A COMPARATIVE ANALYSIS OF THE SIX UNDERGRADUATE

COLLEGE ENVIRONMENTS AT

OKLAHOMA STATE UNIVERSITY

Ву

JOSEPH M. LARKIN

Bachelor of Science Wisconsin State University LaCrosse, Wisconsin 1962

Master of Science Oklahoma State University Stillwater, Oklahoma 1964

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Thesis Approved:

Milliam Penga Thesis Adviser Wallo G. Scall Malla E. Sarana Jahr E. Sushy

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CHAPTER I

THE NATURE OF THE PROBLEM

This dissertation reports an analysis of the undergraduate environments of the six undergraduate colleges at Oklahoma State University.

The investigation seeks to determine if the student perceived environment differs from college-to-college, and the extent to which the non-intellectual factors in the environments differ.

General Background and Need for the Study

In recent years much work has been done in the area of psychological measurement and evaluation. The majority of this research has been aimed at the individual, which has resulted in claims of a better understanding of the individual, and in the university setting, a better understanding of the type of students attending a given university.

Some current research focuses its attention on a comparison of environmental characteristics from one university to another. Often these universities are in different states, and frequently in varying sections of the country. These studies have been quite successful in comparing environments, but in terms of today's universities, and in many cases, the multiversities, it would appear that a wide variance might exist from college-to-college within the university setting. Stern (45, p. 727) focuses on this point when he states the following:

Is there one ideal to which American education should be directed? Even if there were, we have already seen that different students require different treatments in order to arrive at the same end. One of the tasks ahead is to determine the consequences of practices now based on preference rather than purpose. An environment must be suited to the species; if it isn't, the organisms either die or go elsewhere. The characteristics of the student and of the educational objectives must both be employed as a guide in the design of maximally effective environments for learning.

Oklahoma State University is a large, complex university, composed of six undergraduate colleges: a Graduate College, a School of Veterinary Medicine, and a Technical Institute. While many and frequent attempts are made through counseling and advisement to guide students during their college careers, these methods do little in terms of measuring or evaluating the non-intellectual factors present, or the absence of such, in meeting student needs.

Each of the undergraduate colleges has a Director of Student
Personnel, and each undergraduate college utilizes many of its faculty
for advisement and guidance. This advisement and guidance process
often involves helping a student select a major, and it frequently involves students who desire to change their major field of study. This
decision will usually be made on the basis of knowledge of the curriculum and the student. This study would add another dimension to the
decision-making process -- that of the characteristics of the environment which may enhance or deter the student's progress toward his
goals.

Limitations of the Study

A limitation of this study is one common to all studies of attitudes; that is, the validity of the measuring instrument. In addition, the sample studied may not be representative of any group

other than the population from which it was taken. Therefore, generalization of these findings to other groups is not justified.

The eleven factors included in this survey represent at best a partial picture of the important characteristics of the college environment. It is hoped that continuing research will complement this list.

Clarification of Terms

Certain important terms and concepts used in this dissertation are defined below.

Some General Terms and Concepts:

- (1) <u>University</u> refers to the Stillwater campus of Oklahoma State University.
- (2) <u>College</u> refers to the various administrative units and academic disciplines, specifically the six undergraduate colleges at Oklahoma State University:

The College of Agriculture

The College of Arts and Sciences

The College of Business

The College of Education

The College of Engineering

The College of Home Economics.

- (3) <u>Juniors and seniors</u> those who designate themselves as such on their enrollment cards and who have spent the Fall Semester of 1966 at Oklahoma State
 University.
- (4) Full-time students those students enrolled in

- twelve semester hours of course work or more.
- (5) Press of a college environment represents the student's perception of what they face and deal with in the college environment.
- (6) Press is a general label for stimulus, treatment, or process variables; that is, the set of demands upon the individual.

Definition of Terms as Variables:

- (7) The Factors of the College Characteristics Index:
 - a. Aspiration Level A high score on this factor indicates that the college encourages students to set high standards for themselves in a variety of ways. These include opportunities for students to participate in decision-making processes involving the administration of the school, and the administration's receptivity to change and innovation, thus implying that a student's efforts to make some impact on his environment have some probability of being successful. A high level of aspiration is also encouraged by introducing students to individuals and ideas likely to serve as models of intellectual and professional achievement.
 - b. <u>Intellectual Climate</u> The various items contributing to this factor reflect the qualities of staff and plant specifically devoted to

- scholarly activities in the humanities, arts, and sciences.
- c. Student Dignity This factor is associated with institutional attempts to preserve student freedom and maximize personal responsibility.

 Schools with high scores on this factor tend to regulate student conduct by means other than legislative codes or administrative fiat. There is a minimum of coercion and students are generally treated with the same level of respect accorded any mature adult.
- d. Academic Achievement Schools high in this factor set high standards of achievement for their students. Course work, examinations, honors, and similar devices are employed for this purpose.
- e. Academic Climate This factor stresses academic excellence in staff and facilities in the conventional areas of the natural sciences and the humanities.
- f. <u>Self-Expression</u> This factor is concerned with opportunities offered to the student for the development of leadership potential and self assurance. Among the activities serving this purpose are public discussions and debates, projects, student drama, and musical activities, and other forms of participation in highly visible activities.

- g. Group Life This factor is concerned with
 various forms of mutually supportive group
 activities among the student body. These
 activities are of a warm, friendly character,
 more or less typifying adolescent togetherness,
 but the items also reflect a more serious side
 to this culture as represented in activities
 devoted to the welfare of fellow students and
 less fortunate members of the community.
- h. Academic Organization The various components of this factor may be regarded as the environmental counterparts of the needs for orderliness and submissiveness in the individual. High scores on this factor are achieved by institutions which stress a high degree of organization and structure in the academic environment.
- i. Social Form Schools characterized by this factor offer opportunities for the development of social skills of a formal nature and in some respects suggest the finishing school counterpart of the vocational climate.
- j. Play-Work Schools high in this factor offer opportunities for participation in a form of collegiate life reminiscent of the popular culture of the 1920's. These are the institutions sometimes referred to as the fountains of knowledge where students gather to drink.

- w. <u>Vocational Climate</u> The items of this factor emphasize practical, applied activities, the rejection of aesthetic experience, and a high level of orderliness and conformity in the student's relations to the faculty, his peers, and his studies.
- (8) Residence Hall Housing includes all on-campus housing for single students.
- (9) <u>Fraternity or Sorority Housing</u> includes all men's social fraternities represented by the Inter-Fraternity Council, and all women's social sororities represented by the Panhellenic Council at Oklahoma State University.
- (10) Off-Campus Housing includes those apartments and rooming houses in the city of Stillwater rented to undergraduate students enrolled at Oklahoma State University.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Only in recent years has there been a shift from emphasis upon physical facilities and features of the academic setting to an increased interest in the psychological and social effects of the environment as a whole. Researchers are making increased efforts to identify and study those forces which operate and influence the college student (52, p. 425). This effort has been greatly facilitated by the development of testing instruments, such as the College Characteristics Index by Stern and Pace (34) and the Environmental Assessment Technique by Astin and Holland (8).

Attention was gradually shifted from prior areas of interest as educators began to recognize the importance of sociological and psychological forces through which schools affect their students. This appreciation of environmental forces stems from a book by H. A. Murray (28), Explorations in Personality, published in 1938.

Theoretical Background

H. A. Murray suggested a taxonomy by which environmental pressures and the ways in which an individual seeks to structure the environment for himself could be classified. This taxonomy resulted from

experiments in human behavior in which a group of physicians, sociologists, psychologists, and anthropologists sought to inquire into the nature of man. These men agreed that to formulate correctly an experimental finding, personality factors, or variables, must be included.

Murray explains their endeavors in the following way:

We purposed nothing less than (1) to construct methodically a theory of personality; (2) to devise techniques for getting at some of the more important attributes of personality; and (3) to discover basic facts of personality by a study of the lives of many individuals. Our guiding thought was that personality is a temporal whole and to understand a part of it one must have a sense, though vague, of its totality (28, p. 4).

Although there are divergent views on personality theory, these researchers initially agreed to view the personality as a whole, rather than separating personal needs from environmental forces. Their methodology, therefore, included exposing the subject to varied situations; gathering as complete a biographical data as possible; and observing the subjects by different observers who arrived at diagnoses independently. In this way, Murray reports that the total personality could be seen with greater definition.

The theory of personality proposed by these researchers includes the systems of needs and presses that interact to cause an individual to react in a given way at a given time. Need is defined by the author in this way:

A need is a construct which stands for a force in the brain region, a force which organizes perception, apperception, intellection, conation, and action in such a way as to transform in a certain direction an existing, unsatisfying situation. A need is sometimes provoked directly by internal processes of some kind . . . but, more frequently by the occurrence of one of a few commonly effective press (28, p. 123-124).

Press is described as a "direction tendency in an object or situation"

(28, p. 118). Press is equated to the stimulus situation -- that part of the total environment to which the individual attends and responds. Environmental press may be of two kinds: harmful or beneficial, and "gives rise almost invariably to adaptive behavior" (28, p. 119). When the individual recognizes that forces are being exerted upon him and expresses his feelings about that force, such as by saying "This is good," or "This is bad," this recognition may be termed pressive perception. When the individual hypothesizes what might happen if he responds to press in a certain way, he is exercising what Murray has termed pressive apperception.

Murray has classified press as positive or negative, mobile or immobile. Positive press are enjoyable and beneficial, such as a good meal or the company of a good friend. Negative press is harmful or distasteful, such as a threatening knife or a slanderous remark.

Mobile press is moving forces which can be either positive or negative in their effect upon the subject. Immobile press has no effect unless the individual manipulates such press to his own benefit or harm.

Immobile press would include building materials, a glass of water, a barrier, poison ivy, etc. (28, p. 120).

The testing instrument devised by Stern and Pace (34), the College Characteristics Index, utilizes Murray's theory of need and press by synthesizing data about the students and their environment in a single study. Studies of this sort are useful in determining how much diversity exists among student bodies of various colleges or how much diversity exists within a student body of one given college.

Stern and Pace (34) view the institution as a kind of mosaic, composed of environmental press and individual needs. Press is

reflected in the pressures, stresses, and rewards enforced by the college environment, and needs are those organizational tendencies which seem to give unity and direction to personality. Stern further describes a listing of needs as simply those objectives an individual may establish for himself (46, p. 28).

Research Related to College Environmental Studies

Because the instruments for describing environments have become available only recently, studies employing the <u>College Characteristics</u>

<u>Index or the Environmental Assessment Technique</u> are few. The following summaries of those environmental studies which have been reported will be limited to college and university environmental studies. This limitation further narrows the reporting of these studies.

In relation to the purpose of this study, a comparison of intrainstitutional presses, there are few reports of this nature. Of the
environmental studies in general, perhaps the most significant study
is that of Stern and Pace who supervised the administration of the

College Characteristics Index in order to set up a normative sample.

In the spring of 1959, the College Characteristics Index was filled out
by a group of students in sixty institutions. Thirty-two of these
institutions were selected for the normative sample. This sample consisted of liberal arts colleges, parochial and non-sectarian colleges,
both public and private universities, and various types of professional
schools. The authors ranked the scores of the thirty scales on the
test in order to arrive at a general index of the degree of similarity
between one college environment and another. The rank order correlations ranged from +.93 to -.87. The results of the sample revealed the

following ranges:

Type of College	N	Range of	Correlation
Liberal Arts Colleges (private and nonsectarian)	7	+.93	to +. 01
Liberal Arts Colleges (denominational)	7	+.78	to35
Large universities (public and private)	7 · · · · · · · · · · · · · · · · · · ·	+.87	to13
Engineering Schools	4	+. 64	to +. 10
Teacher Training Schools	3	+.71	to35
Institutions located in southeastern states	6	+.82	to75
Institutions located in New England states	4	+.72	to80

Due to the wide variation in these ranges, Stern and Pace suggest that it is more helpful to examine the variation in the environmental press sources. A perusal of this sort will reveal the kinds of pressures and characteristics that tend to go together in similar environments or how the presence of one characteristic is related to the presence of others (31, pp. 21-22).

The major factors which account for the differences in college environments are intellectual and social; furthermore, there seem to be two types of intellectual emphasis -- humanistic and scientific. Pace concludes that there are five types of environments which can be noted:

1. The first type of college environment is identified by high scores on the press scales for humanism, reflectiveness, sentience, understanding, objectivity, energy, and achievement. The school is likely to be characterized by the opportunities offered for students to participate actively in art, music, and

- drama, by long intellectual discussions among students, by frequent concerts and art exhibits attended by large numbers of students, by emphasis on future graduate study, and particularly by the school's reputation for academic freedom.
- 2. A student body sample scoring high on the press scales of scientism, change, and fantasied achievement and low on the press scores of closeness of achievement and order might be in the type of college environment characterized by excellent laboratory facilities in the nautral sciences; by a great number of professors actively engaged in research; by a divergent student population representing a great variety of nationality, religion, and social status; by little conformity among students in dress; and by the lack of closely supervised student organizations and class attendance.
- high scores on the scales of practicality, abasement, dominance, play, and sex. This school is represented by students who have a high concern for establishing a type of status with their peers and for accepting their status in relation to authority. The school offers many practical courses, such as report writing. Students generally are preparing for careers in business, management, or other

practical careers; students do not criticize the administration or teaching practices, as a rule; there is a socially active student government and a recognized group of student leaders; and there are many and varied social events throughout the year.

- 4. The fourth type of college environment is represented by high scores on the scales of affiliation, nurturance, succorance, and conjunctivity. This environment is characterized by a surplus of esprit de corps, such as get-acquainted activities and a first name basis between students and faculty; the school is notable for its friendliness; the school emphasizes its responsibility for preparing the student for a greater service to his community; and the activities in such an environment are carefully planned and supervised.
- impulsion differentiate the fifth type of college environment. This college is characterized by an apparently noisy and boisterous student body. These students are frequently inattentive at concerts and lectures, and they seem to expect others to adapt to them. There is a surplus of student escapades, and many of the activities are spontaneous and unplanned. Confusion and disorganization reign not only among the students in their work, but also among the

faculty in their work (31, pp. 23-26).

Pace emphasizes that aspects of any of these five environmental types may be found on any given campus. What seems to be significant, however, is that according to data collected with the <u>Activities Index</u> which measures needs and the <u>College Characteristics Index</u> which measures press, college students tend to migrate to the type of environment which seems best suited to meet their needs.

Thistlewaite (50) has reported on the diversities in college environments. He studied the press characteristics of the faculty and student peer groups in order to determine what kind of characteristics may be associated with college retention and further graduate study. The subjects of his study were the 8,000 respondents who had scored at the sixty-fourth percentile or higher on the National Merit Scholarship Qualifying Test. Of these 8,000 respondents, 4,200 students were randomly selected and administered the College Characteristics Index. The data collected from these students indicated that where strong press for affiliation, humanism, enthusiasm, independence, achievement and supportiveness is exerted, the retention rate is higher. These same press seem to indicate those environments where students are motivated to continue to advanced graduate training. Conversely, college environments which exert strong press in vocationalism and compliance tend to have lower retention rates and less influence upon National Merit Qualifying Test examinees (50, pp. 145-167).

In an earlier study Thistlewaite concluded that college environments which exert strong emphasis in natural sciences, social sciences, arts, and/or humanities have a high Ph.D. productivity rate (51, pp. 71-76, and 49, pp. 183-191).

J. J. Prior (37) conducted a study in which the <u>College Characteristics Index</u> was used to identify areas of needed self-improvement at Columbia University. He tested for differences in the subgroups of male and female; students living on-campus and off-campus; the real environment as described by the students and by the administration; the real and the ideal environment as described by the administration; the ideal environment as described by the administration; and the ideal environment as described by the students and the administration. The mean raw scores of these groups were statistically compared. The researcher found significant differences in each comparison. The greater difference between the administration's descriptions of the real and the ideal environment suggested steps toward improvement, but the differences in the other comparisons, though significant, did not suggest so strongly the need for improvement (37).

Ducanis (13) conducted a study to determine if there were differences in the students' satisfaction with the environment at a large complex university, Pittsburgh University. The students enrolled in the School of Education were compared on the basis of age, grade point average, sex, and credit load. The students who indicated more satisfaction on an attitude scale devised by the researcher were those students who also indicated that the press of the university environment was high on the College Characteristics Index press scales of achievement, adaptation, affiliation, conjunctivity, ego achievement, emotionalism, energy, objectivity, reflectiveness, succorance, and scientism. The College Characteristics Index press scores of the less satisfied students were high on the abasement and agression scales. Statistical analysis supported the conclusion that there were significant

differences in the characteristics and perceptions of the environment by students who were more satisfied and less satisfied with their environment (13).

Using the Activities Index to measure need and the College Characteristics Index to measure press as felt and perceived by freshman and junior students at Louisiana State University, Raab (38) attempted to determine what type of freshman characteristics would make them satisfied or dissatisfied with the university environment. A random sample of 100 freshmen and 100 juniors were tested. Raab found no significant differences between the satisfaction and dissatisfaction of these groups in relation to the university environment (38).

Keith (22) conducted an intra-institutional study at the University of Alabama to determine the relationship between students' personal needs and environmental presses existing in the undergraduate colleges and to determine if a congruency exists between academic performance and personal satisfaction to needs and press satisfaction. He found significant differences in certain environmental presses and in personal needs in each college subdivision, but he found no significant relationships between satisfaction of the personal needs systems of the students and their expressed personal satisfactions with their college of enrollment (22).

Stern reports that significant relationships may be found between profiles on press scales and the types of institutions sampled. Three types of colleges emerged when data from the Activities Index and the College Characteristics Index was analyzed: the denominational college which is marked by emphasis on conformity, constraint, and dependence; the small liberal arts colleges where students indicated a high

environmental press in intellectualism and personal autonomy; and the college which is described as a source of social pleasure and togetherness, although this college typically lacks academic strength (45, 48).

Stern has also noted subcultural differences within a complex university. After collecting data with the <u>College Characteristics</u>

<u>Index</u> from students at a large eastern university, Stern noted that the average scale value of the press scores provide a reliable basis for denoting press trends, but a certain amount of variability suggests a subcultural difference, for three of the sixteen groups of seniors had distinctly different impressions of the university.

Other studies which use different testing instruments for environmental studies have been reported. Centra (12) reports an intrainstitutional study in which he hypothesized that the major field of a
student is a variable in the student's perception of a large university.

The instrument used for testing was the College and University Environment Scales devised by Pace (30). This instrument identifies five factors of the educational environment: scholarship, practicality,
awareness, propriety, and community. For two of the less dominant
features, Centra found significant differences. The data revealed that
each college group saw its major field environment as being more
scholarly (higher on the scholarship scale) as well as less rebellious
(low on the propriety scale) than the total university environment (12).

Another environmental testing instrument is the Environmental Assessment Technique devised by Astin and Holland (8). The Environmental Assessment Technique measures eight characteristics of the college environment: size, average intelligence, and six personal orientations classified as realistic, intellectual, social, conventional,

enterprising, and artistic. Astin and Holland's instrument describes the college environment in terms of past student body characteristics and present student bodies; i.e., that present students are utilizing self-selection in deciding which college to attend. Thus, in a continuing process, the environment of a college and university will reflect its type of student body.

To substantiate this hypothesis, Astin described 246 colleges and universities in terms of institutional characteristics. He found relatively high correlation between characteristics of the college and the characteristics of the entering student bodies, although there were extreme groups on each of the student input factors at each college and university (3).

In another study, Astin found that the aspirations of students seeking further graduate training is negatively affected by the size of the student body and by the conventional orientation of the college.

These schools tended to emphasize the sports and social life, according to the students' assessment of his college environment (5).

In yet another study, Astin studied the effects of various college environments on the career choices of 3,538 exceptionally able young men in a four year longitudinal study. The results of this study supported his thesis that the student's career choice conforms more to the dominant or modal choice in his college environment (4).

Stern and Pace have taken a virtually opposite stand from that of Astin. The authors of the <u>College Characteristics Index</u> have noted that on the basis of correlations between the <u>College Characteristics</u>

<u>Index</u> and the <u>Activities Index</u>, only about thirty per cent of the college environment is accounted for by student body characteristics,

or in Astin's terms, student input factors (32, p. 47). However, Michael (27) criticized this thirty per cent figure as gratuitous, for he feels that there is a lack of reliability in the data. Michael calls for further studies of relationship between need-press scores within a variety of institutions before the interpretations of Stern and Pace can be accepted with confidence. On the other hand, Michael also criticizes Astin's assumption that "students make the college" and he feels that Astin's methodology may merely be a way of estimating the extent to which student self-selection remains constant from one generation to another (27, pp. 258-259). Astin, however, maintains the following:

Studies of differential college effects are difficult to design primarily because students are not distributed randomly among institutions. Consequently, variations in student performance from one college to another probably reflect, at least to some extent, differences in their student inputs. This problem is complicated by the fact that the independent variable — the college environment — is also related to the student input. Under such conditions, the investigator runs the risk of finding "effects" of college environments which are in fact due to variations in student input (2, p. 71).

Webb and Crowder (53) criticize the validation of the College Characteristics Index and the Activities Index on the basis that it falls far short of the depth of Murray's theory. For a full understanding, the authors feel that one must have a full comprehension of the relative strength and interactions between press and needs and that the College Characteristics Index and the Activities Index do not provide this deeper understanding (52).

Regardless of the criticism, it is evident that a clear need exists to continue to determine what kind of situations and environments do the most for different kinds of people. Pace has suggested

several ways of examining the college environment, such as educational approaches, inventories of resources and features, case histories, alumni studies, evaluation studies, sociological approaches, and psychological approaches (33, pp. 276-277). This particular study falls under the category of the psychological approach for it depends upon data based upon students' perceptions of the college environment. Regardless of the way the college environment is studied, the important need is for a better understanding of this unique setting upon which so much of our nation's future depends. Any attempt to research this area to the end of providing a better understanding of how to give young people a more quality education is surely a contribution, though the research may make only a small contribution.

The importance of environmental studies in terms of goals, aims, and the success of the college has been noted by several authors. Sanford suggests that the success of a college must in some way refer to how successful a given institution is in meeting its goals. Therefore, dependent upon the institution's objectives, there must be different kinds of measures of success for each of the objectives of the college. Though there are several ways of describing the college or university, only with the fullest understanding with the widest variety of measures can administrators and educators discern how successful the institution is in meeting its aims and objectives (40, p. 193).

The aims and objectives of an institution are formal or explicit statements of what the institution means to accomplish (34, pp. 275-276). Many authors have suggested what they feel should be the objectives of the university. Sanford states:

I would like to uphold as the major criterion of educational success the degree to which students are changed in

desired ways (40, p. 198).

Other authors have pursued this idea with the following description of the ideal college graduate:

... [He is] not only intellectually competent, but is also vocationally and professionally trained as well as being socially adept in meeting the demands of the outer world. (16, p. 269).

Institutional self-study should be constantly concerned not only with all areas of the institution, but with how well these areas and forces are aiding the institution in meeting its objectives. Only through these studies can the institution discern if activities are related to the goals; if the goals are consistent with current economic and social conditions; and if the faculty and students agree and adhere to the goals (11, pp. 8-9, and 15, p. 133).

Stern has summarized the justification for environmental studies in this way:

An environment must be suited to the species; if it isn't, the organisms either die or go elsewhere. But what is an optimal environment — one that satisfies or one that stimulates? ... The characteristics of the student and of the educational objectives must both be emphasized as guides in the design of maximally effective environments for learning (45, pp. 727-728).

CHAPTER III

THE METHODOLOGY AND DESIGN OF THE STUDY

Subjects: Population and Sample

The population being studied consists of 4,767 juniors and seniors enrolled at Oklahoma State University during the Spring Semester of 1966 with the following exceptions:

- a. students enrolled in the College of Veterinary

 Medicine.
- b. students classified as juniors or seniors who enrolled for the first time at Oklahoma State University for the second semester of the 1965-66 school year.

The following tables offer a clarification of the subjects for this study. Table I shows the distribution by College of enrollment of the juniors and seniors in the total student population of Oklahoma State University. Table II gives the six per cent sample of juniors and seniors according to their particular College enrollment.

A comparison of the following tables will show the matching of the sample with the total population. Using the Test of Significance of Difference between Proportions method of comparing percentages (1, p. 122-123), no significant difference exists between the population and sample distributions.

TABLE I

JUNIOR AND SENIOR STUDENT POPULATION
BY COLLEGE

College	Juniors	%	Seniors	%
Agriculture	333	14.6	347	13.9
Arts and Sciences	695	30.4	715	28.8
Business	388	17.1	388	15.6
Education	339	14.8	344	13.8
Engineering	312	13.7	451	18.2
Home Economics	214	9.4	241	9.7
TOTAL	3: <u>2281</u>	100.0	2486	100.0

TABLE II
SIX PER CENT SAMPLE OF JUNIORS AND SENIORS BY COLLEGES

College	Juniors	%	Seniors	%
Agriculture	24	16.5	22	15.2
Arts and Sciences	47	32.4	36	25.1
Business	19	13.2	21	14.6
Education	14	9.6	23	15.9
Engineering	25	17.3	26	18.1
Home Economics	16	11.0	16	11.1
TOTAL	s <u>145</u>	100.0	144	100.0

Tables III and IV show the sample distribution and percentage by housing and sex.

TABLE III

DISTRIBUTION OF SAMPLE AND POPULATION BY TYPE OF HOUSING

Type of Housing		Number	%
Sample:			
Off-Campus		134	46.3
Residence Hall		102	35•3
Fraternity or Sorority		53	18.4
	TOTALS:	289	100.0
Population:			
Off Campus		2478	51.9
Residence Halls		1477	31.1
Fraternity or Sorority		812	17.0
	TOTALS:	4767	100.0

TABLE IV

DISTRIBUTION OF SAMPLE AND POPULATION BY SEX

Sex		Number	%
Sample:			
Male		199	68.8
Female		90	31.2
	TOTALS:	289	100.0
Population:			
Male		3384	70.9
Female		1383	29.1
	TOTALS:	4767	100.0

The above samples were made at the beginning of the Spring Semester of 1966. An alphabetical list of all men and women in this population was compiled from the enrollment cards in the Office of the Registrar at Oklahoma State University. A six per cent random sample was drawn from this population which yielded the above tabled distribution.

The sampling procedure followed was to prepare a card for each of the first hundred subjects from the alphabetical listing, shuffle the cards, and draw out seventeen cards. Then starting with the last name drawn, the researcher selected the subject who fell seventeen names below the last name drawn, and continued with each consecutive seventeenth name until the entire sample was drawn.

Testing periods were established which seemed to have the least conflict with the numerous campus events scheduled. Letters were written to the subjects soliciting their cooperation in the study (see Appendix A). Letters and telephone calls were used to arrange subsequent testing periods. Responses were collected from 248 of the 289 subjects contacted, thus yielding an 85.8 per cent return.

Instrument Used in the Study

The instrument used to collect the information was the College Characteristics Index. This inventory utilized a forced choice format consisting of 200 items distributed among thirty scales of ten items each. This instrument was copyrighted in 1963 by George G. Stern. It is distributed by the Psychological Research Center, Syracuse University, Syracuse, New York.

The reliability and validity of this instrument is not available.

The scoring manual states:

This booklet is not intended as a manual. It contains only the most rudimentary materials regarding the administration and scoring of the Activities Index and the College Characteristics Index. Nothing will be found nere regarding the rationale of these instruments, technical data, validity studies, special keys or analytic procedures. Only a few of the many special sets of norms available for the Indexes are included. It is hoped that these materials will be of some help to those who are either engaged in a study at present or are about to undertake one, and are in need of some form of instruction to fill this period just prior to the production of the manual (47, p. 1).

Letters to the Psychological Research Center, Syracuse, New York, and to Dr. Stern yielded the information that the manual for the <u>College</u>

<u>Characteristics Index</u> has not yet been started.

Statistical Design of the Study

The analysis of variance technique was used to test for differences among the groups on the eleven factors of the <u>College Characteristics</u>

<u>Index.</u> Separate analyses of variance were computed for each of the eleven factors, and if the differences were significant at the .05 level, scores of the six colleges on a given factor were analyzed.

Where significance was found, the Scheffe' test was applied between all combinations of the colleges taken two at a time.

The raw data was transferred to IBM cards at the Computing Center at Oklahoma State University, and the facilities of the Center were used to test for differences among the groups.

Statement of Hypotheses

The following hypotheses were tested in order to check for differences among the groups sampled:

(1) Using the analysis of variance test, there will be

no significant difference in the factors of the

<u>College Characteristics Index Environmental Presses</u>

at the .05 level between:

- a. The College of Arts and Sciences and the College of Agriculture
- b. The College of Business and the College of Agriculture
- c. The College of Engineering and the College of Agriculture
- d. The College of Education and the College of Agriculture
- e. The College of Home Economics and the College of Agriculture
- f. The College of Business and the College of Arts and Sciences
- g. The College of Engineering and the College of
 Arts and Sciences
- h. The College of Education and the College of
 Arts and Sciences
- i. The College of Home Economics and the College of Arts and Sciences
- j. The College of Engineering and the College of Business
- k. The College of Education and the College of Business
- 1. The College of Home Economics and the College of Business

- m. The College of Education and the College of
 Engineering
- n. The College of Home Economics and the College of Engineering
- o. The College of Home Economics and the College of Education.
- (2) Using the analysis of variance test, there will be no significant difference in the factors of the <u>College</u>

 <u>Characteristics Index Environmental Presses at the</u>

 .05 level between those students classified as juniors and those classified as seniors.
- (3) Using the analysis of variance test, there will be no significant difference in the factors of the <u>College</u>

 <u>Characteristics Index Environmental Presses at the</u>

 .05 level between males and females.
- (4) Using the analysis of variance test, there will be no significant difference in the factors of the <u>College</u>

 <u>Characteristics Index Environmental Presses at the</u>

 .05 level between those living in
 - a. Fraternity and sorority houses and those living in residence halls.
 - b. Fraternity and sorority houses and those living in off-campus housing.
 - c. Residence halls and those living in offcampus housing.
- (5) Using the Analysis of Variance Test, there will be no significant difference in the factors of the College

<u>Characteristics Index Environmental Presses at the</u> .05 level between those

- a. Whose gradepoint average is in the upper third of the sample and the middle third of the sample.
- b. Whose gradepoint average is in the middle third of the sample and the lower third of the sample.
- c. Whose gradepoint is in the upper third of the sample and the lower third of the sample.

CHAPTER IV

RESULTS

The primary objective of this research project is to compare and contrast the six undergraduate college environments and to gain some understanding as to how the student perceived environment differs from college-to-college at Oklahoma State University.

In order to demonstrate diversity among the groups, the fifteen general hypotheses were tested. This chapter presents the findings of this treatment of the data and the implications of these findings for the hypotheses. A null hypothesis was used for testing, and when the differences tested by the analysis of variance statistical method were found to be significantly greater than would be expected by chance alone, the null hypothesis was rejected and the differences were said to be due to differences in the sample.

These differences were then applied to a <u>posteriori</u> comparison, following a significant F test. The method used was developed by Scheffe' (41, p. 209). This method uses the criterion that the probability of rejecting the null hypothesis when it is true, a Type I error, should not exceed .05 for any of the comparisons made. This is a very rigorous criterion, and because this is so, Scheffe recommends a less rigorous significance level. For this reason, the Scheffe comparisons were made at the .10 level of significance if a significant analysis of variance at the .05 level appeared.

Findings and Disposition of the Hypotheses

I. Diversity Among the Six Undergraduate Colleges

Hypothesis I states that there will be no significant differences between the College of Arts and Sciences and the College of Agriculture according to the factors of the College Characteristics Index Environmental Presses. This hypothesis was rejected by the Scheffe statistical tests by the following procedure:

$$F = t^2 = \frac{(\overline{X}_1 - \overline{X}_2)^2}{S_M^2/n_1 + S_M^2/n_2}$$

 X_1 , X_2 = Means

 $S_{w} = Within-group variance.$

The findings are presented in Table V.

The Colleges of Agriculture and Arts and Sciences differed on nine of the eleven factors tested. The analysis of the difference on the variables tested show that eight of the factors are different at the .05 level of confidence, and the factor of Social Form significantly different at the .01 level.

The students from the College of Agriculture scored significantly higher on the factor of Aspiration Level, than did those from the College of Arts and Sciences. This indicates more opportunities to participate in decision-making processes, and administrative receptivity to change and innovation.

In regard to the Intellectual Climate, students from the College of Agriculture felt more of the staff and plant were specifically devoted to scholarly activities in the humanities, arts and sciences.

TABLE V

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
AGRICULTURE AND ARTS AND SCIENCES

Variable and Source of Variance	Means	Within Group Variance Estimate	\mathbf{r}^1
A			
Aspiration Agriculture	88.69		***
Arts and Sciences	-100.55	66361.35	135.18
Student Dignity			
Agriculture	66.15		***
Arts and Sciences	220.79	87589.92	23.54
Intellectual Climate	*	•	
Agriculture	- 66 . 92		***
Arts and Sciences	- 267.97	46499.98	21.76
Academic Climate			
Agriculture	77.38		***
Arts and Sciences	-163.13	54283.99	26.68
Academic Achievement	-		
Agriculture	41.27	0 1 0-	**
Arts and Sciences	- 177 . 75	82342.85	14.59
Self-Expression			
Agriculture	216.00	01	***
Arts and Sciences	-147.76	138595.54	23.91
Group Life			
Agriculture	236.29		***
Arts and Sciences	- 50 . 40	60934.94	33.78
Academic Organization			
Agriculture	196.97	00966 03	**
Arts and Sciences	67.91	29866.21	13.96
Social Form	0-		**
Agriculture	235.85	42352.69	• •
Arts and Sciences	93•97	42372.09	12.07
Play-Work	3 0- OO		
Agriculture Arts and Sciences	183.89 246.68	77100 00	N C
	270.00	33100.00	N.S.
Vocational Climate	0/17 65		
Agriculture Arts and Sciences	241.67 239.82	11790.63	N.S.
TO STATE DOTATIONS	2,79.02	11, 90 • O)	11.0.

Degrees of Freedom 1,242

F values of 9.25, 11.30, and 15.55 required for significance at .10, .05 and .01 levels, respectively.

Rather than a measure of the amount of actual time and energy expended by the colleges in this direction, this scale offers a description of the perception of the students. The conclusion can then be drawn that the College of Arts and Sciences is not meeting the perceived need for scholarly activities in the humanities, arts, and social sciences for this sample. It can also be concluded that the students in Agriculture feel their objectives in this area are being adequately met.

In terms of Student Dignity, the students from the College of Agriculture feel their conduct is regulated by means other than legislative codes. Students from the College of Arts and Sciences feel their behavior is regulated by coersion, and that they are not treated with the same level of respect as would be accorded a mature adult.

The level of the stress of academic excellence is measured by the scale on Academic Climate. The students from the College of Arts and Sciences feel that not enough stress is placed on academic excellence in the conventional areas of the natural and social sciences, and the humanities. Students from the College of Agriculture feel the level of stress is adequate when compared with the expressions of those from Arts and Sciences.

In the area of Academic Achievement, the Agriculture students feel the press for expectation of achievement exist. Arts and Sciences students feel that the course work, examinations, and honors, do not set high enough standards of achievement for them. This, of course, is a difficult comparison to make without the inclusion of a measure of ability to achieve, and motivation. The assumption that the grading-systems are comparable also weakens this comparison.

Arts and Sciences students expressed a press for greater

Self-Expression. They felt more opportunities for the development of leadership potential were needed. The outlets for the development desired by these students are public discussions, debates, drama, and musical activities. The Agriculture students felt their level of self-assurance and leadership potential was being met. This might well be accounted for by the nature of the course-work and projects carried out as part of the Agriculture curriculum.

The Group-Life Factor is concerned with various forms of mutually supportive group activities among the student body. Arts and Sciences showed a lesser degree of perception of a supporting environment than did Agriculture in this area. That is, Arts and Sciences felt these activities should be more devoted to the welfare of fellow students and less fortunate members of the community. A willingness to devote attention to problems of the community would include such activities as Civil Rights, and student rights.

The degree of organization and structure within the College is measured by the factor of Academic Organization. Both samples reflected a high degree of structure, but the Agriculture students felt a greater need for orderliness and submissiveness on the part of the individual. Arts and Sciences on the other hand, felt less need for structure and orderliness. Since this is not a cause and effect measure, one can only conjecture as to whether this difference would not arise from the task orientation necessary in the field of Agriculture.

The final factor on which the two Colleges differed significantly was that of Social Form. Arts and Sciences students felt they did not have ample opportunities for the development of social skills of a forml nature. Students in Agriculture did not display a similar need.

This finding does not appear to contradict the present conception of the type of students each College would attract.

It should be noted that one interesting result of the comparison of the two Colleges is that they did not differ significantly in the area of Vocational Climate. The items in this factor emphasize practical, applied activities, the rejection of aesthetic experience, and a high conformity in the students relations to the faculty. This finding is not at all consistent with the notion that Agriculture is a highly Vocationally motivated area, and Arts and Sciences a broadening educational experience, less vocationally oriented. This finding certainly deserves further scrutiny and further research.

Table VI presents the findings from the comparison of the College of Business with the College of Agricultre. The sample perceived the environments differently on only two factors, Play-Work and Level of Aspiration.

The measure of the level of aspiration as viewed by the subjects from Business and Agriculture differed at the .Ol level of significance. The students from the College of Agriculture felt they had fewer opportunities to participate in the decision-making processes than did the Business students. Business also felt that the College encourages students to set higher standards for themselves than did students from Agriculture. The sample group from the College of Business also felt the Administration of the school was receptive to change and innovation. Agriculture students felt the administration was less receptive to change and innovation, and that a student's effort in this direction made little impact on his environment.

A second area of difference between the two Colleges is the factor

TABLE VI

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
BUSINESS AND AGRICULTURE

Variable and Source of Variance	Means	Variance Estimate	F
Aspiration			
Agriculture	88.69		***
Business	205.55	66361.34	38.98
Intellectual Climate			
Agriculture	-66.92		
Business	61.91	46499.98	N.S.
Student Dignity			
Agriculture	66.14		
Business	-39.94	87589.92	N.S.
Academic Climate	·	* . '	•
Agriculture	77•37		
Business	89.33	54283.99	N.S.
Academic Achievement			
Agriculture	41.27		
Business	164.05	82342.84	N.S.
Self-Expression			
Agriculture	216.00		
Business	351.83	138595.54	N.S.
Group Life			
Agriculture	236.29		
Business	301.36	60935.93	N.S.
Academic Organization			
Agriculture	196.97	0.0	
Business	172.38	29866.21	N.S.
Social Form	•	e e	
Agriculture	235.84		
Business	274.27	42352.69	N.S.
Play-Work			1 -
Agriculture	183.89		**
Business	326.97	33100.41	11.72
Vocational Climate			
Agriculture	241.67		
Business	217.97	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

described as Play-Work. The difference was found to be significant at the .05 level. The subjects from the College of Business expressed the idea that a great deal of freedom existed in the areas of risktaking, impulsiveness, and general play. Their high score in this area depicts ample opportunities for participation in what is commonly called the "Collegiate Life," and a desire for this opportunity.

An analysis of the comparison between the Colleges of Engineering and Agriculture is presented in Table VII. The Colleges differed at the .Ol level of significance on two factors, Level of Aspiration and Group Life. They also differed at the .O5 level in the area of the Academic Climate.

In regard to the level of aspiration that exists in the two Colleges, Agriculture felt their College set very high standards to be met. The Engineers felt the standards of expectation were inadequate. The Engineering students also felt they were involved in a process of regimentation, and had little, if any, voice in decision-making processes involving the administration of the school.

This feeling of regimentation on the part of the engineers might well be accounted for by the fact that they have limited breadth in course selection. The engineering curriculum has undergone a somewhat broadening of experience phase, but the sample studied felt this is still insufficient.

Academic Climate is a factor which stresses academic excellence in staff and facilities in the areas of natural sciences, social sciences, and the humanities. Dissatisfaction with the current climate was exemplified by the engineering samples' replies. The students in Agriculture did not show this dissatisfaction.

TABLE VII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
ENGINEERING AND AGRICULTURE

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Agriculture	88.69		**
Engineering	4.41	66361.34	22.18
Intellectual Climate			
Agriculture	-66.92		
Engineering	-185.62	46499.98	N.S.
Student Dignity			
Agriculture	66.14		
Engineering	-62.83	87589.92	N.S.
Academic Climate			
Agriculture	77.37		**
Engineering	-100.18	54283.99	13.42
Academic Achievement			
Agriculture	41.27		
Engineering	-53.72	82342.84	N.S.
Self-Expression			
Agriculture	216.00		
Engineering	-108.04	138595.54	N.S.
Group Life			
Agriculture	236.29		***
Engineering	12.67	60935.93	17.00
Academic Organization			
Agriculture	196.97		
Engineering	92.74	29866.21	N.S.
Social Form			
Agriculture	235.84		
Engineering	126.37	42352.69	N.S.
Play-Work			
Agriculture	183.89		
Engineering	157.62	33100.41	N.S.
Vocational Climate			
Agriculture	241.67		
Engineering	238.60	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

Mutually supportive group activities among the student body and a warm, friendly atmosphere were described as missing by the Engineering students. The Agriculture students, however, felt a warm, friendly characteristic was typical of their environment.

The results indicate it would appear that a commonality of background and a sharing of problems would be more typical of students of
Agriculture than would the multi-facets of engineering. A question
that remains unanswered, however, is how does the mutual student support and friendly atmosphere affect achievement and retention?

The results of the comparisons between the environmental perceptions of the students of Education and Agriculture are presented in Table VIII. They differed significantly in terms of Level of Aspiration, Intellectual Climate, Academic Climate and Self-Expression. In all cases the Agriculture students showed more conformity and conventionality than did the Education students.

A difference significant at the .10 level appears in the area of Self Expression. The future educators feel a greater need for the development of leadership potential and self-assurance. This may well be an expression of concern and apprehension prior to being in front of a classroom day after day. It would be interesting to compare this feeling with teachers in the field to see if this feeling for greater training in these areas exists.

The two colleges differed at the .05 level of significance on aspiration and the nature of the intellectual climate. In both of these cases, the Education students felt that higher standards of aspiration should be set and that the activities designed for the student should be more scholarly in nature. In comparison with the views

TABLE VIII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
EDUCATION AND AGRICULTURE

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Agriculture	88.69		**
Education	-135.15	66361.34	13.65
Intellectual Climate			
Agriculture	-66.92		**
Education	-239.21	46499.98	11.54
Student Dignity			
Agriculture	66.14		
Education	-112.72	87589.92	N.S.
		31,50,0,2	
Academic Climate	00.70		***
Agriculture	77.37	FI-097 00	
Education	-185.45	54283.99	23.00
Academic Achievement			
Agriculture	41.27		
Education	-108.57	82342.84	N.S.
Self-Expression			
Agriculture	216.00		*
Education	-54.00	138595.54	9.51
Group Life			
Agriculture	236.29		
Education	144.12	60935.93	N.S.
	411042	00,55.75	
Academic Organization	206 00		
Agriculture	196.97	20066 23	
Education	145.90	29866.21	N.S.
Social Form			
Agriculture	235.84		
Education	165.27	42352.69	N.S.
Play-Work			
Agriculture	183.89		
Education	191.81	33100.41	N.S.
Vocational Climate			
Agriculture	241.67		
Education	279.90	11790.63	N.S.
2440401011	217.70	11/0000	.,

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

of the Education students, the Agriculture students felt the level of aspiration was adequate. The Agriculture students were more content with the intellectual climate of their college.

Significant at the .Ol level was the difference between the colleges on the factor of the Academic Climate. While the Agriculture students were content in this area, the Education students felt a need for a greater stress on excellence in the natural sciences and the humanities.

The last comparison involving the College of Agriculture is that with the College of Home Economics. This comparison is presented in Table IX. It appears significant to this writer that they did not differ significantly on any of the factors measured.

Table X presents the results of the comparison of the views of the students of the College of Business with those of the College of Arts and Sciences. The two colleges differed on seven variables, all significant at the .Ol level.

The results listed in Table X show that in terms of Academic and Intellectual Climate, the two colleges differed widely. In both cases, Arts and Sciences students expressed a lesser degree of satisfaction with the stress placed on scholarly activities. The College of Business students felt an adequate amount of emphasis was being placed on the humanities, as well as the natural and social sciences.

The comparison of the two on the level of Aspiration also showed a lesser degree of satisfaction by the Arts and Sciences students.

Coupled with this desire for a higher level of aspiration for Arts and Sciences students was the feeling of a greater need for self-expression.

In this area the Business students felt their opportunities for the

TABLE IX

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES

PERCEIVED BY STUDENTS OF THE COLLEGES OF

HOME ECONOMICS AND AGRICULTURE

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Agriculture	88.69		
Home Economics	1.51	66361.34	N.S.
Intellectual Climate			
Agriculture	-66.92		
Home Economics	-125.31	46499.98	N.S.
Student Dignity			
Agriculture	66.14		
Home Economics	- 92.31	87589.92	N.S.
Academic Climate			
Agriculture	77.37		
Home Economics	- 34.48	54283.99	N.S.
Academic Achievement			
Agriculture	41.27		
Home Economics	-130.00	82342.84	N.S.
Self-Expression			
Agriculture	216.00		
Home Economics	-31.72	138595.54	N.S.
Group Life			
Agriculture	236.29		
Home Economics	180.34	60935.93	N.S.
Academic Organization			
Agriculture	196.97		
Home Economics	126.20	29866.21	N.S.
Social Form			
Agriculture	235.84		** ~
Home Economics	203.17	42352.69	N.S.
Play-Work			
Agriculture	183.89		
Home Economics	266.55	33100.41	N.S.
Vocational Climate	_		
Agriculture	241.67		e e e e e e e e e e e e e e e e e e e
Home Economics	280.03	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

TABLE X

RESULTS OF SCHEFFE TESTS COMPARING THE ENVIRONMENTAL PRESSES PERCEIVED BY STUDENTS OF THE COLLEGES OF BUSINESS AND ARTS AND SCIENCES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Arts and Sciences	-100.55		***
Business	205.55	66361.34	33.06
Intellectural Climate			
Arts and Sciences	-267.97		***
Business	61.91	46499.98	54.80
Student Dignity			
Arts and Sciences	-220.79		44.14
Business	-39.94	87589.92	N.S.
Academic Climate			
Arts and Sciences	-163.13		***
Business	89.33	54283.99	27.49
Academic Achievement			
Arts and Sciences	-177.74		***
Business	164.05	82342.84	33.22
Self-Expression			
Arts and Sciences	-147.76		***
Business	351.83	138595.54	42.89
Group Life			
Arts and Sciences	-50.40		***
Business	301.36	60935.93	47.55
Academic Organization			
Arts and Sciences	67.91		
Business	172.38	29866.21	N.S.
Social Form			
Arts and Sciences	93.97		***
Business	274.27	42352.69	17.97
Play-Work			
Arts and Sciences	246.68		
Business	326.97	33100.41	N.S.
Vocational Climate			
Arts and Sciences	239.82		
Business	217.97	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

development of leadership potential were being met.

Academic Achievement is described as course work, examinations, honors, and similar devices used to set high standards of achievement for students. Arts and Sciences students felt these procedures were not being employed; whereas, Business students felt that they were sufficiently used to meet their needs.

The students from the College of Business described their setting as mutually supportive and friendly. They also felt they had sufficient opportunities for the development of social skills. The Arts and Sciences students described these facets as missing in their environment as measured by the areas of Group-Life and Social Form.

No significant differences were found when the College of Arts and Sciences and the College of Engineering were compared. This analysis is presented in Table XI.

The Colleges of Arts and Sciences and Education differed in only one factor, that of Group Life. This difference was at the .05 level of significance and is presented in Table XII.

A difference on the factor of Group-Life as exhibited by the students from the Colleges of Education and Arts and Sciences reflects a difference of opinion regarding the friendliness of their environments. The prospective teachers felt a warmer, more supportive climate existed for them than did the Arts and Sciences students.

These results appear to be in accordance with those expected when the two groups are compared. The majority of the students in the College of Education will be enrolled in the same courses as will the Arts and Sciences students for their first two years. The difference in the Group-Life area may well be a result of the group method used in

TABLE XI

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
ENGINEERING AND ARTS AND SCIENCES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Arts and Sciences Engineering	-100.55 4.41	66361.34	N.S.
Intellectual Climate			
Arts and Sciences Engineering	-267.97 -185.62	46499•98	N.S.
Student Dignity			
Arts and Sciences	-220.79	87589.92	N.S.
Engineering	-62.83	07709.92	M.D.
Academic Climate Arts and Sciences	-163.13		
Engineering	-110.18	54283.99	N.S.
Academic Achievement			
Arts and Sciences	-177.74	90710 91	N.S.
Engineering	-53.72	82342.84	N • ₩ •
Self-Expression Arts and Sciences	- 147.76		
Engineering	-108.04	138595.54	N.S.
Group Life			
Arts and Sciences	-50.40	(00-70-0-	
Engineering	12.67	60935•93	N.S.
Academic Organization	(5.03		
Arts and Sciences Engineering	67.91 92.74	29866.21	N.S.
Social Form)		
Arts and Sciences	93•97		
Engineering	126.37	42352.69	N.S.
Play-Work			
Arts and Sciences Engineering	246.68 157.62	33100.41	N.S.
	±)/•∪≥	7,7200812	
Vocational Climate Arts and Sciences	239.67		
Engineering	238.60	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

TABLE XII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
EDUCATION AND ARTS AND SCIENCES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Arts and Sciences	-100.55		
Education	- 135.15	66361.34	N.S.
Intellectual Climate	•		
Arts and Sciences	- 267 . 97		
Education	-239.21	46499.98	N.S.
Student Dignity			
Arts and Sciences	- 220.79		
Education	-112.72	87589.92	N.S.
Academic Climate			
Arts and Sciences	-163.13		•
Education	-185.45	54283.99	N.S.
Academic Achievement			
Arts and Sciences	-177.74		
Education	-108.57	82342.84	N.S.
Self-Expression			
Arts and Sciences	-147.76		
Education	- 54.00	138595.54	N.S.
Group Life			
Arts and Sciences	-50.40		***
Education	144.12	60935.93	13.72
Academic Organization	•		
Arts and Sciences	67.91		
Education	145.90	29866.21	N.S.
Social Form			
Arts and Sciences	93.97		
Education	165.27	42352.69	N.S.
Play-Work			
Play-Work Arts and Sciences	246.68		
Education	191.81	33100.41	N.S.
Vocational Climate Arts and Sciences	239.82		
Education	279.90	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

preparation for practice teaching and the common discussions of problems encountered when they return to the campus after practice teaching.

Findings for the Colleges of Home Economics and Arts and Sciences are similar to those for Arts and Sciences and Education. The results in Table XIII show this similarity.

As was the case for the Colleges of Education and Arts and Sciences, the Colleges of Home Economics and Arts and Sciences analysis shows them differing only in terms of the Group Life factor.

The Home Economics students felt they had more group feeling and that they received more help from fellow students than did the Arts and Sciences students. This difference may again be explained in terms of the group processes involving pre-practice teaching and pre-interning planning sessions. The Arts and Sciences students apparently pursue more widely divergent areas and feel the group feeling does not present itself in their endeavors.

Four areas significantly differ at the .Ol level, two at the .O5 level, and two at the .10 level of significance for the Colleges of Engineering and Business. The eight areas of difference are presented in Table XIV.

Encouragement for students to set high standards for themselves is exhibited by the responses of the College of Business students. Engineering students felt they had little opportunity to participate in decision-making processes and that the college did not encourage high individual standards.

The engineers also declared a shortage of scholarly activities in the humanities, social sciences, and the arts. Business students felt attempts in this area were adequate. It must be emphasized here that

TABLE XIII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
HOME ECONOMICS AND ARTS AND SCIENCES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Arts and Sciences	-100.55		
Home Economics	-1.51	66361.34	N.S.
Intellectual Climate			
Arts and Sciences	- 267 . 97		
Home Economics	-125.31	46499.98	N.S.
Student Dignity			
Arts and Sciences	- 220 . 79		
Home Economics	-92.31	87589•92	N.S.
Academic Climate			
Arts and Sciences	-163.13		
Home Economics	-34.48	54283.99	N.S.
Academic Achievement			
Arts and Sciences	-177.74		
Home Economics	-130.00	82342.84	N.S.
Self-Expression			*
Arts and Sciences	-147.76		•
Home Economics	-31.72	138595•54	N.S.
Group Life			
Arts and Sciences	- 50.40		***
Home Economics	180.34	60935.93	17.68
Academic Organization			
Arts and Sciences	67.91		
Home Economics	126.20	29866.21	N.S.
Social Form			
Arts and Sciences	93•97		•
Home Economics	203.17	42352.69	N.S.
Play-Work			
Arts and Sciences	246.68		
Home Economics	266.55	33100.41	N.S.
Vocational Climate			
Arts and Sciences	239.82	<u>.</u>	
Home Economics	280.03	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

TABLE XIV

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES PERCEIVED BY STUDENTS OF THE COLLEGES OF ENGINEERING AND BUSINESS

Variable and Source of Variance	Means	Within Group Variance Estimate	, F
Aspiration			
Business	205.55		**
Engineering	4.41	66361.34	11.94
Intellectual Climate			
Business	61.91		***
Engineering	-185.62	46499.98	25.82
Student Dignity		101772	
Business	- 39•94		
Engineering	- 62.83	87589.92	N.S.
	· 02 • 0 <i>)</i>		
Academic Climate Business	QO 77		**
Engineering	89.33 -110.18	54283.99	14.36
9 9	-110.10	, , 120, 17	1100
Academic Achievement	761.00		*
Business	164.05	82342.84	11.28
Engineering	- 53•72	02542.04	11.20
Self-Expression			
Business	351.83	3-0-a	***
Engineering	-108.04	138595.54	29.89
Group Life	•		
Business	301.36		***
Engineering	12.67	60935.93	26.79
Academic Organization			
Business	172.38		
Engineering	92.74	29866.21	N.S.
Social Form			
Business	274.27		*
Engineering	126.37	42352.69	10.12
Play-Work		•	
Business	326.97		***
Engineering	157.62	33100.41	16.97
Vocational Climate Business	217.97		
Engineering	280.03	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

though students describe scholarly activities as being held to a minimum, it does not necessarily follow that this is expressing a desire that these activities be increased. It is merely a description of what does exist. Any measure of desired change can only be speculated.

Potential Leadership development and opportunities for selfassurance are described as very much present by the Business students.

Opportunities for development of these traits is described as lacking by the students in the College of Engineering. These students further describe their environment as lacking in friendliness, in opportunities for the development of the formal social graces, and in occasions for participation in the playful side of college life.

Business students describe their college as being very high in stresses related to academic excellence, and that the course work and examinations are some of the factors that stress individual academic excellence.

The only areas in which the two colleges did not differ were in the factors of Student Dignity, Academic Organization, and the Vocational Climate. Students from both colleges felt there was a high degree of organizational structure present; the vocational climates were viewed as similar; and adequate provisions were made to preserve student freedoms.

An analysis of the responses of the students enrolled in the Colleges of Business and Engineering resulted in significant differences on six variables. Of the six, five are significant at the .Ol level, and one at the .10 level. The findings are presented in Table XV.

Comparing the responses of the students from the College of

TABLE XV

RESULTS OF SCHEFFE TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
EDUCATION AND BUSINESS

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Business Education	205.55	66361.34	***
	-135.15	00301•34	30.11
Intellectual Climate Business	61.91		***
Education	239.21	46499.98	33.57
Student Dignity			
Business	-39.94		
Education	-112.72	87589.92	N.S.
Academic Climate	0-		
Business Education	89.33 -185.45	54283.99	*** 23.94
	-107.47	54205.99	∠J•9 4
Academic Achievement Business	164.05		***
Education	108.57	82342.84	15.55
Self-Expression			
Business	351.83		***
Education	-54.00	138595.54	20.46
Group Life			
Business	301.36		
Education	144.12	60935•93	N.S.
Academic Organization	0		
Business Education	172.38 145.90	29866.21	N.S.
	147.90	29000 •21	N.D.
Social Form Business	274.27		
Education	165.27	42352.69	N.S.
Play-Work			
Business	326.97		$x_{k,j} = x_k \cdot \mathbf{x}_k$
Education	191.81	33100.41	9.49
Vocational Climate			
Business	217.97		
Education	279.90	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

Business with those enrolled in the College of Education, the writer found a significant difference at the .Ol level for the factors of Aspiration and Intellectual Climate. On the factor level of Aspiration, the Business students indicate that the College encourages students to set high standards for themselves. In terms of the Intellectual Climate, they describe it as lacking in specific staff and plant devoted to scholarly activities in the humanities, arts, and social sciences. The description provided by the students enrolled in the College of Education is a complete reversal from that of the College of Business students on the two factors.

Self-Expression is described as the opportunities offered to the student for the development of leadership potential and self-assurance. The students enrolled in Business feel they are given ample opportunities in this area. The College of Education students feel more emphasis could be placed on activities serving this purpose. These activities include public discussions and debates, student drama, and musical activities. The Education students expressed a need for participation in highly visible activities.

The difference between the Play-Work factor was significant at the .10 level for the Education and Business College students. Business students felt an atmosphere existed which allows for ample participation in the popular student activities not connected with the school. Education students felt this environment existed but to a lesser degree than did the Business students.

The final comparison which yielded a significant difference was that between the Colleges of Home Economics and Business. The two Colleges differed on two factors: Academic Achievement and

Self-Expression. They also differed at the .05 level of significance on Intellectual Climate, and at the .10 level on Aspiration. These findings are presented in Table XVI.

Students from the College of Business felt that their college set high standards of achievement for them and that adequate stress was placed on academic excellence in the natural sciences, social sciences, and the humanities. These responses compared with those of the Home Economics students indicate that Home Economic students felt a greater need for more emphasis on leadership training, and for more emphasis on Academic Achievement. Home Economics students felt that the course work, examinations, and resulting honors were not sufficient in setting high standards of achievement or an adequate intellectual environment.

The two differed at the .10 level in terms of the level of aspiration set for them. Those in the College of Home Economics felt that students' efforts to make an impact on their environment had a low probability of being successful. In contrast, Business students felt they had adequate opportunities to participate in decision making involving change and innovation.

The final three null hypotheses were accepted. No significant differences existed for the Colleges of Education and Engineering, Home Economics and Engineering, and Home Economics and Education. The results of these comparisons are shown in Tablex XVII, XVIII, and XIX.

Differences between the Colleges of Oklahoma State University which were statistically significant have been discussed in the preceding pages. One outstanding feature of these comparisons which has not been discussed is that concerning the Vocational Climate factor.

This factor is described as emphasizing practical and applied

TABLE XVI

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
HOME ECONOMICS AND BUSINESS

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Business	205.55		· •
Home Economics	-1.51	66361.34	10.37
Intellectural Climate			
Business	61.91		**
Home Economics	- 125 . 31	46499.98	12.10
Student Dignity			
Business	- 39.94		
Home Economics	-92.31	87589•92	N.S.
Academic Climate			
Business	89.33		
Home Economics	- 34.48	54283.99	N.S.
Academic Achievement	-		•
Business	164.05		***
Home Economics	-130.00	82342.84	16.86
Self-Expression		•	
Business	351.83		***
Home Economics	-31.72	138595.54	17.04
Group Life			
Business	301.36		
Home Economics	180.34	60935•93	N.S.
Academic Organization Business	172.38		
Home Economics	126.20	29866.21	N.S.
	120.20	a,,,,,,	
Social Form	001 00		
Business Home Economics	274.27 203.17	42352.69	N.S.
	∠∪ 7 •±/	14)/C 007	110~0
Play-Work	- 0(0-		
Business	326.97	22100 11	N.S.
Home Economics	266.55	33100.41	14 ° D °
Vocational Climate			
Business	217.97	1100 (7)	N C
Home Economics	280.03	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

TABLE XVII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
EDUCATION AND ENGINEERING

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Education	-135.15		•
Engineering	4.41	66361.34	N.S.
Intellectual Climate			
Education	-239.21		
Engineering	- 185.62	46499.98	N.S.
Student Dignity	•		
Education	-112.72		
Engineering	-62.83	87589.92	N.S.
Academic Climate			
Education	- 185.45		
Engineering	-110.18	54283.99	N.S.
Academic Achievement			
Education	-108.57		
Engineering	- 53 . 72	82342.84	N.S.
Self-Expression			
Education	-54.00		
Engineering	-108.04	138595.54	N.S.
Group Life			
Education	144.12		
Engineering	12.67	60935•93	N.S.
Academic Organization			
Education	145.90		
Engineering	92.74	29866.21	N.S.
Social Form			
Education	165.27		
Engineering	126.37	42352.69	N.S.
Play-Work			
Education	191.81		
Engineering	157.62	33100.41	N.S.
Vocational Climate			
Education	279.90	_	
Engineering	238.60	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

TABLE XVIII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
HOME ECONOMICS AND ENGINEERING

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			·
Engineering	4.41		N. G
Home Economics	-1.51	66361.34	N.S.
Intellectual Climate	- 0- 6-		
Engineering Home Economics	-185.62 -125.31	46499.98	N.S.
	<u>-</u> 12 J•31	10 199 • 90	
Student Dignity Engineering	- 62.83		
Home Economics	- 92.31	87589.92	N.S.
Academic Climate) 		
Engineering	-110.18		
Home Economics	- 34.48	54283.99	N.S.
Academic Achievement			
Engineering	- 53•72		
Home Economics	-130.00	82342.84	N.S.
Self-Expression			
Engineering	-108.04	3 = 0 = 0 = 1.	N C
Home Economics	- 31.72	138595.54	N.S.
Group_Life			
Engineering	12.67	60935.93	N.S.
Home Economics	180.34	00957.95	11.00
Academic Organization	00 17		
Engineering Home Economics	92.74 126.20	29866.21	N.S.
	120 •20		
Social Form Engineering	126.37	*	
Home Economics	203.17	42352.69	N.S.
Play-Work			
Engineering	157.62		
Home Economics	266.55	33100.41	N.S.
Vocational Climate			
Engineering	238.60	77000 (-	AT C
Home Economics	280.03	11790.63	N.S.

^{*}Significant at .10 level **Significant at .05 level; ***Significant at .01 level.

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY STUDENTS OF THE COLLEGES OF
HOME ECONOMICS AND EDUCATION

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Education Home Economics	-135,15 -1,51	66361.34	N.S.
Intellectual Climate Education Home Economics	-239.21 -125.31	46499•98	N.S.
Student Dignity		,,,,,,	
Education Home Economics	-112.72 -92.31	87589•92	N.S.
Academic Climate Education Home Economics	-185.45 -34.48	54283•99	N.S.
Academic Achievement Education Home Economics	-108.57 -130.00	82342.84	N.S.
Self-Expression Education Home Economics	-54.00 -31.72	138595•54	N.S.
Group Life Education Home Economics	144.12 180.34	60935.93	N.S.
Academic Organization Education Home Economics	145.90 126.20	29866.21	N.S.
Social Form			
Education Home Economics	165 . 27 203 . 17	42352.69	N.S.
Play-Work Education Home Economics	191.81 266.55	33100.41	N.S.
Vocational Climate Education Home Economics	279 . 90 280 . 03	11790.63	N.S.

^{*}Significant at .10 level; **Significant at .05 level; ***Significant at .01 level.

activities, the rejection of aesthetic experiences, and a high level of orderliness and conformity in the students' relations to the faculty.

No significant difference was found in any of the analyses made between the Colleges.

In terms of the description given, it would appear that Oklahoma State University has a conforming student body in terms of faculty-student relationships. The consistency of this measure throughout the six colleges indicates that the student has a clear understanding of his role and the role of the faculty in terms of the instructional program.

II. Diversity Between the Junior and Senior Classes

The differences on the factors measured have been categorized and described by Colleges. Since the students making up these colleges are of different sexes, classes, and living groups, as well as at different levels of academic success, separate hypotheses were tested to determine if the observed differences could be attributed to the College environments, or if they are merely a result of the various sub-groups.

The first of the minor hypotheses tested was that concerning the academic year of the students who made up the sample. The null hypothesis stated:

Using the analysis of variance test, there will be no significant differences in the factors of the College Characteristics Index Environmental Presses at the .05 level between those students classified as juniors and those students classified as seniors.

The null hypothesis was in part rejected as the significant differences resulted in four factors, all significant at the .05 level. These differences are presented in Table XX. Table XX shows that the juniors indicated a higher aspirational level existed than the seniors indicated existed. The juniors' responses indicated that this high level of aspiration is encouraged by introducing students to individuals and ideas likely to serve as models of intellectual and professional achievement. The seniors did not concur with the juniors on this point.

In interpreting this finding, it would be well to keep in mind that the seniors were three months away from graduation at the time of the administration of the College Characteristics Index. At this point in their education, it is probable that they are less likely to be impressionable and that they are rapidly taking on the air of personal professionalism.

The juniors in the sample did not feel that the institutional attempts to preserve student freedom and maximize personal responsibility were sufficient. The seniors, on the other hand, showed a greater satisfaction with the attempts made in this area. The stage of the student in his collegiate life here again seems to be an important consideration.

Opportunities for the development of social skills of a formal nature are measured by the Social Form Factor. Both juniors and seniors felt these opportunities existed, but the juniors expressed this feeling at a significantly higher level.

The final factor exhibiting a difference between the classes was that concerning Academic Organization. The juniors described the environment as highly structured. The seniors felt the setting was organized and structured, but not to as high a level as described by the juniors.

TABLE XX RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES PERCEIVED BY JUNIORS VERSUS SENIORS

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			-
Junior	33.76		*
Senior	-38.07	76654.64	4.17
Student Dignity			
Junior	-129.47		*
Senior	-49.59	93748.24	4.21
Academic Organization			
Junior	152.62		*
Senior	95 •3 9	30856.37	6.56
Social Form			
Junior	201.19		*
Senior	137.52	44979.92	5.58
Intellectual Climate			
Junior	-151.59		
Senior	-154.27	58579 • 72	N.S.
Academic Climate			
Junior	- 65 .0 0		
Senior	-68.00	65214.62	N.S.
Academic Achievement			
Junior	- 26 . 92		
Senior	- 29.11	93710.58	N.S.
Self-Expression			
Junior	58.52		
Senior	30 .0 8	168296.22	N.S.
Group Life			
Junior	123.21		
Senior	96.92	77126.23	N.S.
Play-Work			
Junior	232.88		
Senior	222.18	35594.65	N.S.
Vocational Climate			
Junior	259.55		
Senior	232.69	11845.68	N.S.

F = 3.84 Significant at .05 *Significant at .05 level

III. Diversity by Sexes

The eleven factors measured were tested by sexes to see if these factors differed significantly. The sexes differed on two factors, Play-Work and Academic Climate. These differences are presented in Table XXI.

In the analysis of male student and female student responses, Play-Work and Academic Climate differed at the .05 level of significance. The females expressed the existence of more opportunities for pleasure seeking and impetuousness than did the males. The men indicated that more time was spent in reflection and organization of details, and that they had fewer opportunities for the popular collegiate life than did their counterparts of the opposite sex.

The Academic Climate was viewed similarly by both sexes. They described it as placing emphasis on the humanities, social sciences, and the natural sciences. Their responses indicated that too much stress for academic excellence was being placed on these areas. The female sample felt this over-emphasis on excellence to a greater degree than did the males.

IV. Diversity Among Housing Groups

An attempt was also made to compare the sample according to their out-of-class environments; namely, their place of residence. Analyses were made whereby the three categories of housing were compared with each other. The results are listed in Tables XXII, XXIII, and XXIV.

The comparison between the students living in off-campus housing and those living in fraternity or sorority housing yielded no significant differences on any of the eleven factors. The results were the

TABLE XXI

RESULTS OF SCHEFFE TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY MALES VERSUS FEMALES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Academic Climate	. ,		
Male	-39.00		*
Female	-120.00	63735.61	5•72
Play-Work			
Male	207.19		*
Female	268.01	34788.23	5.91
Aspiration			
Male	5.14		
Female	-11.27	77891.65	N.S.
Intellectual Climate			
Male	- 147.68		
Female	- 163.00	58528.56	N.S.
Student Dignity			
Male	- 69.76		
Female	-133.84	94425.49	N.S.
Academic Achievement			
Male	- 30.65		
Female	-107.01	93366.13	N.S.
Self-Expression			
Male	32.39		
Female	- 14 . 92	169764.79	N.S.
Group Life			
Male	92.15		
Female	146.92	76622.52	N.S.
Academic Organization			
Male	129.60		
Female	117.17	31644.91	N.S.
Social Form			
Male	160.78		
Female	190.67	45797.70	N.S.
Vocational Climate			
Male	240.37		
Female	259.27	11946.39	N.S.

F = 3.84 *Significant at .05

TABLE XXII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES

PERCEIVED BY HOUSING
RESIDENCE HALLS VERSUS OFF-CAMPUS

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Academic Climate Off-Campus Residence Halls	6.50 -139.38	61248.40	* 8.47
Aspiration Off-Campus Residence Halls	7•57 - 13•74	78162.84	N.S.
Intellectual Climate Off-Campus Residence Halls	-116.07 -177.18	57744 • 56	N.S.
Student Dignity Off-Campus Residence Halls	-57.82 -100.40	94530.86	N.S.
Academic Achievement Off-Campus Residence Halls	-24.10 -78.80	94240.89	N.S.
Self-Expression Off-Campus Residence Halls	80.15 47.18	167555•13	N.S.
Group Life Off-Campus Residence Halls	132.72 103.16	77136.27	N.S.
Academic Organization Off-Campus Residence Halls	114.65 126.03	31652•93	N.S.
Social Form Off-Campus Residence Halls	181.50 161.98	46098.83	N.S.
Play-Work Off-Campus Residence Halls	227 . 49 227 . 94	35768.74	N.S.
Vocational Climate Off-Campus Residence Hall	240.17 255.73	12025.25	N.S.

^{*}Significant at .05 level

TABLE XXIII

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES
PERCEIVED BY RESIDENCE HALLS VERSUS
FRATERNITIES—SORORITIES

Variable and Source of Variance	Means	Within Group Variance Estimate	F
Aspiration			
Residence Halls Fraternities-Sororities	-13•74 7•59	78162.84	N.S.
Intellectual Climate Residence Halls Fraternities-Sororities	-177.18 -189.31	57744.56	N.S.
Student Dignity Residence Halls Fraternities-Sororities	-100.40 -151.08	94530.86	N.S.
Academic Climate Residence Halls Fraternities-Sororities	-114.27 -139.38	61248.40	N.S.
Academic Achievement Residence Halls Fraternities-Sororities	-78.80 -86.87	94240.89	N.S.
Self-Expression Residence Halls Fraternities-Sororities	-47.18 - 4.48	167555•13	N.S.
Group Life Residence Halls Fraternities-Sororities	103.16 75.04	77136.27	N.S.
Academic Organization Residence Halls Fraternities-Sororities	126.03 148.80	31652.93	N.S.
Social Form Residence Halls Fraternities-Sororities	161.98 164.19	46098.83	N.S.
Play-Work Residence Halls Fraternities-Sororities	227.94 228.19	35768.74	N.S.
Vocational Climate Residenc Halls Fraternities-Sororities	255•73 244 .2 1	12025.25	N.S.

TABLE XXIV

RESULTS OF SCHEFFE' TESTS COMPARING THE ENVIRONMENTAL PRESSES PERCEIVED BY FRATERNITIES-SORITIES VERSUS OFF-CAMPUS

Variable and Source of Variance	Within Group Means Variance Estimate		F	
Aspiration Off-Campus Fraternities-Sororities	7•57 7•59	78162.84	N.S.	
Intellectual Climate Off-Campus Fraternities-Sororities	-116.07 -189.31	57744•56	N.S.	
Student Dignity Off-Campus Fraternities-Sororities	-57.82 -151.08	94530.86	N.S.	
Academic Climate Off-Campus Fraternities-Sororities	6.50 -114.27	61248.40	N.S.	
Academic Achievement Off-Campus Fraternities-Sororities	-24.10 -86.87	94240.89	N.S.	
Self-Expression Off-Campus Fraternities-Sororities	80.15 -4.48	167555•13	N.S.	
Group Life Off-Campus Fraternities-Sororities	132.72 75.04	77136.27	N.S.	
Academic Organization Off-Campus Fraternities-Sororities	114.65 148.80	31652•93	N.S.	
Social Form Off-Campus Fraternities-Sororities	181.50 164.19	46098.83	N.S.	
Play-Work Off-Campus Fraternities-Sororities	227.49 228.19	35768.74	N.S.	
Vocational Climate Off-Campus Fraternities-Sororities	240.17 244.21	12025.25	N.S.	

same for the comparison of students living in fraternity or sorority housing and those living in residence halls.

A difference significant at the .05 level on the Academic Climate factor appeared for the off-campus housing and residence hall groups. The students living off-campus showed a greater interest in the humanities and social sciences than did the residence hall group. The residence hall students felt too much emphasis was being placed on academic excellence. The residence hall group showed a greater concern for grades, a concern that may well explain their description of over-emphasis on excellence. The off-campus group did not share the concern for grades.

V. Diversity According to Grade Point Average

The sample was also subdivided into three groups according to their over-all grade point average. One-third of the sample had a grade point average of 2.35 and below; another one-third had an over-all grade point average of 2.36 to 2.59. The final one-third of the total sample had a grade point average of 2.60 and above. All combinations of the three were tested on the eleven factors measured with no significant differences appearing on any of the factors.

It would be expected that students enjoying differing levels of academic success would view the environment differently. This hypothesis was rejected. The results of these comparisons are presented in Table XXV.

Summary

This chapter presented some evidence of the diversity that exists

TABLE XXV

GRADE POINT AVERAGE ANALYSES BY GROUPS WITH VARYING GRADE POINT AVERAGES

Variable and Source of Variance	е	Means	Within Group Variance Estimate	F's	
Aspiration	Upper 1/3 Middle 1/3 Lower 1/3	19.41 0.36 19.81	78016.34		
Intell. Climate	Upper 1/3 Middle 1/3 Lower 1/3	-134.58 -167.40 -155.46	58635.08	N.S.	
Student Dignity	Upper 1/3 Middle 1/3 Lower 1/3	-83.78 -102.03 -87.87	95679•22	N.S.	
Academic Climate	Upper 1/3 Middle 1/3 Lower 1/3	-80.66 -52.44 -67.24	65348.04	N.S.	
Acad. Achievement	Upper 1/3 Middle 1/3 Lower 1/3	-4.89 -59.41 -103.81	93447.69	N.S.	
Self-Expression	Upper 1/3 Middle 1/3 Lower 1/3	70.87 2.56 22.35	169426.58	N.S.	
Group Life	Upper 1/3 Middle 1/3 Lower 1/3	144.53 94.62 94.56	77063.82	N.S.	
Acad. Organ's.	Upper 1/3 Middle 1/3 Lower 1/3	139.93 116.32 120.71	31703.82	N.S.	
Social Form	Upper 1/3 Middle 1/3 Lower 1/3	190.46 168.09 154.76	45972.31	N.S.	
Play-Work	Upper 1/3 Middle 1/3 Lower 1/3	229.84 220.67 233.25	35739.66	N.S.	
Vocational Climate	Upper 1/3 Middle 1/3 Lower 1/3	255.37 239.94 245.54	12035.11	N.S.	

among the six undergraduate college environments at Oklahoma State University.

The six undergraduate colleges were compared with each other.

Table XXVI presents a summary of the fifteen comparisons.

Of the fifteen comparisons made, five were found to be not significant. The comparisons which yielded no significant differences on the factors measured were: Agriculture versus Home Economics; Arts and Sciences versus Engineering; Engineering versus Education; Home Economics versus Engineering; Home Economics versus Education.

Ten of the major null hypotheses were rejected, with significant differences appearing on from one to nine of the eleven factors measured.

Table XXVII presents the mean scores for each college on the eleven factors measured. The mean scores have been plotted on Figure 1 to provide the college profiles.

Differences were also found to be significant between the following: the sexes, the juniors and seniors, and the various housing groups. These differences were significant at the .05 level, but appeared on only two to four of the eleven factors measured.

The sample was also tested to determine if the environment would be viewed differently by students with varying over-all grade point averages. This test yielded no significant differences for any of the factors measured.

TABLE XXVI
SUMMARY OF INTER-COLLEGE COMPARISONS OF PERCEIVED ENVIRONMENTAL DIFFERENCES

	Agriculture	Business	Education	Home Economics	
Agriculture		Aspiration .01*	Aspiration .05		
0		Play-Work .05	Intell. Climate .05		
			Acad. Climate .Ol		
	•		Self-Expression .10	N.S.	
Arts and Sciences	Aspiration .01	Aspiration .01	Group Life .05	Group Life .05	
·	Student Dignity .01	Intell. Climate .01			
•	Intell. Climate .Ol	Acad. Climate .01			
	Acad. Climate .Ol	Acad. Achievement .01			
	Acad. Achievement .05	Self-Expression .01		•	
	Self-Expression .01	Group Life .01			
	Group Life .Ol	Social Form .Ol			
	Acad. Organization .05				
	Social Form .05	·			
Engineering	Aspiration .05	Aspiration .05			
	Acad. Climate .05	Intell. Climate .01			
	Group Life .Ol	Acad. Climate .05			
		Acad. Achievement .10			
:		Self-Expression .Ol			
		Group Life .Ol			
•		Social Form .10			
		Play-Work .01	N.S.	N.S.	
Education	Aspiration .05	Aspiration .01			
	Intell. Climate .05	Intell. Climate .01			
•	Acad. Climate .Ol	Acad. Climate .01	•		
	Self-Expression .10	Acad. Achievement .Ol			
		Self-Expression .01		•	
		Play-Work .10		N.S.	

^{*}Numbers Represent Degrees of Significance

TABLE XXVI (CONTINUED)

	Agriculture	Business	Education	Home Economics
Home Economics		Aspiration .10		
		Intell. Climate .05 Acad. Achievement .01		
	N.S.	Self-Expression .Ol	N.S.	

TABLE XXVII

COLLEGE CHARACTERISTICS INDEX MEAN SCORES

College		Factor Mean Scores									
	Aspiration	Intell. Climate	Student Dignity	Acad. Climate	Acad. Achievement	Self Expression	Group Life	Acad. Organ.	Social Form	Play Work	Vocational Climate
Agriculture	88.69	- 66.92	66.14	77.37	41.27	216.00	236.29	196.97	235.84	183.89	241.67
Arts and Sciences	-100.55	- 267 . 97	-2 20 . 79	-163.13	-177.74	-147.76	- 50.40	67.91	93•97	246.68	239.82
Business	205.55	61.91	- 39.94	89.33	164.05	351.83	301.36	172.38	274.27	326.97	217.97
Education	-135.15	-239.21	-112.72	-185.45	-108.57	- 54.00	144.12	145.90	165.27	191.81	279.90
Engineering	4.41	-185.62	- 62.83	-110.18	- 53.72	-108.04	12.67	92.74	126.37	157.62	238.60
Home Economics	- 1.51	-125.31	- 92.31	- 34.48	-130.00	- 31.72	180.34	126.20	203.17	266.55	280.03
Total Sample	- 0.41	-152.87	- 91.46	- 66.43	- 56.51	16.36	110.70	125.39	170.90	227.79	246.77

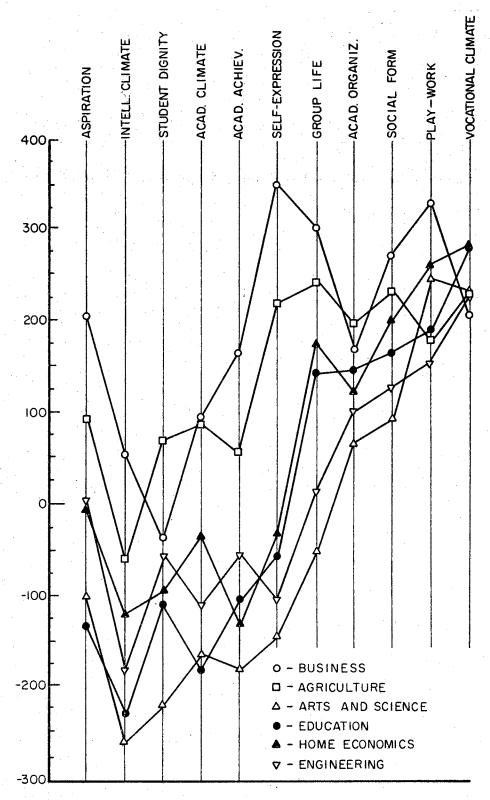


Figure 1. Mean Score College Characteristics Index Profiles by Colleges

CHAPTER V

SUMMARY AND CONCLUSIONS

Review of the Purpose and Design of the Study

This dissertation has reported the results of an investigation designed to determine whether or not a difference in the environments of the six undergraduate Colleges at Oklahoma State University exists and the extent to which the environments differ. It was felt that a better understanding of the students' perception of their environment would provide a supplement to the orientation, advisement and guidance functions carried on at Oklahoma State University. It was also felt that a measure of the undergraduate environments would lend itself to an evaluation of existing goals set for students, as well as aiding in the formulation of new objectives and goals.

The major theoretical orientation was taken from H. A. Murray (28) who introduced a taxonomy for classifying the environmental pressures brought to bear upon a person and the characteristic ways in which the individual attempts to structure the environment for himself. The environmental pressures were labeled as "press", and the individual's attempts to structure the environment were labeled as "needs". Press is reflected in the pressures, stresses, and rewards enforced by the environment, and needs are reflected in the various ways with which the individual copes with his environment.

The <u>College Characteristics Index</u>, developed by C. R. Pace and George Stern (47) is a questionnaire developed for the measurement of press of the environments, particularly the college or university environment. The items of the <u>College Characteristics Index</u> describe activities, policies, procedures, attitudes, and impressions which might be characteristic of the college setting.

The subjects for this study were selected on a random basis from the juniors and seniors enrolled for the second semester of the 1965-66 school year at Oklahoma State University.

Only one instrument was used in the data collection, the <u>College</u>

<u>Characteristics Index</u>. Other data concerning grades and place of residence were taken from University records.

Statistical tests utilized included the analysis of variance technique and Scheffe's a posteriori test of significance (41). The analysis of variance calculations were made at the Oklahoma State University Computing Center.

The hypotheses tested were broken down into five areas. The first set of hypotheses tested concerned the environments as viewed by the students from their respective college of enrollment. The remaining four sets of hypotheses were tested to see if any differences which did exist were related to a student's year in school, his sex, his place of residence, or his over-all grade point average.

A discussion in the preceding chapter has presented the disposition of each of the twenty-three hypotheses tested. In an attempt to avoid repetition only, the most important findings, conclusions, and implications are presented in this chapter.

Findings and Conclusions

- I. Diversity Among the College Environments
 - A. Five of the environmental comparisons yielded no significant differences. It can be concluded that these students viewed their environments as being similar. The college environmental comparisons viewed as being similar are as follows:

Agriculture and Home Economics

Arts and Sciences and Engineering

Education and Engineering

Home Economics and Engineering

Education and Home Economics

- B. Two comparisons showed a difference on only one of the factors, that factor being Group Life. This factor is an expression of the mutually supportive group activities of the environment.
 - 1. The College of Education and the College of Arts and Sciences:

The Education students described their environment as warmer, friendlier, and more mutually supportive than did the students enrolled in the College of Arts and Sciences.

2. The College of Home Economics and the College of Arts and Sciences:

Home Economics students described their setting as designed for student welfare and other student supportive activities, while the students from

Arts and Sciences described these as missing facets in their setting.

The students viewed their environments as similar in all other aspects.

- C. The College of Agriculture and the College of Business comparison yielded significant differences on two of the eleven factors measured. Aspiration and Play-Work.
- D. The environment was viewed differently on three factors,
 Aspiration, Academic Climate, and Group Life by the
 Engineering and Agriculture students.
- E. Two comparisons exhibited differences on four of the measured factors:
 - 1. The College of Agriculture and the College of Education:

The two colleges described their environments as differing in terms of Aspiration, Intellectual Climate, the Academic Climate, and Self-Expression.

- 2. The College of Business and the College of Home Economics: Differences were described by these two colleges in terms of Aspiration, Intellectual Climate, Academic Achievement, and Self-Expression.
- F. Differing on six of the eleven factors measured was the Business College and the College of Education comparison.

 Differences significant at the .Ol level were shown on five factors: Aspiration, Intellectual Climate, the Academic Climate, Academic Achievement, and Self-Expression. A difference at the .10 level was shown on

- the Play-Work factor.
- G. The College of Business and the College of Arts and Sciences differed at the .Ol level of significance on seven factors.

 The seven factors which these students described as significantly different are Aspiration, Intellectual Climate, Academic Climate, Academic Achievement, Self-Expression, Group Life, and Social Form.
- H. Engineering and Business students expressed a difference on eight of eleven factors measured. Differences were shown on the Aspiration, Intellectual Climate, Academic Climate, Academic Achievement, Self-Expression, Group Life, Social Form, and the Play-Work factors.
- I. The Colleges of Agriculture and Arts and Sciences expressed the greatest variances in their environments. Nine of the eleven factors measured were described as differeing significantly. They viewed their environments as similar in regard to the Vocational Climate and Play-Work factors only. In all other aspects, they described their environment as significantly different.
- J. Of the eleven factors measured, one factor, Vocational Climate, yielded no significant difference for any of the college comparisons. While no significant differences were found, it can be concluded that Oklahoma State University has a conforming student body in terms of faculty-student relationships. The six colleges' consistency on the Vocational Climate factor indicates that the students have a clear understanding of their role and the role of the faculty in

terms of the instructional program. What is unclear and unmeasured is the question of whether the students exhibit the same degree of conformity concerning the non-instructional staff, or not, and of how the student views his role in the out-of-class schema.

- K. The final conclusion drawn from the consistency of the Vocational Climate factor is that the Oklahoma State University students show a greater interest in the practical and applied phases of education and a much lesser degree of interest in the theoretical aspects.
- L. The college comparisons indicate the following:
 - 1. The environmental press expressed by the College of
 Business students is similar to that described by
 the students in the Colleges of Agriculture and Home
 Economics, but quite dissimilar to that of Arts and
 Sciences and Engineering.
 - 2. The environment of the College of Arts and Sciences is most like the College of Engineering.
 - The environment of the College of Education is most like that of the College of Home Economics and Engineering.
 - 4. The environment of the College of Business is least like the other five colleges.
 - 5. The Colleges of Agriculture and Arts and Sciences are most dissimilar.
 - 6. The students from the Colleges of Education and Home

 Economics are most similar to the other colleges. The

fact that much of the first two years' work is done in the various colleges could well acount for this similarity.

II. Diversity among the Sample by Sex, Classification, Housing, and Grade Point Average

This section summarizes the findings as analyzed by the variables tested, other than the college in which the student was enrolled.

A. Classification of Students

- 1. The juniors differed with the seniors on four of the eleven factors measured. The juniors felt a higher level of aspiration was set for them than did the seniors.
- 2. The seniors expressed a greater wish for institutional attempts to preserve student freedom and to maximize personal responsibility.
- opportunities for developing social skills of a formal nature. The seniors felt these opportunities did exist, but to a significantly lesser degree than did the juniors.
- 4. The juniors described the Academic Organization as highly structural. The seniors felt the environment was organized and structured, but to a significantly lesser degree than did the juniors.

B. Male and Female Analysis

- When the sample was tested for expressed differences by sex, they differed significantly on two factors: Play-Work and Academic Climate.
- 2. Female scores indicated they felt they had more opportunities for pleasure seeking then did the males.
- 3. Both the males and females felt too much emphasis was placed on academic excellence, but the females expressed this to a significantly greater extent than the males.

C. Analysis by Housing

- 1. The analysis of the responses of students who lived in fraternity or sorority housing and of those who lived in residence halls or in off-campus housing yielded only one significant difference, that of Academic Climate.
- 2. The off-campus group showed a greater interest in the humanities and social sciences than did the residence hall group, but the off-campus group showed a lesser concern for grades. The residence hall group felt too much emphasis was being placed on academic excellence, coupled with a high concern for grades.

D. Analysis by Grade Point Average

1. The sample was subdivided into three groups by their over-all grade point average. No significant differences were found for any of the comparisons.

- 2. The subdivisions that were made necessitate a caution in interpreting these results. The three groups may not have had a wide enough range of grade point averages to make a valid conclusion. The high, middle, and low groups had grade point averages of 2.60 and above, 2.36 to 2.59, and 2.35 and below, respectively, on a 4.0 scale.
- 3. The inference drawn here is that junior and senior students enjoying varying degrees of success view their environment similarly. To verify this statement a new study would have to be undertaken with controls such that equal proportions of the entire grade point range would be included.

Implications

The following inferences may be drawn from the analysis of the previously described data:

- 1. Environmental differences can be measured and described. These differences may or may not enhance a student's chances of success. The data presented here do not lend themselves to warrant this conclusion. However, a consciousness of environmental differences, especially in a learning situation, seems imperative.
- 2. Educators in the six undergraduate colleges can use these data as a partial measurement of environmental factors the sample perceived as present or missing in their college.

- 3. The educative process is concerned with much more than developing student satisfaction. Fulfillment of student potential will be accompanied in part with student satisfaction. The fulfillment of potential would imply that student satisfaction be carefully weighed and studied.
- that it might be beneficial to determine pre-freshman expectations of the environment, and to compare these with descriptions of what does exist for all four classes. The results from such measurements could provide us with a means of meeting student expectations, as well as information concerning how and if the environment changes as the student climbs the ladder of education.
- 5. Goals and levels of expected achievement may not be set at realistic and realizable levels. An open-minded questioning of expectations and how they are being satisfied may add to the future preparation of educational goals.
- 6. Differences in environmental conditions may be desirable.

 The information in this study is limited, but further study to provide additional information should benefit administrators, teachers, and counselors in their attempts to help students meet their educational goals.

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OFFICE OF STUDENT AFFAIRS Stillwater, Oklahoma

April 1, 1966

Dear Student:

You have been selected to be a participant in a study of the undergraduate environments at Oklahoma State University. The information that you can provide in respect to your particular college hopefully will benefit both present and future students.

The information will be collected through the use of a questionnaire concerning different facets of the college environment. This is in no way an attempt to measure your scholastic abilities, but rather it is a gathering of information that you have concerning your classes, instructors, extra-curricular activities, as well as those things which you feel are missing from your college setting.

Since only a representative sample of the Junior and Senior classes has been selected, your participation is extremely important.

Please come to Room B-3 in the basement of the Student Union on either Tuesday, April 5, or Wednesday, April 6, at either 7:00 p.m., 8:00 p.m., or 9:00 0 m. We will have three meeting times each evening to enable everyone to come at his most convenient time. It should take you no longer than thirty minutes to complete the questionnaire.

Thank you for your cooperation.

Sincerely,

Zelma Patchin

Dean of Women

Darrel K. Troxel

Assistant Dean of Men

Joseph M. Larkin

Researcher

VITA

Joseph M. Larkin

Candidate for the Degree of

Doctor of Education

Thesis: A COMPARATIVE ANALYSIS OF THE SIX UNDERGRADUATE COLLEGE

ENVIRONMENTS AT OKLAHOMA STATE UNIVERSITY

Major Field: Student Personnel and Guidance

Biographical:

Personal Data: Born in LaCrosse, Wisconsin, September 16, 1939, the son of Jerry and Berniece Larkin.

Education: Received the Bachelor of Science degree, with a major in Mathematics, from Wisconsin State University, LaCrosse, Wisconsin in June, 1962; received the Master of Science degree, with a major in Student Personnel and Guidance, from Oklahoma State University, in June, 1964; completed requirements for the Doctor of Education degree, with a major in Student Personnel - Higher Education, at Oklahoma State University in July, 1967.

Professional Experience: Counselor and Director of Mens'
Residence Hall on Dean of Mens' Staff Oklahoma State University, 1962-1964; Assistant Professor of Education and Director of Financial Aids, Stout State University, Menomonie, Wisconsin, 1966 to present. Same position for the 1967-68 academic year.

Professional Organizations: American Personnel and Guidance Association, American College Personnel Association, Phi Delta Kappa, Midwestern Financial Aids Association, Wisconsin Student Financial Aids Association