

AN ABSTRACT OF THE THESIS OF

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Title: OLDER AND YOUNGER STUDENTS, FULL-TIME AND
PART-TIME: A COMPARISON OF THEIR PERCEPTIONS
OF THE CAMPUS ENVIRONMENT AT OREGON COLLEGE
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Older and part-time students are enrolling in institutions of higher education in increasing numbers, yet little research has been conducted to see if these students perceive the campus environment differently from younger, full-time students.

The purpose of this study was to compare the perceptions of the college environment of four selected groups of students at Oregon College of Education: older, full-time students (N=50); younger, full-time students (N=50); older, part-time students (N=44); and younger, part-time students (N=36).

The objectives were to compare the perceptions of the college environment between older and younger students, full-time and part-time students, and the interactions of age and type of enrollment.

The participants in the study completed the College and University Environment Scales (CUES), second edition, which measures a student's perception of the campus environment. An additional Biography Sheet was completed to verify sample selection criteria extracted from the OCE master registration list and to provide descriptive data about the sample.

A two-way analysis of variance statistical procedure was used to test the null hypotheses that no significant differences existed among the groups selected. Differences were assessed at the 0.05 level of significance.

From the findings of this study, the following conclusions were drawn:

1. Older students perceive the campus environment as more scholarly, polite, considerate and conventional than do younger students. Older students feel less community and friendliness than do younger students.
2. Full-time and part-time students did not differ in their perceptions of the OCE campus environment.
3. Considering the interaction of age and type of enrollment (full-time or part-time) younger, full-time students perceive the OCE campus to be friendlier and more of a community than the other groups studied. Younger, part-time students felt less campus morale than the other groups.

On the basis of the findings of the study the following recommendations are suggested:

1. It is recommended that this study be replicated on a number of campuses which would employ the CUES II in a manner similar to this study. Replication would determine whether the findings of this study can be generalized or if they are the result of unique circumstances. Such studies should include, if possible, a larger number of subjects for more reliable statistical comparisons.
2. Since there has been little research related to the perceptions that older and part-time students have of college environment, more studies are needed at Oregon College of Education to provide knowledge about the causes of differences from traditionally full-time, younger students.
3. It is recommended that full-time and part-time students have their perceptions of the OCE college environment reexamined since the results of this study contradict previous studies cited in the Review of Literature, Chapter II.
4. Research is necessary to develop a methodology for assessing the needs of older and part-time students.
5. Further research is recommended using the demographic characteristics compiled from the Biography Sheets of the participants of this study. A study should be made of the

relationship of student characteristics such as place of residence, academic major, and whether one is employed or not to see if such factors influence student perceptions of the campus environment.

Older and Younger Students, Full-Time and Part-Time:
A Comparison of Their Perceptions of the Campus
Environment at Oregon College of Education

by

Douglas Page Yates

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TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
Statement of the Problem	3
Rationale for the Study	4
Definition of Terms	7
Limitations of the Study	10
II. REVIEW OF THE LITERATURE	12
Introduction	12
Studies Showing the Acceptability of the Instrument	13
Differences between Full- and Part- Time Students	28
Characteristics of Older Students	33
Summary of Review of Literature	40
III. METHODOLOGY AND PROCEDURES	44
Permission to Conduct the Study	44
Statistical Hypotheses	45
The Instrument	46
The Sample and Population	48
Generalized Student Participant Profile	51
The Statistical Design	53
Summary of Methodology and Procedures	55
IV. ANALYSIS OF DATA	56
Discussion of Findings Relative to the Hypotheses under Investigation	56
Summary	78
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	80
Summary	80
Conclusions	83
Recommendations	88
BIBLIOGRAPHY	90

Table of Contents (Continued)

	<u>Page</u>
APPENDICES	
Appendix A	96
Appendix B	97
Appendix C	98
Appendix D	99
Appendix E	101

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Interaction Hypothesis Illustrated.	73

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	Test Administration. Distribution of Eligibility, Refusals, Nonrespondents, and Invalid Answer Sheets.	52
2	Comparison of Perceptions of the College Environment of Older and Younger Students at Oregon College of Education.	57
3	Comparison of Perceptions of the College Environment of Full-time and Part-time Students at Oregon College of Education.	63
4	Comparison of Perceptions of the College Environment with the Interaction of Age and Enrollment Status among Students at Oregon College of Education.	68
5	Simple Effects Analysis--Scale of Community.	74
6	Simple Effects Analysis--Scale of Awareness.	76
7	Simple Effects Analysis--Scale of Campus Morale.	77

OLDER AND YOUNGER STUDENTS, FULL-TIME AND PART-TIME: A COMPARISON OF THEIR PERCEPTIONS OF THE CAMPUS ENVIRONMENT AT OREGON COLLEGE OF EDUCATION

CHAPTER I

INTRODUCTION

We suggest more chances for reentry by adults into formal higher education. . . and, generally more stress on lifelong learning. We oppose the sharp distinctions now made among full-time students, part-time students, and adult students. Education should become more a part of all life, not just an isolated part of life (Carnegie Commission, *Less Time, More Options*, 1971, p. 11).

Statements such as the one above are being made by the Carnegie Commission and others who are concerned with the use of education to heighten the quality of American life. Lifelong learning in higher education is the result of a variety of historical influences that have resulted in new opportunities for the differing segments of our population.

A brief overview of some of these influences has shown that Harvard College was founded to provide the "future state" with competent rulers, learned clergy and cultured men (*Diversity by Design*, 1975, p. 4). The environment of the campus was involved in conserving existing knowledge rather than the search for new

knowledge. It was classical and aristocratic (Brubacher and Rudy, 1968, p. 5-23).

By the Civil War an egalitarian spirit was emerging in higher education. The passage of the Morrill Act in 1862 to establish Land Grant colleges symbolized low cost college education for the common people, federal support for higher education and an environment geared to training for practical vocations rather than the classical education (Monroe, 1973, p. 6).

During the social changes of the sixties, higher education witnessed an increased concern for the civil rights of others. An equalitarian responsiveness resulted which provided students with ability and need a more equal access to higher education regardless of race, sex, age, or financial ability (Diversity by Design, 1975, p. 6-7).

Today, the rapid growth of new knowledge combined with complex social problems point to the need for citizens to continually gain new skills and intellectual orientations throughout their lives (Hesburgh, 1974, p. 3).

The result of these changes is that populations of students with vastly differing backgrounds and interests are entering college and changing the profile of higher education.

Two such significant populations of students enrolling in higher education are older students and part-time students

(Pitchell, 1975, p. 40; Carnegie Commission, *New Students and New Places*, 1971, p. 3). Their perceptions of the college environment may differ from the traditional full-time younger student and knowledge about such differences, may be valuable to educators and policymakers in higher education.

Statement of the Problem

The central problem of this study was to examine the perceptions that older and part-time students have of the college environment and to determine if their perceptions differ from younger, full-time students.

The major objectives were to:

1. Determine what differences exist in perceptions of older and younger college students toward the campus environment.
2. Determine what differences exist in perceptions of full- or part-time college students toward the campus environment.
3. Examine the interaction of age and enrollment status (full-time or part-time) to determine what differences exist in perceptions of college students toward the campus environment.

Rationale for the Study

Research indicates that dramatic changes are occurring with respect to enrollment patterns in higher education that may affect the structure of the existing college environment. These patterns and their implications are:

1. Older students are enrolling in institutions of higher education in increasing numbers.

The Carnegie Commission has reported that from 1950 to 1970 the number of college students between the ages of 25 and 35 has tripled and this increase in older students is expected to rise for at least the next ten years (Carnegie Commission, *New Students and New Places*, 1971, p. 3).

2. Part-time students are increasing in numbers faster than full-time students.

United States Office of Education surveys indicate that from 1969 to 1972 part-time students increased 3.5 times faster than full-time students (Pitchell, 1975, p. 40).

Boyer suggests that presently the campus environment may not be adequately serving the part-time student. He thinks that because the "college years" are becoming less defined, the traditional campus life that is modeled for the young with classes scheduled mainly Monday through Friday, 10 a.m. to 4 p.m. is outdated because it collides head-on

with the world of work, thus making it difficult for many part-time students to attend college.

3. Older students have educational and psychological needs in learning that are different from the traditionally younger student.

Birren (1964, p. 112) reported that many instructors fail to recognize learning differences between older and younger students such as the older students' general cautiousness and loss of speed in test taking. In another study by Peck (1968, p. 88), many adults entering the youth-oriented culture of the college setting have feelings of inferiority in competing with younger students. This statement was reaffirmed by a Carnegie Commission study which stated that "Higher education is now prejudiced against older students. . . too often they are looked upon as inferior" (Carnegie Commission, *Less Time, More Options*, 1971, p. 19).

4. On many campuses the part-time student is treated differently from the full-time student in terms of the services and programs that are available to him.

Hesburgh (1974, p. 74) states that part-time status presently carries national restrictions in financial aid considerations. On many campuses students are limited in their

use of certain facilities such as health, counseling and advisement.

Pitchell (1975, p. 42) goes so far as to state that "structuring the campus environment for full-time youth has resulted in massive discrimination by collegiate institutions against part-time students."

The differences which exist between older and younger students attending full-time or part-time may be in part a result of services and programs offered, that may well affect their adjustment and persistence in college.

The review of the literature will show that while studies have been conducted with a wide range of student groups in different campus settings, few have been done comparing the perceptions of the college environment of older and part-time students with the more traditional full-time younger student group.

A study such as this one may be valuable to educators and policymakers in higher education. Continuing present policies and practices with regard to programs and services for students on the basis of tradition without careful consideration of the effects of its processes in changing times may result in unmet needs and a needless attrition of students.

This study will also be one step in providing empirical data necessary for the institution to assess and evaluate the educational

effectiveness of its programs and services. The end result might be to promote communication and the maintenance of a more positive climate for older and part-time students.

Finally, it was the intent of this study to provide knowledge about the perceptions that older and part-time students have regarding the college environment at Oregon College of Education and to serve as a frame of reference for research in the future.

Definition of Terms

Adult Student - Any undergraduate student 25 years of age or older.

College Environment - As described by the College and University Environment Scales, edition II (CUES II) by C. Robert Pace. A term used to describe an all-encompassing phrase relating to the physical, social, intellectual, and cultural climate of the campus community.

College and University Environment Scales - The CUES, second edition, by C. Robert Pace, is published and distributed by the Institutional Research Program for Higher Education, Educational Testing Service of Princeton, New Jersey.

The primary purpose of CUES II is to describe the campus environment along several dimensions or scales. The following definitions from the CUES II Technical Manual (Pace, 1969, p. 11)

are used to define what each of the scales and subscales attempts to measure. Since the scales are the dependent variables of the study, they have been included in the Definition of Terms rather than the Appendix.

Scale 1. Practicality:

The 20 items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system--knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive; it responds to entrepreneurial activities and is generally characterized by good fun and school spirit.

Scale 2. Community:

The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

Scale 3. Awareness:

This scale reflects a concern about, and emphasis upon, three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and the future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness--an awareness of self, of society, and of aesthetic stimuli. Along with this push toward

expansion, and perhaps as a necessary condition of it, there is an encouragement of questioning and dissent and a tolerance of non-conformity and personal expressiveness.

Scale 4. Propriety:

These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

Scale 5. Scholarship:

The items in this scale describe a campus characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.

Subscale 6. Campus Morale:

The 22 items in this scale indicate acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and, at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

Subscale 7. Quality of Teaching and Faculty-Student Relationships:

This 11-item scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.

Full-time Student - A student regularly enrolled, taking a course load of between a minimum of 12 and a maximum of 21 credit hours.

Older Student - Same definition as adult student; any undergraduate student 25 years of age or older.

Part-time Student - A student enrolled for fewer than 12 credit hours, whether in a degree or nondegree program.

Traditional Student - See younger student.

Transfer Student - Students enrolled who have not attended Oregon College of Education for a minimum of one academic term.

Upperclass Student - Students who have completed a minimum of three academic terms at Oregon College of Education and have accumulated at least 45 credit hours.

Younger Student - Full-time, undergraduate student between the ages of 18 and 24. Definition from Non-Traditional Study in Institutions of the State System of Higher Education, Oregon State System of Higher Education, Office of Academic Affairs, December 18, 1972.

Eighteen to 24 is the age segment used by the Carnegie Commission to define traditionally younger students (Carnegie Commission, *New Students, New Places*, 1971, p. 3).

Limitations of the Study

The study was limited in the consideration of the collected data in the following ways:

1. The study was limited to one small, rural, state-supported college--Oregon College of Education.

2. The CUES II was administered to older and younger students attending Oregon College of Education on a full-time and part-time basis.
3. The participants of the study were limited to sophomores, juniors, and seniors at OCE who had never attended another college and who were citizens of the United States.
4. The study does not attempt to determine why students perceived the campus environment as they did but rather attempts to answer the questions posed in the null hypotheses.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The review of the literature has been organized to focus on four topical areas:

1. Studies showing the acceptability of the College and University Environment Scales, edition II (CUES II), as a valid research instrument to measure the college environment by examining the wide range of studies in which the CUES has been used.
2. Studies showing increasing enrollments of older and part-time students at colleges and universities and some possible reasons for such increases.
3. Studies that describe the differences in services and programs accorded full-time students and part-time students with the implications that such services and programs have to part-time students' ability to persevere and ultimately succeed in college.
4. Studies relating educational and psychological characteristics of older students that may affect their adjustment in the college environment.

Studies Showing the Acceptability
of the Instrument

The College and University Environment Scales was developed by C. Robert Pace in 1963. The CUES has been widely used by colleges and universities to examine aspects of the institutional environment that help to define the atmosphere or intellectual-social-cultural climate of the institution as students see it (Pace, 1969, p. 9). The CUES II (second edition) is now in circulation based on larger norms.

CUES II scores are based upon collective perception. Test-retest comparisons over a one- or two-year time span using comparable samples of qualified reporters produced highly consistent results (Pace, 1969).

Ralph F. Berdie (1966) analyzed the psychometric method of the opinion poll in a study of University of Minnesota freshmen to consider the differences between their expectations of the college environment with entering freshmen and their perceptions six months later. He reported that the opinion poll (66+ method) was appropriate when institutional scores are desired. He stated that

. . .what students report about their experiences is related to their developing perceptions of the university. . .and the fact these relationships can be observed suggests that the instrument used, CUES, has some validity in appraising perceptions students have of their environment (Berdie, 1966, p. 342).

In another study Berdie (1967) suggested that CUES scores do not present reliable information about individuals, although the CUES is satisfactory for making group comparisons.

Other selected studies are presented to illustrate the acceptability of the CUES to measure the perceptions held by students of the college environment.

Perceptions of the University Environment between Colleges

Centra (1966) used the CUES to examine juniors and seniors at Michigan State University to evaluate differences between colleges (majors) and the university as a whole. Differences were indicated in degree of community atmosphere and level of scholarship. Similarities between colleges appeared on the scales of student awareness and propriety. It was suggested from the results of this study that students generalized from the environment with which they were most familiar to the university environment as a whole.

Changes in Perceptions of Students over Two Years

In another study, Brooks (1968) conducted a study which investigated changes in student perceptions over a period of two years in relation to a number of features at Milliken University.

Her findings were that:

1. In general, the sex of the student did not relate to the change in perception over a two-year period.
2. Place of residence was significantly related to change in student perception.
3. Academic major was related to perceptual change on the propriety and scholarship scales of the CUES.
4. Cumulative grade point averages were noted as being related to only one of the five CUES scales.
5. Amount of financial aid was related to student perceptual change on the propriety dimension.
6. Participation in 7 of the 14 campus activities was significantly related to student perceptual change.

Married and Single Students' Perceptions of the College Environment

Geiken (1972) used the CUES and the Mooney Problem Checklist and determined that married and single students do perceive the campus environment differently. Single students perceive more campus unity than do married students. Married students χ perceive the campus as being more scholarly, well organized, polite and considerate. Married students do not feel a part of the campus environment and do not rate the morale of the campus as highly as single students. Married students do not differ in

problem areas except in finances, living conditions, and employment. Married students use student personnel services less and give them a lower rating. Thus, while married and single students do differ in their perceptions of the campus environment, the main difference lies in the sex of the respondent.

Friends Influencing Student Attitudes

Indiana University has a Groups Program for minority freshmen who, because of their academic and personal backgrounds, may need special services and attention to succeed in college. These non-traditional students are recommended for inclusion in this program through a state network of recommenders seeking out potential students. Olguin (1976) used the CUES II to measure perceptions of the campus environment and possible others who might be significant in the formation of such perceptions.

She found little support of a positive relationship between recommenders' and friends' background characteristics and CUES II scores. Friends were generally more closely related to student scores than were recommenders, suggesting that friends play a significant role in developing expectations of the college environment.

Perceptions of Urban/Suburban
Students and Commuter/
Resident Students

Lindah1 (1967) conducted two studies using students from an urban and suburban college setting and found that his results differed with the generally-held opinion that commuter students do not identify closely with the college and thus do not develop sensitivity and intellectual curiosity. The first study was completed at two state colleges, one of which had three percent resident students and the other which had 16 percent resident students. Using the CUES Lindahl found that more variation in perception occurred between colleges than between residents and commuters at the same college.

Other results from Lindahl's study were:

1. The resident college was perceived as being more group oriented and emphasized practicality; the commuter college was perceived as emphasizing creativity, idealism and self-understanding.
2. In both colleges the commuters perceived less emphasis on practicality than did residents.
3. In both colleges the commuters' perceived more emphasis on the awareness, propriety and scholarship scales than resident students.

Lindahl's second study (1967) was completed among seven California state colleges. Results indicated that colleges with large percentages of commuter students (at least one-third) perceived the environment as placing emphasis on self-understanding, creativity, and idealism. Resident students described an emphasis on practical benefits, togetherness, and friendliness.

Males/Females, Dormitory Residents /
City Residents/Commuters, Different
Majors, Continuing and Transfer Stu-
dents, Married/Single, Fraternity/
Independent Students

Windham (1973) compared the perceptions of the campus environment of student subgroups with each other and with those of other colleges and universities throughout the nation. North Texas State University students ranked lower on all scales of the CUES II when compared to the total national normative group of colleges and universities.

Only one hypothesis was retained in full (null). No significant differences were established between any of the mean scale scores of the three groups divided according to type of residential arrangements. The other hypotheses, while not statistically rejected, were also not fully supported by the analyses of the data (Windham, 1973, p. 106).

Students, Faculty, Administration and Student Affairs Personnel Compared

The CUES II was used by Conkwright (1973) to compare students, faculty, administration and student affairs personnel and their perceptions of an effective versus an ideal institution. The results indicated close agreement between all subgroups on the characteristics of an ideal environment. Slightly more divergence of opinion was noted concerning the environment of East Texas State University. Students, student affairs personnel, faculty, and administrators held similar views of the university environment with student affairs personnel, faculty, and administrators' perceptions resembling each other more closely than they resembled those of the students.

Student Leaders and Non-Leaders in Residence Halls Compared

Sanderson (1970) compared the perceptions of male and female elected student residence hall leaders and non-leader residence hall students. It was concluded that sex differences have a greater influence on residence hall students' perceptions of the university environment than does the leadership factor. Female residence hall students in general have a more congruent view of the university environment than residence hall male students.

Chicano and Anglo Perceptions

In a study comparing Chicano and Anglo students' perceptions Vela (1976) found Chicanos scored higher on the Practicality scale and the Anglos scored higher on the remaining six scales. Chicanos perceived the university environment as providing greater material benefits and avenues for social activities and as being well organized.

Coeducational Residence Living Compared to Single Sex

Freshman students living in residence halls change their perceptions of the university environment significantly on most scales and in a negative direction during their first six months of attendance at college was a conclusion drawn by Miller (1972). He also concluded that freshman females in single-sex halls experience a significantly greater change on the Awareness scale than do freshman females in coeducational residence halls. Freshman males do not differ in the degree of change in their perceptions because of where they live.

The wide range of studies conducted with the CUES points to the acceptability of the instrument in measuring students' perceptions of the college environment.

Such studies have shown that the perceptions of the college environment change greatly in the freshman year and somewhat less over four years. Students tend to generalize from the environment with which they are familiar to the college environment as a whole. Major differences in the environment are perceived according to whether the student is male or female and most authors stress the need to control the sex variable to minimize the effect on the responses to the CUES. There are differences in the way students perceive the college environment due to factors such as marital status, urban and suburban setting, types of living arrangements, racial differences, and friend influences.

None of the authors reviewed considered what perceptions older students or part-time students have of the college environment. With increasing numbers of older and part-time students enrolling in higher education the time is ripe to examine and compare these students' perceptions with the traditionally younger, full-time student. Finally, most of the CUES studies have been conducted at the university level. More information is needed relative to the character and environmental influences of the small college.

Studies Showing Increasing Numbers of Older and Part-Time Students

Historically, American higher education has developed its programs for young, single, unemployed adults who can devote their full time and attention to the four year

pursuit of a college education. These students, however, do not form the majority of the learning force in America (Cross and Jones, 1972, p. 40).

Older and part-time students are making their presence known to higher education more than ever before because there are more of them. A major factor contributing to the increase in enrollments is a general increase in life expectancy. The average life span in this country in 1900 was 45 years; in 1970 it was 72 for men and nearly 77 for women (Bischof, 1976, p. 3). Population statistics indicate that the age of the general population is growing older as the result of at least one factor, the post World War II baby boom (Bischof, 1976).

According to the Census Bureau the median age of the population has increased from 27.9 in 1970 to 29 in 1976. By the turn of the century, the median age will range from 32.5 to 37.3 (The Oregon Statesman, July 26, 1977, p. 3A).

The world of work has had an added effect on increased numbers of older and part-time students in our colleges and universities. In 1900 the average American work week was 62 hours; in 1945 it dropped to 43, and today it is 37 1/2 hours. The shorter four-day and three-day work week is now also beginning to emerge (Boyer, 1975, p. 6). People use less time to earn their livings and have more leisure time.

The Census Bureau has also found that the most dramatic increases in college enrollment in the 1970's have been among adults 25 and older. In 1975, 3.7 million adults registered for college courses which was 34 percent of total college enrollments. This was a huge jump from the 1.7 million enrollments (or 22 percent of the total) in 1970. By 1980 adults could form 40 percent of the total. At the same time the growth in enrollment that higher education has enjoyed as a result of increased numbers of traditional full-time younger students is ending (Graulich, 1977, p. 1).

The period of bouyant natural growth in American higher education, sustained by large rises in the numbers of students seeking admission, is drawing to a close. Between 1961 and 1971, the college-age population increased by 44 percent; between 1971 and 1981, it will grow by approximately 11 percent. While the number of eighteen-year olds--that is, the population of youth at college-entrance age--rose by 39 percent between 1961 and 1971, it will go up by only two percent during the decade that began in 1971. The number of high school graduates is forecast to begin declining by 1980 (National Center for Educational Statistics, 1973, p. 5-9).

While younger full-time students appear to be declining,

. . . part-time students have become the new majority in post-secondary education. According to USOE surveys, part-time students comprised 55 percent of the total post-secondary student body in 1969, and by 1972 this proportion had increased to 57.5 percent. In collegiate institutions in 1972, the number of part-time students was approximately half the total enrollment (Pitchell, 1975, p. 40).

At the same time the number of 18- and 19-year-olds, depending upon the particular year, is declining, leveling off, or increasing only slightly (Munday, 1976, p. 682).

The point of such statistics is that the life patterns of American higher education are changing.

Even though the baby boom has slackened, there are still more people to be served. Mid-career people have more leisure time, and they face the crisis of early obsolescence. Older people now retire earlier, live longer, have more free time, and are often socially unattached. Now we have blocks of freedom throughout all life, and for the first time in our history higher education may be viewed not only as a pre-work tradition but as a process to be pursued from eighteen to eighty-five (Boyer, 1975, p. 7).

The reasons why older and part-time students are increasing need examination to understand what societal forces and pressures cause such "non-traditional" students to enroll in higher education.

Women now make up a significant number of the increasing older and part-time student population in higher education.

According to Cross (1968) the rate of college attendance is increasing more rapidly now for women than for men for the following reasons:

1. Education is becoming increasingly important to women as more of them enter the labor market.
2. The reservoir of academically qualified women not now going to college is large.
3. The attention to obtain equality of opportunity for women means that if women were to enter higher education in the same proportion as men, about one and a half million new students would enter our colleges (p. 134).

Berry and Loring (1970) state that approximately 50 percent of the total participants in adult education are women because of factors such as the changing role of women in our society; labor demands and labor shortages that have given support to women who are motivated to continue their education; the knowledge explosion in the behavioral sciences which has encouraged women to seek out educational programs that will contribute to self-fulfillment; and education for leisure to promote fulfilling and productive use of leisure time.

Berry and Loring (1970) state further that educational patterns illustrate the discontinuity in women's lives in marrying and having children. Many more women than men return to school after an absence of from 5 to 20 years.

Minority students make up another significant part of increasing student populations although the literature is deficient of statistics specific to numbers of older and part-time minorities.

The Census Bureau reported, for example, total black enrollments of 234,000 in 1964, 434,000 in 1968, and 492,000 in 1969 (Crossland, 1971). Mexican Americans, Puerto Ricans, American Indians, and other minorities show increases somewhat proportional but underrepresented to their total population.

Reasons for increases in enrollments are factors such as affirmative action recruitment, bending admissions standards for

"high risk" students, increasing the funds available for minority students, changing students through remedial help and with public education and colleges themselves changing with better programs and curricula to accommodate minority students (Crossland, 1971).

Barriers that continue to cause underrepresentation of minority students are tests used for college admission, poor educational preparation, money, geographic distance from a college, motivation required to overcome poorer academic credentials and racism (Crossland, 1971).

The enrollment of all four minorities tends to be disproportionately concentrated in the early undergraduate years both because minority freshmen enrollments have been increasing recently and because academic survival rates continue to be lower for minority students than for others (p. 14).

Increases in enrollments of minority students are expected to continue into the future as civil and educational reforms attempt to deal with the problems of minority underrepresentation at colleges and universities (Crossland, 1971).

The part-time student has traditionally been thought of by most to also be an older student.

The vocational and/or familial demands placed on all but the youngest adults in our society force all but a small minority of middle-aged adults to pursue their studies part-time (Glass and Harshberger, 1974, p. 211).

The increase in numbers of part-time and older students is causing institutions to alter their structure to accommodate their

Cross (1972) sees colleges adjusting to the concept of part-time study.

One public institution is adjusting to the fact that the average stay of the 'regular student' is seven years rather than the usual four because of part-time and interrupted study (Gould, 1975, p. 41).

Finally, more specialized groups are using the resources of higher education. Continuing professional education for doctors, engineers, teachers, lawyers, etc. has seen dramatic growth. The concept of continuing education is particularly appropriate for professionals, many of whom are graduating into a world where a college education soon becomes obsolete (Haygood, 1970).

Special clientele groups such as labor, management, members of the armed forces, aged, law enforcement officials, business and industry, handicapped, etc. are enrolling in programs on a part-time basis at colleges and universities to meet their educational needs (Haygood, 1970).

In addition to more older students, other changes that will increase higher education enrollment patterns will be greater equality of opportunities among minorities and more programs in adult education. At the same time there will be fewer students because of reduced time for degrees, shifts of enrollments to two-year colleges, reduced graduate enrollments and fewer available high school graduates (Carnegie Commission, *New Students, New Places*, 1971).

A final thought in the examination of enrollment patterns in higher education is aptly expressed by Munday (1976):

College and university student bodies never again will be made up almost entirely of students who are eighteen to twenty-two years old, white, full-time. . . . The traditional college students are there all right, but they have been joined by other non-traditional students who are older, minority, part-time. . . (p. 682).

Differences between Full- and Part-Time Students

Studies related to the abilities and characteristics of part-time students at colleges and universities appear to be few in number. The few studies uncovered by this investigator seem more oriented to describing part-time differences from full-time students from the point of services and programs accorded them rather than individual characteristics. No studies were found comparing perceptions that part-time students and full-time students have concerning the college environment.

Part-time students face most of the same problems of full-time students in going to college and at the same time may have family, economic, and educational problems different from those of traditional undergraduates (Cross, 1975).

Since part-time students have become the majority in post-secondary education, their future lies, somewhat, in the

understanding that educators and policymakers have concerning the needs, similarities, and differences from full-time students.

Studies related to persistence and dropping out in college usually summarize findings in a way that suggests actions that can be taken by the student or the college to lower attrition. Astin (1976) in his exhaustive longitudinal, multi-institutional study of college drop-outs, describes characteristics of the student and the environment that decrease the dropout rate. The alarming conclusion is that many of the characteristics of dropouts are those obviously held by a number of part-time students who work full-time, live at home, and do not have time for much involvement in extra-curricular activities.

A student's chances of completing college can be significantly influenced by environmental circumstances. The positive effect of living in a dormitory during the freshman year has obvious implications for students, administrators and policy-makers. Students concerned about maximizing their chances of finishing college should seriously consider leaving home and living in a dormitory. Simply getting away from home appears to enhance a man's chances of finishing college even if he lives in a private room or apartment. For the woman, however, leaving home may reduce her chances of finishing college if she opts for private residence.

The student's GPA is strongly related to persistence, more so than any other variable in this study. That grades, however, do not always indicate the student's academic potential is reflected in the fact that many students with high potential drop out and many with presumably low potential manage high grades and stay in college. Putting students with poor grades

on academic probation appears to have positive effects on women and negative effects on men. . . .

Participation in extra-curricular activities, especially membership in social fraternities or sororities, is also significantly related to staying in college. These findings support the theory that student persistence to some extent depends on the degree of personal involvement in campus life and environment (Astin, 1976, p. 107-108).

Other significant findings by Astin concluded that the student's source and amount of financial aid can be an important factor in the ability to complete college. Receiving financial support from parents helps while loans seem to be a negative influence. Having a part-time job on campus is a positive factor while working full-time is a negative factor. It also appeared that persistence is enhanced if the student attends an institution in which social backgrounds of other students resemble his or her own social background. Such interactions were most apparent with town size, religion, and race of the student.

The part-time student, it appears, has to cope with a college setting that has done little to understand him.

Although students clearly have an interest in improving their chances of completing college, they are seldom, if ever, in a position to influence national policies and institutional practices that could help them (Astin, 1976, p. x).

At the present time there is a paucity of data regarding the characteristics of part-time students (Jacobiwitz, 1976, p. 1 of abstract).

Pitchell (1975), however, presents a case for discrimination against the part-time student. In his chapter "Financing Part-Time Students" he points out that part-time status carries with it financial aid restrictions not imposed on full-time students, in spite of the fact that proportionately more part-time students have a family income below \$15,000 (72.4 percent compared to 62.2 percent, according to the Census of Population).

This discrimination takes many forms. . . .

The Basic Opportunity Grant (BOG) program is currently limited to full-time freshmen and sophomore students.

None of the \$.5 billion annual expenditure in social-security benefits for the schooling of children with retired, disabled, or deceased parents has been available for dependents participating in post-secondary education on a part-time basis.

While part-time students have been eligible for student-loan programs, these students have not been able to participate in proportion to their enrollments in post-secondary institutions. Only 6.6 percent of the recipients of guaranteed student loans since the inception of the program have been part-time students.

Part-time students do not fare much better at the state level. Of twenty-eight states with some type of needs-based student-aid program, only four provide eligibility for part-time students.

Collegiate institutions contribute to the discrimination. Thirty-four percent of the 1,178 institutions surveyed by the Commission of Nontraditional Study in 1972 made no financial aid available to part-time students. Moreover, according to a recent American Council on Education survey, 58.6 percent of collegiate institutions charge part-time students higher tuition rates than full-time students, with 66.9 percent of public institutions discriminating against part-time students in this way (Pitchell, 1975, p. 43-44).

The part-time student seems to have special problems in the general availability of services of the institution as well.

In one out of four colleges the student who attends classes on evenings and weekends will have to take time off of work during weekdays in order to use the library, student lounges, and study areas. Laboratories, bookstores, and cafeterias are closed before and after classes in at least half the colleges (Cross, 1968).

Access to most other services is limited also with convenient times declining from 39 percent for physical education and recreation facilities and less for computer terminals or centers, business office, financial aids office, and placement offices, down to only 22 percent for health services (Cross, 1968, p. 59).

What the effects of reduced services, differences in financial aid programs and the differing needs that part-time students have on success is not known for sure. Few, perhaps no more than five percent, of the part-time students studying for degrees ever achieve them. It may be that many of these students have no real interest in degrees (Smith et al., 1970). The environmental press on part-time students possibly presents obstacles that make it difficult to persist long enough to graduate. Vermilye (1975) in the book Lifelong Learners: A New Clientele for Higher Education provides a summarizing thought:

To restore flagging faith and flagging markets these institutions will have to become inviting and useful to many persons formerly screened out or ignored: older learners, part-time learners and off-campus learners (p. ix).

Characteristics of Older Students

In the perception of time. . .; it makes a great deal of difference in one's orientation to learning whether life lies ahead as it does at age 21, is midway as at 40, and is largely in the past in memory. . .as at 70. To be behind, on, or ahead of schedule with respect to life expectations, or more important to be aware that one is behind, on, or ahead of schedule, may have a profound effect on life adjustment and consequently one's willingness to undergo a program of systematic instruction (Knowles, 1973, p. 149).

The Carnegie Commission states that higher education is now prejudiced against older students. Too often they are looked upon as inferior (Carnegie Commission, *Less Time, More Options*, 1971). As a matter of fact, the older student has a number of forces working against him when he enters a setting which has been traditionally oriented to older adolescents and younger adults (Glass and Harshberger, 1974).

Kuhlen states that ". . .in a culture that glorifies youthful traits, accords greatest status to those of relatively young years and restricts opportunities for older people, increased age brings significant status loss (Glass and Harshberger, 1974, p. 212).

Birren (Glass and Harshberger, 1974) points out that socially the middle-aged adult finds himself in an "age graded" rather than a "social status graded" situation. He may find that his interests do not correspond with those of the younger adult. Such changes in interests are not only a function of the environment but of long established patterns of behavior as well.

Psychologically Glass (Glass and Harshberger, 1974) says that the adult student, trying to operate within a youth culture, may develop a sense of worthlessness. Youth is valued and he does not have it.

Frenkel-Brunswick (1968) says that the adult in his middle years is in the state of life with the greatest number of social dimensions and may have been deeply involved in his community activities. Returning to school means that he has to disengage from many of these life patterns which can mean a loss in status. Such external forces may alter the effectiveness of the learning environment for him and it may even cause psychological harm (Glass, 1974).

The problems older students experience in higher education are aggravated because it is commonly assumed that the middle-aged know themselves, have resolved their problems, and are relatively stable and rational human beings. This assumption, coupled with the inattention that our society gives to middle age, contributes to feelings of inadequacy on the part of many students (Schlossberg, 1975).

Mental Abilities of Older Students

Studies Supporting Decline of Intelligence. The most commonly used psychometric device used to measure the mental ability

of adults is the Wechsler Adult Intelligence Scale (WAIS). Adults appear to hold their ability in vocabulary, information, and comprehension; they decline in performance level on object assembly, digit symbol, and block design (Bischof, 1976).

Talland (Bischof, 1976) reviewed nine studies concerning cognitive functioning in aging and concluded that intellectual performance parallels biological functioning in decreasing efficiency.

Gilbert's 35-year followup study on intellectual functioning concluded that 'With the exception of vocabulary which shows a slight but significant increase, total group score averages in all groups of test scores show a decline over a 35 or more year period.' However, bright older people 'are still able to function in some areas as well as the average young person' (p. 139).

Studies Supporting Stability of Intelligence. Before

Thorndike (1928), it was commonly believed that the optimum years for learning were 18 to 22 with the date of "no return" at about 45. Evidence is now convincing that no serious decline in learning capacity need occur before 75, and if good health remains, to some later date. "Respecting adult learning, chronological age is not a particularly important factor" (Kidd, 1976, p. 8).

Bischof (1976) cites a number of studies which are used as examples to illustrate the stability of intelligence.

1. Bayley (1968) concluded in a series of studies that intellectual functioning was relatively stable over an age period of 6 to 40 years.

2. Jarvik (1973) stated that the average gain was 3.8 I. Q. points on the Wechsler from ages 18 to 40 years.
3. Thomae (1973), in a study of 1800 German subjects from the time of 7 to 17 and later 200 60-year olds, showed a consistency in intelligence test scores over a three-year period (Bischof, 1976, p. 139-140).

Lorge devised procedures to prove that, with tests of power of learning (with no speed factor involved) there is no decline.

. . . you are not portraying a decline in mental ability, or mental power. You are revealing a decline in the speed of refraction; the mental power is still there. . . . Take Maslow's theory of self-actualization. He says that a person probably can't be actualized until he is older. If we have more experience, we have more things to relate to (Smith, 1976, p. 114).

Investigators acknowledge that research results are influenced by such adult subject factors as motivation, relevancy, anxiety, speed, cautiousness, rigidity, fatigue, and experience. Of course, not all of these attitudes are unique to adult subject populations (Bischof, 1976).

Zahn (1967) reported that health is a major factor in performance and intelligence tests. People with medical and psychiatric disorders are slower in both physical and mental responses than are healthy people of the same age.

Knox (1977) perhaps generalizes the position taken by most investigators today concerning the learning abilities of adults.

In helping people gain a more accurate understanding of adult learning ability, practitioners can emphasize several basic points. Almost all adults can learn almost anything they want to. The main exception to this generalization is that some older adults experience a terminal decline or severe health condition that greatly reduces the ability to remember, learn, and modify behavior deliberately. Otherwise, the maintenance of learning ability during adulthood is well substantiated by both longitudinal studies and anecdotal experience of adults of all ages who learn effectively in family, occupational, and community settings (Knox, 1977, p. 424).

Differences from Younger Learners

Knowles (1973) uses the term andragogy to describe the body of theory and technology based on four major assumptions about adults as learners and their differences from children. They are:

1. Changes in self-concept

This assumption is that as an individual grows and matures his self-concept moves from one of dependence to one of being self-directed.

2. The role of experience

As an individual lives and matures he accumulates an expanding reservoir of experience that causes him to become a resource of learning for himself and others.

This assumption is endorsed by Kidd (1959) who states that:

Any student of any age brings his experience to the classroom or seminar. But the experiences of the adult may be extensive and varied. This may be the richest source of his learning objectives as well as a resource

for testing out hypotheses growing out of the subject matter. To the extent that this is achieved, the adult is likely to take a responsible part in the learning transaction (p. 108).

3. Readiness to learn

As the individual matures, his readiness to learn is decreasingly the product of his biological development and academic pressure and is more the product of developmental tasks required for evolving social roles.

According to Havighurst (Basic Education, 1975) developmental tasks are societal expectations imposed upon the adult of expected achievements at various intervals to be completed in order to be declared successful or normal. The ten social roles identified are worker, mate, parent, homemaker, son or daughter, of aging parents, citizen, friend, organization member, religious affiliate, and user of leisure time. As adults set tasks for these roles, impetus is added to their readiness to learn.

4. Orientation to learning

This assumption is that younger learners have been conditioned to have a subject-centered orientation to most learning or one of postponed application. Adults, on the other hand, tend to have a problem-centered orientation to learning or one of immediate application. Many adults enter an educational activity because of some problem in coping with current life problems. They want to apply tomorrow what they learn today. Learning

under this assumption is based in a time perspective (Knowles, 1973, p. 45-49).

Interference

Another characteristic of adult learners is how interference can inhibit the recall of information in a more dramatic way than it does with younger learners. When adults have a broad understanding of a topic, it is likely that this prior learning can facilitate new learning. However, when the prior learning is similar but different in some respects, it may often interfere with new learning (Knox, 1977).

Hultsch (1974) adds that reviewing information while recalling other information from memory causes more interference in middle age than in young adulthood and as a result it may take the adult longer to master a learning task.

Motivational Differences

Ultimately, the total environment of the student has much to do with motivation and learning. "Some settings. . . may emphasize practical vocational values; others may reinforce social, affiliative values; others may stress intellectual concerns" (McKeachie, 1970, p. 115).

Importantly, the attitudes of family, friends and co-workers may be as primary to the motivation of the adult student attending college as instructors' skills or the type of setting (McKeachie, 1970).

Motivation for satisfying family relationships is likely to be high among adults. Zanders' interview study revealed affiliation to be one of the strongest conscious motives for taking an evening course. A third important motive of adult learners is the need for achievement (p. 117).

Negative motivation in the form of threats of punishment or of withdrawal of satisfaction are likely to produce withdrawal, dropping out, or other maladaptive responses and may result in the adult student not being successful in the learning activity (McKeachie, 1970).

Studies relating to the abilities of adults to learn in a higher education setting and their psychological, social, and intellectual differences from younger learners are abundant. The review of the literature pertaining to older student characteristics pointed to some factors that influence adult learning.

Summary of Review of Literature

The review of the literature has been presented in four topical areas: (1) studies showing the acceptability of the College and University Environment Scales (CUES) as a research instrument; (2) studies showing the increasing numbers of older and

part-time students in higher education; (3) differences between full- and part-time students; and (4) characteristics of older students as learners.

The review of the literature relative to the College and University Environment Scales indicated that the instrument has been widely used to examine a range of factors that influence the collective perception students view as the campus environment. Such use of the CUES points to its acceptance as a valid research instrument in measuring the campus environment.

The literature was notably deficient in studies relative to older and part-time students' perceptions of the campus environment.

Pertaining to increasing numbers of older and part-time students, the literature indicates that older students now comprise over a third of the total college enrollments in the United States. As well part-time students constitute more than half the total population of post-secondary education. Reasons given for the increases were longevity of the general population, shorter work week, more leisure time, the changing role of women in our society, the emerging concept of lifelong learning, continued professional education, and special clientele groups.

Concerning the differences between full- and part-time students the literature revealed that few part-time students

enrolled in degree programs graduate. Studies indicate that many of the characteristics that contribute to dropping out of college are held by part-time students as a group. There is also evidence to suggest that although the part-time student now makes up the majority in enrollment, he does not have available to him the same extent of services that the full-time student has.

Older students experience psychological, social, and intellectual differences from younger students in the higher education setting. The literature indicated mixed opinion as to decline or stability of intelligence with the majority of studies reviewed supporting stability of intelligence and learning as long as the person is in good health.

The older student is motivated more by family and friends in deciding to enroll in college and usually because of some problem in coping with current everyday life. As a result learning tends to be viewed in terms of immediate use rather than postponed application.

The traditional college environment, tailored primarily for the young, may now be in question in terms of relevancy because of the numbers and characteristics of older and part-time students enrolling in higher education.

Finally, in examining older and part-time students it can be concluded that they represent a significant population in terms of

numbers of students to higher education and that there appear to be enough differences to warrant further study, especially in the area of environmental press that may affect student persistence either positively or negatively.

CHAPTER III

METHODOLOGY AND PROCEDURES

This study was an investigation of the perceptions that older and younger students, attending full-time and part-time, have of the college environment.

The major sections include the statistical hypotheses, description of the instrument, the sample and population, and the statistical design.

Permission to Conduct the Study

Permission to conduct the study was granted by the President's office at Oregon College of Education (Appendix A). Procedures were established to protect the right of privacy of each subject. Students were given an explanation of the purpose of the study, the right to decline participation, and a list to sign if they desired a summary of the results when the study was completed. Biographical data such as sex and age were compiled on unnamed but numbered sheets to protect the anonymity of the subjects. The Biography Sheet (Appendix B) explained that the test results and other information would be used for group data comparisons only.

Statistical Hypotheses

The study was designed to determine what, if any, differences in perception exist toward the college environment among older and younger students, attending full-time and part-time at Oregon College of Education.

To facilitate statistical treatment of the data the following hypotheses were stated in null form.

Hypothesis I

There are no significant differences in the scores of perceived campus environmental characteristics between older and younger students at Oregon College of Education.

Hypothesis II

There are no significant differences in the scores of perceived campus environmental characteristics between full-time and part-time students at Oregon College of Education.

Hypothesis III

There are no significant differences in the scores of perceived campus environmental characteristics as a result of the interaction of age and enrollment status at Oregon College of Education.

The Instrument

The College and University Environment Scales, edition II (CUES II), was used to examine the "collective perception" of four groups of students toward the intellectual-social-cultural environment at Oregon College of Education.

The CUES II is composed of 160 true-false statements about college life--facilities, rules and regulations, faculty, curricula, instruction and examinations, student life, extracurricular organizations, and other aspects of the institutional environment (Pace, 1969).

The final 60 questions of the CUES II are used only by the Educational Testing Service for further development of the instrument. Since the answer sheets were hand scored by this investigator and the 60 questions do not relate to the present scales, they were not used in this study.

The test questions are grouped into seven scales. They are: practicality, community, awareness, propriety, scholarship, plus two subscales campus morale, and quality of teaching and faculty-student relationships and are defined under Definition of Terms in Chapter I.

Reliability estimates are presented in the College and University Environment Scales Technical Manual and range from 0.89

to 0.94 which indicates a high degree of internal consistency.

"From this evidence it seems reasonable to say that in general, a given score is probably quite stable. . . (Pace, 1969, p. 45).

Regarding validity Pace correlates characteristics of students with the various scales of the CUES II. The CUES II Technical Manual reports positive support for the concurrent validity of the instrument as follows:

Characteristics of the students are generally congruent with characteristics of the school they attend. Although student characteristics by no means account fully for the environmental differences between colleges, there is obviously some selective matching between students and colleges. There is a positive relationship between the scholastic aptitude of the entering freshmen and the Scholarship scale score of a college, between the aesthetic interests of the entering students and the Awareness scale score of a college, and between the religious interest of students and the Propriety and Community scale scores of a college. There is a negative relationship between the masculinity and pragmatic interests of the students and the Community and Propriety scale scores of a college. These and similar relationships are generally expressed by correlations in the .40s to .60s.

The behavior of students and various attitudes and values expressed by them in college are also generally congruent with the environmental press of their campus. Church attendance is related to the Community and Propriety scale scores of a college. Planning to enter graduate school is related negatively to the Practicality, Community, and Propriety scale scores and positively to the Scholarship scale. Majoring in such fields as social science and humanities is related to the Awareness scale; majoring in business is related to the Practicality scale; majoring in education is related to the Practicality and Propriety scales; majoring in engineering is negatively related to the Community scale. Feeling a strong emotional attachment to a college is related to its press toward Community and Awareness. Participating in

extracurricular activities is related to the Community scale. These and similar attitudes and behaviors have correlations with relevant college press that fall generally in the range of the .30s to .50s. . . .

The conclusion from such associations is that campus atmosphere, as measured by CUES, is a concept buttressed by a good deal of concurrent validity (Pace, 1969, p. 53-54).

Finally, the Biography Sheet was constructed as part of the instrument to provide descriptive data about the sample, to control the independent variables of age, sex, and full-time/part-time status, and to serve as a verification of sample selection information extracted from the OCE Master Registration list.

The Sample and Population

The study was conducted at Oregon College of Education. OCE is a unit of the Oregon State System of Higher Education and is located at Monmouth, Oregon. It is a public coeducational liberal arts college with a primary emphasis in the preparation of teachers. OCE is located in a rural setting and, as such, most students live in the community or in campus housing.

During fall term 1977, the date of this study, a total of 3,212 students was enrolled.

The sample was randomly selected according to the suggested procedures outlined in the CUES II Technical Manual. It included the following groups of students: older, full-time

students; younger, full-time students; older, part-time students; younger, part-time students. Only sophomores, juniors, and seniors were selected to insure that the subjects in answering the CUES II would be reflecting their familiarity and experience with just one institution--Oregon College of Education.

Freshmen were excluded from the study because the CUES II Prospectus reports that

. . . since freshmen have had little experience on campus, they tend to respond to the CUES II in terms of their expectations, which are usually unrealistically high. Their scores are consistently higher than those of upperclassmen (Pace, 1969, p. 10).

The sample was hand selected from the fall term 1977 OCE Master Registration list. It was possible to eliminate students who had possible confounding experiences such as graduate students, foreign students, and first term transfer students.

Within the College there were enough differing academic majors to provide a reasonable cross sample of academic interests.

The sample was defined further by controlling the independent variable of sex and age. A number of men and women students proportional to the OCE enrollment were selected, where possible, to limit an exaggerated sexual bias. Age, a key variable in this study, was controlled to separate all students into either the older or younger groups.

An identification procedure to select the sample was established to coincide with the OCE winter term preregistration. Selected students had their preregistration packets color coded. As the identified students requested their packets, they were asked by this investigator to participate in the study. If they agreed, a detailed explanation of the test and purpose of the study was given, and they were sent to rooms reserved for test administration. Subjects who had agreed to participate, but not immediately, were given a packet of test materials to take home and a return mailer.

As a result of the preregistration identification process the following numbers of students participated in the study.

1. 50 older, full-time students
2. 50 younger, full-time students
3. 29 older, part-time students
4. 18 younger, part-time students

In order to obtain the remainder of students needed in the older and younger part-time groups, a mailing was conducted. The local mailing was, for the most part, hand delivered in an attempt to talk to each student individually. Followup telephone calls were placed after a week to those subjects who had not responded as a reminder. The result was that 18 additional younger part-time students and 15 older part-time students participated in the study.

The final number of students volunteering to participate in the study was as follows:

1. 50 older, full-time students
2. 50 younger, full-time students
3. 44 older, part-time students
4. 36 younger, part-time students

The distribution of eligibility, refusals, nonrespondents and invalid answer sheets is shown in Table 1.

Generalized Student Participant Profile

Appendix E compares the selected biographical characteristics used in this study. Such data lend themselves to the following generalized student participant profile:

Older, full-time student group. Older, full-time students were primarily 25 to 32 years of age, commuters, and enrolled in education and social science. Approximately half were working off-campus with widely varying number of hours per week. Most of the older, full-time students in this study were seniors in class standing.

Younger, full-time student group. The younger students attending full-time at Oregon College of Education were generally 20 to 21 years of age, primarily enrolled in the School of Education, living in the city of Monmouth, and were not working. Of those who

Table 1. Test Administration. Distribution of Eligibility, Refusals, Nonrespondents, and Invalid Answer Sheets.

Student Group	Number of Student Body Eligible	Number of Students Randomly Selected	Number of Students Agreeing to Participate	Refusals	Mailing Respondents	Invalid Answer Sheets ^a	Number in Sample
Older, Full-time	220	150	50	4	Did not mail	0	50
Younger, Full-time	1142	150	50	6	Did not mail	0	50
Older, Part-time	80	80 ^b	46	1	33	2	44
Younger, Part-time	55	55 ^b	36	1	18	0	36

^aSubjects who did not answer all CUES II questions.

^bSelected all students eligible in order to obtain the largest possible sample.

worked most held their jobs on campus and worked 10 hours per week. They were equally distributed among the sophomore, junior, and senior classes.

Older, part-time student group. The older, part-time student at OCE varied widely in age from 25 to 54 with no significant modal age. Most older, part-time students were enrolled in the School of Education and were commuters. The majority were working off-campus 40 hours per week. They were primarily seniors in class standing.

Younger, part-time student group. The younger, part-time student was 22 to 24 years of age, enrolled in education, and either a commuter or living in the city of Monmouth. Most of the part-time younger students were working 40 hours per week off-campus. They were primarily seniors in class standing.

The Statistical Design

The central problem of this study was to see what differences existed, if any, among students in four groups according to age and full-time/part-time enrollment toward their perceptions of the college environment. The general design of the study included the following:

1. The answer sheets were hand scored. Each answer sheet was checked two times for possible errors. The data were

then punched on standard punch cards and analyzed for significant differences by the Computer Center at Oregon State University.

2. A two-way classification analysis of variance was used to test the null hypotheses that no significant differences existed among the groups selected: older, full-time students; younger, full-time students; older, part-time students; and younger, part-time students. The test statistic for the null hypotheses was the F statistic with .05 level of significance being used for the assessment of differences.

The analysis of variance procedure was determined appropriate for this study because of the way CUES II test data fit F statistic criteria. Nie et al. (1975) explain the use of the F statistic analysis of variance as follows:

Analysis of variance is a statistical technique that assesses the effects of one or more categorical independent variables (factors) measured at any level upon a continuous dependent variable that is usually assumed to be measured at an interval level. Conceptually, the cases are divided into categories based on their values for each of the independent variables, and the differences between the means of these categories on the dependent variable are tested for statistical significance. The relative effect upon the dependent variables of each of the independent variables, their combined effects and interactions may be assessed (p. 9).

Kerlinger (1964) adds support for the use of the F statistic in this type of study where four groups of students, randomly selected from a pre-selected eligible population are being compared

for significant differences. He states

An F test. . . simply says that a relation exists. The relational fact is inferred from the significant differences between two, three, or more means. A statistical test like F says in a relatively indirect way that there is or is not a relation between the independent variable (or variables) and the dependent variable (p. 200).

Summary of Methodology and Procedures

Chapter III has been devoted to a description of the methods used to collect and analyze the data of this study. The hypotheses, stated in null, identified four OCE student groups. They were: older, full-time students; younger, full-time students; older, part-time students; and younger, part-time students. The College and University Environment Scales, edition II, a standardized instrument that measures perceptions of the college environment, was administered.

After test scores were obtained from the selected student groups, the analysis of variance statistical procedure was used to examine the data for differences.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to examine student's perceptions of the college environment according to age and enrollment status at Oregon College of Education. The instrument used to measure these perceptions was the College and University Environment Scales, edition II. The CUES II produces scores on seven scales: practicality, community, awareness, propriety, scholarship, campus morale, and quality of teaching and faculty-student relationships.

Discussion of Findings Relative to the
Hypotheses under Investigation

Table 2 shows the mean scores, standard deviations and F values for older and younger participants on the seven scales of the CUES II. Data were compiled and independent decisions were made relative to the retention or rejection of null Hypothesis I.

H_{0_1} : There are no significant differences in the scores of perceived campus environmental characteristics between older and younger students at Oregon College of Education.

Table 2. Comparison of Perceptions of the College Environment of Older and Younger Students at Oregon College of Education.

Scale	Group	Mean	SD	F	Ho Decision
Practicality	Older	7.63	2.79	0.376	retain
	Younger	7.90	2.56		
Community	Older	10.18	3.75	4.45	reject
	Younger	11.28	3.21		
Awareness	Older	8.71	4.50	0.062	retain
	Younger	8.56	4.09		
Propriety	Older	11.06	3.55	10.059	reject
	Younger	9.26	3.20		
Scholarship	Older	11.03	4.61	6.559	reject
	Younger	9.33	4.50		
Campus Morale	Older	11.06	4.50	0.032	retain
	Younger	10.95	4.28		
Quality of Teaching and Faculty Relationships	Older	7.33	2.26	2.312	retain
	Younger	6.83	2.32		

Significant at .05 level = 3.92. Table of F (Winer, 1962, p. 642-647).

Findings

Practicality

The 20 items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system--knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive; it responds to entrepreneurial activities, and is generally characterized by good fun and school spirit.

The mean score on the scale of practicality for older students was 7.63 and 7.90 for younger students. The computed F score was 0.376 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of practicality was retained.

Community:

The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

The mean score on the scale of community for older students was 10.18 and 11.28 for younger students. The computed F score

was 4.45 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of community was rejected.

Awareness:

This scale reflects a concern about, and emphasis upon, three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and the future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness--an awareness of self, of society, and of aesthetic stimuli. Along with this push toward expansion, and perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of non-conformity and personal expressiveness.

The mean score on the scale of awareness for older students was 8.71 and 8.56 for younger students. The computed F score was 0.062 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of awareness was retained.

Propriety:

These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

The mean score on the scale of propriety for older students was 11.06 and 9.26 for younger students. The computed F score was 10.059 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of propriety was rejected.

Scholarship:

The items in this scale describe a campus characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.

The mean score on the scale of scholarship for older students was 11.03 and 9.33 for younger students. The computed F score was 6.559 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of scholarship was rejected.

Campus Morale:

The 22 items in this scale indicate acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

The mean score on the scale of campus morale for older students was 11.06 and 10.95 for younger students. The computed F score was 0.032 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of campus morale was retained.

Quality of Teaching and Faculty-Student Relationships:

This 11-item scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.

The mean score on quality of teaching and faculty-student relationships for older students was 7.33 and 6.83 for younger students. The computed F score was 2.312 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis I for the scale of quality of teaching and faculty-student relationships was retained.

Discussion

The findings indicate that with regard to the scale of community younger students perceive OCE as a friendlier, more cohesive, group-oriented campus than do older students. Younger students perceive that there is more group loyalty and in general, the campus is more of a community.

The propriety scale indicated that older students perceive the campus as mannerly, considerate, proper, and as more conventional than do younger students.

Older students also perceive the campus environment as a place characterized by more intellectuality and scholastic discipline than do younger students.

Comparisons on the other CUES II scales of practicality, awareness, campus morale, and quality of teaching and faculty-student relationships were not significantly different.

Table 3 reports comparisons of perceptions of the college environment of full-time and part-time students at Oregon College of Education. Using the table of F tabular scores were compared to computed scores and hypothesis retentions or rejections were determined.

Ho₂: There are no significant differences in the scores of perceived campus environmental characteristics between full-time and part-time students at Oregon College of Education.

Findings

Practicality:

The 20 items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social

Table 3. Comparison of Perceptions of the College Environment of Full-time and Part-time Students at Oregon College of Education.

Scale	Group	Mean	SD	F	Ho Decision
Practicality	Full-time	8.02	2.64	2.000	retain
	Part-time	7.43	2.71		
Community	Full-time	10.90	3.30	0.363	retain
	Part-time	10.46	3.82		
Awareness	Full-time	8.71	4.15	0.028	retain
	Part-time	8.55	4.49		
Propriety	Full-time	10.32	3.30	0.016	retain
	Part-time	10.31	3.48		
Scholarship	Full-time	10.46	4.33	1.131	retain
	Part-time	9.91	4.98		
Campus Morale	Full-time	11.05	4.13	0.031	retain
	Part-time	10.96	4.72		
Quality of Teaching and Faculty Relationships	Full-time	7.24	2.06	1.235	retain
	Part-time	6.90	2.56		

Significant at .05 level = 3.92.

activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system--knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive; it responds to entrepreneurial activities and is generally characterized by good fun and school spirit.

The mean score on the scale of practicality for full-time students was 8.02 and 7.43 for part-time students. The computed F score was 2.000 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of practicality was retained.

Community:

The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

The mean score on the scale of community for full-time students was 10.90 and 10.46 for part-time students. The computed F score was 0.363 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of community was retained.

Awareness:

This scale reflects a concern about, and emphasis upon, three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and the future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness--an awareness of self, of society, and of aesthetic stimuli. Along with this push toward expansion, and perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of nonconformity and personal expressiveness.

The mean score on the scale of awareness for full-time students was 8.71 and 8.55 for part-time students. The computed F score was 0.028 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of awareness was retained.

Propriety:

These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

The mean score on the scale of propriety for full-time students was 10.32 and 10.31 for part-time students. The computed F score was 0.016 with 3.92 indicated as significant at the

.05 level in the table of F. Null hypothesis II for the scale of propriety was retained.

Scholarship:

The items in this scale describe a campus characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.

The mean score on the scale of scholarship for full-time students was 10.46 and 9.91 for part-time students. The computed F score was 1.131 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of scholarship was retained.

Campus Morale:

The 22 items in this scale indicate acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and, at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

The mean score on the scale of campus morale for full-time students was 11.05 and 10.96 for part-time students. The computed F score was 0.031 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of campus morale was retained.

Quality of Teaching and Faculty-Student Relationships:

This 11-item scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.

The mean score on the scale of quality of teaching and faculty-student relationships for full-time students was 7.24 and 6.90 for part-time students. The computed F score was 1.234 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis II for the scale of quality of teaching and faculty-student relationships was retained.

Discussion

Table 3 indicated there were no significant F scores for any of the seven CUES II scales when comparing full-time and part-time students at Oregon College of Education. Neither group perceived the campus environment in a significantly different way. The null hypothesis II was retained for each of the seven scales representing perceptions of the college environment.

The interactions of age and type of enrollment are shown in Table 4. As in null hypotheses I and II mean scores and F scores are presented along with the hypothesis retention or rejection.

Table 4. Comparison of Perceptions of the College Environment with the Interaction of Age and Enrollment Status among Students at Oregon College of Education.

Scale		Mean	SD	F	Ho Decision
Practicality	OFT ^a	7.82	2.55	0.234	retain
	YFT ^b	8.22	2.74		
	OPT ^c	7.41	3.06		
	YPT ^d	7.44	2.25		
Community	OFT	9.76	3.46	7.575	reject
	YFT	12.04	2.73		
	OPT	10.66	4.05		
	YPT	10.22	3.55		
Awareness	OFT	8.14	4.30	5.723	reject
	YFT	9.28	3.95		
	OPT	9.36	4.67		
	YPT	7.56	4.11		
Propriety	OFT	11.14	3.48	0.014	retain
	YFT	9.50	2.92		
	OPT	10.98	3.67		
	YPT	9.50	3.08		
Scholarship	OFT	10.80	4.48	2.655	retain
	YFT	10.12	4.20		
	OPT	11.30	4.79		
	YPT	8.22	4.73		
Campus Morale	OFT	10.28	4.18	8.115	reject
	YFT	11.82	3.96		
	OPT	11.95	4.73		
	YPT	9.75	4.47		
Quality of Teaching and Faculty Relationships	OFT	7.32	2.15	1.300	retain
	YFT	7.16	1.98		
	OPT	7.34	2.40		
	YPT	6.36	2.68		

^aOFT = Older, full-time students

^bYFT = Younger, full-time students

^cOPT = Older, part-time students

^dYPT = Younger, part-time students

Significant at .05 level = 3.92

Ho₃: There are no significant differences in the scores of perceived campus environmental characteristics as a result of the interaction of age and enrollment status at Oregon College of Education.

Findings

Practicality:

The 20 items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system--knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive; it responds to entrepreneurial activities and is generally characterized by good fun and school spirit.

Mean scores on the scale of practicality are as follows:

older, full-time students (OFT) - 7.82; younger, full-time students (YFT) - 8.22; older, part-time students (OPT) - 7.41; younger, part-time students (YPT) - 7.44. The composite F score was 0.234 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of practicality was retained.

Community:

The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a

community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

Mean scores on the scale of community are as follows:

OFT - 9.76; YFT - 12.04; OPT - 10.66; YPT - 10.22. The composite F score was 7.575 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of community was rejected.

Awareness:

This scale reflects a concern about, and emphasis upon, three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and the future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness--an awareness of self, of society, and of aesthetic stimuli. Along with this push toward expansion, and perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of nonconformity and expressiveness.

Mean scores on the scale of awareness are as follows:

OFT - 8.14; YFT - 9.28; OPT - 9.36; YPT - 7.56. The composite F score was 5.723 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of awareness was rejected.

Propriety:

These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

Mean scores on the scale of propriety are as follows:

OFT - 11.14; YFT - 9.50; OPT - 10.98; YPT - 9.50. The composite F score was 0.014 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale propriety was retained.

Scholarship:

The items in this scale describe a campus characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.

Mean scores on the scale of scholarship are as follows:

OFT - 10.80; YFT - 10.12; OPT - 11.30; YPT - 8.22. The composite F score was 2.655 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of scholarship was retained.

Campus Morale:

The 22 items in this scale indicate acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and at the same time, a commitment to

intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

Mean scores on the scale of campus morale are as follows:

OFT - 10.28; YFT - 11.82; OPT - 11.95; YPT - 9.75. The composite F score was 8.115 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of campus morale was rejected.

Quality of Teaching and Faculty-Student Relationships:

This 11-item scale defined an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.

Mean scores on the scale of quality of teaching and faculty-student relationships are as follows: OFT - 7.32; YFT - 7.16; OPT - 7.34; YPT - 6.36. The composite F score was 1.300 with 3.92 indicated as significant at the .05 level in the table of F. Null hypothesis III for the scale of quality of teaching and faculty-student relationships was retained.

On those scales with significant differences the test of simple effects was applied to see where interaction effects existed (Winer, 1962). The test of simple effects has the same general form as the overall factorial effects and is restricted to a single level of one or more population means (Winer, 1962). The statistical null hypothesis for interaction takes the general form:

$$H_{03}: \mu_{OFT} - \mu_{OPT} - \mu_{YFT} - \mu_{YPT} \quad \text{or}$$

$$\mu_{OFT} - \mu_{YFT} = \mu_{OPT} - \mu_{YPT}$$

Null hypothesis III is illustrated in Figure 1 as follows.

Age	Older Students	μ_{OFT}	μ_{OPT}
	Younger Students	μ_{YFT}	μ_{YPT}
		Full-time	Part-time
		Enrollment	

Figure 1. Interaction Hypothesis Illustrated.

Simple Effects Findings - Community

Table 5 shows the simple effects analysis for the scale of community for null hypothesis III. Significant scores exceeding the .05 level in the table of F of 3.92 were recorded for comparisons of groups OFT and YFT - 10.94, and YFT and YPT of 5.81. Not significant were OPT and YPT - F score 0.34 and OFT and OPT - F score 1.60.

Discussion

Simple effects analysis indicates that younger, full-time students perceive the college environment at OCE as being more

Table 5. Simple Effects Analysis--Scale of Community.

Group	Mean	Group	Mean	Difference	F
OFT	9.76	YFT	12.04	2.28	10.94*
OPT	10.66	YPT	10.22	0.44	0.34
OFT	9.76	OPT	10.66	0.90	1.60
YFT	12.04	YPT	10.22	1.82	5.81*

* Significant at .05 level = 3.92

cohesive, loyal, congenial, friendly, and in sum more of a community than do the other groups studied.

Simple Effects Findings - Awareness

The awareness scale, as indicated in Table 4, was significant at the .05 level when tested by the two-way classification analysis of variance procedure. A further simple effects analysis, Table 6, did not identify any significant group. The main effects of age and type of enrollment were not significant when considered individually or paired with another group. Stated another way, on the scale of awareness it is the interaction that is significant and not the main effects of age or enrollment.

Discussion

The inference related to the scale of awareness is that no single group outscored any other group and is, therefore, not significantly different in its perceptions of the OCE campus environment on this scale.

Simple Effects Findings - Campus Morale

On the scale of campus morale, Table 7, simple effects analysis produced significant F scores of 5.13 when comparisons were made between OPT and YPT and 4.81 between YFT and YPT,

Table 6. Simple Effects Analysis--Scale of Awareness.

Group	Mean	Group	Mean	Difference	F
OFT	8.14	YFT	9.28	1.14	1.82
OPT	9.36	YPT	7.56	1.80	3.58
OFT	8.14	OPT	9.36	1.22	1.93
YFT	9.28	YPT	7.56	1.72	3.42

Significant at .05 level = 3.92.

Table 7. Simple Effects Analysis--Scale of Campus Morale.

Group	Mean	Group	Mean	Difference	F
OFT	10.28	YFT	11.82	1.54	3.21
OPT	11.95	YPT	9.75	2.20	5.13*
OFT	10.28	OPT	11.95	1.67	3.53
YFT	11.82	YPT	9.75	2.07	4.81*

*Significant at .05 level = 3.92.

F scores of 3.21 for OFT and YFT and 3.53 for OFT and OPT were not significant.

Discussion

Younger, part-time students perceive the campus as having less group cohesiveness, less friendly assimilation into campus life, less commitment to intellectual pursuits and overall, less campus morale than the other groups studied.

Summary

The analysis of data found significant differences related to the null hypotheses in the following ways on the CUES II scales.

Ho₁: There are no significant differences in the scores of perceived campus environmental characteristics between older and younger students at Oregon College of Education.

Null hypothesis I comparing older and younger students was rejected on the scales of community, propriety, and scholarship and retained on the scales of practicality, awareness, campus morale and quality of teaching and faculty-student relationships.

Ho₂: There are no significant differences in the scores of perceived campus environmental characteristics

between full-time and part-time students at Oregon College of Education.

Null hypothesis II comparing enrollment status was retained as full-time and part-time students did not differ significantly on any of the CUES II scales.

Ho₃: There are no significant differences in the scores of perceived campus environmental characteristics as a result of the interaction of age and enrollment status at Oregon College of Education.

Null hypothesis III was rejected on the scales of community, awareness, and campus morale as a result of the interaction of age and type of enrollment status (full-time or part-time). The scales of practicality, propriety, scholarship, and quality of teaching and faculty-student relationships were retained.

CHAPTER V

SUMMARY, CONCLUSIONS, AND
RECOMMENDATIONSSummary

The changing face of higher education today is resulting in new educational opportunities for differing segments of our society. Social changes of the seventies point to the need for the concept of lifelong learning-- people continually renewing skills and intellectual orientations throughout their lives. As a result of these changes the populations of older and part-time students are increasing in numbers. Knowledge about their differences from the traditionally younger, full-time student in the campus environment may be valuable to educators.

This study was designed to examine the perceptions that older and younger students, attending full-time or part-time, have of the college environment at Oregon College of Education. Statistical comparisons were made between older and younger students, between full-time and part-time students, and between the interaction of age and type of enrollment. The instrument used to measure such perceptions was the College and University Environment Scales, edition II.

Literature

The review of literature pointed out a wide range of studies using the CUES to examine environmental press. None were found which examined age or type of enrollment or the interaction of these variables.

Other studies examined how part-time students differ from full-time students.

Finally, the literature concerning older students is abundant. The review of the literature as part of the study attempted to point out some psychological, social, and intellectual differences between older students and younger students in the setting of higher education.

Method and Procedures

Students were selected according to age and whether they were attending full-time or part-time. Four student groups were studied. Fifty older, full-time students; 50 younger, full-time students; 44 older, part-time students; and 36 younger, part-time students were tested from randomly selected groups during the Oregon College of Education winter term 1978 registration.

A Biography Sheet was provided to verify master registration information used in group selection and to provide descriptive data about the sample.

Analysis of Data

A two-way analysis of variance was used to test the null hypotheses. Comparisons were made with regard to age, the type of enrollment (full-time or part-time) and their interactions. Group scale score means and standard deviations were computed. In order to determine where differences existed based upon the interactions of age and type of enrollment the test of simple effects was applied. All such differences were tested at the .05 level of significance.

As a result of the statistical treatment the null hypotheses are summarized as follows:

Hypothesis I

There are no significant differences in the scores of perceived campus environmental characteristics between older and younger students at Oregon College of Education. Scale scores differed significantly at the .05 level on the scales of community, propriety, and scholarship.

Hypothesis II

There are no significant differences in the scores of perceived campus environmental characteristics between full-time and part-time students at Oregon College of Education.

Scale scores did not differ significantly on any of the seven CUES II scales.

Hypothesis III

There are no significant differences in the scores of perceived campus environmental characteristics as a result of the interaction of age and enrollment status at Oregon College of Education.

Scale scores differed significantly at the .05 level on the scales of community, awareness, and campus morale.

Conclusions

The following conclusions are summarized from the Analysis of Data:

Hypothesis I was rejected on the CUES II scales for community, propriety and scholarship. When comparing age, older students perceive the campus as polite, considerate, and more conventional than do younger students. Older students also perceive the campus as more scholarly, characterized by intellectuality, than do younger students. Older students, however, perceive less community than do younger students. This is taken to mean they feel less friendliness, group cohesiveness, less feeling

of group welfare and that faculty members are less interested in their welfare than do younger students.

In order to change the current perception of community that older students have, Oregon College of Education could consider activities that will promote the feeling of a friendly, group oriented, cohesive campus for all student groups. Such activities might include:

1. A revision of current older student college orientation sessions.
2. More faculty involvement in the existing older students' organization and the advising program.
3. More social activities for older students to promote friendliness and group cohesiveness.

Older students perceive more propriety than do younger students at Oregon College of Education. In general they view the campus as more mannerly, considerate, proper and conventional. Since propriety is primarily a social perception and not related to primary factors influencing the ability of a student to persist in college, no conclusions or implications are suggested.

Further investigation may be necessary to understand why older students perceive the campus as more scholarly than do younger students. There is the possibility that because of age, older students are assumed to know themselves and to have

resolved their problems while in reality they may have feelings of inadequacy concerning their ability to do scholastic work (Peck, 1965). If such a statement is true, then Oregon College of Education could consider an orientation program for faculty about some of the psychological and learning differences between older and younger students. Such a program might promote understanding, knowledge and support about the needs of older students in the setting of higher education. Finally, student services might consider special tutorial and other assistance programs designed to aid in the adjustment problems older students might have.

Hypothesis II was retained. Enrollment status, that is whether a student is attending full-time or part-time did not differ significantly on any of the seven CUES II scales. This can be taken to mean that full-time and part-time students view the campus similarly.

The review of the literature in Chapter II revealed a number of conditions which seem to work against the success of part-time students in college. Considerations for financial aid, use of campus facilities in the evening hours and student services available to the part-time student, especially at night, are but a few of the conditions where full- and part-time students are treated differently. The results of null hypothesis II seem to be contradictory to findings in the literature and further research is needed to determine why

part-time students viewed the OCE campus similarly to full-time students.

Hypothesis III was rejected on the scales of community, awareness, and campus morale. The interaction of age and type of enrollment resulted in several significant scale score differences. Younger full-time students perceive more community and friendliness at OCE than do older, full-time students, older, part-time students, and younger, part-time students. It can also be said that younger, part-time students felt less campus morale than the other groups. They perceive the campus as less accepting, less cohesive and less committed to intellectual goals.

It is possible to intuitively expect younger, full-time students to perceive the campus as having more community and friendliness than the other groups studied because of the time spent involved in campus life and a general lack of life experience. Studies cited by Kidd and Havighurst earlier lend support to such thinking. This study concurs with such thought. Programs might be considered that serve to promote feelings of community among the other groups studied. Certainly the concept of student activities in higher education seems to be especially relevant if togetherness and a concern for total student welfare is deemed important.

Finally, younger, part-time students perceived less campus morale than did the other groups. They perceive less group

cohesiveness, less friendly assimilation into campus life and less commitment to intellectual pursuits. If a change is desired, programs that involve the younger, part-time student more in the campus environment ought to be considered.

Overall, the findings indicate that there were differences on a number of scales between the groups compared. The findings add strength to the concept that the older student may be different from the younger student.

Summary of Conclusions

As a result of the findings of this study the following conclusions were drawn:

1. Older and younger students differed in their perceptions of the campus environment at Oregon College of Education on the CUES II scales of community, propriety, and scholarship. They did not differ significantly on the scales of practicality, awareness, campus morale and quality of teaching and faculty-student relationships.
2. Full-time and part-time students perceive the campus environment at Oregon College of Education in a similar fashion on all seven of the CUES II scales.
3. The interaction of age and enrollment status causes some student groups to differ in their perceptions of the campus

environment at Oregon College of Education. Differences were recorded on the scales of community, awareness and campus morale. No significant differences were recorded on the scales of practicality, propriety, scholarship, and quality of teaching and faculty-student relationships.

Recommendations

The findings and conclusions derived from this study suggest several recommendations.

1. It is recommended that this study be replicated on a number of campuses which would employ the CUES II in a manner similar to this study. Replication would determine whether the findings of this study can be generalized or if they are the result of unique circumstances. Such studies should include, if possible, a larger number of subjects for more reliable statistical comparisons.
2. Since there has been little research related to the perception that older and part-time students have of college environment, more studies are needed at Oregon College of Education to provide knowledge about the causes of differences from traditionally full-time, younger students.
3. It is recommended that full-time and part-time students have their perceptions of the OCE college environment reexamined

since the results of this study contradict previous studies cited in the Review of Literature, Chapter II.

4. Research is necessary to develop a methodology for assessing the needs of older and part-time students.
5. Further research is recommended using the demographic characteristics compiled from the Biography Sheets of the participants of this study. A study should be made of the relationship of student characteristics such as place of residence, academic major, and whether one is employed or not to see if such factors influence student perceptions of the campus environment.

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APPENDICES

APPENDIX A

To Whom It May Concern

Mr. Doug Yates has requested permission to conduct a doctoral dissertation research project at Oregon College of Education. He has requested the use of student registration information, use of facilities for testing and the use of the OCE letterhead.

I have examined his proposal and am satisfied that his research will be conducted in an ethical manner regarding an explanation of his study to each student participant, the right of each student to decline participation and that safeguards have been taken to assure anonymity and confidentiality of biographical information.

He has my permission to conduct his research with students at OCE and to use the OCE letterhead.

Legitimate research about Oregon College of Education is welcomed. Such research will hopefully serve as a resource to the college in considering future programs.

Ronald L. Chatham, Ph.D.
Director, Institutional Planning
and Research, Assistant
to the President

APPENDIX B

BIOGRAPHY SHEET

The biographical information you provide will be handled confidentially. Information from the questions will be used in comparing characteristics only.

1. Age _____
2. Sex (circle)
 - 2a. Male
 - 2b. Female
3. Academic Major _____
4. Residence (check one)
 - 4a. _____ Dormitory
 - 4b. _____ In Monmouth
 - 4c. _____ Commuter
5. Are you as of Fall Term 1977 (check one)
 - 5a. _____ Full-time (12 or more credits)
 - 5b. _____ Part-time (less than 12 credits)
6. Are you working this term (circle one)
 - 6a. Yes
 - 6b. No
 - 6c. If yes, how many hours per week do you work _____
 - 6d. If yes, do you work on campus (check one)
 - 6d₁. On campus _____
 - 6d₂. Off campus _____
7. Class (circle one)
 - 7a. Freshman
 - 7b. Sophomore
 - 7c. Junior
 - 7d. Senior
 - 7e. Other
8. How many terms have you attended OCE _____

APPENDIX C

Dear

I am in the process of conducting a doctoral research project concerned with student attitudes toward various aspects of the Oregon College of Education campus environment. The project is attempting to compare the perceptions of older and younger students attending full-time and part-time.

Your name, along with others in this study, was chosen through the random selection process. It would be greatly appreciated if you would fill out the enclosed information and return to me as soon as it is convenient for you. The questionnaire and related forms takes approximately 30 minutes to complete. I think you will find it an interesting experience.

The answers of each individual will be completely confidential and only data from the groups as a whole will be published in the study.

The results of this study should be a useful resource in considering future programs for OCE.

Your cooperation is vitally important to this project.

Thank you,

Doug Yates
Director Student Activities
and College Center
838-1220, ext 261

Enclosures: CUES Attitude Book
CUES Answer Sheet
Biography Sheet
Envelope

APPENDIX D

COLLEGE AND UNIVERSITY ENVIRONMENT SCALES
RESEARCH PROJECTInstructions:

Thank you for agreeing to participate in this doctoral research project concerned with student attitudes toward various aspects of the Oregon College of Education campus environment. This project is attempting to compare the perceptions of older and younger students attending full-time and part-time.

Your name, along with others in this study, was chosen through the random selection process from the OCE Master Registration list. It would be greatly appreciated if you would fill out the enclosed information and return to me as soon as it is convenient for you. The questionnaire and related forms take approximately 30 minutes to complete. I think you will find it an interesting experience.

The answers of each individual will be completely confidential and only data from groups as a whole will be published in the study.

This research project has been approved by OCE and the results should be a useful resource in considering future programs for students.

Your cooperation is vitally important to this project.

1. Fill out the attached biography sheet.
2. Enter your name on the answer sheet.
3. Open the test booklet to page 2.
4. Read the directions and follow Instructions for Marking the Answer Sheet for the CUES steps 1 and 2 only. Disregard all other test booklet instructions.
5. Turn to page 4, find question 1. On the answer sheet blacken the appropriate box, that is, T if the statement is generally

characteristic of OCE, or F if the statement is not generally characteristic. Proceed to answer all 160 items.

6. After you have answered all of the questions place all of the materials (test booklet, answer sheet, biography sheet) into the return self-addressed envelope.
7. Mail or turn in the envelope to the College Center office, College Center, OCE, Monmouth, Oregon 97361.
8. If you have questions about this project or would like a summary of the results, feel free to call Doug Yates 838-1220, ext. 261, College Center, OCE.

APPENDIX E

Distribution of Participants in Four Study Groups by Age

Age	OFT		YFT		OPT		YPT		Total	
	n	%	n	%	n	%	n	%	n	%
19	0	0	10	20	0	0	4	11	14	8
20	0	0	15	30	0	0	2	5	17	10
21	0	0	19	38	0	0	5	14	24	13
22	0	0	3	6	0	0	10	28	13	7
23	0	0	2	4	0	0	9	25	11	6
24	0	0	1	2	0	0	6	17	7	4
25-29	22	44	0	0	11	25	0	0	33	18
30-34	18	36	0	0	13	29	0	0	31	17
35-39	4	8	0	0	7	16	0	0	11	6
40-44	4	8	0	0	8	18	0	0	12	7
45-49	2	4	0	0	3	7	0	0	5	3
50-54	0	0	0	0	2	5	0	0	2	1
Total	50	100	50	100	44	100	36	100	180	100

Appendix E. Distribution of Participants in Four Study Groups by Sex, Class Standing and Residence.

	<u>OFT</u>		<u>YFT</u>		<u>OPT</u>		<u>YPT</u>		<u>Total</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<u>Sex</u>										
Male	26	52	21	42	22	50	14	39	83	46
Female	24	48	29	58	22	50	22	61	97	54
Total	50	100	50	100	44	100	36	100	180	100
<u>Class Standing</u>										
Sophomore	8	16	14	28	9	20	9	25	40	22
Junior	14	28	19	38	9	20	7	19	49	27
Senior	28	56	17	34	26	60	20	56	91	51
Total	50	100	50	100	44	100	36	100	180	100
<u>Residence</u>										
Dormitory	1	2	5	10	0	0	1	3	7	4
In Mon-										
mouth	20	40	35	70	7	16	16	44	78	43
Commuter	29	58	10	20	37	84	19	53	95	53
Total	50	100	50	100	44	100	36	100	180	100

Appendix E. Distribution of Participants in Four Study Groups by Academic Major.

Major	OFT		YFT		OPT		YPT		Total	
	n	%	n	%	n	%	n	%	n	%
Art	1	2	3	6	1	2	1	3	6	3
Education	26	52	29	58	15	34	17	47	87	48
Humanities	3	6	4	8	6	13	4	10	17	9
Interdisciplinary Studies	3	6	0	0	2	5	2	6	7	4
Music	0	0	0	0	2	5	1	3	3	2
Psychology	4	8	5	10	2	5	2	6	13	7
Science/Math	0	0	4	8	4	9	2	6	10	6
Social Science	13	26	3	6	8	18	6	16	30	17
Undecided	0	0	2	4	4	9	1	3	7	4
Total	50	100	50	100	44	100	36	100	180	100

Appendix E. Distribution of Participants in Four Study Groups by Work Status and Location.

	OFT		YFT		OPT		YPT		Total		
	n	%	n	%	n	%	n	%	n	%	
<u>Work Hours per Week</u>											
0	26	52	30	60	12	27	6	17	74	41	
1-9	5	10	4	8	1	2	3	8	13	7	
10-19	12	24	10	20	2	5	1	3	25	14	
20-29	3	6	4	8	0	0	8	22	15	9	
30-39	0	0	1	2	6	14	4	11	11	6	
40 and over	4	8	1	2	23	52	14	39	42	23	
Total	50	100	50	100	44	100	36	100	180	100	
<u>Location of Work</u>											
On-campus	9	18	15	30	4	9	6	17	34	19	
Off-campus	15	30	5	10	28	64	24	66	72	40	
Not working	26	52	30	60	12	27	6	17	74	41	
Total	50	100	50	100	44	100	36	100	180	100	