.97	0	80
Hours Exercising	4.25	5.45	0	45
Hours Reading	1.83	3.58	0	28
Hours Partying/Drinking	3.79	7.47	0	60
Hours Videogames	1.65	3.43	0	28
Hours Working	6.49	10.45	0	45
Hours Prayer	0.85	1.78	0	10
Goals - Graduate	1.79	1.35	0	5
Goals - No Goals	0.21	0.97	0	5
Goals - Find a job	2.27	1.50	0	5
Goals - Parents wanted me	0.67	1.58	0	5
Goals - Make Friends	2.60	1.89	0	6
Goals - Get away from home	1.18	1.84	0	5
Goals - Grad School	1.44	1.70	0	5
Goals - Make more money	2.26	1.81	0	5
Goals - Party/Socialize	1.25	1.95	0	5
Goals - Find purpose in life	1.91	1.87	0	5
Expectations - Good career	1.46	1.31	0	11
Expectations - Good friends	2.31	1.54	0	5
Expectations - Find Job while at school	0.92	1.60	0	5
Expectations - Go to parties	0.87	1.75	0	8
Expectations - Find significant other	1.05	1.81	0	5
Expectations - School spirit	0.57	1.36	0	6
Expectations - Get involved with clubs	1.80	2.02	0	6
Expectations - Participate in activities	1.38	1.89	0	5
Expectations - Meet with faculty	0.60	2.81	0	40
Expectations - Be a student leader	0.65	1.55	0	7

Expectations - Meet with staff	0.29	1.05	0	6
Expectations - Challenged academically	2.01	1.59	0	5
Expectations - To fit in	0.36	1.20	0	8
Expectations - Participate in athletics	0.68	1.53	0	8
Expectations - To stand out	0.41	1.21	0	7
Expectations - Learn about differences	1.54	1.84	0	5
Stress - Accessibility	0.47	1.33	0	6
Stress - Finding others like me	0.94	1.73	0	5
Stress - Balancing academics with job	0.93	1.58	0	5
Stress - Getting the classes I want	1.47	1.72	0	5
Stress - Being Academically Unprepared	1.47	1.67	0	5
Stress - Getting involved on campus	1.14	1.79	0	5
Stress - Being discriminated against	0.40	1.23	0	5
Stress - Learning style accommodations	0.64	1.38	0	5
Stress - Choosing a major	1.61	1.61	0	5
Stress - Leaving friends from High School	1.14	1.72	0	5
Stress - College affordability	1.20	1.62	0	7
Stress - Living situation	0.88	1.63	0	6
Stress - Difficulty making friends	1.06	1.74	0	8
Stress - Long distance relationship	0.60	1.48	0	9
Stress - Distance from home	0.99	1.72	0	5
Stress - Parental pressures/concerns	0.70	1.51	0	7
Stress - Finding a job	0.55	1.45	0	9
Stress - Roommate Conflicts	0.75	1.55	0	8
Financial Aid Percentage	60.18	42.62	0	100
Describe Institutional Mission	2.17	0.64	1	3
Inst. makes me feel like I belong	2.10	0.63	1	4
Inst. has fostered a sense of community	3.22	1.03	1	4
Valued by institution for experiences I brought	2.28	0.65	1	4
Encouraged to grow beyond my experiences	1.91	0.59	1	4
Faculty set high goals	1.83	0.54	1	3
Faculty communicate goals clearly	1.91	0.54	1	4
Faculty offer experiential opportunities	2.25	0.71	1	4
Faculty recognize different learning styles	2.22	0.65	1	4
Faculty help me effectively manage my time	2.33	0.68	1	4
Faculty encourage out of class interactions with them	2.44	0.73	1	4
Faculty encourage working collaboratively with peers	2.11	0.56	1	4
Faculty use interactive teaching methods	2.27	0.65	1	4
SS encourage my personal experiences in classroom	2.33	0.68	1	4
SS encourage me to consider other perspectives	2.04	0.62	1	4
SS encourage new ways of thinking about my life	2.11	0.60	1	4
SS develop relationships to promote student learning	2.14	0.64	1	4
Univ. financial resources/staff focused on learning envir.	2.01	0.60	1	4
Challenged by SS to be honest on and off campus	2.20	0.68	1	4
Challenged by SS to be fair in my decision making	2.20	0.65	1	4

Challenged by SS to show dignity to those around me	2.13	0.64	1	4
SS actively support student equality	1.97	0.62	1	4
Expectations for student performance are high	1.95	0.68	1	4
Feel supported by SS staff	2.17	0.66	1	4
Feel supported by other students	2.14	0.69	1	4
Values of Inst. reflect who I am	2.16	0.63	1	4
My academic and out of class experience make me feel part of campus	2.03	0.63	1	4

APPENDIX J

FREQUENCIES OF RESPONSES BY STUDENTS TO GOALS FOR COLLEGE

	Ranked 1	Ranked 2	Ranked 3	Ranked 4	Ranked 5
Graduate from College	135	41	23	13	21
Help Me Find a Job	34	57	67	26	22
Find Purpose in my Life	32	32	24	38	38
Attend Graduate School	26	31	30	22	18
Make Friends	14	37	38	42	54
Be Able to Make More Money	14	31	47	51	28
Wanted to Get Away from Home	10	9	14	27	23
Socialize/Party	7	10	8	21	35
Parents Wanted Me to Go	2	4	4	11	20
Had No Goals in Attending College	0	1	0	1	9

APPENDIX K

FACTOR ANALYSIS – GOALS FOR COLLEGE

	Lack of Purpose	Financially Driven	Indepen-dence	Vocationally Driven	Graduate School
Graduate from College	-.541	.014	.248	.266	.180
Parents Wanted Me to Go	.754	.056	.153	-.022	-.012
Had No Goals in Attending College	.738	-.158	.112	.177	.227
Be Able to Make More Money	.034	.747	.091	.155	-.105
Socialize/Party	.113	-.746	.065	.200	-.043
Make Friends	-.036	-.159	-.755	.168	-.283
Wanted to Get Away from Home	.120	-.168	.693	.126	-.349
Help Me Find a Job	.037	.359	-.238	.526	.180
Find Purpose in my Life	.043	.145	-.057	-.852	.107
Attend Graduate School	.050	-.062	.012	.002	.882

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Lack of Purpose	1.629	16.291	16.291
Financially Driven	1.316	13.156	29.447
Independence	1.19	11.903	41.351
Vocationally Driven	1.15	11.502	52.852
Graduate School	1.059	10.587	63.439

APPENDIX L

FREQUENCY OF RESPONSES BY STUDENTS TO EXPECTATIONS OF COLLEGE

	Ranked 1	Ranked 2	Ranked 3	Ranked 4	Ranked 5
Good Career	171	28	9	4	16
Challenged Academically	32	72	33	27	23
Good Friends	11	59	65	41	17
Learn about Differences	11	28	28	25	26
Find Job While at School	6	18	19	12	16
Get Involved with Clubs	6	12	33	33	36
School Spirit	6	8	13	6	10
To Stand Out	5	10	3	5	8
Find Significant Other	5	7	12	20	25
Participate in Athletics	5	7	11	11	13
Meet with Staff	5	1	8	4	1
Go to Parties	4	4	10	14	22
To fit In	3	5	4	4	8
Be a Student Leader	2	9	5	9	15
Participate in Activities	1	14	24	30	24
Meet with Faculty	1	4	8	9	8

APPENDIX M

FACTOR ANALYSIS – EXPECTATIONS OF COLLEGE

	Make A Name for Self	Career Driven	Find Significant Other	Extracurricular Motivations	Individual Differences	Social Expectations
School Spirit	.615	.071	.090	-.074	-.165	-.040
Meet with Staff	.807	.186	.146	.138	.051	.112
To Stand Out	.714	.278	.025	.099	.068	-.022
To fit In	.738	-.126	.191	-.039	-.015	.124
Good Career	-.046	.821	.005	-.055	.161	-.091
Meet with Faculty	.343	.704	.155	.028	.002	-.045
Find Significant Other	.168	-.005	.741	.113	.060	.086
Get Involved with Clubs	.206	-.109	-.189	.696	.052	-.211
Challenged Academically	.130	-.113	-.366	-.768	.120	-.096
Participate in Activities	.201	-.024	-.310	.253	-.643	.106
Learn about Differences	.104	.051	-.189	.105	.783	.093
Go to Parties	.329	.134	.289	-.016	-.198	.515
Good Friends	-.043	-.087	-.078	-.097	.086	.792

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Make a Name for Self	3.418	21.361	21.361
Career Driven	1.455	9.091	30.452
Family Oriented	1.329	8.307	38.758
Extracurricular Motivations	1.186	7.414	46.172
Individual Differences	1.109	6.933	53.105
Social Expectations	1.045	6.534	59.639

APPENDIX N

FREQUENCY OF RESPONSES BY STUDENTS TO STRESSORS OF COLLEGE

	Ranked 1	Ranked 2	Ranked 3	Ranked 4	Ranked 5
Choosing a Major	71	41	17	20	23
Being Academically Unprepared	45	28	30	17	21
College Affordability	29	28	22	20	12
Getting the Classes That I Want	21	33	26	30	16
Balancing Academics with Job	20	18	16	9	18
Distance from Home	12	11	15	13	23
Learning Style Accommodations	11	7	14	13	8
Difficulty Making Friends	10	17	17	16	19
Leaving Friends From High School	10	13	24	25	15
Roommate Conflicts	9	11	14	9	14
Parental Pressures/Concerns	9	10	8	12	13
Getting Involved on Campus	8	12	19	21	22
Accessibility on Campus	6	2	6	7	11
Long Distance Relationship	5	10	9	3	15
Finding Others Like Me	4	7	14	16	22
Living Situation	3	16	14	14	16
Finding a Job	3	9	6	6	13
Being Discriminated Against Because of My Identity	1	2	8	5	10

APPENDIX O

FACTOR ANALYSIS – STRESSORS OF COLLEGE

	Cultural Barriers	Social Connec-tions	Balancing Academics with Job	College Afforda-bility	Course Scheduling	Getting Involved on Campus
Being Discriminated Against Because of My Identity	.508	.267	.385	.169	.221	.054
Being Academically Unprepared	.601	-.204	-.137	-.106	.012	-.449
Living Situation	.592	-.100	-.066	.356	-.087	.132
Parental Pressures/Concerns	.608	.255	.158	-.022	.064	.074
Leaving Friends From High School	.100	.666	-.078	-.266	.058	-.105
Finding Others Like Me	-.011	.649	.029	.098	.012	-.012
Balancing Academics with Job	-.031	-.095	.740	.074	-.085	-.069
College Affordability	.031	-.055	.104	.775	.124	-.079
Getting the Classes That I Want	.086	.020	.279	.022	-.761	-.001
Choosing a Major	.084	-.120	.462	-.023	.526	.001
Getting Involved on Campus	.162	-.159	.029	-.119	.027	.834

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Cultural Barriers	3.566	19.813	19.813
Social Connections	1.456	8.091	27.904
Balancing Academics with Job	1.224	6.8	34.704
College Affordability	1.09	6.055	40.759
Course Scheduling	1.06	5.888	46.647
Getting Involved on Campus	1.047	5.814	52.462

APPENDIX P

FREQUENCY OF RESPONSES BY STUDENTS REGARDING INSTITUTION

	Strongly Agree	Agree	Disagree	Strongly Disagree
I am encouraged to grow beyond my experiences and past knowledge that I brought to the institution.	53	167	26	2
Southwest University has made me feel like I belong here.	30	170	40	8
I have been valued by the institution for the experiences and knowledge I brought to the institution.	20	147	73	8
I feel that the institution invited and valued my input in campus decision-making.	9	141	82	16

APPENDIX Q

FREQUENCY OF RESPONSES BY STUDENTS REGARDING ACADEMIC SPHERE

	Strongly Agree	Agree	Disagree	Strongly Disagree
My professors/instructors set high goals for me in the classroom.	60	169	19	0
My professors/instructors clearly communicate classroom goals and expectations to me.	47	177	23	1
My professors/instructors encourage learning through the use of activities that require critical thinking and/or problem-solving skills (case study, essay).	43	181	21	2
My professors/instructors offer experiential opportunities (laboratories, field trips, case-studies, non-lecture) to test/apply theories, principles, or knowledge.	35	121	88	4
My professors/instructors encourage me to bring skills and knowledge outside of the classroom into classroom learning/discussion.	31	168	47	2
My professors/instructors recognize different learning styles (verbal, visual, kinesthetic) of students in the classroom and provide a variety of teaching methods (verbal, visual, kinesthetic).	28	139	76	3
My professors/instructors encourage working collaboratively with other students from class.	25	172	49	2
My professors/instructors offer supportive feedback on my performance in class and on assignments/tests.	24	157	62	5
My professors/instructors help me to effectively manage my time in class and on assignments over the course of the term.	22	128	91	7
My professors/instructors encourage active participation in class through the use of interactive teaching methods (non-lecture).	21	145	76	6
I engage in out-of-class interaction with my professors/instructors.	18	119	94	17

APPENDIX R

FACTOR ANALYSIS – ACADEMIC SPHERE

	Teaching Style	Faculty Goals for Students
My professors/instructors set high goals for me in the classroom.	.037	.786
My professors/instructors clearly communicate classroom goals and expectations to me.	.187	.809
My professors/instructors offer experiential opportunities (laboratories, field trips, case-studies, non-lecture) to test/apply theories, principles, or knowledge.	.551	.277
My professors/instructors recognize different learning styles (verbal, visual, kinesthetic) of students in the classroom and provide a variety of teaching methods (verbal, visual, kinesthetic).	.719	.028
My professors/instructors help me to effectively manage my time in class and on assignments over the course of the term.	.616	.195
My professors/instructors encourage working collaboratively with other students from class.	.626	.127
My professors/instructors encourage active participation in class through the use of interactive teaching methods (non-lecture).	.752	-.106
My professors/instructors encourage learning through the use of activities that require critical thinking and/or problem-solving skills (case study, essay).	.507	.302
My professors/instructors offer supportive feedback on my performance in class and on assignments/tests.	.529	.319
My professors/instructors encourage me to bring skills and knowledge outside of the classroom into classroom learning/discussion.	.512	.432

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Teaching Style	3.793	34.484	34.484
Faculty Goals for Students	1.216	11.053	45.537

APPENDIX S

FREQUENCY OF RESPONSES BY STUDENTS TO STUDENT SERVICE SPHERE

	Strongly Agree	Agree	Disagree	Strongly Disagree
At Southwest University, expectations for student performance are high.	59	146	39	4
I believe, from my experience, that student services staff actively support student equality.	44	176	20	8
I believe, from my experience, that university financial resources and staff are focused on learning environments (i.e. computer labs, libraries, websites, student services) throughout the campus.	41	166	39	2
My academic and out-of-class experiences make me feel part of a campus community.	40	165	38	5
I am encouraged by student services staff to consider others' perspectives.	37	169	37	5
I feel supported by other students at the institution.	37	145	60	6
I am challenged by student services staff to show dignity to those around me on and off campus.	32	157	54	5
I feel supported by student services staff.	31	151	60	6
I am challenged by student services staff to be honest on and off campus.	30	146	65	7
I am encouraged by student services staff to apply new ways of thinking about my life.	27	171	45	5
From my perspective, student services staff develop partnerships with others on campus to promote student learning.	27	167	46	8
I am challenged by student services staff to be fair or just in my decision-making on and off campus.	27	150	66	5
The values of the institution reflect who I am.	25	165	51	7
I am encouraged by student services staff to bring my personal experiences into the classroom.	21	132	87	8

APPENDIX T

FACTOR ANALYSIS – STUDENT SERVICES

	Challenge	Support
I am encouraged by student services staff to bring my personal experiences into the classroom.	.743	-.241
I am encouraged by student services staff to consider others' perspectives.	.755	-.255
I am encouraged by student services staff to apply new ways of thinking about my life.	.702	-.178
From my perspective, student services staff develop partnerships with others on campus to promote student learning.	.648	-.100
I am challenged by student services staff to be honest on and off campus.	.771	-.247
I am challenged by student services staff to be fair or just in my decision-making on and off campus.	.810	-.259
I am challenged by student services staff to show dignity to those around me on and off campus.	.813	-.249
I believe, from my experience, that student services staff actively support student equality.	.577	.169
I feel supported by student services staff.	.166	.568
I feel supported by other students at the institution.	.448	.802
The values of the institution reflect who I am.	.393	.705
My academic and out-of-class experiences make me feel part of a campus community.	.403	.808

Total Variance Explained

Factor	Initial Eigenvalues	% of Variance	Cumulative %
Challenge	6.707	47.91	47.91
Support	1.249	8.922	56.833

APPENDIX U

DESCRIPTIVE STATISTICS OF TIME SPENT BY STUDENTS

	Mean	Standard Deviation	Minimum	Maximum
Hours Spent on Academic Initiatives	14.6	10.2	0	51
Hours Spent on Extracurricular Initiatives	30.2	20.9	0	115
Hours Spent on Unconstructive Initiatives	13.5	14.8	0	96

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