Expectation and satisfaction of freshmen and seniors in higher education

1999

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EXPECTATION AND SATISFACTION OF FRESHMEN AND SENIORS IN HIGHER EDUCATION

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Services in the College of Education at the University of Central Florida Orlando, FL

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ABSTRACT

The purpose of this study was to examine the expectation, satisfaction and performance gap levels between selected freshmen and seniors as measured by the selected SSI scales. The problem was to determine if expectation, satisfaction and performance gap levels differed between freshmen and seniors in 1995 and freshmen and seniors in 1998 based on class level, gender and age.

The study examined four selected scales from the twelve scales derived from the Student Satisfaction Inventory (SSI): Campus Climate, Campus Life, Campus Support Services, and Instructional Effectiveness. Respondents rated all items on a 7-point Likert scale with respect to their expectations of and satisfaction with student services represented by the scales.

Findings indicated that, for both 1995 and 1998, freshmen had significantly higher levels of expectation than did seniors in regard to campus climate, campus life and campus support services; freshmen had significantly higher levels of satisfaction than seniors with campus climate, campus life, campus support services and instructional effectiveness; seniors had significantly higher levels of
unmet needs than did freshmen for campus support services and instructional effectiveness, and; there were no significant differences between freshmen and seniors according to gender or age. Responses of 1995 freshmen and seniors and 1998 freshmen and seniors were similar.

The four selected scales served as having the potential to guide administrators in assessing the levels of student satisfaction with both academic and nonacademic student services.
This work is dedicated to my wife Suzanne Rodriguez, and my son Aaron Michael Rodriguez.
ACKNOWLEDGMENTS

This work could not have been made possible without the unwavering love, support and dedication of my wife, Suzanne Alexandra Rodriguez and my son, Aaron Michael Rodriguez. For three plus years, their understanding and patience has allowed me to complete this work. Thank you to all of my past and present colleagues who have offered encouragement and have sometimes shared in the similar pursuit of higher education. Thank you to Dr. Carol Wilson and Dr. LeVester Tubbs, who not only started my professional career at UCF, but were also supportive of my academic pursuits. Thank you to Dr. Pam Anthrop, Dr. Jan Terrell, Dr. Dan Coleman, Dr. Larry Rumbough, and Sabrina Andrews for assisting in my efforts. Thank you to the members of my committee, Drs. Bill Johnson, LeVester Tubbs, Richard Tucker, and Greg Wiens, people who I have also had the pleasure of knowing as colleagues. Finally, thank you to Dr. Mary Ann Lynn, who has been available and positive from Day 1 until Day 1,000 in guiding me through.
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CHAPTER 1
THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Trends that have impacted higher education include a decline in available resources, reduction in public support for increasing tuition costs and accountability related to fiscal expenditures (Upcraft, 1993). As a result, institutions of higher education have been challenged by their various constituents to demonstrate student success by measures that include program effectiveness, retention and graduation rates (Franklin, 1994; Sanders & Burton, 1996). The continued emphasis on higher education accountability by campus officials, politicians and community members has precipitated the need for evaluative assessment of students' satisfaction with academic and social services (Bauer, 1995).

Student assessment, and its resulting component measures, served as the basis for formulating and implementing effective educational programs and services (Franklin, 1994). Assessments have been utilized to target, bolster and support projected enrollment patterns, unit budget allocation and specific educational programs (Bauer, 1995). Additionally, examination of student satisfaction
enabled institutions to identify key students, to support value-added initiatives and to discover institutional variables that aided in student retention and persistence efforts (Franklin; Sanders & Burton, 1996).

The external environment of higher education created a consumerization of the student (Franklin & Shemwell, 1995) that focused on student satisfaction with the emphasis on the customer (student), not the institution. (Sanders & Burton, 1996). Retention efforts by institutions of higher education sought to improve programs and services within and outside of the classroom that would contribute to student success (Noel et al., 1985). In order to maximize greater student satisfaction, colleges and universities have utilized quality initiatives to provide an integrated approach for institutional effort to directly influence student retention (Hossler, 1988).

Researchers focusing upon retention found that student satisfaction had been greatly impacted by institutional efforts to improve programs and services (Stodt, 1987). Quality enhancement programs stressed a broad focus that improved satisfaction for all students (Sanders & Burton, 1996). However, most institutional retention and persistence efforts have focused primarily on freshman and senior students because of the ability to examine the effectiveness
of the offered programs over a period of time (Feldman & Newcomb, 1969).

According to Gardner and Van der Veer (1998), the freshman and senior years represented two critical transitions during a student's college career. Both transitions focused upon student development issues that facilitated transition into and out of college. Cuseo (1998) stated that if equivalent or parallel assessments were utilized for freshmen and seniors, the resulting entry and exit data could be used to conduct value-added programming or skill development services. The assessments could determine the extent of student satisfaction and the degree of student change or development from beginning to the end of the undergraduate experience.

Statement of the Problem

This study sought to assess the differences in expectation, satisfaction and performance gap levels of freshmen and seniors in 1995 and 1998 regarding student services offered by their institution. The study examined four selected scales from the twelve scales derived from the Student Satisfaction Inventory (SSI): Campus Climate, Campus Life, Campus Support Services, and Instructional Effectiveness (Noel-Levitz, 1997). These scales were analyzed
controlling for the variables of class level (freshman and senior), gender and age.

Definitions

Freshman is the category of first-year students who have less than 30 semester hours work (UCF Undergraduate Admissions Catalogue, 1997).

Freshman year experience is a structured set of activities designed to maximize a freshman's potential to achieve academic success and to adjust responsibly to the individual challenges presented by college. (University 101, 1998).

Importance Score is the score on the SSI that represents how strongly a student expects an institution to meet a particular expectation (Juillerat, 1995).

Performance Gap Score is the score on the SSI that represents the gap between the students' expectations and their perception of reality (Juillerat, 1995).

Retention is the category of students who are successfully enrolled at an university or who have graduated (Dunphy, et al, 1987).

Satisfaction Score is the score on the SSI that represents how satisfied the students are that their
expectations are being met by the institution (Juillerat, 1995).

**Senior** is the category of students who have 90 or more semester hours, prior to completion of baccalaureate requirements (*UCF Undergraduate Admissions Catalogue*, 1997).

**Senior year experience** is a structured set of activities designed to enhance the successful transition of college students from undergraduate life to graduate school or to a career (Gardner and Van der Veer, 1998).

**Student Satisfaction Inventory (SSI)** is an instrument constructed by Schreiner and Juillerat (1994) for use by the Noel-Levitz Centers, Inc. that measures expectations of students, the satisfaction of students on various scales and the gap between student expectation and satisfaction.

**Delimitations**

Delimitations of this study are as follows:

1. The data for this study were collected from a single institution.
2. The data were analyzed from only freshman and senior students.
3. The data were cross sectional not longitudinal.
4. The campus environment was not the same in 1995 and 1998.
Assumptions

The following assumptions were acknowledged as part of this study:

1. The SSI scales were an appropriate representation of institutional characteristics significant for freshmen and seniors.

2. The SSI instrument possessed validity and reliability that were satisfactory to conduct appropriate data analysis for this study.

3. The sampled respondents provided a data set that would permit generalizable findings and conclusions related to freshman and senior students at the University of Central Florida.

Purpose

The purpose of this study was to examine the expectation, satisfaction and performance gap levels between selected freshmen and seniors as measured by the selected SSI scales. This study could provide information on expectation levels and levels of satisfaction related to certain aspects of university life at the University of Central Florida. Further, information could be provided on the differences, if any, between expectation and levels of satisfaction in the form of performance gap scores between freshmen and seniors based upon gender and age.
Information obtained regarding expectation, satisfaction and performance gap scores for this study was intended to explore further differences, if any, of freshmen examined in 1995 (Anthrop, 1996) and seniors. This comparison was intended to assist in identifying areas within the institution that might need focused efforts or enhancement. The study was intended to provide information for higher education practitioners, managers and administrators and faculty to understand the expectations of freshman and senior students in order to enhance programs and services.

The study included a review of relevant research regarding student expectation and satisfaction as related to freshmen and seniors. The study also included a review of relevant research regarding differences in student satisfaction by gender and age. The data collected and analyzed could serve as a baseline measure for evaluation for future institutional improvement and retention enhancement activities on a broad range of university issues.

Significance of the Study

The research examined expectation and satisfaction levels between freshmen and seniors in order to develop a clear understanding of the extent to which these students were satisfied with their campus experiences. Through the analysis of the selected SSI data, implications were drawn to
assist higher education researchers and practitioners in determining what programs and services were relevant and satisfying to first year and completing students. The resulting information could be useful in identifying areas that may address their persistence and retention.

The importance of this study includes identifying specific groups that may be dissatisfied with the institutional experience as measured by the SSI; creating a profile of satisfied and successful students in order to aid in retention efforts, and; identifying specific areas for improvement. Additionally, the results may provide insight into student services at urban institutions of higher education.

This study could provide relevant data to assist future higher education researchers and practitioners in determining programs and services that would aid student integration and success in academic and social activities. By examining the differences between freshmen and seniors, campus administrators and faculty could target funding, programs and resources that would benefit these students by integrating them into the campus community or easing the transition into the work force or graduate school. These efforts could be directed in accordance with the institutional mission. The data might also provide insight into student perception of
institutional effectiveness and contribute to an explanation of persistence of students toward graduation.

Conceptual Framework

Astin's (1991) input-environment-output model of student involvement explained how a student's characteristics coming into an institution could be impacted by exposure to various programs in the environment. The assessment of the college environment involved the identification and quantification of events that could influence student outcomes. Self-assessment was critical, according to Astin, because the more proximate the measure was to the student the more significance of the outcome.

Tinto (1993) advocated a model of integration of academic and social systems. The interactive experiences of a student's social and academic integration, according to Tinto, likely increased persistence because of the impact on a student's goals and commitments in the university setting. However, previous researchers had been unable to distinguish attributes of institution-specific goals from general essential processes; therefore, institutional officials were unable to utilize the general and descriptive nature of retention measures.

The quality process in education created an awareness of customer needs, a philosophy to meet and exceed student
expectations in order to create a structure that could improve the quality of services (Spanbauer, 1992). According to Lembecke (1994), three data collection activities were necessary to monitor customer perception of organizational performance: customer needs, expectations and requirements; customer satisfaction, and; customer attrition. These data could be utilized to redesign services and products, to determine future quality and to monitor improvements.

Juillerat (1995) stated that the assessment of student satisfaction in higher education evolved from a reactive approach where institutional energy was spent on responding to students when levels of dissatisfaction became too high to a proactive approach that focused on promoting student satisfaction through student success and retention. Bauer (1995) stated that because the social and academic needs of traditional students differed throughout college years, specific educational programs should be targeted at students at their points of readiness.

The changes that occurred from the freshman to senior years were observed to have the largest effects including gains in factual knowledge, cognitive and intellectual skills and attitudinal and value dimensions (Feldman & Newcomb, 1969). Freshmen succeeded in college when they developed academic and intellectual competencies, established and maintained interpersonal relationships, developed personal
identity, decided on a career and lifestyle, maintained personal health and wellness and developed an integrated philosophy of life (Upcraft & Gardner, 1989). Senior students benefited from targeted programs such as peer advisors and senior-year programs that assisted in orienting students to careers after graduating (Tinto, 1993).

Feldman and Newcomb (1969) identified issues such as faculty-student contact and student organizational involvement as having an impact on student satisfaction. They found a gradual change over the college years rather than a pronounced change in every year. Astin (1991) found that student-student interaction and student-faculty interaction positively affected student satisfaction. Pascarella and Terenzini (1991) found that the largest changes, such as gains in factual knowledge, cognitive and intellectual skills, and attitudinal and value dimensions, occurred from the freshman to senior years through an integrated process of social and academic programs.

Gardner and Van der Veer (1998) suggested that the freshman and senior year experiences could be linked by applying the same philosophy of providing satisfying experiences. Tinto (1993) stated that the goal of early contact with freshmen was the incorporation of individuals into the institution's academic and social communities. The undergraduate experience involved a series of changes that
influenced the growth of a student from freshman year through graduation (Gardner & Van der Veer).

The freshman year experience traditionally had been based upon a holistic approach that educated students by addressing various aspects of student development, attitudes and growth during college (Hankin & Gardner, 1996). Gardner and Van der Veer (1998) stated that the freshman year experience was created to transition students and to identify factors for success. Sanders and Burton (1996) suggested that an integrated analysis of the freshman experience, utilizing a total quality approach, could provide a more comprehensive picture for developing successful institutional strategies.

Gardner and Van der Veer (1998) stated that until 1990, there was little research conducted about the transition of students out of school and into work, graduate school or society. The senior year experience had been structured for students and institutions to improve alumni relations, to promote faculty development, to forge alliances between academic and student affairs and to enhance institutional research and student outcome assessment (Gardner, 1998). By assessing the experiences of students who have matriculated at an institution through their senior year, an institution could determine factors that contributed to their overall satisfaction (Noldon et al., 1996).
Previous studies have considered gender and age as factors on student satisfaction. Tinto (1993) stated that gender and age could indirectly affect a student’s college experiences. Astin (1993) found that gender had mixed positive correlation on institutional areas. Several authors have suggested an analyses of student satisfaction according to gender and class level (Bauer, 1995; Juillerat, 1995; Anthrop, 1996) to determine if the predictors of satisfaction were the same for gender and age. Juillerat and Anthrop concluded that studies that included student demographics such as classification, gender and age be conducted to determine if any differences existed within the variables of the SSI scales.

The SSI was selected as the instrument to study freshmen and seniors regarding their satisfaction and expectation level with campus services. Juillerat (1995) stated that the SSI was based on consumer principles via two components: the student’s perception of a welcoming environment where they are given assistance and guidance for success, and; the function specific aspects of campus areas. These functions are grouped so that the results can provide a target for improvement.

The four selected scales were examined in order to assess the institutional characteristics that were important to freshmen and seniors including possible differences based
upon gender and age. Additionally, the four scales were selected in order to determine if there were significant differences in the importance, satisfaction and interaction of academic and social activities. The SSI provided the unique opportunity to analyze differences, if any, between two sets of students from 1995 and 1998.

**Research Questions**

Specific research questions addressed included:

1. What are the expectation, satisfaction and performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998?

2. What differences, if any, are there in the importance levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

3. What differences, if any, are there in the satisfaction levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

4. What differences, if any, are there between performance gap scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

5. What differences, if any, are there between performance gap scores for the selected scales for freshmen
and seniors in 1995 and freshmen and seniors in 1998 based upon gender?

6. What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon age?

Methodology

Population

The target population for the 1995 study consisted of 2,667 students enrolled at the University of Central Florida. The Office of Institutional Research and Planning Support identified classes offered during the Spring Term 1995 based upon class levels represented, college and class size. A total of 2,667 surveys were distributed with 939 (35%) usable surveys being the yield (UCF Office of Quality Management, 1996). For the purposes of this study, the responses of 154 freshmen and 211 seniors were utilized.

The target population for the current study consisted of 5,199 students enrolled at the University of Central Florida. The Office of Institutional Research and Planning Support identified classes offered during the Spring Term 1998 based upon class levels represented, college and class size. A total of 2,936 surveys were distributed with 2,162 (73%)
responding. For the purposes of this study, the responses of 
374 freshmen and 482 seniors were utilized.

Instrumentation

The Student Satisfaction Inventory (SSI) (Noel Levitz, 1994) was selected as the instrument for this study. The 
selected SSI consisted of 53 items analyzed statistically and 
conceptually to provide four (4) comprehensive scales as 
follows:

Scale 1: Campus Climate. Assessed the extent to which 
the institution provided experiences that promoted a sense of 
campus pride and belonging. This scale also assessed the 
effectiveness of the institution’s channels of communication 
for students.

Scale 2: Campus Life. Assessed the effectiveness of 
student life programs offered by the institution, covering 
issues ranging from athletics to residence life. This scale 
also assessed campus policies and procedures to determine 
students’ perceptions of their rights and responsibilities.

Scale 3: Campus Support Services. Assessed the quality 
of the support programs and services which students utilized 
in order to make their educational experiences more 
meaningful and productive. This scale also covered such areas 
as tutoring, the adequacy of the library and computer labs, 
and the availability of academic and career services.
Scale 4: Instructional Effectiveness. Assessed students' academic experiences, the curriculum, and the campus's overriding commitment to academic excellence. This comprehensive scale covered areas such as the variety to courses offered, the effectiveness of the faculty in and out of the classroom, and the effectiveness of the adjunct and graduate teaching assistants.

Dependent Variables

The dependent variables for the data analyses were the 53 items listed on the survey within the four scales: Campus Climate, Campus Life, Campus Support Services and Instructional Effectiveness.

Demographic Variables

The demographic variables for the data analyses were the characteristics of responding students including class level, gender and age (freshmen and seniors only).

Data Collection

In Spring semester 1995, the SSI was distributed to students and completed in selected classrooms. Instructors were contacted to arrange class time for students to complete the surveys. An incentive in the form of a bookstore discount
was offered to increase participation (UCF Office of Quality Management, 1996).

In March 1998, a letter explaining the purpose of the study was distributed to the students in the selected classrooms. To increase the survey return rate, classroom distribution was selected as the means to distribute the instrument. Instructors were contacted to arrange class time for students to complete the surveys. Some class sections offered extra credit as an incentive for survey completion.

Data Analysis

The data from the 1995 and 1998 SSI were utilized from disks provided by Noel-Levitz, Inc. The data were analyzed to determine implications and conclusions regarding the stated research questions. The data were analyzed for the measurements of importance, satisfaction and gap scores on the respective SSI scales to determine levels of importance and satisfaction as well as the differences, if any, between the two (resulting gap score) for freshman and senior respondents. These data were analyzed to determine if variability existed among freshmen and seniors, by gender and age. The resulting analyses were utilized to make recommendations regarding institutional policy and practice. The findings provided the basic foundation for further discussion, conclusions and implications.
Organization of the Study

Chapter 1 has dealt with the specific purpose of the present study and research questions to be answered. Chapter 2 presents the findings of a survey of related literature that were relevant to the present study. Chapter 3 describes methods and procedures used in the collection of data for the present study. Chapter 4 includes the analyses of data and the presentation of the results. Chapter 5 provides a summary and discussion of the findings, conclusions, implications for practice and recommendations for future research.
CHAPTER 2
REVIEW OF LITERATURE AND RELATED RESEARCH

This chapter provides a review of the relevant literature and research related to student satisfaction and student involvement theories, student satisfaction models and instrumentation. Student satisfaction as related to demographic characteristics, specifically, class level, gender and age, are examined. Institutional efforts concerning quality and retention that impact student satisfaction are also included.

Introduction

The first satisfaction study was conducted by Berdie (1944) to determine if the expectations of freshmen engineering students were being met by the institution. Ewell (1995) stated that due to expanding enrollments at colleges and universities in the 1960s, institutions utilized studies on attrition to examine the satisfaction levels of students. In the 1970s, theorists such as Astin (1993) and Tinto (1993) developed constructs that explained the connection between student involvement and student satisfaction that would lead
to retention. During the 1980s, systematic, longitudinal cohort measures were developed to provide colleges and universities with information on student persistence (Pascarella & Terenzini, 1991).

Although state funding for public higher education has continued to increase (Schmidt, 1998), several states allocated funding based upon performance criteria. Within this context, 3,600 public and private institutions of higher education strived to maintain enrollments and improve program quality in order to satisfy students' needs (Kotler & Fox, 1995). As a result, institutions of higher education determined student success by measures that included program effectiveness, retention and graduation rates, and student satisfaction (Franklin, 1994; Sanders & Burton, 1996).

The majority of campus efforts aimed at assessing student satisfaction have been facilitated by offices of institutional research and student affairs units (Underwood, 1991). Because student affairs professionals frequently provide the leadership on these efforts, Barr et al. (1990) stated that student affairs professionals should collaborate on the design of institutional assessment strategies. The data collected aided college officials in identifying successful programs, sharing knowledge with colleagues about the college experience, influencing quality and how it was
measured, and ensuring that important developmental changes associated with college were monitored.

Over the past four decades, theories and models of student satisfaction as related to higher education have been developed. The assessment of student satisfaction by researchers and university administrators evolved from a reactive approach based on dissatisfaction levels and student unrest (Pervin & Rubin, 1967; Starr, Betz & Menne, 1972) to a proactive approach that focused on preventing student dissatisfaction and promoting student success and retention. University administrators realized that student satisfaction impacted institutional success by attracting and retaining students (Juillerat, 1995).

Certain challenges arose, however, at metropolitan/urban universities in the assessment of student satisfaction (Coles, 1995). Students typically spent only a few hours a day on campus, had little free time for involvement in student services, and were difficult to survey in order to determine satisfaction levels. In response to these obstacles, organizational patterns and institutional delivery systems were adapted by institutions to improve utilization. However, the lack of systematic evaluation of effectiveness created a void in addressing specific programs.

With the increased non-traditional student population and the need for retention information for state-funding,
questions needed to be answered regarding how student satisfaction with student services impacted persistence (Sanford, 1995). Sims (1995) suggested that administrators needed to consider the institution's market uniqueness and other special traditions when evaluating student satisfaction.

Because of these considerations, the University of Central Florida, the institution represented in this study, sought to assess student satisfaction. As the headcount enrollment increased from 20,000 in 1989 to 30,000 in 1998 (UCF Office of Institutional Research and Planning Support, 1998), the institution sought to measure the success of specific university functions in meeting students' needs. Although projected enrollment was anticipated to reach 40,000 students by the year 2007, administrators were committed to determine the levels of student satisfaction with both academic and nonacademic student services that contributed to retention.

**Student Involvement and Student Satisfaction Theory**

Williford (1990) suggested that a connection was needed to determine the relationship between what students learned, how they lived and how they interpreted information. A comprehensive assessment required a consideration of academic and nonacademic characteristics of students as they
progressed through college. Additionally, a value-added assessment of educational outcomes considered the differences between students when they entered and left the institution.

Self-assessment was critical, according to Astin (1991), because the more proximate the measure was to the student’s experiences, the more significant was the outcome. The assessment of the college environment involved the identification and quantification of events that influenced student outcomes. Astin’s input-environment-output model of student involvement explained how a student’s characteristics when matriculating at an institution were impacted by exposure to various programs in the collegiate environment.

Abrahamowicz (1988) studied the involvement and positive influences on student satisfaction to determine the differences between members and nonmembers in student organizations. He found that student members had significantly higher satisfaction levels on all involvement scales than did nonmembers. Most of the positive relationships were based upon faculty and staff interaction.

Tinto (1975, 1993) discussed a theoretical model that explained the process of interaction and integration between individuals and institutions that led to attrition. The interactive experiences of a student’s social and academic experiences, according to Tinto, likely increased persistence because of the impact on a student’s goals and commitments in
the university setting. However, previous researchers had been unable to distinguish attributes of institution-specific goals from general essential processes; therefore, institutional officials were unable to utilize the general and descriptive nature of retention measures.

**Student Satisfaction Models**

Early satisfaction theories focused on preventing student dissatisfaction and attrition by explaining the relationship between students and the campus environment. For example, the ecological theory of student satisfaction emphasized that the campus environment influenced students' assimilation and adaptation to the campus culture. Student discontent with campus life led to satisfaction models that individualized assessment to determine the fit of the student to the environment (Schmidt & Sedlacek, 1972).

According to Scott (1984), while the criteria by which services were evaluated varied by campus type, by student enrollment and by other campus characteristics, the kinds of general student services were universal. Additionally, clarity of institutional purpose was directly linked to student satisfaction since students presumably attended schools whose missions paralleled their own ambitions and educational interests (Chambers, 1984). Chadwick and Ward (1987) suggested that, as a benefit to institutions,
satisfied students would recommend schools to prospective students, enhance a school’s image and increase financial contributions to the institution.

Student perception of the learning environment and campus values were important in planning and implementing student services. Kaufman (1984) determined that institutions could assess quality in student services through student satisfaction based on situational terms appropriate to that institution. Therefore, specific assessment instruments were devised either by institutions or developed by researchers that could be applied in any institutional setting.

Underwood (1991) described assessment activities and procedures that colleges and universities utilized to identify successful student services. He suggested that effective assessment of services would improve the planning, development and performance of campus programs. Most institutions were found to have incorporated student satisfaction as the most frequent type of assessment activity.

In developing and incorporating student satisfaction instruments, Kotler and Fox (1995) stated that a student could experience three broad levels of satisfaction with student services: dissatisfaction, satisfaction and high satisfaction. Expectations were formed on the basis of a student’s prior experiences or perceptions. Therefore, an
institution needed to plan for and to deliver a certain consistent level of performance and to communicate this level to its students in order to adequately assess student satisfaction.

Pace (1985) suggested student outcome assessments evaluated how much gain or progress students had made based on scales measuring quality of effort. Each scale was comprised of activities that enhanced growth, collected demographic information and assessed satisfaction. The survey was an indicator of effort but did not show differences between expectations and satisfaction. Additionally, time elapsed between the educational event and the outcome; therefore, longitudinal studies were weak because of the potential attrition of respondents.

Juillerat (1995) concluded that student satisfaction was divided into two basic components. The first and underlying foundation was the perception that the university was a welcoming environment where students were given assistance and shown concern for their expectations. The second element of student satisfaction was function specific, meaning that satisfaction occurred along areas of student involvement rather than themes. These results provided information for colleges to assess and target specific areas for improvements.
The interaction between individual students and the environment led researchers to identify specific factors that would lead to student satisfaction. Nafziger, Holland and Gottfredson (1975) stated that student-college congruency was a predictor of student satisfaction. They examined student and college characteristics that were conducive to student satisfaction. The reported results indicated that certain college characteristics, such as faculty style of instruction, provided congruency between a student's personality and the institutional environment.

Further research led Morstain (1977) to propose the person-environment congruence model. Students reported high levels of satisfaction if their personalities were congruent with environment. Surveying seniors at a large public institution using scales such as involvement and achievement, he found that students were more satisfied if their personalities were congruent with faculty teaching styles.

Witt and Handal (1984) studied the congruency model between the personal and social environment to determine student satisfaction. They found that congruency was not a better predictor of satisfaction than environment and personality. Additionally, environment had the strongest relationship to student satisfaction.

As campus services expanded, administrators sought to target key programs that affected student satisfaction.
According to Benjamin and Hollings (1987), the ecological model of student satisfaction detailed campus life as a multidimensional construct involving interaction among personal, interpersonal, sociological and contextual factors or processes. Students viewed campus life satisfaction as a positive multidimensional relationship between selected student services and students' perceptions of those services.

In attempting to define the complex relationship between student services and students' perceptions of those services, Pate (1993) outlined three main student satisfaction models: First, the job model, meaning that student satisfaction was parallel to employment satisfaction in the workplace. However, Pate discounted this approach since students were not considered workers. Second, Pate described the psychological-wellness model where satisfaction was a desirable and healthy outcome for students. This model was not successful because dissatisfaction was viewed as a psychological problem. Finally, Pate advocated the consumer approach where education was a service purchased by consumers for some future good. Using this approach, institutions offered student services that strived to create satisfied customers.

The complex relationship between student services and students' perceptions of those services created a consumerization of the student (Kotler & Fox, 1995; Franklin
& Shemwell, 1995). This consumerization viewed student satisfaction with the emphasis on the customer (student), not the institution. (Sanders & Burton, 1996). The disconfirmation model, as applied from the marketing field to higher education, defined student satisfaction as the difference between the expectation level of a product’s performance and the actual performance of the product (Churchill, Jr. & Suprenant, 1982).

Franklin and Shemwell (1995) investigated student satisfaction at a comprehensive research regional university using a questionnaire grounded in the disconfirmation model of customer satisfaction. The researchers utilized the SERVQUAL instrument to produce gap scores between expectation and satisfaction levels. They concluded that satisfaction was more than just ordinal points on a scale; therefore, the disconfirmation model was a good predictor of student satisfaction.

Instrumentation

Levels of student satisfaction change on the basis of responsive intervention by institutions and the naturally occurring developmental changes in a student’s social and academic environment from semester to semester (Juillerat, 1995). Kotler and Fox (1995) stated that student satisfaction could be difficult to measure and, therefore, instruments
such as student panels, exit interviews, and student satisfaction surveys could be used. Juillerat suggested that there were four types of measurement strategies utilized by researchers to assess student satisfaction: using small number of individual items; using modified related instruments; using portions of information from other research and creating scales for measuring satisfaction.

The various measurements of student satisfaction also produced numerous methods of analyzing collected data. Kotler and Fox (1995) stated that three types of statistical analysis were utilized in calculating student satisfaction: Gap analysis, where respondents were asked to decide what services were expected and what was experienced; root cause analysis where researchers examined the factors contributing to negative outcomes; and importance-performance analysis used in order to graph group means. However, these analyses were not useful to researchers in examining individual responses or monitoring long-term changes in satisfaction.

Researchers utilized various methods to measure student satisfaction at single and multiple institutions. Polcyn (1986) surveyed evening students at Pacific Lutheran University utilizing the College Student Satisfaction Questionnaire (CSSQ), a 70-item instrument with five scales: Working Conditions, Compensation, Quality of Education, Social Life and Recognition. Using a seven-point Likert
scale, a two-dimensional view of satisfaction was provided by graphing mean scores. However, individual scores were not utilized in determining specific services that needed improvement.

Astin (1991) determined that self-assessment helped students bring closure to the college experience. Using the College Student Survey (CSS), exiting students provided candid observations that, combined with traditional assessments, presented a complex picture of the undergraduate experience. Astin's use of the CSS produced a national model of services assessment; however, specific institutional services were not identified.

Ruby (1998) studied 689 students at ten institutions that were part of the coalition of Christian Colleges and Universities. Using a 22-item Likert scale, respondents rated areas of expectation and satisfaction with broad areas of student services. Researchers found the greatest gains in satisfaction with services were discovered by assessing gaps, expectations, and satisfaction levels. However, the results were not used to assess quality or to improve services.

According to Juillerat, more accurate and comprehensive measures of student satisfaction were needed. Traditional student satisfaction measures were one dimensional, failed to recognize the role that student expectations played in the measurement of satisfaction, only measured current levels of
satisfaction, were not comprehensive, were too broad and were lacking in statistical rigor. However, the Student Satisfaction Inventory (SSI) revealed aspects of services students considered to be most and least important (Noel-Levitz, 1997).

The SSI provided a vehicle for institutions to set priorities that were closely aligned with the needs of their students (Noel-Levitz, 1997). The primary use of the SSI was in developing awareness and readying campuses for institutional planning. Other items included setting retention agenda, providing feedback to faculty, marketing the institution; providing feedback to students; preparing for accreditation, enhancing TQM, pinpointing needs of ethnic students, targeting commuter needs, and providing direction to departments.

Certain institutions that have utilized the SSI reported large gains in satisfaction with student services (Breindel, 1995). Northern Nevada Community College conducted a student satisfaction survey with its institutional services. The results were compared with the national sample and were used to make comparisons between institutions. (Student Satisfaction Inventory Results, 1995). Additionally, the data file and reporting format of the SSI allowed institutions to study various demographic variables such as class level, gender and age as related to the various scales.
Freshmen and Senior Characteristics

The impact of class level, particularly differences between freshmen and seniors, on student satisfaction has been a focus of student satisfaction studies. Feldman and Newcomb (1969) found a gradual change in student satisfaction over the college years rather than a pronounced change in every year. Schmidt and Sedlacek (1972) measured student satisfaction and found statistical significance depending on enrollment status. Astin (1991) found that student-student interaction and student-faculty interaction positively affected student satisfaction depending on class standing. Finally, Pascarella and Terenzini (1991) found the greatest changes, such as gains in factual knowledge, cognitive and intellectual skills, and attitudinal and value dimensions, occurred from the freshman to senior years through an integrated process of social and academic programs.

According to Gardner (1998), the freshman and senior years represented two critical transitions during a student's college career. Both transitions, according to Gardner and Van der Veer (1998), focused upon student development issues that facilitated transition into and out of college. Cuseo (1998) stated that if equivalent or parallel assessments were utilized for freshmen and seniors, the resulting entry and exit data could be used to conduct value-added programming or to develop student services.
Williford (1990) demonstrated the merit of studying student involvement in a value-added outcomes assessment program defining by investigating change from freshman to senior years. The constructs assessed included Extracurricular Activities, Importance of Graduations, Conversation with Faculty, Social Peer Activities, and Satisfaction and Personal Academic Achievement. Significant differences were found on all constructs between class levels. An increase in importance from freshmen to seniors for all areas except for Peer Activities was also reported.

Bauer (1995) issued the College Student Experiences Questionnaire (CSEQ) to determine the differences in quality of effort and self-reported gains in academic and social development between freshmen and seniors. Utilizing a stratified random sample of 3,000 undergraduates from eight colleges at doctoral-granting institutions, the researcher found significant differences between freshmen and seniors in all areas of social and academic experiences including library experiences, interactions with faculty, residence halls and Greek life. Bauer concluded that the differences between freshmen and seniors could be accounted for by the following reasons: some leadership positions were not available to freshmen; the small random sample was not generalizeable to campus population; qualitative data should have been gathered, and; the results did not necessarily
match institutional goals. The results, however, were useful in assisting college officials interested in understanding the areas for growth, and skills and overall institutional assessment.

Freshmen

Tinto (1993) stated that the goal of early institutional contact with freshmen was the incorporation of individuals into the institution's academic and social communities. Freshmen succeeded in college when they developed academic and intellectual competencies, established and maintained interpersonal relationships, developed personal identity, decided on a career and lifestyle, maintained personal health and wellness, and developed an integrated philosophy of life (Upcraft & Gardner, 1989). Furthermore, Sanders and Burton (1996) suggested that an integrated analysis of the freshman experience, utilizing a total quality approach, could provide a more comprehensive picture for developing successful institutional strategies.

In order to develop an institutional strategy, Klepper, Nelson, and Miller (1987) investigated the transcripts of non-returning students at Duquesne University. They found that freshmen had high academic and social expectations that were unmet in college. These expectations had the potential for being realized over a period of time, however, if
students were actively involved in institutional student services.

Sanders (1994) found that, in order to track student involvement and its impact on persistence, urban institutions utilized freshmen databases to conduct satisfaction surveys. He suggested that institutions utilize an integrated model of student satisfaction based upon Total Quality Management (TQM). Satisfaction studies needed to be longitudinal so that institutions developed a clear picture of changes in levels of student satisfaction.

The University of Colorado developed a longitudinal student outcome data file in order to track a freshman cohort group over a ten-year period (Endo & Bettner, 1985). The data evaluated the students' educational experiences and the effects of academic and support services. The researchers suggested that, when data files were established, certain variables be selected; that multivariate techniques be used to analyze data; that the results should be simplified; and, that the individual results remain confidential.

Sanders and Burton (1996) studied one institutions' urban model of freshman year experience to develop comprehensive outcome measures for assessing freshman success. They found no significant differences in overall satisfaction by age but did identify significance by gender. Men were found to be more satisfied with their academic
satisfaction and teaching, while women were interested in academic satisfaction and social life.

Administrators at Northeast Missouri State University also studied student changes based upon a longitudinal study from freshman to senior year (McClain & Krueger, 1985). The results were made available to all internal constituencies in order to assess the effectiveness and quality of programs. Based upon the results, freshman advising was changed, and graduating seniors stated that they had a more positive experience than they did in their freshman year.

Seniors

Schilling and Schilling (1997) stated that the senior year experience was a structured set of activities designed to enhance the successful transition of college students from undergraduate life into the next phase of their lives. According to Tinto (1993), senior students benefited from targeted programs such as peer advisors and senior-year programs that assisted in orienting students to careers after graduation. By assessing the experiences of students who matriculated at an institution through their senior year, an institution could determine factors that contributed to their overall satisfaction (Noldon et al., 1996).

A senior survey was a central component in assessment efforts in order to compile a data base of information
(Lingrell, 1992). The data gathered was useful to determine curriculum changes, alternatives in courses or general program improvements. Implementation of a senior survey gave faculty and administrators valuable access to information on the evaluation of academic and student services.

Lingrell (1992) reviewed senior surveys and outcomes assessments and found that multiple measures were being utilized. For instance, value-added surveys were administered to students at Northeast Missouri State University when students enrolled, when they graduated, and when they became alumni. These assessments allowed administrators to compare the senior year with other class levels to determine if there were value-added components to the college experience.

**Student Characteristics**

According to Tinto (1975), individual characteristics, such as age and gender, directly impacted and affected the development of educational expectation. Astin (1993) found that gender had mixed positive correlation on institutional areas. Several researchers suggested an analyses of student satisfaction according to gender, age and class level (Bauer, 1995; Juillerat, 1995; Anthrop, 1996) to determine if the predictors of satisfaction were the same for gender and age. Juillerat and Anthrop concluded that studies, using student demographics such as class level, gender and age, be
conducted to determine if any differences existed between those variables and the SSI scales.

**Gender**

Several student satisfaction studies have examined the role of gender as related to satisfaction. Betz, Menne and Klingensmith (1970) developed the College Student Satisfaction Questionnaire (CSSQ) with six dimensions: Policies and Procedures, Working Conditions, Compensation, Quality of Education, Social Life and Recognition. They found that sex differences were not significantly related to satisfaction on any scale. Betz, Starr and Menne (1972) measured 3,123 undergraduates at private and public institutions using the same instrument and found that there were no differences by gender except for the Compensation scale. However, interaction effects for gender by institution for Compensation, Social Life, Working Conditions, Recognition and total satisfaction were present.

Researchers also examined gender differences as related to satisfaction with academic and nonacademic programs. Ramist (1981) found that men were more likely to stop out of college and return; however, surveys indicated that men were more likely than women to complete a degree. It was reported that women dropped out mainly for nonacademic reasons.
Bean and Bradley (1986) studied the relationship between GPA and satisfaction by gender. In a study at a large Midwestern institution, they found that satisfaction had greater influence on performance than performance had on satisfaction. Class level had no significant influence on satisfaction or GPA, while institutional fit was the best predictor of satisfaction for women. Membership in student organizations had no effect on student satisfaction.

Noldon et al. (1996) surveyed seniors at a large eastern university about their satisfaction with academic and student services to determine the effects of gender on satisfaction with student services. They found that positive experiences with services varied by gender: men were more satisfied with registration, computer services and athletics, while women were more satisfied with counseling and health services.

Pike (1989) developed a model for evaluating the relationship between academic performance and student satisfaction and gender. At the University of Tennessee-Knoxville, he studied campus involvement, cultural involvement, and faculty involvement to clarify the performance satisfaction relationship. Gender was found to be negatively related to cultural involvement; faculty-student interaction was determined to have the greatest influence on satisfaction and performance.
Pike and Simpson (1997) further examined the relationship between academic achievement and student satisfaction at the University of Missouri-Columbia, a public research institution. They found evidence of a modest positive reciprocal relationship between a students' academic achievement and satisfaction with college.

In piloting the SSI, Juillerat (1995) found no significant differences between male and female students. Differences were found on the Campus Organizations and Activities scales where males were more satisfied than women. On Importance scales, women were significantly higher on Campus Climate, Curriculum and Instruction, Academic Advising, Campus Support Services, Billing/Financial Aid, Student Acclamation, Safety and Security, Faculty Effectiveness. Even though the overall ratings of satisfaction were similar, the difference in level of importance indicated that women had different and higher expectations than did men.

Age

Researchers have also expressed interest in the interaction of age and student satisfaction. Sturtz (1971) surveyed women at Iowa State University, and found significant differences on the satisfaction with quality of education and policies between students age 18-21 and over
There were no significant differences for satisfaction with social life; however, older students were overall more satisfied than younger students with their college experiences.

Bauer (1995) stated that the social and academic needs of traditional students differed throughout college years; therefore, specific educational programs should be targeted at students at their points of readiness. Eckel (1994) studied students from 18-23 years of age and found that differences with transitions lead to attrition and the need to learn new skills. Further, Pate (1993) studied alumni to test variables on positive consumer satisfaction and found that the age upon enrollment did not significantly affect satisfaction.

Hendershott, Wright and Henderson (1992) studied environmental factors, such as peer groups, that affected student satisfaction. They surveyed students at a comprehensive Northeastern university by class, gender and age. Satisfaction was found to change from year to year regardless of demographics; however, gender was the most important predictor for overall student satisfaction. Again, overall satisfaction was found to be greater in older students than younger students.

Pennington, Zvonkovic, and Wilson (1989) studied changes in student satisfaction and how it was influenced by age and
gender. The study reported that, in general, men were more satisfied with their college experience than women. Older students were more satisfied than younger students. It was reported that overall satisfaction changed over an academic term with the lowest levels at midterm. No significant differences were identified for age or class level. Gender, however, was found to be significant.

Illinois' Moraine Valley Community College (Cohort Analysis, 1993) conducted a longitudinal study of outcomes experienced by students entering as freshmen. The resulting data indicated that retention rates for students under 20 years of age decreased significantly more than for older age groups. Additionally, males were more likely to leave the institution than were females (New Student Survey, 1995). These results were consistent with the data examined by Juillerat (1995). Post-hoc analyses revealed that respondents 25-34 had significantly lower satisfaction than did respondents who were less than 25 years of age or were in the 35-44 age group.

Senter and Senter (1998) stated that the needs of nontraditional students varied extensively and that meeting those needs was more costly than for traditional students. Their study, which used age as a criterion, was based upon the perceived need, not actual use of student services. In studying nontraditional (over 25) and traditional students at
a comprehensive, midwestern state university, nontraditional students were identified as requiring more support and awareness for those services. As indicated by previous research, older students tended to be more satisfied overall with their educational experiences than did younger students.

**Institutional Efforts**

Several institutions addressed the need to measure student awareness, expectation and satisfaction with services. Banta (1985) stated that Tennessee utilized performance criteria, such as student satisfaction, to fund public universities. The University of Tennessee, Knoxville, developed a survey to measure improvement of their academic projects and services in accordance with the state performance criteria. Based upon the results of this survey, the registration process was changed and freshman advising was redesigned.

In another study based upon Tennessee's higher education funding accountability formula, Franklin (1994) conducted a survey of 2,634 undergraduate at East Tennessee State University (ETSU). A significant predictive relationship between overall student satisfaction and major, personal development, analytical problem solving and satisfaction was reported. The results provided ETSU administrators with an understanding of student perceptions of institutional
effectiveness that explained the persistence of students to graduation.

The California Community College Accountability Model (Report, 1995) was examined in response to legislation designed to improve educational quality. Five components, including student satisfaction, were found to be essential measures of institutional effectiveness by consumers of educational programs and services. The results were used for state strategic planning, policy development and budget formulation and compliance reviews and fiscal audits.

University of Central Florida

The University of Central Florida (UCF) began enrolling students in October 1968. Subsequently, the institution developed and assessed surveys to study satisfaction with services or student expectations entering college. In the late 1960s and early 1970s, UCF utilized the American Council on Education’s Student Interest Forms to compare institutional norms with national norms regarding student expectations (Walton, 1968, 1969, 1970). These surveys were administered to freshmen when they attended orientation sessions. The last survey included information on social issues and protest activities. However, these surveys did not assess satisfaction levels with services being offered on campus.
In 1973 (Brown & Coleman), Florida Technological University (the name of UCF prior to 1979) conducted a campus environment study during spring semester to determine students' perception of the university and to foster development of a quality institution. By analyzing views on scholarship, campus morale, faculty and student relationships, it was reported that faculty were highly respected; club activity was not considered important; instructional processes were generally favorable; and, that most students were happy with their total environment. Freshmen were found to be slightly less negative than upperclassmen in their perceptions of social activities.

In a follow-up study in 1975, Brown and McQuilken examined the extent of student involvement in non-academic programs, the extent of student satisfaction and predictors of student satisfaction. In a stratified sample of class levels, it was reported that 90% of students were satisfied with the quality of education. Older students were less interested in activities and less involved than younger students; however, there were no significant differences by age and class level for academic activities. It was also reported that being an upperclassmen was a significant predictor of involvement in non-academic activities. Being female and class level were predictors of awareness of
activities and services. There was a significant relationship between academic motivation and class level.

A search of institutional research indicated that no student satisfaction surveys were conducted at UCF during the early 1980s. Beginning in 1987, however, the Cycles Survey was administered annually by the Division of Student Affairs in order to assess student opinions and attitudes concerning academic and overall college experiences (Lawson & Shields, 1996). In analyzing the data during that ten-year period, it was found that most students were satisfied or very satisfied with the institution. These surveys, however, did not compare the levels of satisfaction with the levels of expectation regarding services.

According to Terrell (1996), one of the goals established for UCF when President John C. Hitt took office in 1992 was to increase enrollment growth. Additionally, the university was faced with decreases in state funding support, legislative demands for higher accountability, and public demands for improved quality in the programs and services. To meet these challenges, UCF began quality management implementation in 1993 to gather baseline data to assess work processes, services, productivity, and institutional environment for students.

Furthermore, in 1994, UCF developed a Retention Plan to address the high rate of attrition of first and second year
students. The plan focused on a continuous process of interaction and dedication to UCF students through effective and efficient student services. Academic and nonacademic student services were addressed in order to focus on specific services that aided First-Time-in-College (FTIC) and transfer students.

The Office of Quality Initiatives utilized the Student Satisfaction Inventory to monitor changes in student satisfaction levels that resulted from the retention efforts. Anthrop (1996) analyzed the 1995 SSI data to examine the expectation and satisfaction levels of freshmen students. Freshmen rated all institutional characteristics, except Campus Life, as at least important in meeting expectations. Significant differences were based upon employment, residence and institutional choice. She concluded that the SSI identified issues important to freshmen and that Campus Life issues should be given special consideration in retention efforts.

**Summary**

Chapter 2 has presented an overview of student satisfaction. This chapter examined the demographic characteristics of gender and age as related to student satisfaction. This chapter has referenced work discussing quality efforts directed at student satisfaction.
Additionally, specific institutional assessment models, including measures employed at the University of Central Florida, have been related as to demographic variables of class, gender and age.
CHAPTER 3
METHODOLOGY

Introduction

The literature review in Chapter 2 established the foundation upon which this research was conducted. Freshman and senior students at the University of Central Florida were surveyed, utilizing the Student Satisfaction Inventory (SSI), regarding their ranking of importance and satisfaction levels by class, gender and age. This chapter describes the research methodology and the design of the study. Sections included are: Statement of the Problem, Population, Instrumentation, Data Collection and Data Analysis.

Statement of the Problem

This study sought to assess the differences, if any, in importance, satisfaction and performance gap levels of freshman and senior students in 1995 and freshman and senior students in 1998 regarding selected student services offered at the University of Central Florida. The study examined four of the twelve scales derived from the SSI: Campus Climate, Campus Life, Campus Support Services, and Instructional Effectiveness. These scales were analyzed controlling for the
variables of class level (freshman and senior), gender and age.

Population

For the 1995 survey, the Office of Institutional Research and Planning Support identified a stratified proportional sample of the 24,493 enrolled students at UCF during Spring semester 1995. Classes were selected based upon class levels represented, colleges and class size (Report, 1996). A total of 2,667 surveys were distributed with 939 (37%) responding. The 1995 sample for the current study consisted of 365 total students, 154 freshmen (16% of respondents) and 211 seniors (22% of respondents).

For the 1998 survey, the Office of Institutional Research and Planning Support identified a stratified proportional sample of the 27,172 enrolled students at UCF during Spring semester 1998. Classes were selected based upon class levels represented, college and class size (Andrews, 1998). A total of 2,936 surveys were distributed with 2,223 (76%) responding. The 1998 sample for the current study consisted of 838 total students, 366 freshmen (16%) and 472 seniors (21%).
## Description of the Sample

Table 1 shows the demographic profiles of the students who responded to the SSI in 1995 and 1998. Response frequencies and percents are reported for 1995 and 1998 class levels by gender and age. The 1995 sample consisted of 154 freshmen (7% of the total freshman population) and 211

### TABLE 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>1995</th>
<th>1998</th>
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<tr>
<td></td>
<td>N</td>
<td>%</td>
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<tr>
<td>GENDER</td>
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<tr>
<td>Freshman</td>
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<tr>
<td>Female</td>
<td>87</td>
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<tr>
<td>Male</td>
<td>67</td>
<td>43%</td>
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<tr>
<td>Senior</td>
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<tr>
<td>Female</td>
<td>121</td>
<td>57%</td>
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<tr>
<td>Male</td>
<td>90</td>
<td>43%</td>
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<tr>
<td>AGE</td>
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<tr>
<td>Freshman</td>
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<tr>
<td>18 and under</td>
<td>81</td>
<td>53%</td>
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<tr>
<td>19 to 24</td>
<td>71</td>
<td>46%</td>
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<td>25 and over</td>
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<tr>
<td>Senior</td>
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<tr>
<td>18 and under</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>19 to 24</td>
<td>209</td>
<td>57%</td>
</tr>
<tr>
<td>25 and over</td>
<td>73</td>
<td>43%</td>
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seniors (2% of the total senior population) for a total N=365. The 1998 sample consisted of 366 freshmen (13% of the total freshman population) and 472 seniors (5% of the total senior population) for a total N=838.

As shown in Table 1 for 1995, it was observed that the percents of males and females in 1995 were the same for freshman and senior respondents. A total of 87 (57%) freshman females and 67 (43%) freshman males responded to the SSI. That year, 121 (57%) senior females and 90 (43%) senior males responded.

In 1998, it was observed that a larger percent of freshman females responded than did their senior counterparts. A total of 222 (61%) freshman females and 144 (39%) freshmen males responded to the survey, while 264 (56%) senior females (56%) and 207 senior males (44%) responded.

According to the distribution by age in 1995, a majority (81, 53%) of the freshman students sampled were 18 and under, followed by the category 19 to 24 (71, 46%) with only 2 (1%) respondents being 25 and over. For seniors in 1995, no respondents were 18 and under; 209 (57%) reported their ages as 19 to 24 and 73 (43%) were 25 and over.

As demonstrated in Table 1 for 1998, there was a greater percent of freshmen in the 19-24 year old age group than for seniors. A majority (197, 54%), of the freshman students sampled were 19 to 24; 166 (45%) respondents were 18 and
under and 3 reported being 25 and over. Senior respondents in 1998 reported to being 19 to 24 (242, 51%), 25 and over (229, 49%) while only one (1) responded to being 18 and under.

**Instrumentation**

The instrument was based upon a survey originally developed by Juillerat (1995) for her dissertation *Investigating a two-dimensional approach to the assessment of student satisfaction: Validation of the SSI*. The SSI was selected as the instrument for this study because it 1) provided information on discrepancies between students' expectations of services and the actual services they received; and 2) has been utilized at other four-year public institutions to measure student satisfaction with student services.

Additionally, Juillerat (1995) stated that the SSI was created to measure student satisfaction as a reflection of current consumer trends in higher education. The SSI provided advantages over traditional methods of assessing student satisfaction because it was based on customer theory. By assessing the differences between students' expectations and satisfaction with services, the SSI provided specific data to target a service or project.

The SSI scales were developed, according to Juillerat (1995), by interviewing students and higher education experts
to determine how student satisfaction was related to the whole educational experience. The pilot instrument contained 248 items and was tested on a random sample of 100 students at a private, northeastern liberal arts college. Items were removed based upon inadequate item-total correlations, standard deviations, inter-item correlations, and correlations with criterion variables. Three higher education experts subsequently reviewed the SSI analysis to remove the items, resulting in a 167-item instrument.

The revised 167-item SSI was then piloted on a random sample of 4,974 students from 27 four-year institutions (Juillerat, 1995). The respondents, chosen from representatives attending a national conference on student retention, were from various size and geographically-situated institutions. All participants (n=742) completed the SSI and two other student satisfaction instruments, the College Student Satisfaction Questionnaire (CSSQ) and the Coppersmith Inventory, as part of a validity check (Juillerat, 1995).

This final administration resulted in an 82-item, 12-scale instrument. The Student Satisfaction Inventory (SSI) was designed from that final instrument by Stephanie Juillerat and her colleague Laurie Schreiner for use by institutions of higher education (Noel-Levitz, 1997). The Noel-Levitz Group utilized the SSI to compare institutional results and to generate individual campus reports.
Reliability

Juillerat (1995) conducted tests for reliability on the SSI. Internal consistency was measured utilizing Cronbach's alpha on both importance and satisfaction scores. The coefficient alpha estimates were .97 and .98 for overall importance and satisfaction scores respectively. Based upon these results, Juillerat concluded that the SSI was a very reliable instrument.

To determine the reliability for each of the four scales for this study, Cronbach's alpha was calculated. Table 2 presents reliability coefficients for each of the four scales for importance and satisfaction scores. The results indicated a strong internal reliability for all of the scales for 1995 and 1998 for both importance and satisfaction.

It is evident from the data shown in Table 2 that for 1995, the Campus Life scale (.89) importance score reliability was the highest. The reliability of each of the remaining three scales, as indicated by the coefficient alphas of Campus Climate (.84), Instructional Effectiveness (.75), and Campus Support Services (.70), were also high. The results indicated that reliable scores could be derived for each of the selected scales.

As shown in Table 2, importance score reliability in 1998 was identical for three scales; Campus Climate, Campus Life, and Instructional Effectiveness importance reliability
was high (.92). The reliability of the remaining scale, Campus Support Services (.85), was also high. The results indicated that reliable scores could be derived for each of the scales.

TABLE 2
1995 AND 1998 SSI SCALE RELIABILITY: IMPORTANCE AND SATISFACTION

<table>
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<tbody>
<tr>
<td>IMPORTANCE</td>
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<tr>
<td>1. Campus Climate</td>
<td>.84</td>
<td>.92</td>
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<tr>
<td>2. Campus Life</td>
<td>.89</td>
<td>.92</td>
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<tr>
<td>3. Campus Support Services</td>
<td>.70</td>
<td>.85</td>
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<tr>
<td>4. Instructional Effectiveness</td>
<td>.75</td>
<td>.92</td>
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<tr>
<td>SATISFACTION</td>
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<tr>
<td>1. Campus Climate</td>
<td>.91</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Campus Life</td>
<td>.90</td>
<td>.87</td>
<td></td>
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<tr>
<td>3. Campus Support Services</td>
<td>.81</td>
<td>.81</td>
<td></td>
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<tr>
<td>4. Instructional Effectiveness</td>
<td>.90</td>
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</tbody>
</table>
Table 2 also displays high satisfaction score reliability in 1995: Campus Climate (.91) was the highest; Campus Life (.90), Instructional Effectiveness (.90), and Campus Support Services (.81) were also high. The results indicated that reliable scores could be derived for each of the scales.

Table 2 displays high satisfaction score reliability in 1998 with Instructional Effectiveness (.92) yielding the highest score. The reliability scores for the scales Campus Climate (.91), Campus Life (.87), and Campus Support Services (.81) were also high. The results indicated that reliable scores could be derived for each of the scales.

**Data Collection**

The 1995 data utilized for this study was collected during the 1995 Spring semester at the University of Central Florida. The SSI (Appendix A) and a cover letter (Appendix B) were prepared for distribution to the identified classes. The purpose for sending a cover letter was to explain the intent of the study and to ask students to complete the survey. Staff members of the Unit of Academic Development and Retention and the Office of Quality Initiatives distributed the surveys to instructors.

In March and April 1995, the Student Satisfaction Inventory was distributed by instructors in the selected
classes. A cover letter was attached indicating that students would receive a 25% discount at the bookstore when completing the survey. The incentive was offered to maximize survey participation (UCF Office of Quality Management, 1996).

During March and April 1995, instructors arranged either class time for completion of the surveys or asked students to return completed surveys at the subsequent class meeting. Additional instructors were contacted in order to facilitate survey administration. Additionally, researchers collected some surveys during class sessions. These data collection efforts resulted in a usable return rate of 35% (Report, 1996).

The 1998 data utilized for this study was collected during the 1998 Spring semester at the University of Central Florida. The SSI and a cover letter (Appendix C) were prepared for distribution to the identified classes. The purpose for sending a cover letter was to explain the intent of the study and to ask students to complete the survey. Staff members of the Divisions of Academic Affairs and Student Affairs distributed surveys to instructors.

During March and April 1998, instructors arranged either class time for completion of the surveys or asked students to return completed surveys at the subsequent class meeting. Some instructors also offered extra credit as an incentive for survey completion. Other instructors were contacted via
e-mail in order to facilitate survey administration. Additionally, researchers collected some surveys during class sessions. Attempts to increase survey completion resulted in a usable return rate of 76% (Andrews, 1998).

The returned surveys were collected for preparation of the data for statistical analysis. The surveys were sent to Noel-Levitz for tabulation of the instruments' responses. The 1995 and 1998 data were transferred from Noel-Levitz to the institution on computer disks. Analysis of the data were completed for this study using SPSS 8.0 for Windows (SPSS, Inc. 1997) statistical software.

Data Analysis

The data collected from the 1995 and 1998 samples were analyzed to determine levels of importance and satisfaction as well as the differences, if any, between the resulting gap scores for freshman and senior respondents. The data were also analyzed to determine if variability existed among the freshmen and seniors in 1995 and freshmen and seniors in 1998 by gender and age. The 53 items (Appendix D) that were subjected to statistical analysis resulted in four comprehensive scales as follows:

The Campus Climate scale was designed using 17 items to assess the extent to which the institution provided experiences that promoted a sense of campus pride and
belonging. This scale also assessed the effectiveness of the institution’s channels of communication for students.

The Campus Life scale was developed using 15 items to assess the effectiveness of student life programs offered by the institution covering issues ranging from athletics to residence life. This scale also assessed campus policies and procedures to determine students’ perceptions of their rights and responsibilities.

The Campus Support Services scale was designed using 7 items to assess the quality of the support programs and services that students utilized in order to make their educational experiences more meaningful and productive. This scale also covered such areas as tutoring, the adequacy of the library and computer labs, and the availability of academic and career services.

The Instructional Effectiveness scale was developed using 14 items to assess students’ academic experiences, the curriculum, and the campus’ overriding commitment to academic excellence. This comprehensive scale covered areas such as the variety to courses offered, the effectiveness of the faculty in and out of the classroom, and the effectiveness of the adjunct and graduate teaching assistants.

The scales utilized for the data analysis included 53 items that reflected institutional characteristics. The four scales and the corresponding survey items included: Campus
Climate (1, 2, 3, 7, 10, 29, 37, 41, 45, 51, 57, 59, 60, 62, 66, 67, 71); Campus Life (9, 23, 24, 30, 31, 38, 40, 42, 46, 52, 56, 63, 64, 67, 73); Campus Support Services (13, 18, 26, 32, 44, 49, 54); and Instructional Effectiveness (3, 8, 16, 25, 39, 41, 47, 53, 58, 61, 65, 68, 69, 70) (Noel-Levitz, 1997). Appendix D provides a listing of each numerical item and its narrative descriptive statement.

Data Analysis for Research Question 1

What are the importance, satisfaction and performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998?

Analysis of the data for Research Question 1 involved the tabulations of importance mean, satisfaction mean and performance gap mean scores for the selected scales. The means were calculated according to the responses using the 7-point Likert-type scale for the items associated with the four selected scales. The importance, satisfaction and performance gap scores were determined by class level for both 1995 and 1998. The mean scores are presented in tabular format to facilitate further discussion.

Each selected SSI item within the scales was stated as a positive expectation a student may or may not hold concerning institutional services (e.g. "Library resources and services are adequate"). Initially, for each item, the respondents were asked to rate the importance of the expectation to their
overall college experience. Respondents utilized a seven-point Likert scale in responding to each item: 1=Not at all Important, 2=Not Very Important, 3=Somewhat Unimportant, 4=Neutral, 5=Somewhat Important, 6=Important, 7=Very Important, and 0=Does Not Apply. The option 0=Does Not Apply was included for use when an institution did not offer a particular service and was recoded as system missing.

Importance mean scores were interpreted based upon the following categories: 1.00-1.99=Not at All Important, 2.00-2.99=Not Very Important, 3.00-3.99=Somewhat Unimportant, 4.00-4.99=Neutral, 5.00-5.99=Somewhat Important, 6.00-6.99=Important, 7.00=Very Important. These categories indicated the level of expectation of students with institutional services represented by the four selected scales. Mean scale scores for each comparison group have been included in parentheses in the following discussion to add to its clarity. Freshman importance mean scores are indicated first followed by the corresponding senior mean.

Respondents were requested to rate their level of satisfaction as to whether the institution met the stated expectation. Respondents utilized a 7-point Likert scale in responding to each item: 1=Not at all Satisfied, 2=Not Very Satisfied, 3=Somewhat Dissatisfied, 4=Neutral, 5=Somewhat Satisfied, 6=Satisfied, 7=Very Satisfied, and 0=Not Applicable/Not Used. The option 0=Not Applicable/Not Used was
included for use when a student did not utilize an institutional service and was recoded as system missing.

The interpretation of satisfaction mean scores was based upon the following categories: 1.00-1.99=Not at All Satisfied, 2.00-2.99=Not Very Satisfied, 3.00-3.99=Somewhat Dissatisfied, 4.00-4.99=Neutral, 5.00-5.99=Somewhat Satisfied, 6.00-6.99=Satisfied, 7.00=Very Satisfied. These categories indicated the level of satisfaction of students with institutional services represented by the four selected scales. Mean scale scores for each comparison group have been included in parentheses in the following discussion to add to its clarity. Freshman satisfaction mean scores are indicated first followed by the corresponding senior mean.

Performance gap mean scores were interpreted based upon the level of difference found between importance and satisfaction mean scores for each scale. Any performance gap score above 0.00 indicated unmet expectations for freshman and senior respondents. For the purposes of this study, performance gap mean scores indicated the levels of unmet student needs: 0.00-1.00=Low, 1.01-2.00=Moderate, 2.01-7.00=High.

For the purpose of analyzing the Research Questions of this study, the SSI demographic items of Class Level (107), Gender (102), and Age (103) were utilized. To distinguish between freshman and senior responses, the variable Class
Level was assigned the following values: 1=Freshman, 4=Senior. In order to further analyze the data, the following numerical values were assigned to the variable Gender: 1=Male, 2=Female. Due to a small number of respondents in some of the five originally established age categories, (1=18 and under; 2=19-24; 3=25-34; 4=35-44; 5=45 and over), the variable Age was recoded into three categories: 1=18 and under; 2=19-24; 3=25 and over.

Data Analysis for Research Question 2

What differences, if any, are there in the importance levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

Data analysis for Research Question 2 was conducted using one-way ANOVA. Review of the ANOVAs indicated the variations between importance mean scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998. Results of the ANOVAs are presented in tabular format with mean scores for each scale, standard deviations and total number of responses reported. The level of statistical significance between class level by scale is also indicated. Further discussion of any scale for which the probability of significant differences was determined at the .05 level is included.
Data Analysis for Research Question 3

What differences, if any, are there in the satisfaction levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

Data analysis for Research Question 3 was conducted using one-way ANOVA. Review of the ANOVAs indicated the variations between satisfaction mean scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998. Results of the ANOVAs are presented in tabular format with mean scores for each scale, standard deviations and total number of responses reported. The level of statistical significance between class level by scale is also indicated. Further discussion of any scale for which the probability of significant differences was determined at the .05 level is included.

Data Analysis for Research Question 4

What differences, if any, are there between performance gap scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

Data analysis for Research Question 4 was conducted using one-way ANOVA. Review of the ANOVAs indicated the variations between performance gap mean scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998. Results of the ANOVAs are presented in tabular format with mean scores for each scale, standard deviations, total number of responses reported and
statistical significance. Further discussion of any scale for which the probability of significant differences were determined at the .05 level is included.

Analysis for Research Question 5

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon gender?

Data analysis for Research Question 5 was conducted using factorial ANOVA. Review of the ANOVA results indicated the variation in results between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon gender. Results of the ANOVAs are presented in tabular format for performance gap scores that were found to have either a main effect or interaction effect by class level and gender. ANOVAs are presented with degrees of freedom and the probability level of statistical significance between class level by scale. Further discussion of any scale for which the probability of significant differences was determined at the .05 level is included.
Data Analysis for Research Question 6

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon age?

Data analysis for Research Question 6 was conducted using factorial ANOVA. Review of the ANOVA results indicated the variation in results between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon age. Results of the ANOVAs are presented in tabular format for performance gap scores that were found to have either a main effect or interaction effect by class level and age. ANOVAs are presented with degrees of freedom and probability level of statistical significance between class level by scale. Further discussion of any scale for which the probability of significant differences was determined at the .05 level is included.

The analyses of the data, tables, and appropriate narratives are presented in Chapter 4. These analyses were utilized to make recommendations regarding institutional policy and practice that could impact student satisfaction. In Chapter 5, the findings provided the basic foundation for further discussion, conclusions and implications.
CHAPTER 4
ANALYSIS OF THE DATA

This study sought to assess the differences, if any, in importance, satisfaction and performance gap levels of freshman and senior students in 1995 and freshman and senior students in 1998 by gender and age regarding selected student services offered at the University of Central Florida. This chapter provides results of the analysis of data. Results of the study have been organized using the six research questions. Tables and supportive narratives for each of the research questions are provided in the following sections.

Research Question 1

What are the importance, satisfaction and performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998?

For freshmen and seniors in 1995, importance, satisfaction and performance gap scores were determined for the four selected SSI scales (Campus Climate, Campus Life, Campus Support Services and Institutional Effectiveness). First, respondents were requested to rate the expectation of the 53 scaled items by indicating if they were Not at all Important, Not Very Important, Somewhat Unimportant,
Neutral, Somewhat Important, Important, or Very Important. Second, respondents were requested to rate their level of satisfaction by indicating whether they were Not at all Satisfied, Not Very Satisfied, Somewhat Dissatisfied, Neutral, Somewhat Satisfied, Satisfied, or Very Satisfied with the 53 scaled items. Performance gap mean scores, the differences between importance and satisfaction scores, indicated either a High, Moderate, or Low level of unmet expectations for freshman and senior respondents.

The importance, satisfaction, and performance gap mean scores for freshmen and seniors in 1995 and 1998 are reported in Table 3. Mean scale scores for each comparison group have been included in parentheses in the following discussion to add to its clarity.

Importance Scores: 1995 Freshmen and Seniors

As reported in Table 3, for importance mean scores in 1995, freshmen students rated the selected scales higher than did their senior counterparts: Instructional Effectiveness (6.45, 6.44); Campus Support Services (6.28, 6.07); Campus Climate (6.18, 5.98); and, Campus Life (6.08, 5.44). Importance mean scores generated for all the scales for freshmen were greater than 6.00 and were determined to be at
TABLE 3

IMPORTANCE, SATISFACTION AND PERFORMANCE GAP MEAN SCORES:

1995 AND 1998 FRESHMEN AND SENIORS

<table>
<thead>
<tr>
<th>Scale</th>
<th>Importance</th>
<th>Satisfaction</th>
<th>Performance Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMPUS CLIMATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>6.18</td>
<td>5.05</td>
<td>1.23</td>
</tr>
<tr>
<td>Seniors</td>
<td>5.98</td>
<td>4.50</td>
<td>1.49</td>
</tr>
<tr>
<td>CAMPUS LIFE</td>
<td></td>
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</tr>
<tr>
<td>Freshmen</td>
<td>6.08</td>
<td>5.08</td>
<td>.95</td>
</tr>
<tr>
<td>Seniors</td>
<td>5.44</td>
<td>4.31</td>
<td>1.27</td>
</tr>
<tr>
<td>CAMPUS SUPPORT SERVICES</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>6.28</td>
<td>5.22</td>
<td>1.08</td>
</tr>
<tr>
<td>Seniors</td>
<td>6.07</td>
<td>4.70</td>
<td>1.55</td>
</tr>
<tr>
<td>INSTRUCTIONAL EFFECTIVENESS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>6.45</td>
<td>5.28</td>
<td>1.14</td>
</tr>
<tr>
<td>Seniors</td>
<td>6.44</td>
<td>4.81</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Note: Not all respondents completed every item of the survey instrument. Performance gap scores calculated for difference between satisfaction and importance, however, not all respondents completed every item.

For senior respondents, the Campus Support Services and Instructional Effectiveness scales were Important with mean scores of at least 6.00, while the scores for Campus Climate and Campus Life were Somewhat Important (at least 5.00).

These results indicated that freshmen and seniors had the highest expectations for Instructional Effectiveness scaled items and the lowest expectations for Campus Life.
services represented by that scale. Overall, these results indicated that, for the UCF freshmen and seniors sampled in this study in 1995, freshmen placed higher importance on the four selected scales than did the senior respondents.

Satisfaction Scores: 1995 Freshmen and Seniors

As reported in Table 3, for satisfaction mean scores in 1995, freshmen students rated the selected scales higher than did their senior counterparts: Instructional Effectiveness (5.28, 4.81); Campus Support Services (5.22, 4.70); Campus Life (5.08, 4.31); and, Campus Climate (5.05, 4.50). The freshmen sampled in 1995 indicated they were at least Somewhat Satisfied in that all four scales (Campus Climate, Campus Life, Campus Support Services and Instructional Effectiveness) yielded mean satisfaction scale scores greater than 5.00. Senior satisfaction mean scores generated for all scales were greater than 4.00 and were determined to be at least Neutral.

These results indicated that freshmen and seniors had the highest satisfaction with Instructional Effectiveness scaled items. Freshmen had the lowest satisfaction with Campus Climate, while seniors and the lowest satisfaction for Campus Life services represented by that scale. Overall, these results indicated that, for the UCF freshmen and seniors sampled in this study in 1995, freshmen expressed
higher satisfaction on the four selected scales than did their senior counterparts.

Performance Gap Scores: 1995 Freshmen and Seniors

As reported in Table 3, for performance gap means in 1995, scores for senior students on the selected scales were greater than their freshmen counterparts: Instructional Effectiveness (1.74, 1.14); Campus Support Services (1.55, 1.08); Campus Climate was (1.49, 1.23); and, Campus Life (1.27, .95). These results also indicated that the scale with the largest performance gap mean score for freshmen was Campus Climate, while the scale with the largest performance gap mean score for seniors was Instructional Effectiveness. All scales, except for Campus Life for freshmen, generated a performance gap mean score of at least 1.00. These results indicated that there was a Low level of unmet student expectations for the freshmen and seniors sampled in 1995 based upon the selected scales.

Importance Scores: 1998 Freshmen and Seniors

As reported in Table 3, for importance mean scores in 1998, freshmen students rated the selected scales higher than did their senior counterparts: Instructional Effectiveness (6.37, 6.35); Campus Climate (6.17, 5.98); Campus Support Services (6.18, 6.00); and, Campus Life (5.75, 5.17).
Importance mean scores generated for three of the scales (Instructional Effectiveness, Campus Life, and Campus Climate) for freshmen were greater than 6.00 and were determined to be at least Important. The Campus Life scale was rated by freshmen respondents to be at least Somewhat Important. For senior respondents, the Campus Support Services and Instructional Effectiveness scales were considered Important with mean scores of at least 6.00, while the scales for Campus Climate and Campus Life were Somewhat Important (at least 5.00).

These results also indicated that freshmen and seniors had the highest expectations for Instructional Effectiveness scaled items and the lowest expectations for Campus Life services represented by that scale. Overall, these results indicated that, for the UCF freshmen and seniors sampled in this study in 1998, freshmen placed higher importance on the four selected scales than did the senior respondents.

Satisfaction Scores: 1998 Freshmen and Seniors

As reported in Table 3, for satisfaction mean scores in 1998, freshman students rated the selected scales higher than did their senior counterparts: Campus Support Services (5.42, 5.00); Instructional Effectiveness (5.31, 5.09); Campus Climate (5.22, 4.81); and, Campus Life (5.00, 4.59). The freshmen sampled in 1998 indicated they were at least
Somewhat Satisfied in that all four scales (Campus Climate, Campus Life, Campus Support Services and Instructional Effectiveness) yielded mean satisfaction scale scores greater than 5.00. Seniors sampled in 1998 were at least Somewhat Satisfied with the scales, Campus Support Services and Instructional Effectiveness, with mean scores above 5.00. Additionally, reporting seniors were at least Neutral with respect to Campus Life and Campus Climate with mean scores of at least 4.00.

These results also indicated that freshmen and seniors had the lowest satisfaction with Campus Life scaled items. Freshmen had the highest satisfaction with Campus Support Services represented by that scale. Seniors had the highest satisfaction with Instructional Effectiveness. Overall, these results indicated that, for the UCF freshmen and seniors sampled in this study in 1998, freshmen expressed higher satisfaction on the four selected scales than did their senior counterparts.

Performance Gap Scores: 1998 Freshmen and Seniors

As shown in Table 3, for performance gap means in 1998, scores for senior students on the selected scales were higher than those of their freshman counterparts on three scales: Instructional Effectiveness (1.26, 1.03); Campus Climate (1.22, .89); and, Campus Life (1.01, .73). On one scale,
Campus Support Services, performance gap mean scores were greater (.58, .52) for freshmen than for seniors. All scales, except for Campus Climate for freshmen and Campus Support Services for both groups, generated a performance gap mean score of at least 1.00. These results indicated that there was a Low level of unmet student expectation for the freshmen and seniors sampled in 1998 based on the selected scales.

The scale with the largest performance gap mean score for freshmen and seniors was Instructional Effectiveness. The scale with the lowest performance gap mean score for both groups was Campus Support Services. These results indicate that the expectations of both reporting freshmen and seniors in 1998 were being met by the institution to a greater extent in regard to Campus Support Services than in the other scales. The area of greatest unmet need for both groups was in the Instructional Effectiveness scale.

Research Question 2

What differences, if any, are there in the importance levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

In order to respond to this question, two separate one-way ANOVA procedures were performed for each of the importance mean scale scores for freshmen and seniors in 1995 and freshmen and seniors in 1998. The four scales, as represented by importance mean scale scores, were the
dependent variables. Class level (freshman, senior) was the independent variable. The reported importance mean scale scores, the standard deviations, and the significance levels (p<.05) are reported in Table 4. Significance levels and mean scores have been included in parentheses in the following discussion to add to its clarity.

1995 Freshmen and Seniors

As indicated in Table 4, significant differences were identified in importance mean scale scores for three of the four scales of 1995 freshmen and seniors. For the Campus Climate scale (p<.01), the mean importance score for freshmen (6.18) differed significantly from that of seniors (5.98). On the Campus Life scale (p<.00), the mean for freshmen (6.08) differed significantly from that of seniors (5.44). The freshman importance mean (6.23) for Campus Support Services also differed significantly (p<.00) from the senior mean (6.07). The results indicated that students' expectations towards the services represented in the three scales were influenced by class level. Freshmen viewed campus climate, campus life and campus support services as being more important than did seniors.

No significant difference in mean scale scores was observed between 1995 freshmen and seniors in regard to Instructional Effectiveness. Thus, respondents' perceptions
TABLE 4
IMPORTANCE MEAN SCORES AND ONE-WAY ANOVA: 1995 AND 1998 FRESHMEN AND SENIORS

<table>
<thead>
<tr>
<th>INSTITUTIONAL CHARACTERISTICS</th>
<th>FRESHMEN</th>
<th></th>
<th></th>
<th>SENIORS</th>
<th></th>
<th></th>
<th>P VALUE</th>
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<tr>
<td></td>
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<td>SD</td>
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<td>MEAN</td>
<td>SD</td>
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<tr>
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<td>163</td>
<td>.85</td>
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<td>.00*</td>
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<td>Campus Support Services</td>
<td>6.17</td>
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<td>298</td>
<td>6.00</td>
<td>.80</td>
<td>317</td>
<td>.01*</td>
</tr>
<tr>
<td>Instructional Effectiveness</td>
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<td>.72</td>
<td>284</td>
<td>6.35</td>
<td>.63</td>
<td>341</td>
<td>.65</td>
</tr>
</tbody>
</table>

Note: Not all respondents completed every item of the survey instrument.

*p<.05
regarding instructional effectiveness did not appear to have been influenced by their class level.

1998 Freshmen and Seniors

As reported in Table 4, significant differences were identified in importance mean scale scores for three of the four scales of 1998 freshmen and seniors. For the Campus Climate scale (p<.01), the mean importance score for freshmen (6.17) differed significantly from that of seniors (6.02). The freshmen importance mean (6.17) for Campus Support Services also differed significantly (p<.01) from the senior mean (6.00). On the Campus Life scale (p<.00), the mean for freshmen (5.75) differed significantly from that of seniors (5.17). The results indicated that students' expectations towards the services represented in the three scales were influenced by class level. Freshmen viewed campus climate, campus life and campus support services as being more important than did seniors.

No significant difference in mean scale scores was observed between 1995 freshmen and seniors in regard to Instructional Effectiveness. Thus, respondents' perceptions regarding instructional effectiveness did not appear to have been influenced by their class level.
Research Question 3

What differences, if any, are there in the satisfaction levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

In order to respond to this question, separate one-way ANOVA tests were performed for each of the satisfaction mean scale scores for freshmen and seniors in 1995 and freshmen and seniors in 1998. The four scales, as represented by satisfaction mean scale scores, were the dependent variables. Class level (freshman, senior) was the independent variable. The reported satisfaction mean scale scores, the standard deviations, and the significance levels (p<.05) are reported in Table 5. Significance levels and mean scores have been included in parentheses in the following discussion to add to its clarity.

1995 Freshmen and Seniors

As reported in Table 5, significant differences were identified in satisfaction mean scale scores for all four scales of 1995 freshmen and seniors. For the Campus Support Services scale (p<.01), the mean satisfaction score for freshmen (5.22) differed significantly from seniors (4.70). On the Instructional Effectiveness scale (p<.00), the mean for freshmen (5.28) differed significantly from seniors (4.81). The freshman satisfaction mean (5.08) for Campus Life also differed significantly (p<.00) from the senior mean.
| INSTITUTIONAL CHARACTERISTICS | FRESHMEN | | | SENIORS | | | | P VALUE |
|-----------------------------|---------|--------|--------|---------|--------|--------|--------|
|                             | MEAN    | SD     | N      | MEAN    | SD     | N      |        |
| 1995                        |         |        |        |         |        |        |        |
| CAMPUS CLIMATE              | 5.05    | .78    | 102    | 4.50    | 1.02   | 139    | .00*   |
| CAMPUS LIFE                 | 5.08    | .88    | 53     | 4.31    | .82    | 72     | .00*   |
| CAMPUS SUPPORT SERVICES     | 5.22    | .93    | 92     | 4.70    | 1.06   | 123    | .01*   |
| INSTRUCTIONAL EFFECTIVENESS | 5.28    | .78    | 110    | 4.81    | 1.00   | 152    | .00*   |
| 1998                        |         |        |        |         |        |        |        |
| CAMPUS CLIMATE              | 5.22    | .76    | 233    | 4.81    | .90    | 309    | .00*   |
| CAMPUS LIFE                 | 5.00    | .83    | 128    | 4.60    | .68    | 138    | .00*   |
| CAMPUS SUPPORT SERVICES     | 5.42    | .89    | 253    | 5.00    | .88    | 261    | .00*   |
| INSTRUCTIONAL EFFECTIVENESS | 5.31    | .82    | 284    | 5.10    | .92    | 321    | .00*   |

Note: Not all respondents completed every item of the survey instrument.  *p < .05
Finally, for the Campus Climate scale (p<.00), the mean satisfaction score for freshmen (5.05) differed significantly from that of seniors (4.50). These results indicate that students' satisfaction towards the services represented in the four scales were influenced by class level. Freshmen were more satisfied with campus climate, campus life, campus support services and instructional effectiveness than were their senior counterparts.

1998 Freshmen and Seniors

As indicated in Table 5, significant differences were identified in satisfaction mean scale scores for all four scales of 1995 freshmen and seniors. For the Campus Support Services scale (p<.00), the mean satisfaction score for freshmen (5.42) differed significantly from seniors (5.00).

On the Instructional Effectiveness scale (p<.00), the mean for freshmen (5.31) differed significantly from that of seniors (5.10). The freshmen satisfaction mean (5.22) for Campus Climate also differed significantly (p<.00) from the senior mean (4.81). Finally, for the Campus Life scale (p<.00), the mean satisfaction score for freshmen (5.00) differed significantly from that of seniors (4.60). These results indicate that students' satisfaction towards the services represented in the four scales were influenced by class level. Freshmen were more satisfied with campus
climate, campus life, campus support services and instructional effectiveness than were their senior counterparts.

**Research Question 4**

What differences, if any, are there between performance gap scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

In order to respond to this question, separate one-way ANOVA tests were performed for each of the performance gap mean scale scores for freshmen and seniors in 1995 and freshmen and seniors in 1998. The four scales, as represented by performance gap mean scale scores, were the dependent variables. Class level, freshman or senior, represented the independent variable. The calculated performance gap mean scale scores, the standard deviations, and the significance levels (p<.05) are reported in Table 6. Significance levels and mean scores have been included in parentheses in the following discussion to add to its clarity.

**1995 Freshmen and Seniors**

As reported in Table 6 for 1995, a significant difference was identified on two scales between freshmen and seniors for performance gap mean scale scores at the .05 level: Instructional Effectiveness (p<.00) and Campus Support Services (p<.01). Senior means (1.74) for Instructional
TABLE 6
PERFORMANCE GAP MEAN SCORES AND ONE-WAY ANOVA: 1995 AND 1998 FRESHMEN AND SENIORS

| INSTITUTIONAL CHARACTERISTICS | FRESHMEN | | | | | SENIORS | | | | | P VALUE |
|-------------------------------|---------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
|                               | MEAN    | SD    | N     | MEAN  | SD    | N     |       |       |       |       |       |       |
| 1995                          |         |       |       |       |       |       |       |       |       |       |       |       |
| Campus Climate                | 1.23    | .88   | 101   | 1.49  | 1.32  | 131   | .09   |       |       |       |       |       |
| Campus Life                   | .95     | 1.00  | 51    | 1.27  | 1.05  | 24    | .22   |       |       |       |       |       |
| Campus Support Services       | 1.08    | .98   | 91    | 1.55  | 1.23  | 86    | .01*  |       |       |       |       |       |
| Instructional Effectiveness   | 1.14    | .89   | 88    | 1.74  | 1.07  | 121   | .00*  |       |       |       |       |       |
| 1998                          |         |       |       |       |       |       |       |       |       |       |       |       |
| Campus Climate                | .89     | .73   | 225   | 1.22  | .96   | 294   | .00*  |       |       |       |       |       |
| Campus Life                   | .58     | 1.02  | 118   | .52   | .93   | 130   | .59   |       |       |       |       |       |
| Campus Support Services       | .73     | .98   | 246   | 1.01  | .99   | 253   | .00*  |       |       |       |       |       |
| Instructional Effectiveness   | 1.03    | .87   | 217   | 1.26  | .95   | 303   | .00*  |       |       |       |       |       |

Note: Not all respondents completed every item of the survey instrument. Performance gap scores calculated for difference between satisfaction and importance; however, not all respondents completed every item.

*p < .05
Effectiveness differed significantly from freshmen means (1.14). The Campus Support Services senior mean (1.55) differed significantly from the freshmen mean (1.08).

These results indicated that for both campus support services and instructional effectiveness, class level was significant when considering the level of unmet student needs for institutional services represented by the two scales. In the areas of campus support services and instructional effectiveness, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts.

1998 Freshmen and Seniors

As reported in Table 6 for 1998, a significant difference was identified on three scales between freshmen and seniors for performance gap mean scale scores at the .05 level: Campus Climate (p<.00); Campus Support Services (p<.00); and Instructional Effectiveness (p<.00). For the Campus Climate scale, the mean gap scores for seniors (1.22) differed significantly from freshmen (1.22) differed significantly from freshmen (.89). Senior performance gap means (1.01) for Campus Support Services also differed significantly from freshmen means (.73). The Instructional Effectiveness scale was significantly different for senior (1.26) and freshmen means (1.03).

These results indicated that for campus climate, campus support services and instructional effectiveness, class level
was significant when considering the level of unmet student needs in regards to institutional services represented by the three scales. In the areas of campus climate, campus support services and instructional effectiveness, 1998 seniors expressed a higher level of unmet need than did their freshmen counterparts.

**Research Question 5**

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon gender?

In order to respond to this question, separate factorial ANOVAs were performed for performance gap mean scores for freshmen and seniors in 1995 and freshmen and seniors in 1998. The four scales, as represented by performance gap mean scores, were the dependent variables. Class level (freshmen, senior) and gender (male, female) were the independent variables.

Tables are presented only for the scales that indicated significance at the .05 level for interaction between variables. The degrees of freedom and the significance levels are reported in the following tables. Significance levels have been included in parentheses in the following discussion to add to its clarity.
1995 Freshmen and Seniors

As indicated in Table 7, it was observed that for the Campus Support Services scale (p<0.004), there was a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for campus support services, class level was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of campus support services, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts.

TABLE 7

CAMPUS SUPPORT SERVICES: ANOVA FOR PERFORMANCE GAP SCORES BY CLASS AND GENDER 1995

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>8.436</td>
<td>.004*</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>.002</td>
<td>.963</td>
</tr>
<tr>
<td>Class x Gender</td>
<td>1</td>
<td>1.269</td>
<td>.262</td>
</tr>
<tr>
<td>Within</td>
<td>173</td>
<td>(1.232)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square.
*p<.05.

However, no significant main effect (p<.963) or interaction effect (p<.262) was reported for gender for this scale. This result indicated that while class standing had an
impact in determining performance gap mean scores for campus support services, the gender of the respondent did not have an impact. Additionally, the combination of the variables Class and Gender did not produce effects beyond the main effects of the variables upon the scales. The mean differences among the groups for the variable class were not dependent upon the levels of the variable gender (male and female).

As indicated in Table 8 for 1995, it was observed that for the Instructional Effectiveness scale ($p<.000$), there was

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>18.330</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>2.281</td>
<td>.132</td>
</tr>
<tr>
<td>Class x Gender</td>
<td>1</td>
<td>.950</td>
<td>.331</td>
</tr>
<tr>
<td>Within</td>
<td>205</td>
<td>(.993)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square. *$p<.05$. 

a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for instructional effectiveness, class level was significant when
considering the level of unmet student needs with institutional services represented by the scale. In the area of instructional effectiveness, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts.

However, no significant main effect ($p<.132$) or interaction effect ($p<.331$) was reported for gender for this scale. These results indicated that while class standing had an impact in determining performance gap mean scores for instructional effectiveness scales, the gender of the respondent was not significant. Additionally, the combination of the variables Class and Gender did not produce effects beyond the main effects of the variables upon the scales. The mean differences among the groups for the variable class were not dependent upon the levels of the variable gender (male and female).

1998 Freshmen and Seniors

As indicated in Table 9 for 1998, it was observed that for the Campus Climate scale ($p<.000$), there was a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for campus climate, class level was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of class climate, 1998
seniors expressed a higher level of unmet need than did their freshmen counterparts.

TABLE 9
CAMPUS CLIMATE: ANOVA FOR PERFORMANCE GAP SCORES CLASS AND GENDER 1998

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>19.046</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>14.207</td>
<td>.000*</td>
</tr>
<tr>
<td>Class x Gender</td>
<td>1</td>
<td>.051</td>
<td>.821</td>
</tr>
<tr>
<td>Within</td>
<td>514</td>
<td>(.751)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>517</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square.
*p<.05.

Additionally, it was observed that for the Campus Climate scale (p<.000), there was a significant main effect in the comparison of performance gap mean scores by gender. This result indicated that for campus climate, gender was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of campus climate, 1998 female students expressed a higher level of unmet need than did their male counterparts.

However, no significant interaction effect (p<.821) was reported for gender for this scale. This result indicated that the combination of the variables Class and Gender did
not produce effects as a result of the interaction beyond the main effects of the variables upon the scales. The mean differences among the groups for the variable class were not dependent upon the levels of the variable gender (male and female).

As indicated in Table 10 for 1998, it was observed that for the Instructional Effectiveness scale (p<.003), there

TABLE 10

INSTRUCTIONAL EFFECTIVENESS: ANOVA FOR PERFORMANCE GAP SCORES CLASS AND GENDER 1998

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>8.664</td>
<td>.003*</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>5.374</td>
<td>.021*</td>
</tr>
<tr>
<td>Class x Gender</td>
<td>1</td>
<td>.527</td>
<td>.527</td>
</tr>
<tr>
<td>Within</td>
<td>516</td>
<td>(8.44)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>519</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square. *p<.05.

was a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for instructional effectiveness, class level was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of instructional effectiveness, 1998 seniors expressed a
higher level of unmet need than did their freshmen counterparts.

Additionally, it was observed that for the Instructional Effectiveness scale (p<.021), there was a significant main effect in the comparison of performance gap mean scores by gender. This result indicated that for instructional effectiveness, gender was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of instructional effectiveness, 1998 female students expressed a higher level of unmet need than did their male counterparts.

However, no significant interaction effect (p<.527) was reported for gender for this scale. This result indicated that the combination of the variables Class and Gender did not produce effects beyond the main effects of the variables upon the scales. The mean differences among the groups for the variable class were not dependent upon the levels of the variable gender (male and female).

As indicated in Table 11 for 1998, it was observed that for the Campus Support Services scale (p<.001), there was a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for campus support services, class level was significant when considering the level of unmet student needs with
institutional services represented by the scale. In the area of campus support services, 1998 seniors expressed a higher level of unmet need than did their freshmen counterparts.

TABLE 11

CAMPUS SUPPORT SERVICES: ANOVA FOR PERFORMANCE GAP SCORES CLASS AND GENDER 1995

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>11.485</td>
<td>.001*</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>2.714</td>
<td>.100</td>
</tr>
<tr>
<td>Class x Gender</td>
<td>1</td>
<td>.831</td>
<td>.831</td>
</tr>
<tr>
<td>Within Gender</td>
<td>494</td>
<td>(.960)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>497</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square. *p<.05.

However, no significant main effect (p<.100) or interaction effect (p<.831) was reported for gender for this scale. This result indicated that while class standing had an impact in determining performance gap mean scores for campus support services, the gender of the respondent was not significant. Additionally, the combination of the variables Class and Gender did not produce effects beyond the main effects of the variables upon the scales. The mean differences among the groups for the variable class were not
dependent upon the levels of the variable gender (male and female).

Research Question 6

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon age?

In order to respond to this question, separate factorial ANOVAs were performed for performance gap mean scores for freshmen and seniors in 1995 and freshmen and seniors in 1998. The four scales, as represented by performance gap mean scores, were the dependent variables. Class level, (freshman, senior) and age, as determined by the coded age categories, were the independent variables.

Tables are presented only for the scales that indicated significance at the .05 level for interaction between variables. The degrees of freedom and the significance levels are reported in the following tables. Significance levels have been included in parentheses in the following discussion to add to its clarity.

1995 Freshmen and Seniors

As indicated in Table 12 in 1995, it was observed that for the Instructional Effectiveness scale (p<.002), there was a significant main effect in the comparison of performance
gap mean scores by class. This result indicated that class standing had an impact in determining performance gap mean scores for Instructional Effectiveness. This result indicated

**TABLE 12**

**INSTRUCTIONAL EFFECTIVENESS: ANOVA FOR PERFORMANCE GAP SCORES CLASS AND AGE 1995**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F ratio</th>
<th>F prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>1</td>
<td>9.912</td>
<td>.002*</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>.057</td>
<td>.944</td>
</tr>
<tr>
<td>Class x Age</td>
<td>0</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Within</td>
<td>205</td>
<td>(1.006)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicates means square. *p<.05.

that for instructional effectiveness, class level was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of instructional effectiveness, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts.

However, no significant main effect (p<.944) was reported for age for this scale. This result indicated that while class standing had an impact in determining performance gap mean scores for campus support services, the age of the
respondent was not significant. Due to a small cell size, the interaction between class and age could not be calculated.

1998 Freshmen and Seniors

In 1998, based on the analysis of the data, there were no significant differences at the .05 level between the class level of respondents, the respondents' age and the four selected scales. The combination of the variables Class and Age did not produce main or interaction effects upon the scales. The mean differences among the groups for the variable class were not dependent upon the respondents' age. Thus, the data demonstrated that, for 1998 freshmen and seniors the respondents' level of unmet needs were not influenced by class standing or age.

The analyses of the data, tables, and appropriate narratives have been presented in Chapter 4. In Chapter 5, these analyses are used to form conclusions and to make recommendations in regard to the expectation and satisfaction of freshmen and seniors in higher education. Also presented are recommendations for the development of services for freshmen and seniors and recommendations for further research.
CHAPTER 5

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Statement of the Problem

This study sought to assess the differences in expectation, satisfaction and performance gap levels of freshmen and seniors in 1995 and 1998 regarding student services offered by their institution.

Sample and Data Collection

For the 1995 survey, the Office of Institutional Research and Planning Support identified a stratified proportional sample of the 24,493 enrolled students at UCF during Spring semester 1995. Classes were selected based upon class levels represented, colleges and class size (Report, 1996). A total of 2,667 surveys were distributed with 939 (37%) responding. The 1995 sample consisted of 154 freshmen (7% of the total freshman population) and 211 seniors (2% of the total senior population) for a total N=365.

The 1995 data utilized for this study were collected during the 1995 Spring semester at the University of Central Florida by mailing the SSI and a cover letter in March and
April. Staff members of the Unit of Academic Development and Retention and the Office of Quality Initiatives distributed the surveys to instructors. Additionally, researchers collected some surveys during class sessions. These data collection efforts resulted in a usable return rate of 35% (Report, 1996).

For the 1998 survey, the Office of Institutional Research and Planning Support identified a stratified proportional sample of the 27,172 enrolled students at UCF during Spring semester 1998. Classes were selected based upon class levels represented, college and class size (Andrews, 1998). A total of 2,936 surveys were distributed with 2,223 (76%) responding. The 1998 sample consisted of 366 freshmen (13% of the total freshman population) and 472 seniors (5% of the total senior population) for a total N=838.

The 1998 data utilized for this study were collected during the 1998 Spring semester at the University of Central Florida by mailing the SSI and a cover letter in March and April. Staff members of the Divisions of Academic Affairs and Student Affairs distributed surveys to instructors. Attempts to increase survey completion resulted in a usable return rate of 76% (Andrews, 1998).
Instrumentation

The survey instrument used in the study was developed by Juillerat (1995) for her dissertation *Investigating a two-dimensional approach to the assessment of student satisfaction: Validation of the SSI* to measure levels of student expectation and satisfaction with student services. The four selected scales of student services, comprised of 53 items, were Campus Climate, Campus Life, Campus Support Services and Instructional Effectiveness. Additionally, the SSI contained items that were used to gather demographic information such as class level, gender and age.

Respondents were asked to utilize a 7-point Likert-type scale to accurately describe their expectation and satisfaction with the student services represented by the scales. Performance gap scores were determined by the differences between expectation and satisfaction scores. The importance, satisfaction and performance gap scores were calculated by class level, gender and age for both freshmen and seniors in 1995 and 1998.

Summary and Discussion of the Findings

Six research questions were used to guide the study. A summary of the findings in regard to these six research questions follows:
Research Question 1

What are the importance, satisfaction and performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998?

1995 Freshmen and Seniors

Using the survey instrument, freshmen and seniors were asked to respond as to how they perceived their expectations for and satisfaction with institutional services. For the UCF freshmen and seniors sampled in this study in 1995, freshmen placed higher importance on the four selected scales, Campus Climate, Campus Life, Campus Support Services and Instructional Effectiveness, than did their senior counterparts. Additionally, of the responding students, freshmen and seniors had the highest expectations for Instructional Effectiveness scaled items and the lowest expectations for Campus Life services represented by that scale.

Using the survey instrument, freshmen and seniors were asked to respond as to how they perceived their satisfaction with institutional services. For the UCF freshmen and seniors sampled in this study in 1995, freshmen expressed higher satisfaction on the four selected scales than did their senior counterparts. These results suggested that freshmen had higher expectations of institutional services represented by the scales than did senior respondents. Freshmen and
seniors had the highest satisfaction with Instructional Effectiveness scaled items. Freshmen expressed the lowest satisfaction for the Campus Climate scale while seniors expressed the lowest satisfaction with the Campus Life scale. These results suggested that, overall, freshmen had higher satisfaction with institutional services represented by the scales than did senior respondents.

Using the expectation and satisfaction scores, performance gap scores were calculated to determine the level of unmet needs. For performance gap means in 1995, scores for senior students on the selected scales were greater than their freshmen counterparts. These results indicated that, overall, seniors had higher levels of unmet needs than freshmen respondents. The scale with the largest performance gap mean score for freshmen was Campus Climate, while the scale with the largest performance gap mean score for seniors was Instructional Effectiveness.

1998 Freshmen and Seniors

Using the survey instrument, freshmen and seniors were asked to respond as to how they perceived their expectations for and satisfaction with institutional services. For the UCF freshmen and seniors sampled in this study in 1998, freshmen placed higher importance on the four selected scales, Campus Climate, Campus Life, Campus Support Services and
Instructional Effectiveness, than did the senior respondents. These results also indicated that freshmen and seniors had the highest expectations for Instructional Effectiveness scaled items and the lowest expectations for Campus Life services represented by that scale. These results suggested that freshmen had higher expectations of institutional services represented by the scales than did senior respondents.

Using the survey instrument, freshmen and seniors were asked to respond as to how they perceived their satisfaction with institutional services. For the UCF freshmen and seniors sampled in this study in 1998, freshmen expressed higher satisfaction on the four selected scales than did their senior counterparts. These results suggested that freshmen had higher satisfaction with institutional services represented by the scales than did senior respondents. Freshmen had the highest satisfaction with Campus Support Services, while seniors had the highest satisfaction with Instructional Effectiveness scaled items. Both groups had the lowest satisfaction with Campus Life services represented by that scale.

Using the expectation and satisfaction scores, performance gap scores were calculated to determine the level of unmet needs. For performance gap means in 1998, scores for senior students on the selected scales were higher than those
of their freshmen counterparts on three scales. These results indicated that, overall, seniors had higher levels of unmet needs than freshmen respondents. On one scale, Campus Support Services, performance gap mean scores were greater for freshmen than for seniors. The scale with the largest performance gap mean score for freshmen and seniors was Instructional Effectiveness. The scale with the lowest performance gap mean score for both groups was Campus Support Services.

Research Question 2

What differences, if any, are there in the importance levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

1995 Freshmen and Seniors

Using the importance scores, the data showed that students' expectations towards the services represented in three scales were influenced by class level. Freshmen viewed campus climate, campus life and campus support services as being more important than did seniors. No significant difference in mean scale scores was observed between 1995 freshmen and seniors in regard to Instructional Effectiveness.
1998 Freshmen and Seniors

Significant differences were identified in importance mean scale scores for three (Campus Climate, Campus Support Services and Campus Life) of the four scales of 1998 freshmen and seniors. Freshmen viewed campus climate, campus life and campus support services as being more important than did seniors. The results indicated that students' expectations towards the services represented in the three scales were influenced by class level. No significant difference in mean scale scores was observed between 1998 freshmen and seniors in regard to Instructional Effectiveness.

Research Question 3

What differences, if any, are there in the satisfaction levels on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

1995 Freshmen and Seniors

Using the importance scores, the data showed that significant differences were identified in satisfaction mean scale scores for all four scales in 1995 between freshmen and seniors. Freshmen were more satisfied with campus climate, campus life, campus support services and instructional effectiveness than were their senior counterparts. These results indicate that students' satisfaction toward the services represented in the four scales was influenced by class level.
1998 Freshmen and Seniors

Using the importance scores, the data showed significant differences were identified in satisfaction mean scale scores for all four scales in 1998 between freshmen and seniors. Freshmen were more satisfied with campus climate, campus life, campus support services and instructional effectiveness than were their senior counterparts. These results indicate that students' satisfaction towards the services represented in the four scales were influenced by class level.

Research Question 4

What differences, if any, are there between performance gap scores on the selected scales between freshmen and seniors in 1995 and freshmen and seniors in 1998?

1995 Freshmen and Seniors

Based on the analysis of data for 1995, a significant difference was identified on two scales (Instructional Effectiveness and Campus Support Services) between freshmen and seniors for performance gap mean scale scores at the .05 level. In the areas of campus support services and instructional effectiveness, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts. These results indicated that for both campus support services and instructional effectiveness, class level was significant when considering the level of unmet student needs for institutional services represented by the two scales.
1998 Freshmen and Seniors

For 1998, a significant difference was identified on three scales (Campus Climate, Campus Support Services and Instructional Effectiveness) between freshmen and seniors for performance gap mean scale scores at the .05 level. In the areas of campus climate, campus support services and instructional effectiveness, 1998 seniors expressed a higher level of unmet need than did their freshmen counterparts. These results indicated that for campus climate, campus support services and instructional effectiveness, class level was significant when considering the level of unmet student needs in regard to institutional services represented by the three scales.

Research Question 5

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon gender?

1995 Freshmen and Seniors

It was observed that for the Campus Support Services and Instructional Effectiveness scales, there were significant differences in the comparison of performance gap mean scores by class. This result indicated that for campus support services and instructional effectiveness, class level was significant when considering the level of unmet student needs
for institutional services represented by those scales. However, no significant differences were reported for gender for these scales. This result indicated that, while class standing had an impact in determining performance gap mean scores for campus support services and instructional effectiveness, the gender of the respondent was not significant.

The data analysis also revealed that there were no significant differences at the .05 level between the respondents' gender and the four selected scales. Thus, the data demonstrated that the students' perceptions in regard to the Campus Climate, Campus Life, Campus Support Services, and Instructional Effectiveness were not influenced by their gender. Additionally, the combination of the variables, Class and Gender, did not produce significant differences in the scales. The mean differences among freshmen and seniors were not dependent upon the students' gender.

1998 Freshmen and Seniors

For 1998, it was observed that for the Campus Climate, Campus Support Services and Instructional Effectiveness scales, there were significant differences in the comparison of performance gap mean scores by class. This result indicated that for campus climate, campus support services and instructional effectiveness, class level was significant
when considering the level of unmet student needs for institutional services represented by the scales. In the areas of campus climate and instructional effectiveness, 1998 seniors expressed a higher level of unmet need than did their freshmen counterparts. On one scale, campus support services, freshmen expressed a higher level of unmet need than did their senior counterparts.

Additionally, it was observed that for the Campus Climate scale, there was a significant main effect in the comparison of performance gap mean scores by gender. These results indicated that for campus climate, gender was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of campus climate, 1998 female students expressed a higher level of unmet need than did their male counterparts.

No significant differences were reported for gender for the other three scales. Additionally, the results indicated that the combination of the variables, Class and Gender, did not produce significant differences in the scales. The mean differences among freshmen and seniors were not dependent upon the students' gender.
Research Question 6

What differences, if any, are there between performance gap scores for the selected scales for freshmen and seniors in 1995 and freshmen and seniors in 1998 based upon age?

1995 Freshmen and Seniors

For 1995, it was observed that for the Instructional Effectiveness scale, there was a significant main effect in the comparison of performance gap mean scores by class. This result indicated that for instructional effectiveness, class level was significant when considering the level of unmet student needs with institutional services represented by the scale. In the area of instructional effectiveness, 1995 seniors expressed a higher level of unmet need than did their freshmen counterparts.

However, based on the analysis of the data, there were no significant differences at the .05 level between the class level of respondents, the respondents' age and the four selected scales. The combination of the variables, Class and Age, did not produce significant differences between the scales. The mean differences among freshmen and seniors were not dependent upon the respondents' age. In summary, the data demonstrated that, for 1995 freshmen and seniors the respondents' level of unmet needs were not influenced by class standing or age.
1998 Freshmen and Seniors

In 1998, based on the analysis of the data, there were no significant differences at the .05 level between the class level of respondents, the respondents' age and the four selected scales. The combination of the variables, Class and Age, did not produce significant differences between the scales. The mean differences among freshmen and seniors were not dependent upon the respondents' age. In summary, the data demonstrated that, for 1998 freshmen and seniors, the respondents' level of unmet needs were not influenced by class standing or age.

Conclusions

Given the students' responses, it was concluded that:

1. For both 1995 and 1998, freshmen had significantly higher levels of expectation than did seniors in regard to campus climate, campus life and campus support services. This concurs with Klepper et al. (1987) who found that non-returning freshmen students had high expectation levels for institutional services. In explanation, seniors may have been more familiar with the institutional services and, therefore, may have had lower expectations. Additionally, this could mean that UCF's efforts, such as campus tours, updated brochures and open houses, have been successful. Incoming
students may hold a higher expectation for student services because of the positive image that has been created.

2. For both 1995 and 1998, freshmen had significantly higher levels of satisfaction than seniors with campus climate, campus life, campus support services and instructional effectiveness. This conclusion was similar to the findings of Pascarella and Terenzini (1991), Williford (1990) and Bauer (1995) that supported the belief that changes in factual knowledge, cognitive and intellectual skills, and attitudinal and value dimensions, occurred from the freshman to senior years through an integrated process of social and academic programs. Freshmen, having higher expectations than seniors, might also be expected to place more emphasis on being satisfied with institutional services during what is a major year of transition for college students. Additionally, this could mean that UCF has been successful in providing specific services to freshmen such as first-year advising.

3. For both 1995 and 1998, seniors had significantly higher levels of unmet needs than did freshmen for campus support services and instructional effectiveness. This could mean that seniors had unmet needs for particular services such as computer labs, career services and academic advising that were important to their satisfaction but that may not have been received. Tinto (1993) reflected on the benefit to
senior students from targeted programs such as peer advisors and career services. UCF, through adopting a "consumer" mentality, admittedly was concentrating its efforts on incoming freshmen. It is not, therefore, surprising that the institution had not totally succeeded in meeting senior needs.

4. For both 1995 and 1998, there were no significant differences between freshmen and seniors according to gender or age. Similarly, Sanders and Burton (1996) found no significant differences in overall satisfaction by age. The results as to gender were also supported by Juillerat (1995) who found no significant differences between male and female respondents in her research. This may indicate that UCF provides programs and services that are adequate for both genders and all age groups and does not need to target specific gender and age groups within the freshmen and senior classes.

5. Responses of 1995 freshmen and seniors and 1998 freshmen and seniors were similar. As stated in Chapter 2, UCF began quality management implementation to assess work processes, services, productivity, and institutional environment for students (Retention Plan, 1994). The campus environment was significantly different in 1998 than in 1995. As examples, enrollment totals increased from 25,000 to 27,000, and student service facilities, including a student
union, a new career center and expanded computer labs were built. Despite these rather dramatic changes, the results between freshmen and seniors were similar for each of the two years.

Implications and Recommendations

At the onset of this research, it was believed by this researcher that the expectations and satisfaction levels of students would be different according to class level, gender and age. It was expected that seniors would have greater satisfaction with some campus services because of their familiarity with those services; however, this was not the case.

The differences between the researcher's expectations and the actual findings of this study could be attributed to the rapidly changing nature of the UCF campus environment between 1995 and 1998. For instance, enrollment increased from 25,000 to 27,000; new facilities, such as residence halls, an expanded bookstore and a student union, were added; and special programs that targeted freshmen, such as LEAD Scholars, were initiated and expanded. Considering the findings and conclusions of this study, it would appear that student expectation and satisfaction might benefit from the following initiatives:
for those students. Detailed information concerning student services could be provided to incoming students and posted on the university’s web page. UCF currently provides first-year advising, two-day orientation programs and specialized programs for freshmen students. However, a freshman seminar or freshman year experience could utilize the high expectation levels to involve students in campus activities and interdisciplinary learning programs. The freshman year experience could also assist, utilizing a total quality approach, in identifying factors for student success.

2. Since seniors in the present study displayed lower levels of satisfaction and higher levels of unmet needs, the institution could create special programs, such as a senior year experience, that could target particular issues. The senior year experience could provide career training, a capstone learning experience or preparation for graduate studies. These programs could provide a holistic perspective to a senior’s college career.

3. As the headcount enrollment continues to climb toward a projected enrollment of 40,000 students, the institution will continue to expand its facilities and programs. Because of these large investments and their impact on retention, administrators should be committed to determine the levels of student satisfaction with both academic and nonacademic student services. Staff development opportunities
1. The high levels of freshmen expectations implies that more resources and programs may need to be instituted for those students. Detailed information concerning student services could be provided to incoming students and posted on the university's web page. UCF currently provides first-year advising, two-day orientation programs and specialized programs for freshmen students. However, a freshman seminar or freshman year experience could utilize the high expectation levels to involve students in campus activities and interdisciplinary learning programs. The freshman year experience could also assist, utilizing a total quality approach, in identifying factors for student success.

2. Since seniors in the present study displayed lower levels of satisfaction and higher levels of unmet needs, the institution could create special programs, such as a senior year experience, that could target particular issues. The senior year experience could provide career training, a capstone learning experience or preparation for graduate studies. These programs could provide a holistic perspective to a senior's college career.

3. As the headcount enrollment continues to climb toward a projected enrollment of 40,000 students, the institution will continue to expand its facilities and programs. Because of these large investments and their impact on retention, administrators should be committed to determine
the levels of student satisfaction with both academic and nonacademic student services. Staff development opportunities could be offered to share the results of the SSI with faculty and staff as a means to encourage them to implement and integrate new programs or to improve services. The results of the 1995 and 1998 surveys seem to indicate, that to some extent, these efforts have been successful.

**Recommendations for Future Research**

This study sought to assess the differences in expectation, satisfaction and performance gap levels of freshmen and seniors in 1995 and 1998 regarding student services offered by their institution. Conclusions drawn from this study identified variables that affected the expectation and satisfaction of UCF freshmen and seniors. The following are suggestions for further research:

1. Other institutions, similar to UCF, utilizing the SSI should be used for comparison.
2. Freshmen and senior students should be surveyed semi-annually in both fall and spring semesters.
3. A study could be undertaken to examine differences between all class levels.
4. A study could be undertaken to examine other demographic variables that affect student expectation and satisfaction.
5. A study should be conducted longitudinally over 5 and 10 year periods.

6. Qualitative studies, such as focus groups, could be conducted with freshmen and seniors to enrich the quantitative data.

7. Variables should be included in the survey for comparative and normative evaluation with similar metropolitan/urban institutions.
Appendixes
Appendix A

Survey Instrument
May 26, 1998

Mr. Reuban Rodriguez  
Office of Student Affairs  
University of Central Florida  
PO Box 163245  
Orlando, FL 32816-3245

Dear Mr. Rodriguez:

We authorize you to reproduce a copy of the Student Satisfaction Inventory™ for use with your dissertation appendix. We also realize that this permission extends to the microfilming of your dissertation.

I am enclosing the National Student Satisfaction Reports from 1995, 1996 and 1997, as we discussed. Please let me know how else I can be helpful. Good luck with your use of the SSI!

Sincerely,

Julie Hanschman  
Program Consultant
Dear Student,

Your institution is interested in systematically listening to its students. Therefore, your thoughtful and honest responses to this inventory are very important.

You are part of a sample of students carefully selected to share feedback about your college experiences thus far. Your responses will give your campus leadership insights about the aspects of college that are important to you as well as how satisfied you are with them.

To preserve confidentiality, your name is not requested.

Thank you for your participation.

Instructions:
- Use a No. 2 pencil only. Please do not use ink or ballpoint pen.
- Erase changes completely and cleanly.
- Completely darken the oval that corresponds to your response.

Each item below describes an expectation about your experiences on this campus. On the left, tell us how important it is for your institution to meet this expectation. On the right tell us how satisfied you are that your institution has met this expectation.

1. Most students feel a sense of belonging here.
2. The campus staff are caring and helpful.
3. Faculty care about me as an individual.
4. Admissions staff are knowledgeable.
5. Financial aid counselors are helpful.
6. My academic advisor is approachable.
7. The campus is safe and secure for all students.
8. The content of the courses within my major is valuable.
9. A variety of intramural activities are offered.
10. Administrative staff are approachable to students.
11. Billing policies are reasonable.
12. Financial aid awards are announced to students in time to be helpful in college planning.
13. Library staff are helpful and approachable.
14. My academic advisor is concerned about my success as an individual.
15. The staff in the health services area are competent.
16. The instruction in my major field is excellent.
17. Adequate financial aid is available for most students.
18. Library resources and services are adequate.
19. My academic advisor helps me set goals to work toward.
20. The business office is open during hours which are convenient for most students.

Please do not mark in this area.

459401

121
<table>
<thead>
<tr>
<th>Importance to me</th>
<th>My level of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. not important at all</td>
<td>not available/not used</td>
</tr>
<tr>
<td>2. not very important</td>
<td>somewhat unsatisfied</td>
</tr>
<tr>
<td>3. somewhat unimportant</td>
<td>neutral</td>
</tr>
<tr>
<td>4. somewhat important</td>
<td>somewhat satisfied</td>
</tr>
<tr>
<td>5. very important</td>
<td>satisfied</td>
</tr>
<tr>
<td>6. extremely important</td>
<td>highly satisfied</td>
</tr>
</tbody>
</table>

- 21. The amount of student parking space on campus is adequate.
- 22. Counseling staff care about students as individuals.
- 23. Living conditions in the residence halls are comfortable and adequate space, lighting, heat, air conditioning, telephones, etc.
- 24. The intercollegiate athletic programs contribute to a strong sense of school spirit.
- 25. Faculty are fair and unbiased in their treatment of individual students.
- 26. Computer labs are adequate and accessible.
- 27. The personnel involved in registration are helpful.
- 28. Parking lots are well-lighted and secure.
- 29. It is an enjoyable experience to be a student on this campus.
- 30. Residence hall staff are concerned about me as an individual.
- 31. Schedules and space have equal opportunities to participate in intercollegiate athletics.
- 32. Tutoring services are readily available.
- 33. My academic advisor is knowledgeable about requirements in my major.
- 34. I can easily get involved in campus organizations.
- 35. Faculty provide timely feedback about student progress in a course.
- 36. Admissions counselors accurately portray the campus in their recruiting practices.
- 37. There is a commitment to academic excellence on this campus.
- 38. There is an adequate selection of food available in the cafeteria.
- 39. I am able to experience intellectual growth here.
- 40. Residence hall regulations are reasonable.
- 41. Students are made to feel welcome on this campus.
- 42. I can easily get involved in campus organizations.
- 43. Faculty provide timely feedback about student progress in a course.
- 44. Admissions counselors accurately portray the campus in their recruiting practices.
- 45. In the fall, the academic experience is enjoyable.
- 46. It is an enjoyable experience to be a student on this campus.
- 47. There is a sufficient number of weekend activities for students.
- 48. Admissions counselors accurately portray the campus in their recruiting practices.
- 49. There are adequate services to help me decide upon a career.
- 50. Class change/drop/add policies are reasonable.
- 51. This institution has a good reputation within the community.
- 52. The student center is a comfortable place for students to spend their leisure time.
- 53. Faculty take into consideration student differences as they teach a course.
- 54. Bookstore staff are helpful.
- 55. Major requirements are clear and reasonable.
- 56. The student handbook provides helpful information about campus life.
- 57. I seldom get the "run-around" when seeking information on this campus.
- 58. The quality of instruction I receive in most of my classes is excellent.
- 59. This institution shows concern for students as individuals.
- 60. I generally know what's happening on campus.
- 61. Adjunct faculty are competent as classroom instructors.
- 62. There is a strong commitment to racial harmony on this campus.
- 63. Student disciplinary procedures are fair.
- 64. Non-student volunteer services help students adjust to college life.
- 65. Faculty are usually available after class and during office hours.
- 66. Tuition paid is a worthwhile investment.
- 67. Freedom of expression is protected on campus.
- 68. Nearly all of the faculty are knowledgeable in their field.
- 69. There is a good variety of courses provided on this campus.
- 70. Graduate teaching assistants are competent as classroom instructors.
- 71. Channels for expressing student complaints are readily available.
- 72. On the whole, the campus is well-maintained.
- 73. Student activities fees are put to good use.

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Your institution may choose to provide you with additional questions on a separate sheet. The section below numbered 74 - 83 is provided as a response area for those additional questions. Continue on to item 84 when you have completed this section.

Choose the one response that best applies to you and darken the corresponding oval for each of the questions below.

99. So far, how has your college experience met your expectations?
1. Much worse than I expected
2. Quite a bit worse than I expected
3. Worse than I expected
4. About what I expected
5. Better than I expected
6. Quite a bit better than I expected
7. Much better than I expected

100. Rate your overall satisfaction with your experience here thus far.
1. Not satisfied at all
2. Not very satisfied
3. Somewhat dissatisfied
4. Neutral
5. Somewhat satisfied
6. Satisfied
7. Very satisfied

101. All in all, if you had it to do over again, would you enroll here?
1. Definitely not
2. Probably not
3. May be not
4. I don't know
5. May be yes
6. Probably yes
7. Definitely yes

CONTINUE TO THE NEXT PAGE

123
Choose the one response that best describes you and darken the corresponding oval for each of the items below.

102. Gender:

1. Female
2. Male

103. Age:

1. 18 and under
2. 19 to 24
3. 25 to 34
4. 35 to 44
5. 45 and over

104. Ethnicity/Race:

1. African-American
2. American Indian or Alaskan Native
3. Asian or Pacific Islander
4. Caucasian/White
5. Hispanic
6. Other
7. Prefer not to respond

105. Current Enrollment Status:

1. Day
2. Evening
3. Weekend

106. Current Class Load:

1. Full-time
2. Part-time

107. Class Level:

1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Special Student
6. Graduate/Professional
7. Other

108. Current GPA:

1. No credits earned
2. 1.99 or below
3. 2.0 - 2.49
4. 2.5 - 2.99
5. 3.0 - 3.49
6. 3.5 or above

Your Social Security Number is requested for research purposes and will not appear on any report.

110. Employment:

1. Full-time off campus
2. Part-time off campus
3. Full-time on campus
4. Part-time on campus
5. Not employed

111. Current Residence:

1. Residence hall
2. Fraternity / Sorority
3. Own house
4. Rent room or apartment off campus
5. Parent's home
6. Other

112. Residence Classification:

1. In-state
2. Out-of-state
3. International (not U.S. citizen)

113. Disabilities:

Physical disability or a diagnosed learning disability?

1. Yes
2. No

114. When I entered this institution, it was my:

1. 1st choice
2. 2nd choice
3. 3rd choice or lower

Social Security Number:

Write your Social Security number in the nine spaces of the box provided. Completely darken the corresponding oval.

115. Major:

Fill in major code from list provided by your institution.

116. Item requested by your institution:

1
2
3
4
5
6

Thank you for taking the time to complete this inventory.

Please do not fold.

459401

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Appendix B

1995 Cover Letter
March, 1995

Dear Student,

You have been selected to participate in a survey that will evaluate what is important to you at UCF, along with your levels of satisfaction in those areas. Your answers to these questions will help the university target improvement projects to increase UCF’s performance in providing you with quality education and services. This survey is being conducted jointly by the Office of Quality Management and Enrollment and Academic Services’ office of Academic Development and Retention.

Your responses to this survey will remain absolutely confidential. No one will ever know how you answer the questions. The information you furnish will be combined with the responses of thousands of other UCF students.

Participation in this survey is completely voluntary. You may choose not to return the survey. However, please know that in order to provide a good sample of UCF students, your input is important.

Thank you in advance for taking time out of your busy schedule to assist us in making your educational experience a more satisfying one. When you return this survey, you will receive a certificate worth 25% off your next purchase of clothing in the UCF Bookstore.

If you have any questions or concerns about this project, please do not hesitate to contact either of us. Thanks again for your cooperation.

Sincerely,

Maribeth Ehasz-Sanz, Ph.D.
Assistant Dean
Academic Development and Retention

Jan Terrell, M.Ed
Director
Quality Management Initiatives

enclosures
Dear Student,

As part of UCF's Continuous Quality Improvement efforts, you have been selected to participate in a survey that will evaluate what is important to you at UCF, along with your levels of satisfaction in those areas. Your answers to the survey questions will help the university target improvement projects to increase UCF's performance in providing you and your peers with high quality educational programs and services. This survey is being conducted jointly by administrative units in the Divisions of Academic Affairs, Administration and Finance, and Student Affairs.

Your responses to these survey questions will remain absolutely confidential. No one will know how you individually responded to the questions. The information you furnish will be combined with the responses of thousands of other UCF students. Social security numbers will be used only to supply us with information that can be generalized to selected demographic groups of students.

Participation in this survey is voluntary. However, please know that the more responses we have from a wide variety of students, the better we will be able to identify areas for improvement that will benefit all students.

Thank you for taking the time to complete this survey and assist us in making your educational experience a more satisfying one. If you have any questions or concerns about this project, please contact the Quality Initiatives Office at 275-4330.

March 1998
Appendix D

Survey Scaled Items
Campus Climate Scale

Item Narrative

1. Most students feel a sense of belonging here.
2. The campus staff are caring and helpful.
3. Faculty care about me as an individual.
7. The campus is safe and secure for all students
10. Administrators are approachable to students
29. It is an enjoyable experience to be a student on this campus.
37. I feel a sense of pride about my campus.
41. There is a commitment to academic excellence on this campus.
45. Students are made to feel welcome on this campus.
51. This institution has a good reputation within the community.
57. I seldom get the run-around when seeking information on this campus.
59. This institution shows concern for students as individuals.
60. I generally know what's happening on campus.
62. There is a strong commitment to racial harmony on this campus.
66. Tuition paid is a worthwhile investment.
67. Freedom of expression is protected on campus.
71. Channels for expressing student complaints are readily available.

Campus Life Scale

Item Narrative

9. A variety of intramural activities are offered.
23. Living conditions in the residence halls are comfortable.
24. The intercollegiate athletic programs contribute to a strong sense of school spirit.
30. Residence hall staff are concerned about me as an individual.
38. There is an adequate selection of food available in the cafeteria.
40. Residence hall regulations are reasonable.
42. There are a sufficient number of weekend activities for students.
46. I can easily get involved in campus organizations.
52. The student center is a comfortable place for students to spend their leisure time.
56. The student handbook provides helpful information about campus life.
63. Student disciplinary procedures are fair.
64. New student orientation services help students adjust to college.
67. Freedom of expression is protected on campus.
73. Student activities fees are put to good use.

Campus Support Services Scale

Item Narrative

13. Library staff are helpful and approachable.
18. Library resources and services are adequate.
26. Computer labs are adequate and accessible.
32. Tutoring services are readily available.
44. Academic support services adequately meet the needs of students.
49. There are adequate services to help me decide upon a career.
54. Bookstore staff are helpful.

Instructional Effectiveness Scale

Item Narrative

3. Faculty care about me as an individual.
8. The content of the courses within my major is valuable.
16. The instruction in my major field is excellent.
25. Faculty take into consideration student differences as they teach a course.
39. I am able to experience intellectual growth here.
41. There is a commitment to academic excellence on this campus.
47. Faculty provide timely feedback about student progress in a course.
53. Faculty take into consideration student differences as they teach a course.
58. The quality of instruction I receive in most of my classes is excellent.
61. Adjunct faculty are competent as classroom instructors.
65. Faculty are usually available after class and during office hours.
68. Nearly all of the faculty are knowledgeable in their field.
70. Graduate teaching assistants are competent as classroom instructors.
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