THE EXTENT OF HIGH SCHOOL AND EARLY COLLEGE INVOLVEMENT AS AN EARLY INDICATOR OF ATTRITION PRONE STUDENTS AT AN ARTS AND SCIENCES COLLEGE WITHIN A MULTIUNIVERSITY

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support. They never seemed to doubt that their Mom could do
it. My love, respect and admiration for each of them keeps
pushing me forward in life.
    I would like to thank my husband, David, who stood by
me and helped me in this, sometimes, frustrating endeavor.
His suggestions and support gave me the confidence to
accomplish this important goal in my life.
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## CHAPTER I

## INTRODUCTION TO THE STUDY

## Overview

During the $1980 s$, more than fifteen million students will enroll in the more than three thousand colleges and universities in the United States. The predictions are that 40 per cent, six million students, will never receive a degree and may not fulfill their life goals. Of the remainder, 40 per cent of them will graduate in four years, and the remaining 20 per cent will eventually return to institutions to finish degrees (Cope, 1978).

This attrition problem has serious social, Psychological and financial implications for society with its impact on higher education. The number of high school students is declining and, with it, the potential enrollment for higher education. The birth rate declined 26 per cent from 1963 to 1975 , according to the Statistical Abstract of the United States, and it was forecast that between 1979 and 1995, there would be declining numbers of high school graduates in all but ten states (Noel, 1985).

The problem of attrition has no easy answers because there are many unrelated variables. Hoyt (1978) suggested that persistence was indeed a choice and that the absence of

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satisfaction gave students a variety of choices, including
leaving the institution. Aston (1984) furthered this idea by
stating that the quality and the quantity of student
involvement in an educational program was directly
associated with a students' learning and personal
development in that program. Many students have so little
involvement and satisfaction with their college or
university that they leave before the end of their first
semester or never return for a second semester. Many major
attrition problems begin early and need to be discovered and
addressed as soon as possible.
    The adjustment of freshmen to college is a multi-
dimensional problem. There are many changes to be faced.
The following reasons were suggested in different studies:
facing sudden freedom, experiencing different living
conditions, making new friends, changing patterns of class
hours, focusing on future careers, leaving home and family,
participating in new activities, having different social
interactions, moving to a changed environment, experiencing
loneliness and homesickness. All these changes and many more
confront new freshmen. Becoming involved and satisfied with
this new life poses unique and challenging problems.
    Researchers suggested that more needed to be known
about students before they entered college and during their
freshman year. Hoyt (1978) suggested that variables which
effect involvement and satisfaction should be explored at
different times in this period since this was the time when
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attrition was the nighest. At four year public insti=utions,
3 3 \text { per cent of the entering freshman class left before their}
sophomore year. Having this information would provice the
possibility for intervention strategies that could lead to
the possible retention of many students.
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Background for the Study at
    Oklahoma State University
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Like most institutions of higher education, Oklahoma State University was faced with attrition problems. Because of this concern, Dr. Lee Noel, a researcher interested in attrition and retention studies, was invited to this campus in September, 1985, to conduct a fact finding study and a workshop on attrition and retention for faculty and staff. Noel found that Oklahoma State University had a freshman dropout rate of 30-33 per cent which he stated was higher than at most comparable universities. He cited two attrition prone groups, the academically underprepared students and the undecided students. Twenty-six per cent of the Oklahoma State University freshmen could be considered academically underprepared. These freshmen had a 16 or less ACT composite while the Oklahoma average was 17.3 ans the national average was 18.7. A high number of Oklahoma State entrants could be considered undecided as 68 per cent of the graduating seniors had changed majors 2.8 times. Only 30 per cent of Oklahoma State University freshmen graduated in their original major.

One thousand entering freshmen left Oklahoma State University between 1980 and 1984. In 1980, the university had 13.4 per cent of the college-going market of the state, but Noel reported in his workshop that the percentage was, at the time of the workshop, below 10 per cent. He concluded that there were many strategies that could be employed to increase retention and left his suggestions for a retention program.

According to the Student Profile 1987, a yearly statistics report about Oklahoma State University, compiled by the Office of Institutional Research, there were 2,847 new freshmen enrolled in the fall semester of 1987. The Student Profile 1986 reported 3,044 new freshmen. The statistics showed the importance of retaining the existing student population.

For a study of attrition and retention, the College of Arts and Sciences provided a unique situation. It had a required freshman orientation class program with an available group for conducting a study during the first semester of college. Attrition information from this group would be useful not only for other Colleges at Oklahoma State University, but for other similar ones in the United States. Reasons for what caused attrition would benefit students in seeking their highest potential and would help reduce a serious financial impact on institutions of higher education.


#### Abstract

Many approaches to this type of study were done. Involvement in college and in satisfaction with college were cited as two important indicators for study in order to lessen attrition and to retain students. GPA and ACT scores were not used as indicators.


## Statement of the Problem

There exists a lack of effective indicators for identifying which students would drop out of college during their first semester or before beginning a consecutive second semester. Attrition could result in the loss of human and financial resources as well as contribute to human frustrations and to unacceptable social implications.

Purpose of the Study

The purpose of this study was to determine if the level of high school senior year involvement or first semester college involvement and satisfaction were indicators of attrition prone students. Finding the reasons why students did not re-enroll for a second semester of college could provide answers for a greater retention of students.

Rationale for the Study

Knowing which measures indicated attrition prone students would allow for the early identification of those students who might drop out. Identification of those students would allow for the development of appropriate
intervention strategies and of methods for retaining students.

## Research Questions

1. Is senior year high school involvement an indicator of second semester college enrollment?
2. Is first semester college involvement an indicator of second semester enrollment?
3. Is high school senior year involvement related to first semester college involvement?
4. Is satisfaction with college at the beginning of the first semester an indicator of second semester college enrollment?
5. Is satisfaction with college at the end of the first semester an indicator of second semester college enrollment?
6. Is satisfaction with college at the beginning of the first semester related to satisfaction with college at the end of the first semester?

## Hypotheses

The six research questions were rephrased as null hypotheses:

Hypothesis 1: There is no difference in the level of high school involvement between those students that stayed in college or those students that left college before beginning a second college semester.

Hypothesis 2: There is no difference. in the level of first semester college involvement between those students that stayed in college or those students that left college before beginning a second college semester.

Hypothesis 3: There is no correlation between the levels of involvement in the senior year of high school and the first semester of college for: (1) the stayers and (b) the leavers.

Hypothesis 4: There is no difference in the level of satisfaction at the beginning of the first semester of college between those students that stayed in college or those students that left college before beginning a second college semester.

Hypothesis 5: There is no difference in the level of first semester college involvement at the end of the first semester between those students that stayed in college or those students that left college before beginning a second college semester.

Hypothesis 6: There is no correlation between the levels of satisfaction at the beginning of the first semester of college and the end of the first semester of college for: the (a) stayers and the (b) leavers.

Dropout refers to students who leave an institution and who do not return. For the purposes of this study, it refers to students who did not return the second semester since it was not known if the students would be stopouts (students who left for a period of time, but eventually returned) or dropouts.

Leavers refers to students in this study who did not return for the second semester of college.

Stayers refers to students in this study who returned for the second semester of college.

Attrition Rate refers to the numbers of students in this study, stated as a percentage, who did not return for the second semester of college.

Retention Rate refers to the numbers of students in this study, stated as a percentage, who did return for the second semester of college.

Involvement refers to "the amount of physical and psychological energy that the student devotes to the academic experience. Thus, a highly involved student is one who, for example, devotes considerable energy to studying (academic), spends much time on campus, participates actively in student organizations (activities) and interacts (social) frequently with faculty members and other students (Astin, 1984)." In this study, involvement refers to student involvement with the academic, the activities, and the social areas during the senior year of high school and the
first semester of college.
Satisfaction refers to the fulfillment of needs or human wants. "Satisfactions arise from two sources: a sense of progress (including expected progress) in reaching personal goals (academic) and a sense of comfort with the environment (social), acceptance, security, freedom from pressure (Hoyt, 1978)." In this study, satisfaction refers to self-determined student satisfaction with the academic and the social areas during the first semester of college.

## Basic Assumptions

The following assumptions were made for this study: 1. The students who responded to the two instruments provided honest responses in their perceptions.
2. The first and second instruments were administered properly and explained fully.
3. The students who did not take the first and second instruments were either absent from class or had dropped out.

Scope and Limitations

Oklahoma State University is one of the two largest state institutions of higher education in Oklahoma. The College of Arts and Sciences is only one of seven colleges at Oklahoma State but has about 25 per cent of the total student population.

The study was limited to students who were enrolled in the College of Arts and Science's orientation classes, who were present in class on the days of the study and who participated in the study. Students with less than twelve credit hours were eliminated from the study since that is considered to be part time status by the University. Students with over twenty-eight credit hours, but enrolled in the freshman orientation classes, were eliminated from the study since that is considered to be sophomore status by the University.

The conclusions cannot be generalized to another population because it was not necessarily representative of a student population in another higher education setting. The results might provide useful information for other institutions, colleges and universities.

## CHAPTER II

REVIEW OF LITERATURE

This review presents the continuing investigation into the causes of attrition and the retention measures that have been used to alleviate it. The reasons for attrition are of such a complex nature that there is no one exact answer. Continuing to understand the factors or indicators associated with this important subject could lead to a reduction of the attrition that occurs in our colleges and our universities today.

The purpose of the review was to investigate the literature and the research that was relevant. It was divided into the following categories: (1) The History of Attrition and Retention in Higher Education; (2) The Relevant Models: Theoretical Reasoning Underlying the Problem; (3) The Demographic, Student and College Factors: The Practical Reasoning Underlying the Problem; (4) The College of Arts and Sciences, Oklahoma State University in the Fall of 1987; The Conclusion and the Findings in the Literature Review.

The History of Attrition and Retention in Higher Education


#### Abstract

Educators have been concerned about the problem of attrition and retention since the early years of this century. There was a marked increase in studies beginning with the 1960s. A history of the enrollment trends in this century was explored by Parker (1971) who began his exploration with the 1920s. In that decade, the soldiers of World War I returned in masses to our colleges and our universities which resulted in higher enrollments than ever before. With the beginning of the 1930 s came a general decline in both the national economy and the fluctuations in institutional enrollments. Federal aid programs brought some enrollment increases in 1934-35. The 1940s brought the war veterans again to the campuses.

There was a period of relative stability in the 19505 with only a sign of the problems that would occur in the 1960s. The problems contributed to a time of high enrollments. Consideration was given to the faculty, the finances and the physical facilities that would be necessary to house this rapidly growing population of students.

From 1960 until 1969, enrollment in all institutions of higher education rose from 3,600,000 to approximately 7,980,000. This unique population of students exercised a new power in the United States by protesting about the conditions at their institutions. The institutions, in


turn, sought new ways to meet the increasing challenges. Parker's (1971) report ended with the invasion of Cambodia by the United States and South Vietnamese forces on May 1, 1970. Both negative and positive factors concerning higher education and its place in history were explored giving a foundation for further research.

A warning sign in the area of attrition came in 1957 when Iffert $(1957)$ found that only 40 percent of entering freshman stayed to graduate in four years. His study on the cause and effect relationships between variables and attrition and the effectiveness of various retention programs brought about and was supported by the studies of Cope and Hannah (1975) and many others. Summerskill (1962 reviewed over thirty five studies completed between 1913 and 1953 and found that as many as 50 per cent of the matriculating students were being lost.

Other researchers found that, in general, a pattern was emerging (the 40-20-40 pattern) where 40 per cent of entering students to institutions would graduate in four years, 20 percent would graduate at a later time, either from that institution or another, and 40 percent would never graduate (Cope, 1968 and Pantages and Creedon, 1978).

Institutions became painfully aware that the early and the middle of the 1970 would result in a decrease in this seemingly unending number of students because of the significant birthrate decline that took place in the middle
of the 19505 . New ways to counteract this problem were needed (Lenning, et al, 1980).
 research such as McNeely, Iffert, Summerskill, Cope, Hannah, Pantages and Creedon and summarized the history:

Student departure has been a much studied phenomenon. There have been few problems in higher education which have received as much attention. Yet there is still much we do not know about the complex processes involved. Though we have been able to map out the dimensions of the patterning of rates of departure among the student population generally and have come to associate certain individual attributes with differences in rates of departure, we have only recently begun to scratch the surface of the complex processes of interaction among people within institutions which give rise to those pattern (p.36).

The Relevant Models: Theoretical Reasoning
Underlying the Problem

Many models were found which related to the attrition and the retention area. Several of them were pertinent to this study and provided the theoretical basis. sperence attrition with models, and he applied Durkeheim's theory of suicide to his study. It was Durkeheim's belief that when people were not sufficiently integrated into society, the chance for suicide was greater. Spady analogized this to a parallel between attrition and suicide in that there was the same lack of social interaction and commitment to a system found in this situation. The Durkeheimian model (Spady, 1970) did not recognize the family background of students, which Spady felt was relevant to his model. A later model
expanded it to differentiate between women and men and also related it to the complexity of relationships that could exist in the problem of attrition. His model was important to a further exploration of models.

Tinto (1975) furthered this idea by finding that when the students were no longer integrated socially with other students in the institution, and when the institutions values were no longer reflected, students could become dropouts. His study was a longitudinal process where the student interacted over a time period with the academic and the social systems within the institution. Both the quality and the frequency of this interaction was most important. Although Tinto agreed that outside factors could impact students in their life goals and institutional commitment, it did not necessarily cause them to leave.

This model, and the ones by Spady, were tested in many studies. Terenzini and Pascarella (1977), in a study of 500 freshmen at Syracuse University, was one which supported Tinto's hypothesis. They found that academic and social 7. factors did have a significance in finding persisters and 98 str 4 dropouts. Their second study (1979) tested the student faculty interaction outside of class in its relationship to attrition and retention, and it also supported Tinto's ideas. Tinto's model was general and had much utility.

Flannery (1973) furthered the study of this model by defining the cause for attrition as the difference between student expectations and the resulting student attainments.


#### Abstract

He divided the factors into the categories of society, student and college factors and put them into circles which overlapped.

Alfred (1974) followed by trying to apply symbolic interaction theory to attrition and retention in a model that was interactive. He identified 15 genetic factors in his model along with 16 internal factors and 21 external factors and did a study based on this model in 1972. He used a chi square analysis to compare persisting and nonpersisting students, obtaining a significant relationship with student attrition at the .01 alpha level for 17 of his 23 variables, some of which dealt with the reasons for pursuing college and for plans to continue college.


The Demographic, Student and College Factors:
The Practical Reasoning Underlying
the Problem

Most of the studies that were found were empirically oriented. Many were demographic which gave information to institutions that were largely uncorrectable. Unfortunately these studies, though producing the awareness of attrition, did not include plans for retention efforts. Cope and Hannah (1975), in a much quoted study, said:

In essence, colleges do not know the market and, by trial and error, often attempt to reawaken interest with untried methods designed for an inadequately researched clientele. What research is done is segmented: conclusions and inferences are drawn from limited data and produce much dialogue, but rarely solutions. Even in attrition research, the common and
best predictors - GPA, SAT scores, and so on - do not predict and provide little help in solving the problem of withdrawal from college (p.108). Studies read for this research was done on literature that accounted for student and college factors as well as demographic factors.

Stop outs were an important factor in retention and attrition studies. These were students who took a break and who intended to resume college experience and to get a $\cos ^{2}+e^{2}$ frence ${ }^{2}$ degree. Kesselmañ (1976) explored what kind of students stopped out and why. Eighty students participated in his study, as well as college presidents, deans and admissions officers; the latter group gave personal interviews. Assistance was received from 101 colleges on a survey questionnaire, on college attitudes and on policies in regard to stopouts. The study identified the options open to those who wished to continue their education, stating that a stopout was not a failure but a searcher who would only return when institutions addressed his needs, and when that student wanted to return.

Much research has been done about this group of students. Since knowing if students would return was future information, most of the reading in this study was done on dropouts, despite the fact that they might ultimately become stopouts.

Sanford's (1967) book studied where the institutions failed in relation to students' educational goals. He reported on personality theory, on aspects of student development and on the educational environment with its links to the environment outside of college. He began by


#### Abstract

stating that college students needed to be prepared to face the world in many different roles. The problems with social pressure and operating with peer cultures was explored. Breaking away from conformity was important information to know when leaving college and entering into the work world. He found that undergraduate education would not change fundamentally without graduate school reform, and recommended that more research directed at human problems was needed (Sanford, 1967). Not (efeents Newcomb and Wilson (1966) studied peer group influences. There was a need to know the conditions that peers could influence which would complement, or be contrary to, the aims of institutions. The study began with the general nature of peer group influence and explored the categories of the changing student in the entering year in intellectual development, in interests in new fields, in the world view in personal philosophy, in personality development, in social development, in career plans and choices, and in attitude toward college. The study provided indirect looks at student characteristics as outcomes of college characteristics, and initial student attributes and experiences, and then it studied the interaction among them al1.


Gordon (1984) did an informative study on undecided college students. The studies on this variable have been prominent since the 1920 . The research was confusing, according to this author, and she cited that it might relate
to the definition of indecision and the particular population under study. She examined the characteristics of undecided students and the program intervention methods that were used. The largest group of these students were entering freshmen, and they were the easiest to approach. Gordon discussed methods and techniques that could be used and a developmental advising approach which could be used for this population. There were many model programs, and they all stressed the need for a coordinating effort across the whole campus to achieve overall success.

An important study (Noel, 1982) on the underpreparedness of students was done in 1981 . The lowest 10 to 15 per cent of students needed to be studied because they were among the most attrition prone and that, if corrected, the rate of dropping out among this population could be significantly reduced. The publication focused on the services and the programs that were for those who were academically underprepared for college work when they began their freshman year. This group was cited in the study as a problem group by reference to other research by Iffert, Astin and others who studied attrition. Underprepared students were a group that was complex.

This study by Noel (1982) used two samples of institutions: 233 from institutions studied in a recent survey by ACT who provided services to academically underprepared students and to a random national sample of 656 from around the United States. The conclusions were
that there were several major themes, and these were discussed: the quality of service delivery, the affective and cognitive support, the stability of funding and evaluation and the supporting data. There was a high level of interest in helping academically underprepared students. This study was valuable as it provided a perspective on how to reach and how to retain this group of attrition-prone students. Two reports of special interest, mentioned in the study, were Haughey's report on intrusive advising and Nisber, Ruble and Schurr's report on the Meyer-Briggs Type Indicator and its use in diagnosing learning styles and learning behaviors in the high-risk college students. The study provided a comprehensive guide for handling this characteristic student group.

The Cash Kowalski (1977) study examined many factors associated with student attrition. It was conducted at a major Midwestern university and studied specifically the factors in three areas: the college environment, the home environment and the student's personal, emotional and academic characteristics. It found that the institutions should try to improve the procedures to assist students who come to college with personal, emotional and academic problems and that more studies should be made on nonpersisting students to determine why they persist or do not persist. It was the conclusion, that if these students were found, they could be retained by intervention methods.

The Astin (1968) study of college environment was a large one and concerned the characteristics of their undergraduate environments. It measured some of the important differences among the many institutions. The study tested the peer environment, the classroom environment, the administrative environment, the physical environment and the
 student's sensory input) was developed. The stimuli covered the four environmental areas. The result was that the study demonstrated how environmental differences affect the educational and the personal development of students. It was directed to educate administrators and faculty members on how they might improve the student environment.

The Koplik and DeVito (1986) study was done because of the need for information on the problems of current college students and how they might have changed from information that was previously available. It was for the purpose of making universities aware of the trends and the needs of their students. By comparing the problems of students over ten years in different areas, information on change was discovered. The conclusions were that college students seemed more troubled in 1986 than in 1976 in every part of their lives, and this could be an indication that today's society had a greater acceptance of psychological difficulties and a willingness to express them. The implications were that administrators should expand counseling services and that counselors would have an easier
job because of the willingness of students to seek and to accept help. Retention could be increased because of the psychological adjustment to college being handled, since students often lacked the skills to cope with the encountered stresses.

The Spuhler (1983) study was done on a regional campus in the Indiana state system. It studied the reasons for students leaving that particular university and addressed new programs or services that might have made them stay. An instrument was sent out to 220 former students who were selected from a random sample, and a retention model was constructed. The conclusions were that some of the retention problems existed because this was not a four-year degree program. Further implications were that on-going studies needed to be done concerning the attrition problem, including a systematic evaluation of the retention model. This was a sample of many studies done on two year degree granting programs. Involvement was an additional problem because the student did not plan to remain at the institution to complete a four year degree, and many of the students were part time. Because this was typical to two year programs and this present study was with four year institutions, the literature review was mostly concerned with four year institutions.

Despite the fact that many studies showed that early identification of attrition-prone students would help with retention, few studies addressed this problem. Barbee's
(1985) study was important to this research. He studied the summer orientation process as an early identification area. The first part of the study was conducted on 2000 out of 3000 freshmen who attended the three day orientation in the summer of 1981 at his California institution. The 964 students, who voluntarily supplied their names to be used for the study, were tested again in the second semester; 394 responded. The study tested campus involvement, and his conclusion was that students who were more involved during their first year on campus tended to be the ones who were more involved during orientation.

Cope and Hannah (1975) addressed the importance of bonding between students and their institutions. There needed to be a clear image of the value of their programs. The authors also reported that for over fifty years of attrition research, the withdrawal rate was high and had changed very little. Colleges have found out much information, but have not done much to find ways to help control attrition. They emphasized that most looked at statistical information, and few looked at the individual human experience. Students filled out exit forms that provided essentially uninsightful, unusable, and merely statistical, information.

Breneman (1982) encouraged trustees of universities to find attrition statistics from their institutions and other comparable institutions as well. He was especially concerned about this since a national survey of college and university
presidents reported that only 16 per cent of them expected to lose enrollments at their institutions, and 42 per cent expected enrollments to actually increase. This was in spite of his statistics which reported that between 1982 and the mid-1990s, the traditional college-age population would experience a 25 per cent decline.

After exploring the past enrollment trends, the Francis' (1980) study from the American Council on Education concluded that despite the diversity in projected enrollments for the year 2000 , there was a consistency in the projected enrollment declines for the 1980s. Colleges and universities needed comprehensive characteristics analyses of currently enrolled students. This would include finding out which students were attracted to their particular programs. Adults and younger students were attracted to different locations, institutions, and programs. It was very necessary to know the market. The purpose of this report was to explore the enrollment trends to help with the decisions that must be made by higher education, and for institutions to know how to effectively attract students.

Beal and Noel (1979) did a report for the ACT and the National Center for Higher Education Management systems on what worked in retention. The study did not focus on fixed variables such as sex, high school grade point average and other non changeable items and instead focused on factors that could result in the retention of students and be
changed by institutions such as orientation and counseling. Many actions were suggested with a shift to the positive, retention, from the negative, attrition.

With the survival of institutions of higher education being a primary concern, Martorana and Kuhns (1978) concluded that change was an important factor to consider. Their book was directed at the prime decision makers: the administrators, the faculty, the trustees, the officials, the boards, the scholars, the analysts of institutional change, the economists, the sociologists and the professors. They discussed every aspect of change from the necessary characteristics of institutions in the future to a theory of interactive forces that could effect change and could foster more academic innovations. Their guide would be useful for any strategic planning group in this area to use in developing future plans and useful.

An ACT study by Smith, Lippitt, Noel and Sprandel (1981), provided an important model for mobilizing campus retention. The study cited that from the 250 colleges at the time of the Civil War, there were now more than 3,000 colleges and universities. The large growth in recent years did not prevent the fact that institutions needed work to keep from becoming obsolete. With resources decreasing, more campus innovations were required for them to remain healthy and with adequate enrollments, to keep them operating. Studies were needed to find the indicators to increase retention and to find out how to define responsive target
groups. In addition, it was necessary to learn what was needed to maintain the current population, such as learning support centers, enriched academic advising, faculty awareness, career assistance programs, and improved orientation activities. They cited that involvement experiences had only begun to reveal their importance for retention. Institutions needed to carefully examine their mission and their quality of life in order to keep up their populations.

Institutions needed to study their programs and their target groups. There were many action areas where colleges need improvement. Beal and Noel (1979) stated :

The current concern regarding attrition, however, reflects the awareness that an undetermined number of students may be leaving for the wrong reasons. Some colleges have feared that they would undermine their academic integrity by assisting such students and influencing them to remain in school. It is helpful to remember that even a slight percentage change in retention rate can have budget implications and make retention programs cost effective (p.89-90).

A retention coordinator could organize action groups. Among the groups mentioned by Beal and Noel (1979) were: faculty awareness and development activities, "significant other" peer programs, career assistance programs, learning support centers and activities, expanded orientation activities, and effective academic advising. It was their view that although there was information on why students left, adequate information did not exist about intervention changes, and that there needed to be a concentration in this area.

Noel (1985) summed up the underlying themes of student attrition (p. 10-15). His first theme was academic boredom and uncertainty which lead to a lack of purpose and challenge. This could be counteracted with good teaching and advising. Uncertainty was a problem because when students did not know what they wanted as career choices, frustration could result. Another theme was the problem of transition and adjustment difficulties. Changing to a new environment could pose problems. The third theme was the limited or the unrealistic expectations of college. Academic underpreparedness was a fourth theme because many high schools did not adequately prepare students with the necessary skills to succeed in college. Incompatibility was another theme that frequently occurred when the mission statement of an institution was unclear or when recruitment extended to the wrong market. Finally, there was irrelevancy; there needed to be a concrete rationale for the courses that students had to take.

## - year?

Noel strongly believed that the responsibility for attrition was in the quality of the institution. He stated:

As we have seen, quality on campus begins with selecting, nurturing, and rewarding faculty, advisers, and other staff who are committed to creating a quality environment for students. Retention is highest at institutions that are committed to delivering the kind of educational experience that leads to learning and success. That is not surprising, for when students sense that they are learning, growing, developing, maturing, they will keep returning term after term for more of the same (p.24). He then offered ten steps for institutions to take:
deciding to act, creating the need, identifying supporters,

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assembling a start-up committee, formalizing effort,
convening the committee, displaying the data, beginning
implementation, establishing priorities for action, gaining
top level support, and assessing the impact.
    Astin (1977) believed that student involvement theory
had many implications for research and inspired this present
study. In his article, he defined the complex word,
involvement, and placed theory into the notion of actual
student involvement. Research in this area was discussed,
    and it was found that factors contributing to the students
    who were retained and those who left, were related to
    involvement. Studies showed that one important factor was
    student residence, and that on-campus residence related
    strongly to retention. Extra curricular activities were
    deemed important, as well as part time jobs on campus.
    This information was from a study that he did in 1975 on
    college dropouts. Following his explanations of the
    results, he offered some practical applications for
    faculty, administrators, counselors, and student personnel
    workers and suggested that more research be done.
    The Kramer study (1985) advised that campuses put new
emphasis on the needs of the individual because statistics
showed that students left when their needs were unfulfilled.
The study determined the differences between the students
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who stayed and those who left, with the effects of their social and academic integration and commitment. A
questionnaire was sent to a random sample of five populations in the fall of 1982. Demographic information, evaluation of the university experience, information concerning college goals and personal development were explored. The conclusions were that academic involvement was important as well as the social and the personal needs of students. A sense of commitment to an educational goal was important, and finally that economic factors also played an primary role.

College students today were described in Tinto's (1987)
new book. He reported that:
As of 1980 , approximately $92 \%$ of all first-time college students came from the preceding high school graduating class. Another $6 \%$ were young persons who delayed their first entry into college one or more years after high school graduation. Most of the remaining members of an entering cohort were adults who had either begun their college careers for the first time after many years of educational activity or had renewed a college career that had been started many years earlier (p.10).

Understanding how marketing in higher education influenced students was important for this study. Topor (1983) addressed ways that students have identified with and bonded with an institution. Communications materials, advertising, publicity, personal contact, atmospherics, graphic logos, outreach materials were all important in defining the institution and were important for students finding a fit. Litten, Sullivan and Brodigan (1983) added to the importance of finding the intended audience for the specific institution. The correct choice of a college was important for success and retention.

Patrick, Myers and VanDusen (1979), in their manual for conducting retention studies, offered important insight on designing and on implementing questionnaires, and included samples. The data-analysis phase was also addressed and explained. They stressed the importance of documentation of the results of surveys and the need to relate the results to previous studies which included conclusions and recommendations.

The College of Arts and Sciences<br>Oklahoma State University<br>in the Fall of 1987

Ok lahoma State University (1986-88 catalog) is one of the two largest universities in the State of Oklahoma and is a land grant college. It was founded on December 25, 1890, as the Oklahoma Agricultural and Mechanical College. Seven colleges are on the campus: Agriculture, Arts \& Sciences, Business Administration, Education, Engineering, Home Economics and the Graduate College. It is located in Stillwater, Oklahoma, a city of approximately 40,000. The city is situated between Tulsa and Oklahoma City, the two major cities which are each located an hour away.

More than 20,000 were on the Stillwater campus; 87 per cent were in - state students; 6 per cent were from other states and 17 per cent were from foreign countries. Fiftysix percent of the population was male, and $44 \%$ was female. There was a 9 per cent minority population on the campus.

The principle student enrollment (1987 Student Profile) was the youth population of Oklahoma making any enrollment projections largely based on the graduates from high school. Even though it is expected that there would be an increase over the 1987-88 enrollment, there is not much hope for increases in the 1990s. The University stated that it would institute marketing efforts with the high schools and the junior colleges in the coming years.

In a study of the Big Eight Schools (Colorado, Iowa State, Kansas, Kansas State, Missouri, Nebraska, Oklahoma and Oklahoma State), Oklahoma State University had the highest attrition rate with 29.6 per cent for freshmen. As a result of this, there was a telephone survey to find out about retention efforts in the other Big Eight schools. All had orientation programs and most had decentralized advisement and tutoring services. This information was from the Office of the Assistant Vice President for Academic Services, June 16, 1987.

The Daily Q'Collegian, $^{\text {Col }}$ campus newspaper, reported in its February 11, 1988, edition that spring enrollment was down by 382 students from last spring and has been dropping for the fifth consecutive year. It was at the lowest level since 1983 when it reached its peak.

When Lee Noel visited the campus, September of 1985, he reported several facts about this University. Oklahoma State students had an average ACT score is 21, which was higher than the national average which was 18.7, and the Oklahoma
average which was 17.3. He stated that Oklahoma State University lost 1000 entering freshmen between 1980 and 1984 and had 13.4 per cent of the college going market in Oklahoma. His two recommendations were to emphasize the importance of strong academic advising, and quality teaching at the lower division level.

Oklahoma State University had a one day orientation program in 1987 which included an introduction to the colleges and to the academic advisement in the college of choice. Those who could not attend the summer session, either enrolled by mail or enrolled late. Students were encouraged to attend Alpha, a four day orientation program for freshmen that was held before the beginning of the fall semester as an extended orientation for new students. Many students chose not to attend this program.

The College of Arts and Sciences is one of the largest Colleges at Oklahoma State with over 25 per cent of the students. The College has a freshman advising system with a ratio of 275 students to each adviser. In addition to the freshman advisement program, there is a required orientation class for those in the College. It met once a week for the entire semester. When students declare majors, as early as the second semester in college, they move to academic counselors in their fields.

Conclusion and Summary of Findings from the Literature Review

There have been many years of research, publications and studies on attrition and retention with focuses on the different factors. Despite this research, there were few solutions to the problem. This was due in part to the complexity of the human factors involved, in part to the research that focused on uncontrolled factors, and in part to the lack of concrete programs for retention. There were no single causes, but there were areas that needed further study and attention. Implications from the research indicated that retention could be improved with action programs.

From the literature, involvement was a significant area that warranted more study. It was also apparent that attrition was best studied as early as possible, because the majority of dropouts occur between the freshman and the sophomore years. The first six weeks of the freshman year was identified as a critical time period.

The history and importance of research in attrition and retention was cited in this chapter. The situation at Oklahoma State University, and specifically, The College of Arts and Sciences was discussed. This study was an example of a typical College of Arts and Sciences within a major university, and it is hoped that the information that was obtained might prove insightful for other similar campuses.

Alexander Aston (1977), in his book, Preventing
Students From Dropping Out, stated the problem clearly:
Dropping out of college is a little like the weather: something everyone talks about but no one does anything about. This predilection for talk over action is reflected in much of the research on dropouts, which has focused more on counting, describing, and classifying them than on seeking solutions to the problem (p.1).

## METHODOLOGY

This chapter explains how the study presented in this dissertation was conducted. The following steps of the research process are discussed:

1. Survey of the related 1 iterature.
2. Subjects.
3. Design.
4. Development of the instruments.
5. Procedure.
6. Statistical tests.

Survey of the Related Literature

Literature from various sources was reviewed which included: (1) books on retention and attrition; (2) journals on higher education, counseling and academic student affairs; (3) reports on attrition and retention; (4) newspaper articles on attrition and retention. Dissertation abstracts were examined, and those that were obtainable concerning the subject were used. A computerized search (ERIC) was conducted using both journal entries and special publications from 1975 to 1988 , and abstracts were printed for all identified sources.

Books from the review of the literature provided the theoretical background for the study. The bibliographies in these books also provided references to many sources of related materials. This study differed from other studies on the subject of attrition. It did not consider GPA or ACT as variables. One study of attrition prone students was found that addressed early identification before the second semester of college, and considered involvement. That study was conducted by Barbee (1985), who tested students during a summer orientation program. There were no research studies found that focused on attrition, involvement or satisfaction with college of arts and science's students.

Subjects

The subjects were students in the College of Arts and Sciences at Oklahoma State University, Stillwater, Oklahoma. This group of individuals was available to the researcher as Coordinator of Arts and Sciences orientation courses. The students were enrolled in one of 43 sections of a required orientation course in the College. The course met during the fall semester of 1987. The materials presented in the course introduced the students to various aspects of academic and social life within the College and at the University.

A total of 925 students were on the original class enrollment records. Only 816 of this number participated in this study (Table I). A total of 604 students took the early
and late instrument; 165 took the early instrument only; 47 took the late instrument only. Of the original 816 students, 752 were 5 tayers and 64 were leavers.

TABLE I
DISTRIBUTION OF STUDY RESPONDENTS BY STAYERS AND LEAVERS

| Group | Response to the Instruments |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Early and Late Instruments | Early <br> Instrument | Late <br> Instrument | Total |
| Stayers | 573 | 137 | 42 | 752 |
| Leavers | 31 | 28 | 5 | 64 |
| Total | 604 | 165 | 47 | 816 |

The participant sample was delimited by the following factors: (1) Only Arts \& Sciences students were included; (2) Students with less than 12 credit hours were excluded (Twelve hours was considered full time status.); (3) Students with more than 28 credit hours were excluded (Twenty-eight hours was considered to be sophomore status.); (4) Only students who were present on the days of the data collection were included in the study.

The study design was descriptive. The student subjects were divided into two groups: (1) those students who began the second college semester the 1987-88 year (stayers); (2) those students who did not begin the second semester of the 1987-88 year (leavers).

Differences in the subjects' involvement and the subjects' satisfaction with college were measured. Involvement in the senior year of high school and involvement in college (the twelfth week) were measured. Satisfaction with college at the beginning of the first semester (the second week) and at the end of the first semester (the twelfth week) were measured. No special materials or presentations were provided to the subjects. The measures were strictly based on normally occurring events in the subjects' lives.

Development of the Instruments

The data gathering instruments designed for this study were developed from ideas in the literature and from other instruments. Two nationally used instruments were identified which measured information similar to what was needed for this study. The first nationally instrument was developed by Aston (1975) and was administered to entering freshmen during summer enrollment, at Oklahoma State University, in the fall of 1987. Another nationally used instrument was


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developed by Pace (1979). These instruments had general questions and did not pertain to involvement and to satisfaction specifically. They were used for ideas in developing the data gathering instruments for this study.

Two separate, but closely related, instruments were designed to gather data (Appendix A and Appendix B). The first, or early, instrument was divided into three sections. These sections were: (1) demographic data; (2) involvement in the senior year of high school; (3) satisfaction with college by the second week of the first semester of college. The second, or late, instrument was divided into two sections. These were: (1) involvement in the first semester of college by the twelfth week; (2) satisfaction with college by the twelfth week of the first semester of college.

The wording in both instruments was the same on the involvement and the satisfaction sections with the exceptions of "first semester in college" replacing "the senior year of high school" in the involvement sections. The demographics section in the early instrument was not repeated in the later instrument. The student's number was required on both instruments in order to merge the two sets of data.


The demographics section consisted of 12 questions. These questions concerned the students': sex, age, campus residence, membership in fraternal organizations, high school graduation class size, home town size, financial aid
need, hours worked, freshman enrollment date, participation in the Alpha Orientation Program, credit hours, and reasons for attending college. The question which addressed the reasons for attending college was the only question allowing for multiple responses in this section.

The involvement sections in the two instruments requested responses to seven questions in common. These questions concerned: number of hours per week spent studying, time spent talking with teachers, time spent talking with academic counselors, time spent studying at the library, number of hours spent participating in clubs and sports, numbers of hours spent socializing, and time spent attending cultural events. Two additional questions on the first instrument, from the demographics section asked the students to indicate if they were involved in a fraternal organization or if they had attended a pre college orientation program (ALPHA). These were considered first semester college involvement.

The satisfaction sections on the two instruments, included in this study, consisted of eight questions concerning satisfaction with Oklahoma State University. These questions requested that students indicate their satisfaction with: their choice of Oklahoma State as a university, their choice of Arts and Sciences as a college and their satisfaction with teachers, classes, academic advisement, housing, social life and friendships. There were other questions included in this section for use in other


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research and were not a part of this study. Content validity of the items in the instruments was determined through a review of both instruments by five faculty members, two academic counselors, and three students. The content was critiqued by this group based on the relevance of each item to the subjects of involvement and of satisfaction. A number of changes and revisions were made.

A pilot testing was conducted using several faculty, members, academic counselors and students. The pilot respondents were then interviewed regarding the instruments. The data from this interview and the outcome of the pilot instruments were used to refine the instruments.


## Procedure

The two instruments were administered by the mentors (faculty member or academic counselor) in each of the orientation class sections. The first instrument was administered the second week of the semester. The second instrument was administered the twelfth week of the semester.

The instruments were examined for student number and for completeness, and the data was entered into a computer file. After both sets of data were in the computer file, they were merged by student number into one file. Information was then obtained from university records concerning the students who did not re-enroll for the spring
semester. This information was also merged into the data file by student number.

## Statistical Tests


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Testing the hypotheses required assessing the significance of the participants' responses to the questions posed in the data gathering instruments. Descriptive statistics were first developed from the data to characterize and to summarize the participants' responses. Inferential statistics were then used to test the six hypotheses. The Statistical Analysis System (SAS, 1982) was used to compute the descriptive and the inferential statistics.

The four hypotheses concerning the relationship of involvement and satisfaction to re-enrollment were tested in the following manner:


1. All question scales were changed to a three point scale.
2. Four summary scores were computed, the first two as involvement indexes and the second two as satisfaction indexes. The high school involvement index was computed using questions B through $H$ from the involvement section on the first instrument. The college involvement index was computed using questions $B$ through $H$ from the second instrument and questions $E$ and $K$ from the demographics section of the first instrument. The early college satisfaction
index was computed using questions A through $H$ from the satisfaction section of the first instrument. The late college satisfaction index was computed using questions $A$ through $H$ from the satisfaction section of the second instrument.
3. Frequency distributions were developed to describe the summary score and the question. These distributions were developed by group $\{s t a y e r s$ and leavers).
4. The hypotheses were tested using the $t$ test to compare the means of the two groups' summary score at the $p$. is less than the .05 level of significance.
5. Where the null hypothesis was rejected, the probable reason for the rejection was explored by comparing the number of responses to each question in the summary measure set using the chi square statistic.

The two hypotheses concerning the relationships of the two involvement and the two satisfaction scales were tested in the following manner:

1. Each individual was ranked on the four summary scales.
2. Spearman's rank order correlation (rho) was computed for each group as a descriptor of the relationship between sets of measures and tested for significance at the P. is less than . 05 level of significance.

## CHAPTER IV

FINDINGS

This chapter presents and analyzes the data from the research instruments. In the analysis, descriptive statistics, frequencies and means, were used to summarize the data presentation. Other statistics, chi square, t test and Spearman's rho, were used in comparing various sets of data. The . 05 level of significance was used to evaluate the relevance of the comparisons. The presentation and the analysis were organized by:

1. Attrition rate data.
2. Respondent demographics.
3. Research questions.

Attrition Rate

Attrition rate was defined for the purpose of the study as the percentage of students that did not re-enroll for a second college semester. At the beginning of the second semester, 64 of the 816 students participating in the research, did not enroll in a second college semester (Table I, p. 39). The attrition rate, or percentage, was 7.8 per cent.

This was not the attrition rate used in analyzing the research questions. Due to the different numbers of students responding to first instrument and the second instrument, the attrition rate varied. The attrition rate used in analyzing the responses to questions on the first instrument was 7.7 per cent. Of the 769 students responding to questions on this instrument, 59 students did not re-enroll at the beginning of the second semester. The attrition rate used in analyzing responses to the second instrument was 5.6 per cent. Of the 816 students completing this survey instrument, 36 of those remaining to the end of the first semester did not re-enroll at the beginning of the second semester.

## Respondent Demographics

Demographics information on the respondents, was collected on the first survey instrument. Therefore, the reported demographic data is based on responses from 769 students. Responses to the 12 demographic questions are presented in Table II. The responses show that:

1. The study participants were primarily female, 60.2 per cent.
2. Of the group, 97.3 per cent were 17,18 , or 19 years of age.
3. Most participants, 88.4 per cent, lived in university housing (dormitories or fraternities).

TABLE II
DEMOGRAPHICS OF PARTICIPANTS

$$
(N=769)
$$

Measure Fer Cent Number

Sex (N = 769)

| Male | 39.8 | 306 |
| :--- | :--- | :--- |
| Female | 60.2 | 463 |

Age $(N=767)$

| 16 | 0.1 | 1 |
| ---: | ---: | ---: |
| 17 | 14.0 | 107 |
| 18 | 79.1 | 607 |
| 19 | 4.2 | 32 |
| 20 or older | 2.6 | 20 |

Residence $(N=768)$

Residence hall/fraternity
88.4

679
Home or off campus
11.6

89

Membership in Fraternal Organization $\langle N=767$ )

| A member | 16.0 | 123 |
| :--- | :--- | :--- |
| Might join | 42.3 | 324 |
| Won't join | 41.7 | 320 |

Size of High School Graduation Class (N = 769)
300 or under
53.4

411
300-400
18.8

144
400-500
10.9

84
500-600
6.6

51
600 or over
10.3

79

Size of Home Town ( $N=767$ )
Under 1,000
1,000 to 20,000
20,000 to 40,000
40,000 or more

| 6.3 | 48 |
| ---: | ---: |
| 27.3 | 208 |
| 22.4 | 171 |
| 44.0 | 335 |


| Measure Per | Cent | Number |
| :---: | :---: | :---: |
| Use of Financial Aid ( $N=767$ ) |  |  |
| No | 51.8 | 397 |
| Yes, less than 50\% of income | 19.0 | 146 |
| Yes, more than $50 \%$ of income | 16.4 | 126 |
| No, but will | 9.5 | 73 |
| No, never will | 3.3 | 25 |
| Need to Work in College ( $N=769$ ) |  |  |
| Yes | 19.4 | 149 |
| No | 47.6 | 366 |
| Maybe | 33.0 | 254 |
| Enrollment Date at Oklahoma State University $\langle N=769$ ) |  |  |
| May 28 to July 2 | 68.4 | 517 |
| July 2 to August 14 | 23.8 | 175 |
| August 14 to the first week of school | 6.1 | 47 |
| Concurrently enrolled in high school | 2.9 | 22 |
| Attended summer school | . 8 | 6 |
| Participation in Alpha ( $N=769$ ) |  |  |
| In most of the program | 14.2 | 109 |
| In some of the program, a few activities | 41.7 | 269 |
| No interest | 16.1 | 123 |
| No time to spend | 18.9 | 145 |
| Didn't know about it | 3.0 | 23 |
| Didn't, but wished they had | 6.1 | 47 |
| Enrollment by Credit Hours ( $N=769$ ) |  |  |
| 6 to 11 hours | . 5 | 4 |
| 12 to 13 hours | 19.8 | 152 |
| 14 hours | 30.2 | 232 |
| 15 hours | 22.6 | 174 |
| 16 hours | 19.4 | 149 |
| 17 hours | 6.9 | 53 |
| 18 or more hours | 0.6 | 5 |

## TABLE II (Continued)

| Demographic Areas Per | Cent | Number |
| :---: | :---: | :---: |
| Reasons for Attending College * (N = 769) |  |  |
| To get away from home | 37.9 | 292 |
| Couldn't find a job | 0.9 | 7 |
| To gain a general education | 66.8 | 514 |
| To gain an appreciation of ideas | 35.2 | 271 |
| My friends were going to attend college | 15.6 | 120 |
| To get a better job | 68.1 | 524 |
| To please a parent or a friend | 17.2 | 132 |
| To acquire a pre med, pre law degree | 29.8 | 229 |
| As a two year program | 1.3 | 10 |
| To find a career, undecided | 32.3 | 248 |
| To meet other people | 51.9 | 399 |
| To find a husband or a wife | 7.2 | 55 |

*The total equals more than $100 \%$ because most
participants gave more than one reason.
4. Involvement or intention of involvement in fraternal organizations was high with 58.3 per cent of the students either affiliated or considering affiliation.
5. Over half of the students, 53.4 per cent, were from high school classes of 300 students or less.
6. Forty-four percent of the students came from home towns with a population of 40,000 or more.
7. Over half, 51.8 per cent, were not using financial aid.
8. Just under half of the students, 47.6 per cent, did not intend to work during the first semester of college.
9. There were 91.2 per cent of the students who enrolled before August 14 th.
10. Only 55.9 per cent of the 5 tudents participated in a part of the Alpha orientation program.
11. The majority of students, 99.9 per cent, were enrolled in 12 to 17 credit hours.
12. There were twelve possible responses for the reasons why students were attending college. The students were requested to respond to all reasons which applied to them.

There were three reasons which yielded a response rate greater than 50 per cent. The majority of students indicated that they were attending college: to gain a general education (66.8 per cent); to get a better job (68.1 per (ent); to meet other people (51.9 per cent).

There were three answers which yielded a response rate greater than 30 per cent: 37.9 per cent wanted to get away from home; 35.2 per cent came to gain a better appreciation of ideas; 32.3 per cent came to find a career.

The remaining six responses were all under 30 per cent: 29.8 per cent came to acquire a pre med or pre law degree; 17.3 per cent came to please a parent or a friend; 15.6 per cent came because their friends were going to attend


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college; 7.2 per cent came to find a husband or a wife; one per cent came because they were using this as a two year program; and one per cent came as they could not find a job.

\section*{Research Questions}


Research Question One: Is high school senior year involvement an indicator of second semester college enrollment?

Hypothesis: There is no difference in the level of high school involvement between those students that stayed in college or those students that left college before beginning a second college semester. Table III and Table IV present the frequency measures of high school involvement for both stayers and leavers as well as a comparison of the data using the independent samples $t$ test comparison of the means of the stayers and the leavers (Table V).

The variances of the two data sets first compared for equality to determine the appropriate degrees of freedom. The variances were equal ( $p$ is less than .05), and 763 degrees of freedom was calculated for use in the $t$ test. The $t$ test results ( $t=.2403$ ) indicated that there was no significant difference (p. is less than . O5) between the means of the two groups. For the high school involvement question, the researcher failed to reject the null hypothesis.

TABLE III

> IS SENIOR YEAR HIGH SCHOOL INVOLVEMENT AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY VALUE BY STAYERS

| Summa <br> Scale | ry Involvement <br> (Range 7-21) | Freq. | \% | Cum. Freq. | Cum. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | 9 | 6 | 0.8 | 6 | 0.8 |
|  | 10 | 25 | 3.5 | 31 | 4.4 |
|  | 11 | 34 | 4.8 | 65 | 9.2 |
|  | 12 | 105 | 14.9 | 170 | 24.0 |
|  | 13 | 120 | 17.0 | 290 | 41.0 |
|  | 14* | 118 | 16.7 | 408 | 57.7 |
|  | 15 | 115 | 16.3 | 523 | 74.0 |
|  | 16 | 83 | 11.7 | 606 | 85.7 |
|  | 17 | 47 | 6.6 | 653 | 92.4 |
|  | 18 | 36 | 5.1 | 689 | 97.5 |
|  | 19 | 16 | 2.3 | 705 | 99.7 |
| Low | 20 | 2 | 0.3 | 707 | 100.0 |

TABLE IV
IS SENIOR YEAR HIGH SCHOOL INVOLVEMENT AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY VALUE BY LEAVERS

| Summa Scale | y Involvement <br> (Range 7-21) | Freq. | \% | Cum. Freq. | Cum. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | 9 | 1 | 1.7 | 1 | 1.7 |
|  | 10 | 1 | 1.7 | 2 | 3.4 |
|  | 11 | 3 | 5.2 | 5 | 8.6 |
|  | 12 | 9 | 15.5 | 14 | 24.1 |
|  | 13 | 9 | 15.5 | 23 | 39.7 |
|  | 14* | 8 | 13.8 | 31 | 53.4 |
|  | 15 | 12 | 20.7 | 43 | 74.1 |
|  | 16 | 7 | 12.1 | 50 | 86.2 |
|  | 17 | 4 | 6.9 | 54 | 93.1 |
|  | 18 | 2 | 3.4 | 56 | 96.6 |
|  | 19 | 1 | 1.7 | 57 | 98.3 |
| Low | 20 | 1 | 1.7 | 58 | 100.0 |

TABLE V

# IS SENIOR YEAR HIGH SCHOOL INVOLVEMENT AN AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? COMPARISON BY STAYERS AND LEAVERS -FREQUENCIES t TEST 



Research Question Two: Is first semester college involvement an indicator of second semester college enrollment?

Hypothesis: There is no difference in the level of first semester college involvement between those students that stayed in college or those students that left college before beginning a second college semester. Table VI and Table VII present the frequency measures of college involvement for both stayers and leavers as well as a comparison of the data using the independent samples test comparison of the means of the stayers and the leavers (Table VIII).

TABLE VI

## IS FIRST SEMESTER COLLEGE INVOLVEMENT AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY VALUE BY STAYERS

| Summary Involvement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Scale | (Range 9-27) | Freq. | \% | Cum. Freq. | Cum. \% |
| High | 9 | 4 | 0.7 | 4 | 0.7 |
|  | 10 | 5 | 0.8 | 9 | 1.5 |
|  | 11 | 23 | 3.8 | 32 | 5.2 |
|  | 12 | 51 | 8.3 | 83 | 13.6 |
|  | 13 | 95 | 15.5 | 178 | 29.1 |
|  | 14 | 110 | 18.0 | 288 | 47.1 |
|  | 15* | 124 | 20.3 | 412 | 67.4 |
|  | 16 | 107 | 17.5 | 519 | 84.9 |
|  | 17 | 53 | 8.7 | 572 | 93.6 |
|  | 18 | 26 | 4.3 | 519 | 97.9 |
|  | 19 | 9 | 1.5 | 607 | 99.3 |
| Low | 20 | 2 | 0.3 | 611 | 100.0 |

TABLE VII

IS FIRST SEMESTER COLLEGE INVOLVEMENT AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY VALUE BY LEAVERS


TABLE VIII

# IS FIRST SEMESTER COLLEGE INVOLVEMENT AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? COMPARISON BY STAYERS AND LEAVERS -FREQUENCIES $t$ TEST 



The variances of the two data sets were first compared for equality to determine the appropriate degrees of freedom. The variances were equal (p. is less than .05), and 644 degrees of freedom was selected for use in the $t$ test.

The $t$ test results ( $t=2.1903$ ) indicated that there was a significant difference (p. is less than . O5) between the means of the two groups. For the college involvement question, the researcher rejected the null hypothesis.

The reasons behind the rejection of the hypothesis were explored by analyzing the two groups' responses to each of the questions included in the summary measures of involvement. The single sample chi square test was used to compare the responses between the two groups. The obtained
chi squares indicated no significant difference between the groups on the following questions:

* How often did you spend time outside of class talking with teachers your first semester of college?
* How often did you spend time outside of class talking with academic counselors your first semester of college?
* How often did you study at the library during your senior year?
* How many hours a week did you spend dating or socializing with your friends your first semester of college?
* How often did you attend art, theater, musical or cultural events at your school your first semester of college?
* Did you participate in the Alpha orientation program?

However, significant differences between the groups were found on the other three questions (p. less than .05). Table IX presents the analysis for the question: How many hours a week did you spend studying for your classes your first semester of college? This measure was significant. A higher than expected number of leavers spent fewer hours studying than did the stayers.

TABLE IX

CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY THE NUMBER OF HOURS OF INVOLVEMENT A WEEK SPENT STUDYING FOR CLASSES THE FIRST SEMESTER of COLLEGE

| Group | Numbers of Hours per Week |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 16 or more | 6-15 | 0-5 | Total |
| Stayers | 170 | 368 | 77 | 615 |
| Leavers | 4 | 23 | 9 | 36 |
| Total | 174 | 391 | 86 | 651 |

Chi Square C.V. 2 df $=5.99$
$P<.05$

Cal. Chi Square $=7.58$

Table $X$ presents the analysis of the question: How many hours a week did you spend participating in students clubs, groups or sports your first semester of college? A higher number of leavers than expected spent fewer hours on these activities than did the stayers.

TABLE X

> CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY THE NUMBERS OF HOURS OF INVOLVEMENT A WEEK SPENT
> PARTICIPATING IN CLUBS AND SPORTS THE FIRST SEMESTER OF COLLEGE

| Group | Numbers of Hours per Week |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 16 or more | 6-15 | 0-5 | Total |
| Stayers | 67 | 244 | 303 | 614 |
| Leavers | 1 | 8 | 27 | 3 |
| Total | 68 | 252 | 330 | 650 |

Chi Square C.V. $2 d f=5.99 \quad \mathrm{P}<.05$
Cal. Chi Square $=9.25$

Table XI presents the analysis of the subject: Membership in a social sorority or fraternity? A higher number of leavers than expected will not join a fraternal organization.

TABLE XI

## CHI SQUARE CONTINGENCY TABLE FOR STAYERS <br> AND LEAVERS OF INVOLVEMENT BY MEMBERSHIP IN A FRATERNAL <br> ORGANIZATION THE FIRST SEMESTER OF COLLEGE

| Group | I am a member. | $\begin{aligned} & \text { I migh } \\ & \text { will } \end{aligned}$ | I $w$ joi | Total |
| :---: | :---: | :---: | :---: | :---: |
| Stayers | 119 | 303 | 28 | 708 |
| Leavers | 4 | 21 | 34 | 59 |
| Total | 123 | 324 | 320 | 767 |

Chi Square C.V. $2 d f=5.99 \quad \mathrm{P}<.05$
Cal. Chi Square $=7.96$

## Research Question Three

Research Question Three: Is high school senior year involvement related to first semester college involvement?

Hypothesis: There is no correlation between the levels of involvement in the senior year of high school and the first semester of college for (1) the stayers and (b) the
leavers. Table XII presents Spearman's rho as a measure of correlation for the two groups as well as the related level of significance and the numbers of observations. Table III, IV and Table $V$ show the ranking from high to low involvement and the calculated involvement mean in the senior year of high school. This was calculated by stayers and by leavers. Table VI, Table VII, and Table VIII show the ranking from high to low involvement and the calculated involvement mean in the first semester of college. This was calculated by stayers and by leavers.

TABLE XII

> IS HIGH SCHOOL SENIOR YEAR INVOLVEMENT RELATED TO FIRST SEMESTER COLLEGE INVOLVEMENT? CORRELATION SUMMARY VALUE (SPEARMAN'S RHO)

| Group | Spearman Correlation Coefficient (Rho) | Prob. >/R/ <br> Under HO:RHO $=0$ | Number of Observations |
| :---: | :---: | :---: | :---: |
| Stayers | . 36 | . 0001 | 556 |
| Leavers | . 15 | . 4486 | 29 |

The hypothesis is rejected for the stayers (p. is less than . O5) as recorded in Table XII. High school senior year
involvement of the stayers is weakly correlated (rho $=.36$ ) with first semester college involvement. The hypothesis is rejected for the leavers (p. is less than .05). High school senior year involvement of the leavers did not appear to be correlated with first semester college involvement. Further exploration of the changes in involvement by the leavers was prohibited by the small number of leavers.

Research Question Four

Research Question Four: Is satisfaction with college at the beginning of the first semester of college an indicator of second semester college enrollment?

Hypothesis: There is no difference in the level of satisfaction at the beginning of the first semester of college between those students that stayed in college or those students that left college before beginning a second college semester. Table XIII and Table XIV present the frequency measures of early first semester college satisfaction for both stayers and leavers as well as a comparison of the data using the independent samples $t$ test comparison of the means of the stayers and the leavers (Table XV).

TABLE XIII
IS SATISFACTION WITH COLLEGE AT THE - BEGINNING OF THE FIRST SEMESTER AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY value by stayers

| Summa <br> Scale | y Involvement (Range 8-24) | Freq. | \% | Cum. Freq. | Cum. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | 8 | 98 | 13.9 | 99 | 14.0 |
|  | 9 | 106 | 15.0 | 205 | 29.0 |
|  | 10 | 104 | 14.7 | 309 | 43.8 |
|  | 11* | 126 | 17.8 | 435 | 61.6 |
|  | 12 | 84 | 11.9 | 519 | 73.5 |
|  | 13 | 60 | 8.5 | 579 | 82.0 |
|  | 14 | 56 | 7.9 | 635 | 89.9 |
|  | 15 | 22 | 3.1 | 657 | 93.1 |
|  | 16 | 26 | 3.7 | 683 | 96.7 |
|  | 17 | 14 | 2.0 | 697 | 98.7 |
|  | 18 | 6 | 0.8 | 703 | 99.6 |
|  | 20 | 1 | 0.1 | 704 | 99.7 |
| Low | 21 | 2 | 0.3 | 706 | 100.0 |

TABLE XIV
Is SATISFACTION WITH COLLEGE AT THE beginning of the first semester an INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY value by leavers

| Summary Involvement Scale (Range 8-24) |  | Freq. | \% | Cum. Freq. | Cum. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | 8 | 10 | 16.9 | 10 | 16.9 |
|  | 9 | 5 | 8.5 | 15 | 25.4 |
|  | 10 | 3 | 5.1 | 18 | 30.5 |
|  | 11 | 11 | 18.6 | 29 | 49.2 |
|  | 12* | 5 | 8.5 | 34 | 57.6 |
|  | 13 | 8 | 13.6 | 42 | 72.2 |
|  | 14 | 2 | 3.4 | 44 | 74.6 |
|  | 15 | 4 | 6.8 | 48 | 81.4 |
|  | 16 | 6 | 10.2 | 54 | 91.5 |
|  | 17 | 3 | 5.1 | 57 | 96.6 |
| Low | 18 | 2 | 3.4 | 59 | 100.0 |

TABLE XV

> IS SATISFACTION WITH COLLEGE AT THE BEGINNING OF THE FIRST SEMESTER AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? COMPARISON BY STAYERS AND LEAVERS FREQUENCIES T TEST

| Group | $N$ | Mean | SD |
| :---: | :---: | :---: | :---: |
| Stayers | 706 | 11.19 | 2.47 |
| Leavers | 59 | 12.05 | 3.00 |
| t C.V. |  | $\Delta f=$ | P. < |

Cal. $t=2.15$

* Degrees of freedom calculated due to unequal variances.

The variances of the two data sets were first compared for equality to determine the appropriate degrees of freedom. The variances were unequal (p is less than .05), and 64.7 degrees of freedom (calculated due to unequal variances) was selected for use in the $t$ test. The $t$ test results $\{t=2.1535)$ indicated that there was a significant difference ( $p$. is less than . O5) between the means of the two groups. For the early first semester college satisfaction question, the researcher rejected the null hypothesis.

The reasons behind the rejection of the hypothesis were explored by analyzing the two groups' responses to each of the questions included in the summary measures of
satisfaction. The single sample chi square test was used to compare the responses between the two groups. The obtained chi squares indicated no significant differences (p. less than . O5) between the groups on all the questions except: Are you satisfied with your choice of Oklahoma State University (Table XVI)? A higher than expected number of leavers were not satisfied with their choice of Oklahoma State University.

TABLE XVI
CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY SATISFACTION WITH THE CHOICE OF OKLAHOMA STATE UNIVERSITY AT THE BEGINNING OF THE FIRST SEMESTER OF COLLEGE

| Group | Satisfied | $\begin{aligned} & \text { Mostly } \\ & \text { Satisfied } \end{aligned}$ | Unsatisfied | Total |
| :---: | :---: | :---: | :---: | :---: |
| Stayers | 548 | 148 | 14 | 710 |
| Leavers | 31 | 25 | 3 | 59 |
| Total | 579 | 173 | 17 | 769 |
| Chi Square C.V. 2 df $=5.99$ |  |  | $p<.05$ |  |
| Cal. Chi | are $=18.00$ |  |  |  |

Research Question Five: Is satisfaction with college at the end of the first semester an indicator of second semester college enrollment?

Hypothesis: There is no difference in the level of first semester college involvement at the end of the first semester between those students that stayed in college or those students that left college before beginning a second college semester. Table XVII and Table XVIII present the frequency measures of late first semester college satisfaction for both stayers and leavers as well as a comparison of the data using the independent samples $t$ test comparison of the means for the stayers and the leavers (Table XIX).

The variances of the two data sets were first compared for equality to determine the appropriate degrees of freedom. The variances were equal (p. is less than . 05), and 641 degrees of freedom was selected for use in the $t$ test.

The $t$ test results ( $t=3.3093$ ) indicated that there was a significant difference (p. is less than . OS) between the means of the two groups. For the late first semester college satisfaction question, the researcher rejected the null hypothesis.

The reasons behind the rejection of the hypothesis were explored by analyzing the two groups' responses to each of

TABLE XVII

IS SATISFACTION WITH COLLEGE AT THE END OF THE FIRST SEMESTER AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT?

SUMMARY VALUE BY STAYERS

| Summa <br> Scale | y Involvement <br> (Range 8-24) | Freq. | $\%$ | Cum. Freq. | Cum. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High | 8 | 45 | 7.4 | 45 | 7.4 |
|  | 9 | 46 | 7.6 | 91 | 15.0 |
|  | 10 | 67 | 11.0 | 158 | 26.0 |
|  | 11 | 76 | 12.5 | 234 | 38.5 |
|  | 12 | 91 | 15.0 | 325 | 53.5 |
|  | 13* | 73 | 12.0 | 398 | 65.5 |
|  | 14 | 56 | 9.2 | 454 | 74.7 |
|  | 15 | 51 | 8.4 | 505 | 83.1 |
|  | 16 | 42 | 6.9 | 547 | 90.0 |
|  | 17 | 25 | 4.1 | 572 | 94.1 |
|  | 18 | 18 | 3.0 | 590 | 97.0 |
|  | 19 | 8 | 1.3 | 598 | 98.4 |
|  | 20 | 5 | 0.8 | 603 | 99.2 |
|  | 21 | 2 | 0.3 | 605 | 99.5 |
|  | 23 | 1 | 0.2 | 606 | 99.7 |
| Low | 24 | 2 | 0.3 | 608 | 100.0 |

TABLE XVIII
IS SATISFACTION WITH COLLEGE AT THE END OF THE FIRST SEMESTER AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? SUMMARY VALUE BY LEAVERS

Summary Involvement
Scale (Range 8-24) Freq. $\%$ Cum. Freq. Cum. \%

| High | 8 | 1 | 2.9 | 1 |
| :---: | :---: | :---: | :---: | ---: |
| 2.0 | 2.9 | 2 | 5.7 |  |
| 10 | 1 | 2.9 | 6 | 17.1 |
| 11 | 4 | 11.4 | 13 | 37.1 |
| 12 | 7 | 8.0 | 16 | 45.7 |
| 13 | 3 | 5.7 | 18 | 51.4 |
| $14 *$ | 3 | 8.6 | 21 | 60.0 |
| 15 | 5 | 14.3 | 26 | 74.3 |
| 16 | 6 | 17.1 | 32 | 91.4 |
| 17 | 1 | 2.9 | 33 | 94.3 |
| 18 | 2 | 5.7 | 35 | 100.0 |

TABLE XIX

> IS SATISFACTION WITH COLLEGE AT THE END OF THE FIRST SEMESTER AN INDICATOR OF SECOND SEMESTER COLLEGE ENROLLMENT? COMPARISON BY STAYERS AND LEAVERS FREQUENCIES $t$ TEST

the questions included in the summary measure of satisfaction. The single sample chi square test was used to compare the responses between the two groups. The obtained chi squares indicated no significant difference between the groups on the following questions:

* Are you satisfied with the College of Arts and Sciences?
* Are you satisfied with most of your teachers as a group?
* Are you satisfied with most of your classes?
* Are you satisfied with your academic advisement?
* Are you satisfied with your social life?

However, significant differences between the groups was found on the other three questions (p. less than. 05). Table $X X$ presents the analysis for the question: Are you satisfied with your choice of Oklahoma State University? This measure was significant. There was a higher number of leavers than expected who were not satisfied with their choice of Oklahoma State University.

TABLE $X X$
CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY SATISFACTION WITH THE CHOICE OF OSU AT THE END OF THE FIRST SEMESTER OF COLLEGE

| Group | Satisfied | Mostly Satisfied | Unsatisfied | Total |
| :---: | :---: | :---: | :---: | :---: |
| Stayers | 393 | 201 | 20 | 614 |
| Leavers | 7 | 17 | 12 | 36 |
| Total | 400 | 218 | 32 | 650 |

Chi Square C. V. $2 \quad d f=5.99 \quad p<.05$
Cal. Chi Square $=75.584$

Table XXI presents the analysis of the question: Are you satisfied with your housing? A higher number of the leavers than expected were not satisfied with their choice of housing.

TABLE XXI
CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY SATISFACTION WITH HOUSING AT THE END OF THE FIRST SEMESTER OF COLLEGE

| Group | Satisfied | Mostly Satisfied | Unsatisfied | Total |
| :---: | :---: | :---: | :---: | :---: |
| Stayers | 263 | 249 | 102 | 614 |
| Leavers | 12 | 11 | 12 | 35 |
| Total | 275 | 260 | 114 | 649 |

Chi Square C. V. $2 d f=5.99$
$\mathrm{p}<.05$
Cal. Chi Square $=7.15$

Table XXII presents the analysis of the question: Are you satisfied with your friendships in college? A higher number of the leavers than expected were not satisfied with their friendships.

TABLE XXII
CHI SQUARE CONTINGENCY TABLE FOR STAYERS AND LEAVERS BY SATISFACTION WITH FRIENDSHIPS AT THE END OF THE FIRST SEMESTER OF COLLEGE

| Group | Satisfied | $\begin{aligned} & \text { Mostly } \\ & \text { Satisfied } \end{aligned}$ | Unsatisfied | Total |
| :---: | :---: | :---: | :---: | :---: |
| Stayers | 386 | 200 | 29 | 615 |
| Leavers | 21 | 8 | 7 | 36 |
| Total | 407 | 208 | 36 | 651 |
| Chi Square C.V. 2 df $=5.99$ P P < |  |  |  |  |

Cal. Chi Square $=14.58$

## Research Question Six

Research Question Six: Is satisfaction with college at the beginning of the first semester related to satisfaction with college at the end of the first semester?

Hypothesis: There is no correlation between the levels

```
of satisfaction at the beginning of the first semester of college and the end of the first semester of college for the (a) stayers and the (b) leavers. Table XXIII presents Spearman's rho as a measure of correlation for the two groups as well as the related level of significance and the number of observations. Table XIII, Table XIV and Table XV show ranking from high to low satisfaction and the calculated satisfaction mean for the beginning of the first semester of college. This was calculated by stayers and leavers. Table XVII, Table XVIII and Table XIX show ranking from high to low satisfaction and the calculated satisfaction mean for the end of the first semester of college.
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TABLE XXIII

IS SATISFACTION WITH COLLEGE AT THE BEGINNING OF THE FIRST SEMESTER RELATED TO SATISFACTION WITH COLLEGE AT THE END OF THE FIRST SEMESTER? CORRELATION SUMMARY VALUE - SPEARMAN'S RHO

| Group | Spearman Correlation Coefficient (Rho) | Prob. >/R/ <br> Under HO:RHO $=0$ | Number of Observations |
| :---: | :---: | :---: | :---: |
| Stayers | . 53 | .0001 | 563 |
| Leavers | . 43 | . 0183 | 30 |

```
The null hypothesis is rejected for the stayers (p. is less than . O5). Satisfaction with college at the beginning of the first semester is correlated (rho \(=.53\) ) with satisfaction with college at the end of the first semester. The null hypothesis is similarly rejected for the leavers (p. is less than . O5). Satisfaction with college at the beginning of the first semester of college for the leavers is correlated (rho \(=\). 43) with satisfaction with college at the end of the first semester of college.
```

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to identify possible determinants of attrition prone students. Identification during the first semester of college of those students that might leave could benefit both the students and the institutions. Early identification would allow for intervention methods as a part of an overall retention program.

The research specifically questioned if differences existed between college stayers and leavers as to high school and college involvement and as to satisfaction with college. Participants in the study provided data on their senior year high school involvement and their first semester college involvement. They also provided data on their satisfaction with college at both the beginning and at the end of the first college semester. The results of the study are presented in four sections:

1. Summary of the results of the study.
2. Conclusions.
3. Recommendations for further research.
4. Recommendations for the College of Arts and Sciences.

## Summary of the Results of the Study

The results of the study must be reviewed in the context of the population. Female students comprised 60 per cent of the participants. In contrast, female students comprised 44 per cent of the student body at Oklahoma State University, the study site. The majority of the participants were 17 to 19 years old.

Freshmen, at the study site, were required to live in University, or fraternal organization housing unless they were able to commute. This requirement, coupled with the remoteness of the site, Stillwater, Oklahoma, compared to a major metropolitan area, resulted in 8 out of 9 participants living in campus housing. That is not true on many campuses, according to available data. However, the requirement did provide the opportunity for participants to be more intimately involved with campus activities and with their student peers than in many college settings.

There were several other interesting results. Five out of 10 students were from small high schools, reflecting the rural nature of Oklahoma. Ninety-nine per cent of the students were enrolled in 12 or more credit hours. Enrollment at that level was a requirement for freshmen to be considered full time and a requirement for Arts and Sciences freshmen to take the orientation classes, where the data were collected.

The first research question sought to determine if stayers and leavers differed in their level of high school
involvement. The results of the research did not support the hypothesis that there was a difference in the two groups in terms of high school involvement.

The second research question sought to determine if the stayers and the leavers differed on their level of first semester college involvement. In this case, the null hypothesis of no difference was rejected, suggesting that the two groups differed in their level of first semester college involvement. The differences in involvement level centered on their specific activities. A higher percentage of stayers spent time studying and time in clubs, groups or sports activities. Stayers were also more likely to join a fraternal organization than were those who left by the end of the first semester.

The third research question explored the relationship of high school involvement with first semester college involvement. The level of stayer involvement remained the same, however the level of involvement of the leavers decreased.

Research question four sought to determine if the stayers and the leavers differed as to early college satisfaction. Findings revealed that satisfaction of the stayers was higher than the satisfaction of the leavers. The major cause of this difference was related to the leavers not being satisfied with their selection of Oklahoma State University.


#### Abstract

Research question five investigated the difference in the stayer and the leaver satisfaction at the end of the first semester of college. In this case also, the stayers were more satisfied than the leavers. However, the differences now focused on not only the choice of Oklahoma State University but also included the leavers lower level of satisfaction with housing and with friendships.

The sixth research question asked if early and late college satisfaction was related. For both groups, the early level of satisfaction reflected the later level of satisfaction.


## Conclusions

Conclusions were drawn from the analysis of the data as reflected in the preceding summary. In general, leavers and stayers differed as to involvement and to satisfaction during the first semester of college. The leavers' level of satisfaction and involvement was lower than that of the stayers.

1. Based upon the findings, it is concluded that the level of involvement in high school does not indicate whether students will enroll in a second semester of college.
2. Based upon the finding that leavers' involvement in the first semester of college was lower than the involvement of the stayers, it is concluded that early social involvement is an important factor in
deterring students from dropping out.
3. It was found that the lower level of satisfaction of the leavers with Oklahoma State University early in the semester was maintained through the semester. Therefore it is concluded that special efforts to develop positive first impressions and early social involvement, along with development of early friendships and satisfaction with housing, must be the focus of early college experience, in order to discourage dropping out after the first semester.

Recommendations for Further Research

1. It is recommended that there should be studies of intrusive advising to determine if student satisfaction with the choice of university could be changed.
2. It is recommended that true causal models of attrition be developed. Such models should have much in common with general behavioral theories, specifically those dealing with employee turnover.
3. It is recommended that similar studies be done on different types of post secondary schools, such as vocational technical schools and other types of colleges, such as business and engineering.

Recommendations for the College of Arts and Sciences

1. It is recommended that the College increase its emphasis on freshman orientation, on freshman orientation classes, and on freshman academic counseling, by providing more involvement activities to bond these students to the College.
2. It is recommended that the College support programs which foster interaction, and satisfaction between freshmen and upperclassmen and faculty, such as: (1) a mentor program for students to team-up with a faculty member; (2) a big brother/big sister program for upperclassmen and freshmen.

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APPENDIX A
INSTRUMENT ONE

## SURVEY I PART I HIGI SCIMOL/COLLEEE INVOLVEAENT

This survey is designed to help us learn more about the kinds of activities in whach you participated in high school and in which you plan to participate in college. It will also help us to learn about your satisfaction with OSU. Fersonal information will to kept confidential and used in group form. please respond as accurately as possible. Thank you fot your tine.

PLEASE CIRCLE TIE APPROPRIATE NUMBER UNDER EACI CATEGORY WITII NUMBERS
A. Student number:
or name, if you do not remenber your number: $\qquad$
B. Sex:

1 Male
2 . Eenale
C. Age: $\qquad$
D. My current college residence is:

1 In a residence hall.
2 At home with parents or relatives or guardians.
3 A room or apartment within 10 miles of campus.
4 Out of town - more than 10 miles from campus.
5 In a fraternity or sorority.
E. Membership in a social sorority or fraternity:

1 I am a menber.
2 I might join one.
3 I will join one.
4 I will not join one.
E. The size of my high school graduating class was:

1 Under 100
2 100-199
3 200-299
4 300-393
5 400-499
6 500-599
7600 or more
G. The size of my hame town is:

1 Under 1,000
2 1,000-19,999
3 20,000-39,999
4 40,000 or above
H. I am presently using financial aid or a loan to attend OSU.

1 No.
2 Yes, for less than 508 of my expenses.
3 Yes, for more than 508 of my expenses.
4 No, I am not using financial aid or a loan to attend OSU, but plan to use one.
5 No, I am not using financial aid or a - loan to attend OSU and never will.

1. I will need to work during the school year to pay for my education:

1 Yes.
2 No.
3 Maybe
J. I enrolled at OSU:

1 During the pre-enrollment progran May 28 to July 21.
2 July 1 - August 14.
3 August 17 to the first week of school.
4 I was concurrently errolled in high school.
5 I attended summer school.
K. Participation in Nuplis:

1 I participated in most of the activities and programs.
2 I participated in sare of the activities and programs.
3 I participated in a few of the activities and programs.
4 I wasn't interested
5 I didn't have the tine to spend.
6 I didn't know about it.
7 I didn't, but wish I had attencled.
L. I am currently errolled in $\qquad$ credit hours.
M. My reason for attending college was: (Circle all that apply to you.)

1 To get away from hone.
2 I couldn't find a job.
3 To gain a general education.
4 To gain an appreciation of ideas.
5 Ny friends were going to attend college.
To get a better job.
7 To please a parent or a friend, etc.
8 to acquire a pre-med, pre-vet or pre-law degree.
9 As a two year college program.
10 To find a career - undecided now.
11 To neet other people.
12 To find a husband or wife.
13 Other (Specify)

SURVEY I PNRT II HIGI SCHOOL INVOLVENENT

These questions concern your high school involvement only. The answers should pertain to your senior year in high school.

## PLEASE CIRCLE THE APPROPRIATE NUMBER UNDER EACII CATEGORY

A. On average, how many hours a week did you work while attending high school your senior year?

1 None
2 Less than 10
3 11-20
$4 \quad 21-30$
531 or more
B. On average, how many hours a week did you spend studying for your classes your senior year?

1 None
2 1-5
3 6-10
4 11-15
$5 \quad 16-20$
621 or more
C. On average, how many hours a week did you spend participating in students clubs, groups or sports your senior year?

1 None
2 1-5
3 6-10
4 11-15
$5 \quad 16-20$
621 or more
D. On average, how many hours a week did you spend dating or socializing with your Eriends your senior year?

1 None
1-5
3 6-10
11-15
$5 \quad 16-20$
FOR TIE QUESTIONS THAT APPLY, EREQULNTLY indicates 5 OR NDRE TIMES \& OCCASIONALLY INDICATES 1 TO 4 TIMES
E. How often did you spend time outside of class talking with teachers your senior year?

Frequently
2 Occasionally
3 Never
F. How often did you spend time outside of class talking with academic counselors your senior year?

```
Frequently
Occasionally
Never
```

G. How often did you attend art, theater, musical or cultural events at your school your senior year?

1 Frequently
2 Occasionally
3 Never
H. How often did you study at the library during your senior year?

1 Frequently
2 Occasionally
3 Never
I. What clubs or organizations did you belong to your senior year and were you an officer or committee chair person? Circle one or both if it applies. Circle as many as apply to you.

## Menber Officer, etc

| 1 | la | Sports participant |
| ---: | :--- | :--- |
| 2 | 2a | Sports booster |
| 3 | 3a | Speech or drama |
| 4 | 4a | Music: voice or |
| instrunent |  |  |
| 5 | 5a | Newspaper or yearbook |
| 6 | 6a | Student government |
| 7 | $7 a$ | Vocational |
| 8 | $8 a$ | A-11, agricultural |
| 9 | 9a | Ilonor society |
| 10 | $10 a$ | Social |
| 11 | $11 a$ | Other (specify) |
|  |  |  |

J. What people supported your involvement in school your senior year? Circle as many as apply to you.

1 Peer or close friend
2 Parent
3 Sister or brother
4 Teacher
5 Relative
6 Academic counselor
7 Enployer
8 Religious affiliate
9 Friend of family
10 Older person in school
11 Fersonal counselor
12 Other (specify) $\qquad$

## SURVEY I PART III EARLY COLLDGE SATISEACTION

These questions concern your satisfaction with OSU up to this point in time.
PLEASE CIRCLE TIE APPRORRIATE NUMLIER UNDER EACI CAILEGORY
A. Are you satisfied with your choice of OSU?

1 Yes
Mostly yes
Mostly no
4 No
B. Are you satisfied with the College of Arts Sciences?

1 Yes
2 Mostly yes
3 Mostly no
4 No
C. Are you satisfied with most of your teachers as a group?

```
1 Yes
Mostly yes
Mostly no
N NO
```

D. Are you satisfied with most of your classes?
ss
Mostly yes
Mostly no
No
E. Are you satisfied with your academic advisement?

1 Yes
2 Mostly yes
3 Mostly no
4 No
F. Are you satisfied with your housing?

1 Yes
Mostly yes
Mostly no
4 No
G. Are you satisfied with your social life?

1 Yes
2 Mostly yes
3 Mostly no
4 No
H. Are you satisfied with your friendships in college?
1 Yes
2 Mostly yes
3 Mostly no
4 NO
I. Do you ever feel homesick?

1 Erequently
2 cccasionally
3 Never
J. Do you ever feel lonely?

1 Erequently
2 Occasionally
3 Never
K. Do you hope to spend more time socializing next semester?
1 Yes
2 No
3 Don't know
L. Do you feel that you will achieve academically?
$\begin{array}{ll}1 & \text { Yes } \\ 2 & \text { No }\end{array}$
3 Don't know
M. Do you feel confident about your major career goals?

1 Yes
2 No
3 Still undecided
N. Do you worry about your health?

1 Yes
2 No
3 Sonetimes
O. Do you worry about your finances for school?

1 Yes
2 No
P. Do you cut classes?

1 No
2 Occasionally
3 Frequently
Q. Do you plan to return to OSU in the spring?

1 Yes
2 No
3 Don't know
R. Do you plan to stay in Arts and Sciences?

1 Yes
2 No, I plan to (specify)
S. Do you plan to graduate from OSU?

1 Yes
2 No
3 Don't kncw
4 I plan to transfer to $\qquad$
T. How of ten do you plan to return home this semester?

1 ar less times
2 3-4 times
. 3 5-6 times
4 7-8 times
5 More than 9 times
6 Not applicable. I live at home now.
7 If you circled 3 or more times, why do you return home?

APPENDIX B
INSTRUMENT TWO

These questions concern your college involvement only. The answers should pertain to your first semester. Student number number $\qquad$ - Thank you for your time.

PLEASE CIRCTE THE APPROPRIATE NUMBER UNDER EACH CATDGORY
A. On average, how many hours a week did you work while attending college your first semester?

1 None
2 Less than 10
3 11-20
$4 \quad 21-30$
531 or more
B. On average, how many hours a week did you spend studying for your classes your first semester?

1 None
2 1-5
$3 \quad 6-10$
$4 \quad 11-15$
$5 \quad 16-20$
621 or more
C. On average, how many hours a week did you spend participating in students clubs, groups or sports your first semester?

1 None
2 1-5
3 6-10
4 11-15
$5 \quad 16-20$
621 or more
D. On average, how many hours a week did you spend dating or socializing with your friends your first semester?

1 None
2 1-5
3 6-10
4 11-15
$5 \quad 16-20$
FOR THE QUESTIONS THAT APPLY, FREQUENTLY INDICATES 5 OR MORE TIMES \& OCCASIONALLY INDICATES 1 TO 4 TIMES
E. How often did you spend time outside of class talking with teachers your first semester?

1 Erequently
2 Occasionally
3 Never
F. How often did you spend time outside of class talking with academic counselors your first semester?

1 Frequently
2 Occasionally
3 Never
G. How often did you attend art, theater, musical or cultural events your first semester in college?

```
Frequently
Occasionally
Never
```

H. How often did you study at the library during you first semester in college?
1 Frequently
2 Occasionally
3 Never

1. What clubs or organizations did you belong to your first semester in college and were you an officer or committee chair person? Circle as many as apply to you.

Member Officer, etc

| 1 | 1a | Sports participant |
| ---: | :--- | :--- |
| 2 | 2a | Sports booster |
| 3 | 3a | Speech or drama |
| 4 | 4 a | Music: voice or <br> instrument |
| 5 | $5 a$ | Newspaper or yearbook |
| 6 | 6 a | Student government |
| 7 | 7 a | Vocational |
| 8 | 8 a | 4-H, agricultural |
| 9 | 9 a | Honor society |
| 10 | 10 a | Social |
| 11 | 11 a | Other (specify) |

J. What people supported your involvement in college your first semester? Circle as many as apply to you.

Peer or close friend Parent
Sister or brother
Teacher
Relative
Academic counselor
Employer Religious affiliate Friend of family
Older person in school
11 Personal counselor
11 Personal counse

SURVEY II PART II LATE SEMESTER I COLLBGE SATISFACTION
These questions concern your satisfaction with oSU up to this point in time.
PLEASE CIRCIE THE APPROPRIATE NUMBER UNDER EACH CATEGORY
A. Are you satisfied with your choice of OSU?

1 Yes
2 Mostly yes
3 Mostly no
4 No
B. Are you satisfied with the College of Arts Sciences?

1 Yes
2 Mostly yes
3 Mostly no
4 No
C. Are you satisfied with most of your teachers as a group?

```
1 Yes
2 Mostly yes.
3 Mostly no
```

4 No
D. Are you satisfied with most of your classes?

```
Yes
Mostly Yes
Mostly no
No
```

E. Are you satisfied with your academic advisement?

```
Yes
Mostly yes
Mostly no
NO
```

F. Are you satisfied with your housing?

```
Yes
Mostly yes
Mostly no
NO
```

G. Are you satisfied with your social life?

```
Yes
Mostly yes
Mostly no
No
```

H. Are you satisfied with your friendships in college?

1 Yes
2 Mostly yes
3 Mostly no
4 No
I. Do you ever feel homesick?

1 Erequently
occasionally
Never
J. Do you ever feel lonely?

```
Frequently
    Occasionally
    Never
```

K. Do you hope to spend more time socializing next semester?

1 Yes
2 No
3 Don't know
L. Do you feel that you will achieve academically?

1 Yes
2 No
3 Don't know
M. Do you feel confident about your major career goals?

1 Yes
2 No
3 Still undecided
N. Do you worry about your health?

1 Yes
2 No
3 Sometimes
O. Do you worry about your finances for school?

1 Yes
2 No
P. Did you cut classes?

1 No
2 Occasionally
3 Frequently
Q. Do you plan to return to OSU in the spring?

1 Yes
2 No
3 Don't know
R. Do you plan to stay in Arts and Sciences?

1 Yes
2 No, I plan to (specify) $\qquad$
S. Do you plan to graduate from OSU?

1 Yes
2 No
3 Don't know
4 I plan to transfer to $\qquad$
T. How often did you return hane this semester?

[^1]Mary Varnell Mandeville

Candidate for the Degree of<br>Doctor of Education

Thesis: THE EXTENT OF HIGH SCHOOL AND EARLY COLLEGE INVOLVEMENT AS AN EARLY INDICATOR OF ATTRITION PRONE STUDENTS AT AN ARTS AND SCIENCES COLLEGE WITHIN A MULTIUNIVERSITY

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    I would like to thank my four wonderful children, Linda, Peter, Tom and Jeffrey for their psychological

[^1]:    12 or less times
    2 3-4 times
    3 5-6 times
    4 7-8 times
    5 More than 9 times
    6 Not. applicable. I live at home now.
    7 If you circled 3 or more times, why did you return home?

