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TOWARD THE UNIVERSITY ENVIRONMENT.

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A STUDY OF THE PERCEPTIONS OF BLACK AND WHITE
COLLEGE FRESHMEN AT MICHIGAN STATE UNIVERSITY
TOWARD THE UNIVERSITY ENVIRONMENT

By

1970
Gerald A. McIntosh

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ABSTRACT

A STUDY OF THE PERCEPTIONS OF BLACK AND WHITE COLLEGE FRESHMEN AT MICHIGAN STATE UNIVERSITY TOWARD THE UNIVERSITY ENVIRONMENT

By

Gerald A. McIntosh

The purpose of this study was to assess the perceptions of black and white freshmen students at Michigan State University toward the university environment, and the influence of several variables on those perceptions. Student perceptions toward the university were determined through the use of the College and University Environmental Scales and a personal data sheet constructed by the investigator.

The population from which the sample for this study was obtained consisted of all freshmen enrolled at Michigan State University during the spring term of 1970. The sample consisted of 165 students: 70 black students and 95 white students.

The following hypotheses were tested to determine the influence of selected variables on freshmen student attitudes toward the university environment:

Hypothesis I

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of race.

Hypothesis II

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their academic success (G.P.A.).

Hypothesis III

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

Hypothesis IV

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

Hypothesis V

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

Hypothesis VI

The perceptions of freshmen students at Michigan State University toward the university environment

will not differ significantly on the basis of the racial composition of the high school they attended.

Hypothesis VII

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

Hypothesis VIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

Hypothesis IX

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of academic success (G.P.A.).

Hypothesis X

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

Hypothesis XI

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

Hypothesis XII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school they attended.

Hypothesis XIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

The following interpretations and generalizations were made as a result of this research:

1. The results of this research demonstrated a higher regard on the part of black freshmen students for the practical orientation and the scholastic environment of Michigan State University than on the part of white freshmen students.

2. Sex was not found to have a significant influence on perceptions toward the university environment in any of the group comparisons made in this study.

3. Academic success was found to be an influential variable on student perceptions only where total group comparisons were made.

4. The college major variable was significant on the total group analysis and the white student group analysis. In both of these instances, those persons enrolled

in the more technically oriented fields viewed the university more positively than did students enrolled in the social science oriented areas.

5. The socio-economic status variable was found to be significant for the total group and the black student group and not significant for the white student group.

6. The racial composition of high school variable was found to be significant for only the total group.

7. Generally, for all three of the groups analyzed, those respondents from urban areas perceived the university environment significantly more favorably than did respondents from rural areas.

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CHAPTER I

THE PROBLEM

Introduction

The history of higher education clearly points out that educational institutions, developed in response to societal needs and expectations, were directly influenced by the prevailing economic, political, and social climate in America. Furthermore, the University in the broadest sense was designed to satisfy the prevailing needs and expectations of white students who either had middle, upper-class or rural backgrounds. Few, if any, environmental changes have been made in the University to meet the needs and experiential backgrounds of black youngsters from urban areas.

This assumption is symbolically supported by the recent number, content of grievances, and demands placed upon university administrators by students designated as "disadvantaged" in major colleges and universities throughout the country. While more and more colleges and universities are actively recruiting and enrolling black and other minority group students, there has been a concomitant growth of disenchantment on the part of these students.

Cochran (27) has described today's black student in the following manner:

The "veranda" education that they received as elementary pupils remains fresh in the memory of most black college students today. That recollection, coupled with their acute desire to acquire an education relevant to the tasks they must perform in behalf of their still impoverished, still exploited community is readily transformed into displeasure over their status in higher education.

He further adds:

The reforms which we deem essential in education, however, are not limited to areas of curriculum and technique. Equally important is reform of the environment in which education is supposed to take place. Black people on university campuses do not seek separate facilities for the sake of preaching racial separatism or to seek to create a new myth of black superiority and infallibility. They do so rather because they have too often found that the oppressive white environment (oppressive in ways which most white people even now cannot seem to comprehend) prevents them from accomplishing the tasks they feel they must be about--the improvement of the lot of black people in every dimension, in every particular.

This situation exists, primarily, because university personnel have been attempting to treat the symptoms rather than the causes of disenchantment. It seems mandatory that a systematic study be made of the situation in an effort to accurately determine the causes of the problem. Consequently, the logical point of departure would be the actual students' perception of the adequacy of the university environment in which they find themselves.

Because of the investigator's concern for and interest in the academic and social life of black students, the significance of this study has a measure of personal need

satisfaction, and hopefully, will have some impact on environmental modification or "institutional change," so that the university might more adequately meet the needs of all its students.

Statement of the Problem

This study is concerned with the perceptions of black and white college freshmen toward the environment at Michigan State University. It is generally acknowledged that there are many factors involved in the perceptions of students to the university environment. However, as black enrollments increase, their demands for recognition in the university environment also increase, e.g., black studies, cultural programs, black faculty members, etc.; if stability and thereby optimal learning situations are to be maintained, the university will have to make some adjustments.

It is necessary therefore, to determine the differences between the perceptions of black and white students in relation to the environmental characteristics of their college, and the specific factors which may influence those perceptions.

Purpose of the Study

The purpose of this study is to compare a selected group of black and white college freshmen with respect to their perceptions of the university environment. Such a study can be of considerable help in developing more

effective administrative procedures and providing data to assist university personnel in more adequately meeting the needs of all university students.

Definition of Terms

Cultural Deprivation--implies a description of a child or a group of people living in a socio-economic environment which reflects an income of a certain quantity and a home condition of a certain quality and which in turn, reflects attitudes towards academic and social behavior, towards authority and of certain mores and folkways which are not acceptable to the person who is describing the group.

College Environment--a system of pressures, practices, and policies intended to influence the development of students toward the attainment of important goals of higher education.

Personal Needs--denotable characteristics of individuals, including drive, motives, goals; etc.

Environmental Press--a general label for stimulus, treatment, or process variables.

Minority Group--a racial group of people who constitute a numerically small segment of the total population. In addition, are economically and politically controlled by the majority group.

Research Hypotheses

Hypothesis I. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of race.

Hypothesis II. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their academic success (G.P.A.).

Hypothesis III. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their college major.

Hypothesis IV. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

Hypothesis V. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

Hypothesis VI. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school they attended.

Hypothesis VII. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

Hypothesis VIII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

Hypothesis IX. Within the same racial group, the perceptions of freshmen students toward the university environment will not differ significantly on the basis of academic success (G.P.A.).

Hypothesis X. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

Hypothesis XI. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

Hypothesis XII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school attended.

Hypothesis XIII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

Limitations of the Study

The study is limited by the factors inherent in the use of any questionnaire. These include the difficulties in tabulating, validating, securing the complete cooperation of the respondents, and developing adequate sampling procedures.

Delimitations of the Study

The principle delimitation of this study is that it is concerned only with the perceptions of black and white freshmen students at Michigan State University. In addition, the factors of campus unrest and the investigator's race may have a significant effect upon the responses of the sampled.

Procedures Used in This Study

The population of this study consisted of the freshmen class at Michigan State University during Spring Term of 1970. Two sample groups on the basis of race were identified in five required university courses with high freshmen student enrollments. The sample groups were obtained from the total group of black and white college freshmen students at Michigan State University.

In order to adequately compare the two groups, the College and University Environment Scale, and a personal data sheet will be administered to each person in the two groups.

Organization of the Study

For the purpose of convenience and systematic consideration, this study is reported in five chapters. Chapter I presents an introduction to the study, the purpose of the study, a statement of the problem, a definition of terms, the limitations and delimitations of the study and the procedures used. Chapter II presents a review of the literature. Chapter III will be a detailed report of the methodology used in administering the Questionnaire and the procedures used in analyzing the data. The findings are reported in Chapter IV. A summary of the findings along with the conclusions and implications for further study will be presented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Within the past ten years, studies of the college environment have become an important aspect of educational research. This interest, largely, grows out of the desire to determine the effects of various aspects of the university environment on the student population.

Numerous theories have been developed about the positive or negative effects of the campus climate, i.e., teaching techniques, dormitory life, extra-curricular activities, peer group relationships, etc., on the academic and social development of college students. However, until the late 1950's, very little effort was devoted to the development of instruments and methods for proving or disproving these theories. In a relatively short period of time, many significant advances have been made toward the development of highly valid and reliable measures of college environments.

There now exists a vast number of methods for studying the college environment. Pace (71), one of the most prominent researchers in this area, discussed the major approaches in the Teachers College Record:

1. Educational approaches
2. Inventories of resources and features such as accreditation reports, directories, etc.
3. Alumni studies which usually result in an estimate of scholarly productivity or possible evaluation studies in which the emphasis is upon how well the adult behavior of former students exemplifies the ideal of an educated man, a good citizen, etc.
4. Evaluation studies emphasizing student achievement of important educational objectives such as acquisition of desired interest, attitudes and values.
5. Sociological approaches which view the college as a social system with emphasis on peer groups, role behavior and communication networks.
6. Management surveys stressing fiscal and administrative affairs.
7. Psychological approaches including personality development and individual differences within and between college student bodies and the student's perception of the college environment.

Research studies may be found that utilize these various approaches to assess the college environment. However, for the purposes of this study, only those techniques using psychological approaches will be reviewed.

The writer has chosen, for organizational reasons, to divide this chapter into four sections. The first section will present a review of studies forming the Basic Approaches for the study of college environments. The second section will present a review of unique studies which have attempted to measure perceptions of various subcultures toward the college environment. The third section will be a presentation of research completed in which the C.U.E.S. was used

as a measuring instrument. The final section will present a review of research studies related to black students and higher education.

A Historical Review of the Study of the
Measurement of College Environment

Pace and Stern (73) and other authorities in the field of college environmental measurement, credit Henry Murray with the development of the theories most instrumental in initiating efforts toward the construction of objective measures of personality. Murray's "need-press" theory is offered as an example.

In the broadest sense, the term "need" refers to denotable characteristics of individuals, including drives, motives, goals, etc. The term "press" can similarly be regarded as a general label for stimulus, treatment, or process variables.

Stern (73), using Murray's classification of needs as a model, constructed a needs inventory called the Activities Index. This instrument was the first kind to be developed, rigorously tested and validated. The basis for the instrument was the belief that a college environment may be viewed as a system of pressures, practices and policies intended to influence the development of students toward the attainment of important goals in higher education. A preliminary attempt to validate the test was conducted by administering it to 423 students and 75 faculty members at five institutions. The data revealed significant differences in the press of different college environments. The instrument appeared to be promisingly reliable

and valid. Its use (or the use of similar instruments) makes possible an increase in the understanding of ways in which institutions make their impact upon students and their effectiveness.

Another early researcher in the field, Thistlewaite (87), developed the College Press Scales. These scales are divided into two groups--faculty press scales and student press scales. Thistlewaite's purpose was to identify items and item combinations which were related to a criterion index--namely, the institutions production of future doctorates in the Natural Sciences, Arts, Humanities, and Social Sciences. The purpose of this instrument was to describe those aspects of the environment which were related to scholarly productivity.

Astin and Holland (6), in 1961 developed the Environmental Assessment Technique which focuses on the personal orientation of the collective student body as a way of determining the characteristics of the college environment.

In 1951, Wispé (97) completed some significant research that compared the value of student-centered group instruction to subject-matter-centered group instruction methods. The results revealed no significant differences between the two methods. It, therefore, appeared that the success of the learning process might depend upon the best combination of teaching technique and student need.

Eddy (32), in 1959, after examining data from interviews and participant-observer notes at 20 colleges, conducted a study that stressed the importance of the over-all college climate. He suggested that in small, homogeneous colleges, standards were influenced strongly by the total community; on the other hand, in more diversified colleges, students sought out smaller reference groups. He concluded a college has the greatest impact on its students when its components reinforced the major college goals.

In 1956, Hemphill (46) developed a questionnaire for specifying the characteristics by which differences among groups may be described. Upon obtaining the descriptions of 19 college departments by 130 faculty members in one university, the following characteristics were dominant: stratification, potency, participation, and hedonic low. They also tended to be low in homogeneity, permeability, control, and viscosity.

Pace, one of the original authors of the College Characteristic Index (C.C.I.), has completed further research resulting in the refinement of the previous instrument into a new instrument. It is called the College and University Environment Scales, Second Edition (C.U.E.S.11) and was chosen for use in this study. A complete description will be presented in the third section of this chapter.

A Review of Studies Forming the Basic Approaches
for the Study of College Environments

As previously stated, the most significant research conducted in the area of college environment analysis has been completed since the middle 1950's. Numerous designs have been developed for this purpose. However, in this section, only those designs which have had wide use and indicate promise for future study will be reviewed.

According to Stern (81), much of the theoretical groundwork for the study of college environments was laid by H. A. Murray (1938) when he developed and introduced a "taxonomy" for classifying the environmental pressures and the characteristic ways in which an individual strives to structure the environment himself.

He called the external pressures press, their internal counterparts needs. Both needs and press are inferred from characteristic activities and events, the former from things that the individual typically does, the latter from things that are typically done to him in some particular setting.

From this theoretical base came the initial work of Stern, Stein, and Bloom (84) which was an attempt to study the relationships between situation, personality and learning. This initial study acted as a catalyst for further research in this area.

A survey of the literature has revealed several major college environmental studies that will be reviewed in this section as background for the discussion of research projects involving the C.U.E.S. in the next section of this chapter.

The College Characteristics Index
and the Activities Index

The C.C.I. and A.I. are perhaps the most widely used instruments designed to measure the characteristics of the college environments as it relates to need (students) and press (institution). These instruments were developed, primarily, because of the interests of Stern in personality assessment, and Pace, in the area of evaluation and measurement in higher education.

The Activities Index was prepared originally by Stern (81) in collaboration with B. S. Bloom, M. I. Stein, and H. Lane for use in the Chicago studies of student personality assessment. The instrument is made up of 300 items describing commonplace daily activities, distributed among 30 scales of ten items each, to which the individual records his likes or dislikes.

The College Characteristics Index, developed in collaboration with C. R. Pace, had a design similar to that of the Activities Index. The items, however, describe activities, policies, procedures, attitudes, and impressions that could be characteristic of various types of undergraduate college settings.

Pace (71), as a result of research conducted at San Francisco State College in the 1959-1960 academic year, lists the following environmental characteristics for that college:

Intellectual-Humanistic-Esthetic

1. Interest in poetry, music, painting, sculpture, etc.
2. Library with paintings and phonograph records which circulate widely.
3. Many opportunities for students to understand and criticize art, music, and drama.
4. A lecture by an outstanding literary critic would be well attended.
5. One need not be afraid of expressing extreme or unpopular views.
6. There are many opportunities for individual creative activity.
7. In class discussions, papers and exams, the main emphasis is on breadth of understanding, perspective, and critical judgement.
8. Most professors are thorough teachers and really probe into the fundamentals of their subject.

Independent-Scientific

1. The library is exceptionally well equipped with journals and books in the Natural Sciences.
2. Laboratory facilities in the Natural Sciences are excellent.
3. The students represent a great variety in nationality, religion and social status.
4. The history and traditions of the college are not emphasized.
5. Many famous people are brought to the campus for lectures, concerts, etc.
6. Student grades are not reported to parents.
7. Students have adequate time for personal privacy.
8. Students do not need a written excuse for class absence.

Status-Oriented-Practical

1. Freshmen do not have to take orders from upper-classmen.
2. Student leaders do not have special privileges.
3. Students are not expected to report violations of rules.
4. Student elections do not generate much campaigning or feeling.
5. Psychology courses deal in a practical way with personal adjustment and human relations.

Group Welfare

1. Students are encouraged to be independent and individualistic.
2. Not much enthusiasm is aroused by fund drives for campus chest, Care, Red Cross, Refugee Aid, etc.
3. There is a student loan fund which is very helpful for minor emergencies.
4. The professors seem to have time for conversation with students.

In 1966, Stern (83) administered the C.C.I. to 3,000 freshmen entering four dissimilar colleges, finding that they were quite realistic in their idea of the degree of freedom expected at their prospective college choices. However, they were extremely idealistic in areas of intellectual, social activities and self-expression.

Cohen (28) administered the A.I. to 3,000 persons and the C.C.I. to 3,400 persons at 55 colleges to determine the interaction of personality needs of students and environmental press. Five factors emerged from this study--self-expression, intellectual, nurturant, vocational, and collegiate.

McFee (62), in an effort to determine the relationship between student personality needs and college environmental press, obtained responses from 100 students enrolled in introductory psychology courses at Syracuse University. He found no correlation between scale scores of individuals on the C.C.I. and their parallel scores on the A.I.; nor did he find strong relationships between personality need and the student's perception of environmental press.

The College Characteristic Index has also been used in longitudinal studies to determine the change, if any, of student perceptions. In 1962 Johnson and Kurpius (52) administered the C.C.I. to 99 freshmen and 61 juniors at the University of North Dakota. The study dealt with the perceptions of students toward the intellectual and non-intellectual emphasis at the university. In 1964, 151 freshmen and 41 juniors were again administered the C.C.I. The juniors in the latter group were freshmen in 1962. Freshmen in both groups perceived a greater emphasis on intellectual climate than did juniors, but the difference was less in 1964. The 1962 freshmen who re-evaluated their perceptions in 1964 saw less intellectual emphasis in 1964 than they did in 1962. Compared to juniors in 1962, the juniors in 1964 perceived greater emphasis on intellectual environment since upper-classmen generally tend to perceive less emphasis than freshmen.

Ivey (41) found at Colorado State University, from responses to the C.C.I., that between students, dormitory head residents and student personnel workers the difference was greatest between head advisors and students in relation to their perceptions of the college environment. The students perceived the environment as being more vocationally-intellectually oriented, academically more structured, and the provision of more opportunity for freedom.

In comparison to personnel workers, students felt that the college provided more opportunity for self-assurance, leadership, decision-making, and greater standards of academic achievement.

Seymour (80) compared the responses of 360 college-bound high school seniors and their counselors on the C.C.I. to those of 210 students of four colleges in St. Louis, to determine the reality of the perceptions of high school seniors and high school counselors. He found that:

1. The counselors tended to be more extreme with their perceptions of intellectual and social environments than the students attending particular colleges.
2. Counselors over-estimated the academic challenge at two higher rated schools, and were very negative in their perceptions of the other two schools.
3. Counselors perceived the vocationally-oriented school as being more restrictive than it actually was, and viewed the intellectually oriented college as a party

school even though students attending the college felt their social life was not pronounced.

4. The high school students tended to exaggerate the intellectual climate of all four schools, but did not have as extreme attitudes as counselors.

Stricker (85), in an attempt to measure the inter-relationships of the Activities Index and College Characteristics Index scores, administered them to 379 freshmen and 442 upperclassmen at a large university. Both tests were scored in parallel ways by reducing their 300 items to 30 scales scores. The scale scores were combined to yield first-order A.I. factors (intellectual orientation, dependency needs, emotional expression, and educability), and two second-order C.C.I. factors (intellectual climate and nonintellectual climate). It was demonstrated that each A.I. score significantly correlated with each C.C.I. score, but the magnitude of correlations showed that the factors share little common variance, indicating that the scores may be used as relatively independent measures.

Greene (39) used the C.U.E.S. and C.C.I. to examine the perceptions of 111 students of the University of Seven Seas floating campus. The scores of the two instruments were compared to the schools the students previously attended and to the National Sample Norms for the two instruments. The comparisons revealed that the students tended to have good impressions of group friendliness and

expressiveness of the floating campus, but were more critical of administrative policies, curriculum, intellectual climate and scholarship of the shipboard university.

Baker (8) gave the C.C.I. to 57 honor freshmen and 33 randomly selected nonhonor freshmen at Wisconsin State University. Those students surveyed perceived the university differently with respect to six of the thirteen C.C.I. factors. He also found that the environmental press varied according to the student's perceived needs.

Barger (9) measured 105 and 96 women freshmen and sophomore students, at the University of Florida, and found that 85 percent of those items on which students agreed reflected:

1. Perception of student closeness
2. Informality
3. Involvement
4. Variety
5. Socially oriented student culture
6. Faculty involved in research and not easily accessible to students outside class
7. Formality of student-faculty relationships

Pervin (74) had 190 Princeton University undergraduates complete the C.C.I. in May, 1964, and mailed the same instrument in June, 1964, to all accepted freshmen, to measure their expectations of Princeton. He found the expectations of entering freshmen higher on every scale of the C.C.I.

than those students already in attendance. A year later, freshmen asked to evaluate the views they had when entering, reported less emphasis on intellectual and abstract understanding, togetherness and social welfare than they had anticipated. Conversely, they reported more emphasis than expected on change, fantasied achievement, objectivity, open-mindedness, and heterosexual interests.

The Environmental Assessment Technique

This approach to the measurement of the differences between institutions was devised by Astin and Holland (6). The results of their research was initially reported in 1961 showing the principal dimensions along which institutions of higher education differ. A factor analysis using 33 variables and a large nationwide sample of 335 institutions yielded six significant factors: affluence, size, private or public support, masculinity, realistic emphasis, and homogeneity of the environment.

The research design was well planned, this approach and the instrument devised are well accepted as one method of measuring the differences in college environments. Astin (3) reported additional research which validated the E.A.T. against the C.C.I. at 36 colleges, producing eight characteristics of the student body--size, intelligence, and six "personal orientations" (realistic, intellectual, social, conventional, enterprising, and artistic).

Junior College Environmental Studies

While many studies have attempted to measure the perceptions of students, faculty members, etc. toward the college environment at four year degree granting institutions, the literature reveals few studies concerned with the environmental characteristics of the junior college or two-year institutions. Pace (72) administered the C.U.E.S. to incoming freshmen at a junior college, two small liberal arts colleges, and two large universities during orientation week. Their responses were compared with those of upperclassmen from the same institutions. Substantial differences were shown, especially on the Scholarship, Awareness, and Community scales.

The freshmen expected none of the five institutions to rate lower than the seventy-ninth percentile for Scholarship and Awareness, whereas the actual rating by upperclassmen ranged as low as the forty-third percentile for the former and twenty-first for the latter scales. On the Community scale, the freshmen expected no lower than the fiftieth percentile; the upperclassmen ranked one institution down in the twelfth. The author suggests that, "by alerting students to discrepancies as wide as these between expectation and reality, C.U.E.S. might be able to save them from considerable 'cultural shock'."

Pace (70) reports several studies conducted in 1963-1964 designed to adapt the C.U.E.S. for use in junior

colleges, and to relate junior colleges to each other as well as four year institutions. The results were:

a. The scales of Scholarship, Awareness, Community, Propriety, and Practicality were shown to be relevant but did not emerge as clear factors.

b. The two factors which did emerge were: (1) "expansion" factor which reflected broadening of awareness and scholarship, and (2) "responsibility" factor which reflected a degree of freedom and maturity realized by students and encouraged by the school.

c. Comparatively, the junior colleges scored higher on Practicality and Propriety, lower on Scholarship and Awareness and average on Community.

d. The sense of community was reported as less at the junior colleges than at residential liberal arts colleges, but much higher than large urban institutions.

Gelso and Sims (35), in an effort to determine whether the perceptions toward a residential junior college differ among commuter students, resident students, and faculty members, administered the C.U.E.S. to 106 commuters, 111 residents, and 31 faculty members of a state co-educational junior college in the South. The results of the study indicated that the perceptions of all three groups were similar. The faculty and residents ranking of the five scales were the same. Commuters ranked Propriety before Community. The faculty perceived more of the Community dimension than either student group.

Hendrix (47), in a research project, administered the C.C.I. to 297 randomly chosen students at twenty public supported junior colleges in Minnesota, Texas, and California. The students were instructed to imagine themselves in an institution where each item was true and then rate their preferences for that institution on a nine point scale. Thirty scales were factored. The correlation matrix of the five resulting factors and 300 items were rotated to identify the individual items most highly related to the five factors. Two factors survived rotation--social conformity vs. social and intellectual independence and stimulation, and unipolar, describing a stereotyped "Rah, Rah" college. Dichotomizing the factors produced student types: gregarious-conservatives, gregarious-independents, loner-conservatives, loner-independents.

Richards and Braskamp (75) conducted a study of 102 junior college environments by cataloging characteristics of the institutions into six categories: Private financial control, Conventionalism (related to the age of the institution), Transfer emphasis, Business orientation, Size, and Technological specialization. Students entering two-year colleges were influenced more by practical than intellectual or social consideration in choosing a college, and were concerned more with the instrumental value of education for higher income than with personal intellectual development.

Butler (24) selected a random sample of students at both the junior college and university level to try and determine if the needs or perceptions of environment for junior college students differed from those of university students. The subjects completed the C.C.I. and the A.I. The junior college climate was perceived as providing less encouragement for leadership and self-assurance, and less exposure to diversity of experience, such as faculty, public discussion and innovation. On the non-academic scale, the university was considered more collegiate because of its extra-curricular activities, group spirit, etc.

The results suggested a need for increased student personnel services at the junior college to provide more opportunities for personal and social development.

College Environment and the Development of Talent

A new approach to the study of differences in college environment and its effects was developed and tested by Thistlewaite (86). In 1958-59 he selected a sample of 916 National Merit Scholars and certificate winners currently studying at 36 colleges and universities. The main instrument used was the College Characteristics Index. Students were asked to recall what their expectations were for college environments at the time they entered college and also what their perceptions were as experienced members of the student body. He reports the following results:

1. The press of different colleges vary considerably.
2. Expectations held for the college environment are consistent with the perceived college press.
3. College environment is an important factor in the student's motivation to seek advance intellectual training.

Astin (5) challenged Thistlewaite's research methods and statistical treatment of data. He believed that student recall of expectations could not be used as valid data because of the influence of actual college attendance. In an attempt to answer these charges, Thistlewaite (88) reported additional research in a study of 2,405 undergraduate men students at 140 institutions across the country. He reported that there was no evidence to dispute his previous results. An additional refinement of the data revealed that male students who report that their teachers who exert weak press for compliance tend to raise their aspirations for advanced intellectual training more than male students who do not report such a press.

Astin (4) subjected his original research and that of Holland at 36 institutions to further study, to determine the part the undergraduate's educational experience played in stimulating him to go on for the Ph.D. degree. The results were that the variation in Ph. D. productivity appears to be as much a function of difference among the students themselves as to the motivational effects of the college environment.

Holland (48, 49) studied students' explanations of college choice and parental expectations about college. In answer to a question about what aspects of a college made it "best," parents of National Merit Scholars listed quality of faculty, scholastic standards, curriculum, reputation, and facilities. In the actual choice of college, practical and financial factors were of substantial influence, academic factors played a moderate secondary role.

Heist (44) made use of data from the total scores on the American Council of Education Exam for a representative sample of more than 1,850 institutions in American Higher Education and from a project conducted in cooperation with the National Merit Scholarship Corporation.

The results clearly pointed out a great deal of diversity between students in American Higher Education, accompanied by an implied lack of variety in the facilities, programs and educational procedures. This diversity was demonstrated by: (1) reviewing the range of academic ability within institutions and the variation in mean scores among institutions and the selected sub-classifications of institutions, and (2) by presenting differences in personality characteristics among select and supposedly rather homogeneous groups of students of superior ability-classified schools attended.

Faculty Perceptions

Boyer and Michael (19) administered the C.U.E.S. to 278 faculty members and 278 seniors at seven small colleges. The impressions of both groups were in close accord on all items. When the results of the study were compared with four well-known colleges, the average percentile ranking of the seven small colleges (religiously-oriented) was somewhat higher in Practicality, much higher in Community, slightly lower in Awareness, much higher in Propriety and average in Scholarship. Those surveyed appeared to have strong senses of Community feeling and Propriety.

Eckert, Stecklein and Sagen (31), in a research project involving college faculty members, found that personal interest and motivation were influential in attracting people to college teaching--interest in the subject matter, the intellectual challenge of the job, or the desire to work with college students. Half the sample of faculty members studied felt that they had come into the profession more or less by accident. The authors, in addition, found that a majority of college teachers came from low socio-economic backgrounds.

Lazarsfeld and Thielens (55), in a study of reactions of social science faculty members in 165 colleges to matters of academic freedom, analyzed their data in numerous ways to reveal relationships among institutional characteristics. They found, for example, that conservative teachers were

more oriented toward the institution which employed them, whereas permissive teachers (meaning critical-minded and tolerant of new ideas) were more oriented toward the profession at large. Permissive teachers were more likely to be productive scholars; the better the college, and more of its teachers were permissive. Also, the better the college, the better its administration protected the faculty.

In an analysis of manifest and latent social roles, Gouldner (37, 38) described faculty members as cosmopolitans and locals. Cosmopolitans were low on loyalty to the organization, high on commitment to their special skills, and tended to have an outer-reference group orientation.

Other Research Studies Concerned with the Measurement of the College Environment

There are a considerable number of research projects completed and reported since approximately 1960 which have dealt generally with the student's perception of the college environment as a member of the student body at a specific college, and the effects of the student's perception on academic achievement or other variables. These projects represent a wide variety of methods and consequent results that exemplifies the increased interest in the study of college environments. It seems highly desirable to point out the methods and the results of those attempts at this time.

Hassenger (43) administered three measures of college environment C.U.E.S., and E.A.T. to a cross-section of American Catholic Colleges. Those institutions surveyed indicated great variations in academic and social atmospheres, thus discouraging generalizations. They were, however, generally below the norms in encouragement of academic excellence, scholarship, cultivation of personal, political and psychological "soul-searching." They were also generally above the norms in encouragement of group and community loyalty, social consideration, conformity, and caution.

Weiss (95) also used the C.U.E.S., C.C.I., and E.A.T. to measure the kind of influence a college campus produces.

On the C.C.I., the eight Catholic colleges surveyed tended to be high in group life, academic organization and social form, indicating a strong group spirit with emphasis on orderliness and mannerliness. They showed a wide range on measures of student dignity and academic climate while they tended to be low on aspiration level and intellectual climate.

On the C.U.E.S., the 27 Catholic colleges surveyed tended to be low on Awareness. The women's colleges were very high on Community and Propriety, while the men's colleges and those awarding only undergraduate degrees were low on Awareness, Propriety, and Scholarship.

On the E.A.T., as a group the 178 Catholic institutions surveyed were slightly above average in selectivity, conventional enterprising, and realistic orientation. Women's and co-educational colleges tended to be high in conventional and enterprising orientations, while the men's college showed the opposite tendency. Those institutions with enrollments over 5,000 and those colleges awarding Ph.D's, tended to be high in selectivity and conventional and enterprising orientations, and low in artistic orientation.

Creager (29) factor analyzed the 70 variables used in describing 244 four-year colleges and universities from an earlier series of studies (Astin, 1965 and 1967) to study the relationships among the groups of variables: administrative, environmental assessment, freshmen input factors, college environment factors, image factors, and Ph.D.-B.A. origins.

The six major factors that emerged were drinking versus religiousness, masculinity-femininity, size, Roman Catholic affiliation, realistic orientation, and rate of cheating.

In 1958-59, Birney and Taylor (15) conducted a study at Amherst College, by randomly sampling 57 senior students, to establish the various behavioral and attitudinal patterns which distinguish between these students. The results suggest that the main variables in effect were those of

ability, talent, orientation to college, and reinforcement patterns provided by the college. By the senior year these variables seem to constitute stable patterns of behavior.

Nunnally, Thistlewaite, and Wolfe (66) used freshmen and sophomores at the University of Illinois to redefine, through factor analysis, a set of independent dimensions which might account for the interrelationships between items in the Inventory of College Characteristics. The results were a set of factored scales that permits a reduction in redundancy and assistance in identifying new dimensions for describing effective learning environments. There are a dozen factors related to student perceptions of college environments.

1. Systematized energy of faculty
2. Toughness of lectures
3. Availability of faculty to students
4. Interestingness of lectures
5. Faculty interest in Arts and Humanities
6. Vocational emphasis
7. Intellectual drive of students
8. Personal appearance and manners
9. Competition
10. Science interest
11. Pressure against scholarly activities
12. Interest in visiting speakers

Nichols (65) compared a group of National Merit Scholarship finalists (432 men from 104 different colleges and 204 women from 86 different schools) on the basis of the 16 Personality Factor Questionnaire, the Holland Vocational Preference Inventory, and 10 personality scales at the time of graduation from high school and shortly before entering college in an effort to study the effects of college environments on the personality of students. The results were:

1. Scores on Vocational Preference Inventory generally decreased as vocational interests became more specific.
2. Personality scales showed a general decline in super-ego strength and deferred gratification, with an increase in tolerance for ambiguity.
3. Extroversion increased for students attending affluent institutions (both sexes) and anxiety increased for students attending colleges with realistic curricula (engineering, agriculture, etc.).
4. Super-ego strength was not significantly affected by specific college environments.
5. Attendance at affluent institutions was related to increased dominance in women.

A four-year longitudinal study was conducted by Bauer (11) that utilized interviews, autobiographies, participant-observer reports and information from university files on 60 men and women undergraduates at a large

co-educational institution, to determine what sociological factors affect education in a college environment. The following factors were found to most influence socialization:

1. Housing group, i.e., fraternity and sorority houses, dormitories and off-campus quarters.
2. Parental values and opinions.
3. The assignment of honor students to small honor classes.

Lehmann (56) found as a result of administering the Inventory of Beliefs, the Test of Critical Thinking, the Differential Values Inventory, the Dogmatism Scale, and an Experience Inventory to 1051 students as freshmen and again as seniors to determine changes in critical thinking ability, stereotypic beliefs, dogmatism, and values. He found that: (a) there is a significant decrease in stereotypic beliefs and unreceptivity to new ideas, (b) seniors are more "outer-directed" than they were as freshmen, (c) there is a significant improvement in critical thinking ability, and (d) seniors are not more homogeneous in certain attitudinal traits than freshmen. It was also shown that most of the changes took place during the freshman and sophomore years.

In another study conducted at Michigan State University in 1958, Lehmann (57) again studied 92 percent of entering freshmen who differed in (a) religious preference,

(b) size of home community, (c) type and size of high school attended, (d) nativity of parents, (e) level of father's and mother's education, and (f) father's primary occupation. The results clearly pointed out that there are significant socio-cultural differences in attitudes and values.

Chickering (25), in a study of the relationship between institutional characteristics and student personality at 13 small colleges, found high correlations between institutional characteristics and student personality.

a. Students with conservative religious beliefs attended schools with similar emphasis.

b. Altruistic students attended church-related schools where service was emphasized.

c. Students who scored highest on intellectual interest sought out schools varying from traditional patterns.

d. Students reluctant to express impulse attended colleges with many regulations and close supervision.

In another study, Chickering (26) administered the experience of college questionnaire to random samples of students at four colleges participating in the project on student development. Responses were obtained from 80 to 193 students at the colleges and were compiled in the categories of mental activities in class, mental activities in studying for courses, role of the teacher, reasons for studying, feelings about courses, patterns of work, and

average number of hours spent studying, reading and watching television.

Mental activity in studying was keyed to the nature of the class: where listening and note-taking predominated, memorization predominated; where teachers primarily disseminated information, students seldom synthesized, applied or questioned. In classrooms using dialogue, teachers were often co-learners and resource people. Where lecture and discussion were used equally, teachers were more apt to combine information giving and dialogue with creative individual methods. Student classroom participation tended to lead to motivation out of interest or concern, not merely to meet requirements. Students motivated intrinsically most frequently reported feeling challenged and confident and interested. At the experimental and progressive college, most students reported feeling challenged and confident. At the selective college with a highly structured curriculum, only about one-third of the students reported feeling challenged more often than rarely, but about half felt confident and interested. When fewer than two-thirds of its students feel challenged, confident, and interested, a college should analyze its curriculum and teaching methods.

Gardner (34), to determine the attitudes of students toward the university in the categories of professor-student rapport, teaching methods and procedures, and

testing procedures, used questionnaire investigation, student's opinions and attitudes. The finding indicated that there are areas on which professors could focus attention in an attempt to improve the perceptions which university students have relative to the university program. The clear indication is that professors need to strive to see situations from the point of view of the student. Perhaps student-professor planning of objectives and more exploration as to the why of certain course requirements would help undergraduates feel that their point of view is considered.

A Review of the Development of the College and
University Environmental Scales, Second
Edition and Its Use in Recent Research

The College and University Environmental Scales, First Edition, was developed by C. Robert Pace, published and copyrighted in 1963. It was designed to measure the college environment by identifying those characteristics of the college which appeared to be representative of the institutional environment. This instrument was the outgrowth of the College Characteristics Index developed by Stern and Pace in 1958.

For purposes of this study, the College and University Environment Scales, Second Edition (C.U.E.S. II) will be used. Pace (67) describes the instrument as follows:

The second edition of C.U.E.S. has the same purpose as the first edition: to aid in defining the atmosphere or intellectual-social-cultural climate as the

college students see it. The reasons for producing a second edition are three. In the first place, so many colleges and universities used the first edition that it became possible to develop new norms based on a larger and more representative number of colleges and universities across the country, and we felt that this broader base for interpreting C.U.E.S. should be made available. Secondly, we suspected that some of the original items were probably better than some others and we wanted to improve the instrument by identifying its best items and eliminating others. And, finally, we wanted to provide a basis for future revisions by introducing new items that would give a more balanced content and enable us to keep abreast of changes and trends in higher education.

The C.U.E.S. II consists of 160 items which are divided into seven scales for the purpose of analysis. The scales are identified and described by Pace in the C.U.E.S. II manual.

Scale 1. Practicality. 20 items comprise this dimension of the scale. They describe an environment characterized by enterprise, organization, material benefits, and social activities. The main emphasis in this area is the perceived orderliness of the environment.

Scale 2. Community. The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

Scale 3. Awareness. The items in this scale reflect a concern about an emphasis upon three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about world events, the welfare of mankind, and the present and future conditions of man suggests the search for political meaning and idealistic commitment. Along with this push toward expansion, and

perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of nonconformity and personal expressiveness.

Scale 4. Propriety. These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

Scale 5. Scholarship. The items in the scale describe an environment characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its sake, and intellectual discipline--all these are characteristic of the environment.

Scale 6. Campus Morale. The items in this scale describe an environment characterized by acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

Scale 7. Quality of Teaching and Faculty-Student Relationships. This scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest and helpfulness toward the student.

The C.U.E.S. II statements are designed to sample the general atmosphere of the institution, the social and intellectual climate and the style of life on the campus. It may be scored and analyzed by the opinion poll method of consensus of opinion or by statistical methods using group mean scores and standard deviations.

The validity of the C.U.E.S. scores obtained from specific colleges with scores on the Productivity Indexes developed by Thistlewaite (86) from the same colleges. The Pearson-Product Moment Correlation Method was employed. Correlations were found to exist between the C.U.E.S. scores and other institutional features and the data is presented in the C.U.E.S. Manual (67).

Reliability of the C.U.E.S. scores was tested by the use of the Kuder-Richardson Formula 21 and the Split-halves correlated by the Spearman-Brown Formula. The reliabilities are all uniformly high and are reported in the C.U.E.S.; the investigator was unable to find any research efforts completed using the C.U.E.S.II. Therefore, this section will be devoted to discussion of research projects involving the C.U.E.S. results from different sub-groups. Pace (68) obtained the following results:

1. Scores on all scales were stable over periods of up to seven years.
2. Men and women at the same institution had similar scores on all five scales. However, women scored 3 to 4 points higher, consistently, on Community and Propriety scales.
3. Faculty generally scored one point higher on all scales except Scholarship which was four points higher.
4. All upperclassmen had essentially similar scores. Second term freshmen, consistently, scored approximately three points higher, except on the Practicality scale.

5. There was no relationship found between personality or ability measures and C.U.E.S. scores.

6. No significant differences could be found between commuter and resident students.

7. Entering freshmen scored considerably higher during orientation week than upperclassmen.

Several studies have been conducted that sample the perceptions of freshmen students prior to entering the college environment.

Pace (72) suggests the C.U.E.S. might answer the questions of "What is the college like?" and "Who should go where?" He reports:

In one study, selected seniors from three Los Angeles high schools were asked to answer C.U.E.S. according to what they expected would be true of college. A similar group was asked to answer in view of what they hoped would be true. Both sets of answers--the expected and the ideal--were nearly identical. And both differed substantially from the actual profiles of the colleges they hoped to enter.

Marks (61) designed a study to determine the degree to which students perceptions of school influenced personality and motivational factors. Five hundred seventy entering freshmen at the Georgia Institute of Technology were administered the C.U.E.S., nine personality scales, and two motivational factors are highly related and cannot always be separated.

In a study of 200 Indiana secondary school seniors who had applied for admission to Ball State Teachers College, Abbott(1) found significant differences in their

perceptions of the college environment on the basis of sex, vocational objectives, campus visitation experience, and geographical location of residence.

Berdie (14, 15) conducted two studies at the University of Minnesota using 7,000 freshman students. In the first study, which also sampled 130 parents of students in this group, it was found that expectations of the entering freshmen varied according to sex and the college entered; C.U.E.S. scores were unrelated to Minnesota Scholastic Test scores, high school rank, or freshman fall quarter grades for men and women. Furthermore, they were independent of personality characteristics measured by the Minnesota Counseling Inventory. The C.U.E.S. scores of parents were generally unrelated to the scores of their children. However, profile and sample means were similar, which suggests parent and child experiences reflect attitudes held by the wider community.

The second study involved 292 of the original 7,000 entering freshmen; they were re-tested and given a questionnaire concerned with living and transportation arrangements, participation in campus activities, and social activities with other students. It was found that changes in their perceptions of the university were unrelated to living and transportation arrangements, high school grades or academic aptitude. However, changes in scores on the C.U.E.S. Community and Awareness scales were related to some college experiences.

The C.U.E.S. has also been used to measure the perceptions of various subcultures in particular institutional setting of the college or university environment.

In the fall of 1965, McPeck (63) administered the C.U.E.S. to all returning students, faculty members and administrators at Milliken University. Returning administrators scored higher on the Community scales than did students or faculty members. New students and sophomores expected a more scholarly and aware environment than did new faculty or seniors. The ideal environment as described by new students, faculty and administrators emphasized scholarship, awareness and community. Women students gave higher ratings to campus awareness, community orientation, scholarship, politeness and consideration than did men. All students (men) felt a need for increased personal status, practical benefits, procedures and organization. Science and music majors described more awareness on campus than did undecided students or liberal arts, business, and humanities majors, and gave higher ratings to scholarship than did undecided and humanities students. Science majors perceived the ideal campus environments as having more practicality, awareness, propriety, and scholarship, while music majors emphasized community features as the ideal.

The results of research conducted by Bagley (7) at the four colleges of the State University of New York, where freshmen, upperclassmen, transfer students and faculty

members were sampled, suggested incoming freshmen and transfer students have high expectations about an institution; but, as their length of campus residence increases, their expectations decrease to "reality plateau."

Lindall (60) conducted two studies, using the C.U.E.S., to determine the degree of attachment to the college environment on the part of the commuting student. In the first study, students at two state colleges within the same system were sampled; one suburban with 3 percent resident students, the other in an agricultural community with 16 percent resident students. It was found that a greater amount of variance in perceptions of the college environment occurred between colleges than between residents and commuters at the same college. The second study sampled groups of students at seven California State Colleges. The results revealed that at two of the colleges with one-third resident students, practical benefits, togetherness, and friendliness were emphasized; at the two colleges with three to seven percent resident students, the emphasis was on self-understanding, creativity, idealism, and scholarship.

In an effort to test the assumption that scores on the C.U.E.S. and 14 scales of the Omnibus Personality Inventory to 102 junior and senior women at the University of California. The results were as follows:

1. Several C.U.E.S. items related to scale scores on the Omnibus Personality Inventory. Students scoring highest

on Practicality items of the C.U.E.S. tended to score high on the Practical Outlook Scale of the O.P.I., and showed a preference for unambiguous situations.

2. Awareness dimensions of the C.U.E.S. related to scientific interests, social extroversion, altruistic concerns, lack of anxiety, and masculine interests on the O.P.I.

3. The results of relationships shed doubt on underlying theoretical assumptions of the C.U.E.S.: that the individual and his environment can be separately analyzed.

Another significant and interesting use of the C.U.E.S. has been the comparison of the perceptions of individuals or groups who have divergent social and/or political orientations.

Jansen and Winborn (42) used the C.U.E.S. to compare leaders of campus social-political action groups with the leaders of four other categories of student leaders on the basis of their perceptions of the prevailing campus environmental press at Indiana University. A random sample of 257 students were chosen from the five following categories: social-political action leaders, religious organization leaders, university residence hall leaders, activities leaders, and fraternal leaders. Significant differences were found among the five categories on four of the five scales of the C.U.E.S. Significant differences were also found between males and females on four of the five categories represented on the C.U.E.S.

In an effort to determine the relationships between the institutional climate and organized student protest, Sasajima (77) found that C.U.E.S. scores from 109 colleges revealed that student protest, regardless of issue, was low in colleges characterized by a high degree of structure, orderliness, rules, and an emphasis on vocational preparation. On those campuses which encouraged scholarship, personal awareness, and intellectual achievement, protest was more common. Exception to this was the relatively low level of protest against instructional procedure at colleges that pressed for academic excellence. Strong protest against the United States militarism and in favor of Civil Rights was found at colleges having strong emphasis on scholarship and intellectual activities, particularly in the liberal arts. Generally, it was found that the C.U.E.S. had high association with the strength of off-campus issues, but very little association with on-campus issues.

Black Students and Higher Education

A thorough review of the literature revealed a minimal amount of completed research that examines the perceptions of black students toward predominantly white college environments, which suggest that much work needs to be done in this area before generalizations can be made about the effects of integrated higher education upon black students. The major research efforts in the general area of black students and higher education are relatively recent and, for

the most part, were conducted as doctoral dissertations, which suggests that higher education for Black Americans has suffered from an attitude of "benign neglect," as indicated by the relatively small numbers of blacks enrolled in higher educational institutions.

Due to the unavailability of research literature relative to this specific study, the author will review in this section the general, most pertinent, literature related to black students and higher education.

In a study to determine the adequacy of preparation for college of black male students at a large midwestern state university, Bindman (16) found that poor high school academic training is a major factor in the lack of preparation on the part of black students from both integrated and segregated high schools. Also, socio-economic status had no significant bearing on this phenomena, thus indicating differential treatment for black students at both integrated and segregated schools. The author makes the following recommendations for remedying the situation.

1. That blacks be given special treatment in relation to admission policies.
2. Post-high school programs are needed in the form of tutorial services; summer enrichment sessions at the college level; and special counseling services.
3. Provision of housing arrangements which maximize study conditions and access to academic assistance.

Vittenson (90), in an attempt to examine those problems confronting the black college student, utilized the Mooney Problem check list, college level, to obtain objective responses from 100 black students at Illinois Teachers College, Chicago North and Chicago South. The general results of the study were that the greatest majority of the sample, regardless of sex and age difference, were concerned with: (a) their preparation for college work, (b) self-improvement, improvement culturally, fear of speaking up in class discussion, fear of making mistakes, and religion and morals. The author summarizes that:

These general concerns and the apparent pre-occupation with fear, suggest some very real feeling of inferiority or inadequacy on the part of the respondents, particularly in a white dominated setting. Which, in turn suggests that the environmental setting has some built in factors that contribute to those feelings.

Bartee (10) conducted a study which was designed to determine whether there existed any difference between disadvantaged black and white college students on the basis of self-concept and perception of the environment; and what impact the college experience had on these characteristics. The findings suggested little change in perception between the freshmen and senior levels of higher education, and there was no deviation on the part of the disadvantaged college students from the control group, and the pattern of group mean scores tended to be more closely related to race than social economic background. In addition, the results clearly demonstrated significant gain in self-concept

on the part of black students as a result of availability of and tenure in higher education, and there was no deviation on the part of the disadvantaged college students from the control group, and the pattern of group mean scores tended to be more closely related to race than socioeconomic background.

Scott (79), as a result of allegations that "meaningful integration had not occurred at Indiana University," attempted to determine the level of race consciousness at that institution. The most significant finding was that the subjects (64) perceived themselves as being isolates and not a part of the general campus life. There was widespread belief that university policies related to the provision of university services without regard for race or color, were not enforced and were unenforceable.

Touchstone (89) attempted to determine if the additional frustration of discrimination elicits additional overt and covert reaction among blacks. The results revealed no significant differences between black and white students in regard to aggression. Differences were found based on socio-economic status but only in the case of passivity.

A total of 102 students were sampled at Morgan State College by Derbyshire (30) to examine personal identity, through interrelating aspects of society, culture and personality. The results of the study identified the most

common characteristics as identity conflict and confusion. The student's main primary group tends to be definable socio-cultural and national rather than in racial terms.

In a study designed to determine if participation of minority group members differed from that of majority group member students in extra-curricular activities and whether or not social attitudes were a factor in extent of participation, Humiston (51) found both similarities and differences in expressed desire to participate.

Helton (45) designed a study to gather general personal and academic information about black graduate students in five white state colleges in Tennessee. He found that most of the students were from low socio-economic backgrounds. The majority (62.92 percent) were born in Tennessee. The mean age of admission was 33.13 years. Sixty-nine percent were married. The mean scores of the available Graduate Record Examination (GRE) verbal section and the Miller Analogies Test conversion were 425.03. Seventy-eight percent were enrolled in Education and 18.3 percent were enrolled in Liberal Arts. In good academic standing were 47.39 percent. While 13.72 percent had received their degrees, 30.06 percent were maintaining a G.P.A. below 3.0 and 8.82 percent had dropped out. None of the five institutions were making an active effort to provide special services for black graduate students.

Bradley (20) attempted to investigate selected characteristics, academic performance, personal problems and

successes of Negro undergraduate students enrolled in seven predominantly white state colleges and universities in Tennessee between 1963 and 1965. The findings generally revealed that:

1. Of enrolled blacks, 54.4% were female, three-fourths were born in Tennessee, and 81.8% were single.
2. They were admitted without regard to race and were largely from lower socio-economic backgrounds.
3. Even though mean average was below 20th percentile on the American College Test, about one-half were in good academic standing.
4. Some faculty had demonstrated prejudicial feelings and actions but dedicated personnel had offset these incidents.

In a study designed to address itself to questions relating to size and proportion of the black student population, the quality of its academic performance, and factors associated with academic achievement, Bindman (16) found that most important factors affecting academic achievement of black male students were associated with their patterns of participation in the informal, semi-formal, and formal structures of the university. The results of isolation and rejection for the student were:

1. Absence of meaningful social and academic contacts.
2. Residence patterns which negatively effected access to academic aids and support.

The purpose of the study by Frenkel (33) was to explore the reliability of reported differences between personalities of black and white subjects on personality

measures not adequately controlled for variables. The findings revealed more anxiety for both matched and unmatched white students. In both matched and unmatched groups, blacks scored significantly higher on the acquiescence scale. Higher ego strength and aggression scores were found for white students only in the matched groups. In the unmatched groups, black females differed significantly from white females on the masculinity-femininity scales.

The research designed to explore certain hypotheses relating to the psychological needs of black students and the press exerted on them by the psychological environment of a black college, by Brewer (23) found that the students had strong dependency and intellectual and impulse expression needs; needs of students as a group were related to the press of the institution as perceived by students as a group, although the needs of individual students were unrelated to individual student perceptions of the press of the institution.

The purpose of a study by Anderson (2) was to investigate probable sources of differences between the dimensions of the non-intellectual characteristics of selected groups of high and low achieving black college students and whether these characteristics showed sex variations. Significant differences were found between the dimensions of the non-intellectual characteristics of personality needs,

personality adjustment, interests, and study habits and attitudes possessed by the high and low achieving experimental groups of the study. There was also a significant difference between the dimensions of the personality and interest characteristics of the sex groups, but no significant differences between the dimensions of their study habits and attitudes.

Milliken and Clardy (64), in an article reviewing the literature related to discrimination and prejudicial practices of college student personnel services, described the admissions services as "the most readily identified personnel service practicing discrimination." Mainly, this is because it is the first contact that the student has at the college. Additionally, if the student is refused admission, on the basis of race, the other services have no opportunity to discriminate against him. Social fraternities also have a long history of discriminatory practices, not necessarily by student members but often adult advisors, and national chapters. Housing has often been an area in which minority group students have felt they were treated unfairly, both on and off campus. Because of the policies of outside agencies, college placement services are often in extremely precarious situations.

Bressier (22), in a brief history of higher education for black people, cites the societal and environmental factors that impact negatively on the educational process

of black students, assails the fallacies of admission requirements, and most importantly, discusses the needed environmental changes that would positively effect or enhance the educational opportunities for black people, and possibly have an effect on the entire society:

- A. Curriculum revision that positively reflects the image of the Black American.
- B. Provision of opportunities for more meaningful interaction between black and white students at all levels of college life.
- C. The development of skills and commitments on the part of black students that will enable them to more adequately be involved in the struggle of black people for societal change.

Summary

In this chapter, a brief history of the development of college environmental studies was presented along with a review of relevant studies. In addition, a number of basic and unique methods were discussed. It is apparent that significant gains have been made, both in volume and worth. However, the study of college environments is still in its early stages of development, and much more refinement and organization of efforts must be done, particularly in terms of the perceptions of black students and the perceived adequacy of environmental conditions. In that regard this study should be of some significance in providing a model for future investigation.

CHAPTER III

THE DESIGN AND METHODOLOGY OF THE STUDY

Design of the Study

This study was designed to compare the perceptions of black and white college freshmen students at Michigan State University toward the university environment. The basic comparisons are to discover differences between the group perceptions of a college, their perceptions of specific characteristics, and the influence of the variables of: (1) grade point average, (2) geographical background of students, (3) sex, (4) college major, (5) family socio-economic background, and (6) racial composition of high school attended on their perceptions.

The basic procedures making up the design of this study included the selection of two random samples of individuals, the collection of data by administering the instruments in selected university courses, the analysis of the data in terms of the objectives of the study and the formulation of conclusions and recommendations which could be appropriately drawn from the research results.

The Sample

The population from which the sample for this study was obtained consisted of all freshmen enrolled at Michigan State University during the Spring Term of 1970. Two samples of black and white students were secured by identifying five university courses that had high enrollments of freshmen students, and with the instructors and students permission administering the instruments during a class period. Only those students who were freshmen were asked to complete the instruments and were given the option of participating in the study or not. The sample consisted of 165 freshmen students: 70 black students and 95 white students.

The investigator acknowledges the possibility of a degree of contamination of the data by the fact that the investigator's race may have had an effect on the respondents' answers, and that universities in general and Michigan State University specifically were being strongly criticized by students at the time the research was being conducted.

The Instruments

A personal data form, completed by all respondents, was designed to provide personal and family data unavailable from other sources. This data is found in Table 1.

The principle measuring instrument used in this study was the College and University Environmental Scales, Second

TABLE 1.--Summary of personal data information.

Categories	Black Students	White Students
<u>Sex</u>		
Male	31	37
Female	47	63
<u>Grade Point Average</u>		
2.00-under	26	4
2.00-2.50	50	26
2.50-3.00	18	40
3.00-over	3	28
<u>Socio-Economic Status</u>		
Lower	9	1
Lower-middle	21	3
Middle	15	13
Upper-middle	15	11
Lower-upper	6	19
Upper	4	26
Upper-upper	4	25
<u>Racial Composition of High School Attended</u>		
0-40% Black	24	93
40-70% Black	21	3
70-100% Black	28	1
<u>Geographical Background</u>		
Population under 50,000	19	57
Population over 50,000	53	41

Edition (C.U.E.S. II). The employment of the instruments in this study was not the use for which it was designed.

Pace states (67):

The test is, therefore, a device for obtaining a description of the college from the students themselves, who presumably know what the environment is like because they live in it and are part of it. What the students are aware of, and agree with some unanimity of impression to be generally true, defines the prevailing campus atmosphere as students perceive it.

As reported in Chapter II, some research has been completed with this instrument to determine the perceptions of college freshmen but the results are inconclusive as to the effectiveness of the scales. One of the objectives of this study was to determine the effectiveness of this instrument in measuring the perceptions of students who have gained their image of an institution without having lived in the environment for an extended length of time, and thereby acculturated by the environment. Regardless of the difference of purpose, the investigator believes the C.U.E.S. II to be the best instrument available at this time.

Analysis of Data

The data obtained by administering the C.U.E.S. II to determine the respondent's perception of the environmental characteristics of Michigan State University were scored on each scale according to the scoring procedure accompanying the instrument.

In addition, the data obtained by administering the personal data sheet to determine the correlation between those independent variables and students perceptions of the university environment were tabulated by coding the personal data obtained from individuals, and prepared to facilitate transfer to punch cards.

The data will be analyzed using a technique appropriate to the type of information desired. Significant differences in the group mean scores will be tested by one-way analysis of variance to determine the variance between mean scores as influenced by those factors assumed to effect student perceptions toward the university environment. The level of rejection for the hypotheses was established at $\alpha = .05$.

Summary

In this chapter the design of the study was presented along with the methods and procedures employed in conducting the investigation. The population was defined as all freshmen students at Michigan State University during the Spring Term of 1970. The sample was 70 black and 95 white students.

The instruments used in the collection of data were described and the available reliability and validity information on the C.U.E.S. II was reported.

Finally, in the last section the methodology, the analysis of data, one-way analysis of variance at $\alpha = .05$ level of rejection were discussed.

CHAPTER IV

ANALYSIS OF THE DATA

The major purpose of this study was to assess the perceptions of black and white freshmen students at Michigan State University toward the university environment. In addition, several variables were analyzed that might influence the perceptions of sample students. The study also attempted to determine the influence of selected variables on the perceptions of students of the same racial group toward the university environment.

This chapter will present the results of the data collected as described in Chapter III, by administering the College and University Environment Scale, and a personal data sheet.

The chapter is divided into three sections in order to systematically present the data. Each section presents the mean scores, and the analysis of variance results in separate tables for each independent variable found to be significant at the .05 level. The chapter is divided as follows:

A. The perceptions of the total group as tested by the College and University Environment Scale are presented

as compared to the variables of race, academic success (G.P.A.), college major, socio-economic status, racial composition of high school attended, and the population of hometown.

B. The perceptions of black respondents as tested by the College and University Environment Scale are presented as compared to the variables of sex, academic success (G.P.A.), college major, socio-economic status, racial composition of the high school attended, and the population of hometown.

C. The perceptions of white respondents as tested by the College and University Environment Scale are presented as compared to the variables of sex, academic success (G.P.A.), college major, socio-economic status, racial composition of the high school attended, and the population of hometown.

The College and University Scale as reported in Chapter III is composed of seven sub-scales. However, because of the experimental nature of the last two scales, they have been analyzed and reported in this study together and designated as the Campus Scale.

The writer has chosen in this chapter to present in table form only those independent variables that revealed significance at the .05 level of confidence. Those variables that were not significant at this level will, however, be discussed.

Analysis of the Data for the Total Group

The perceptions of black and white students toward the environment at Michigan State University were determined by testing the following hypothesis:

Hypothesis I

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of race.

The results presented in Table 2 are the mean scores for black and white respondents on the six scales of the C.U.E.S. No significant differences are shown between the mean scores of black and white respondents on the scales of Community, Awareness, Propriety, or Campus. The table does, however, reveal slightly higher mean scores for black respondents on the scales of Practicality and Scholarship.

Table 3 presents the analysis of variance of mean scores on the C.U.E.S. on the basis of race. Significance was found on the Practicality and Scholarship scales at the .01 level of rejection. The scales of Community, Awareness, Propriety, and Campus were not found to be significant at the .05 level of rejection.

Relationship between Students' Academic Success and Perceptions Toward the University Environment

Hypothesis II

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their academic success (G.P.A.).

TABLE 2.--Mean score comparisons obtained on the C.U.E.S
for all respondents grouped according to race.

Scale	Factor	"n"	Mean	S.D.
Practicality	Black	70	10.37	2.67
	White	95	9.16	2.58
Community	Black	70	8.91	2.94
	White	95	8.34	3.58
Awareness	Black	70	10.01	3.72
	White	95	10.25	4.74
Propriety	Black	70	6.07	2.81
	White	95	5.49	2.67
Scholarship	Black	70	8.82	3.79
	White	95	6.92	4.00
Campus	Black	70	14.50	6.53
	White	95	15.83	5.62

TABLE 3.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to race.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	59.35	1	59.35	8.68	0.004
Within cat.	1114.97	163	6.84		
Total	1174.33	164			
<u>Community</u>					
Between cat.	13.44	1	13.44	1.22	0.272
Within cat.	1800.71	163	11.05		
Total	1814.15	164			
<u>Awareness</u>					
Between cat.	2.29	1	2.29	0.12	0.728
Within cat.	3064.92	163	18.80		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	13.40	1	13.40	1.79	0.182
Within cat.	1214.39	163	7.45		
Total	1227.79	164			
<u>Scholarship</u>					
Between cat.	147.46	1	147.46	9.61	0.002
Within cat.	2501.27	163	15.35		
Total	2648.73	164			
<u>Campus</u>					
Between cat.	71.46	1	71.46	1.97	0.163
Within cat.	5922.80	164	36.34		
Total	5994.27	164			

Table 4 presents the mean scores for black and white respondents to the C.U.E.S. on the basis of academic success (G.P.A.). The results show slightly higher mean scores for the 2.00 and under group on all six of the scales.

In Table 5, the analysis of variance shows the null hypothesis to be rejected on the scales of Practicality and Scholarship at the .01 level. The hypothesis was not rejected on the scales of Awareness, Propriety, Community, and Campus at the .05 level.

Students' College Major and Perception of the University Environment

Tables 6 and 7 present mean scores, standard deviations and analysis of variance results which test the following hypothesis:

Hypothesis III

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their college major.

For the purpose of coding and analyzing the data, the respondents' college majors were classified into three major areas:

College 1

- A. College of Arts and Letters
- B. College of Communication Arts

College 2

- A. College of Education
- B. College of Social Science
- C. College of Home Economics

TABLE 4.--Mean score comparisons obtained on the C.U.E.S. for all respondents grouped according to academic success (G.P.A.).

Scale	Factor	"n"	Mean	S.D.
Practicality	2.00-under	28	10.89	2.38
	2.00-2.50	54	9.99	2.91
	2.50-3.00	52	9.19	2.13
	3.00-over	30	8.73	2.92
Scholarship	2.00-under	28	9.53	3.92
	2.00-2.50	54	8.37	4.25
	2.50-3.00	52	6.96	3.35
	3.00-over	30	6.13	4.06
Awareness	2.00-under	28	11.57	4.25
	2.00-2.50	54	9.09	3.81
	2.50-3.00	52	10.23	4.12
	3.00-over	30	10.47	5.28
Propriety	2.00-under	28	5.86	2.45
	2.00-2.50	54	5.50	2.92
	2.50-3.00	52	5.90	2.84
	3.00-over	30	5.73	2.60
Community	2.00-under	28	9.21	2.75
	2.00-2.50	54	8.91	3.75
	2.50-3.00	52	8.19	3.04
	3.00-over	30	7.83	3.18
Campus	2.00-under	28	15.79	7.40
	2.00-2.50	54	15.19	6.30
	2.50-3.00	52	14.79	5.58
	3.00-over	30	15.53	5.11

TABLE 5.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to academic success (G.P.A.).

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	90.72	4	22.68	3.35	0.01
Within cat.	1083.60	160	6.77		
Total	1174.33	164			
<u>Scholarship</u>					
Between cat.	225.78	4	56.45	3.73	0.006
Within cat.	2422.95	160	15.14		
Total	2648.73	164			
<u>Awareness</u>					
Between cat.	135.12	4	33.78	1.84	0.123
Within cat.	2932.09	160	18.33		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	6.48	4	1.62	0.21	0.931
Within cat.	1221.31	160	7.63		
Total	1227.79	164			
<u>Community</u>					
Between cat.	96.65	4	24.16	2.25	0.066
Within cat.	1717.49	160	10.73		
Total	1814.15	164			
<u>Campus</u>					
Between cat.	67.26	4	16.82	0.45	0.769
Within cat.	5927.00	160	37.04		
Total	5994.27	164			

TABLE 6.--Mean score comparisons obtained on the C.U.E.S. for all respondents grouped according to college major.

Scale	Factor	"n"	Mean	S.D.
Practicality	College 1	39	9.82	2.45
	College 2	99	9.16	2.71
	College 3	21	11.33	2.66
Scholarship	College 1	39	6.51	3.58
	College 2	99	7.91	4.06
	College 3	21	9.14	4.40
Awareness	College 1	39	9.56	4.25
	College 2	99	10.22	4.44
	College 3	21	11.00	3.82
Propriety	College 1	39	5.38	2.32
	College 2	99	5.77	2.92
	College 3	21	6.14	2.82
Community	College 1	39	7.87	3.45
	College 2	99	8.77	2.29
	College 3	21	9.00	3.27
Campus	College 1	39	15.05	5.20
	College 2	99	15.37	6.18
	College 3	21	15.67	7.47

TABLE 7.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to college major.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	101.17	3	33.72	5.06	0.002
Within cat.	1073.16	161	6.67		
Total	1174.33	164			
<u>Scholarship</u>					
Between cat.	103.56	3	34.52	2.18	0.092
Within cat.	2545.17	161	15.81		
Total	2648.73	164			
<u>Awareness</u>					
Between cat.	29.68	3	9.89	0.52	0.666
Within cat.	3037.53	161	18.87		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	9.50	3	3.17	0.42	0.740
Within cat.	1218.29	161	7.57		
Total	1227.79	164			
<u>Community</u>					
Between cat.	26.80	3	8.93	0.80	0.493
Within cat.	1787.35	161	11.10		
Total	1814.15	164			
<u>Campus</u>					
Between cat.	25.03	3	8.34	0.27	0.965
Within cat.	5959.24	161	37.08		
Total	5994.27	164			

College 3

- A. College of Natural Sciences
- B. College of Veterinary Medicine
- C. College of Engineering
- D. College of Business

The statistical results presented in Table 6 are the mean scores for all respondents on the C.U.E.S. as influenced by the college major variable. The results show slightly higher scores on all six scales for respondents in the College 3 category.

The analysis of variance test presented in Table 7 revealed significance on the Practicality Scale at the .01 level. The scales of Scholarship, Awareness, Propriety, Community and Campus were not significant at the .05 level.

The Relationships Between Student Perception of the University Environment and Their Sex

Hypothesis IV

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

The before-mentioned hypothesis was tested by a comparison of group means for all respondents to the C.U.E.S. and an analysis of variance test. No significance was found on any of the scales, therefore, the hypothesis was not rejected on any scales of the C.U.E.S.

Socio-Economic Status and
Student Perceptions of the
University Environment

Tables 8 and 9 present the group means and analysis of variance scores for all respondents to the C.U.E.S. on the basis of socio-economic status. The Practicality scale showed significance at the .01 level. The hypothesis tested was:

Hypothesis V

Freshmen students at Michigan State University will not differ significantly in their perceptions of the university environment on the basis of Socio-Economic Status.

There was no significance found on the scales of Scholarship, Awareness, Propriety, Community, and Campus at the .05 level.

Racial Composition of High School
Attended and Student Perceptions of
the University Environment

Respondents were divided into three groups on the basis of the racial composition of the high school they attended as indicated by them on the personal data sheet. Those groups consisted of: (1) those students who attended high schools whose racial composition was 0-40% black, (2) those students whose high school was 40-70% black, and (3) those students whose high school was 70-100% black.

Hypothesis VI

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school they attended.

TABLE 8.--Mean score comparisons obtained on the C.U.E.S. for all respondents grouped according to socio-economic status.

Scale	Factor	"n"	Mean	S.D.
Practicality	Lower class	9	10.56	3.05
	Lower-middle class	23	11.04	2.34
	Middle class	26	10.58	2.44
	Upper-middle class	24	9.42	2.02
	Lower-upper class	25	8.84	2.82
	Middle-upper class	30	9.69	2.64
	Upper class	27	8.44	2.81
Scholarship	Lower class	9	9.44	2.35
	Lower-middle class	23	8.26	3.70
	Middle class	26	8.58	3.87
	Upper-middle class	24	8.29	3.96
	Lower-upper class	25	7.44	4.17
	Middle-upper class	30	6.97	4.63
	Upper class	27	6.52	3.96
Awareness	Lower class	9	9.22	3.03
	Lower-middle class	23	10.70	3.91
	Middle class	26	10.42	4.22
	Upper-middle class	24	9.58	4.32
	Lower-upper class	25	10.52	3.42
	Middle-upper class	30	10.10	4.79
	Upper class	27	9.96	5.56
Propriety	Lower class	9	6.78	3.31
	Lower-middle class	23	5.61	2.35
	Middle class	26	5.81	2.45
	Upper-middle class	24	5.92	2.83
	Lower-upper class	25	5.72	3.01
	Middle-upper class	30	5.23	2.56
	Upper class	27	6.00	3.06
Community	Lower class	9	9.11	2.47
	Lower-middle class	23	9.52	3.31
	Middle class	26	8.88	3.69
	Upper-middle class	24	8.08	2.67
	Lower-upper class	25	8.60	3.51
	Middle-upper class	30	7.83	4.18
	Upper class	27	8.41	3.44
Campus	Lower class	9	14.89	4.48
	Lower-middle class	23	16.43	7.54
	Middle class	26	14.96	5.35
	Upper-middle class	24	14.25	5.56
	Lower-upper class	25	15.08	7.04
	Middle-upper class	30	15.67	5.11
	Upper class	27	15.41	6.61

TABLE 9.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to socioeconomic status.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	138.28	7	19.75	2.99	0.006
Within cat.	1036.05	157	6.60		
Total	1174.32	164			
<u>Scholarship</u>					
Between cat.	118.90	7	25.87	1.62	0.187
Within cat.	2529.83	157	15.97		
Total	2648.73	164			
<u>Awareness</u>					
Between cat.	28.70	7	4.10	0.21	0.982
Within cat.	3038.51	157	19.35		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	34.48	7	4.93	0.65	0.716
Within cat.	1193.31	157	7.60		
Total	1227.79	164			
<u>Community</u>					
Between cat.	68.35	7	9.76	0.88	0.525
Within cat.	1745.80	157	11.12		
Total	1814.15	164			
<u>Campus</u>					
Between cat.	71.24	7	10.18	0.27	0.965
Within cat.	5923.03	157	37.73		
Total	5994.27	164			

The results of the statistical treatment of the data collected demonstrated a significance level of .02 on the Practicality scale of the C.U.E.S. when analyzed on the basis of racial composition of high school attended. Tables 10 and 11 present the group means and analysis of variance scores on the basis of the before-mentioned variables. There was no significance found on the scales of Scholarship, Awareness, Propriety, Community, and Campus at the .05 level.

Population of Hometown and Student Perceptions of the University Environment

Respondents were divided into two groups on the basis of the population of their hometown: (1) up to 50,000, and (2) 50,000 or more people.

Hypothesis VII

The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

The results of the statistical treatment of the data revealed a significance level of .04 on the Practicality scale of the C.U.E.S. when analyzed on the basis of population of hometown. None of the other scales were found to be significant on the basis of this variable. Tables 12 and 13 present the group means and analysis of variance scores on the variable of population of hometown.

TABLE 10.--Mean score comparisons obtained on the C.U.E.S. for all respondents grouped according to the racial composition of the high school attended.

Scale	Factor	"n"	Mean	S.D.
Practicality	0-40%	112	9.26	2.53
	40-70%	24	10.13	3.19
	70-100%	27	11.00	2.47
Scholarship	0-40%	112	7.41	3.85
	40-70%	24	8.33	4.69
	70-100%	27	8.78	3.99
Awareness	0-40%	112	10.22	4.39
	40-70%	24	9.79	3.74
	70-100%	27	10.52	4.55
Propriety	0-40%	112	5.62	2.79
	40-70%	24	5.67	2.81
	70-100%	27	6.22	2.53
Community	0-40%	112	8.61	3.43
	40-70%	24	8.63	3.00
	70-100%	27	8.59	3.35
Campus	0-40%	112	15.90	5.63
	40-70%	24	13.67	4.89
	70-100%	27	14.52	8.09

TABLE 11.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to the racial composition of the high school attended.

Scale	Sum of Squares	Degrees of Freedom	Mean Squares	f	Probability
<u>Practicality</u>					
Between cat.	71.71	3	23.90	3.49	0.017
Within cat.	1102.62	161	6.85		
Total	1174.33	164			
<u>Scholarship</u>					
Between cat.	77.62	3	25.87	1.62	0.187
Within cat.	2571.11	161	15.97		
Total	2648.73	164			
<u>Awareness</u>					
Between cat.	50.59	3	16.86	0.90	0.443
Within cat.	3016.62	161	18.74		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	9.04	3	3.01	0.39	0.754
Within cat.	1218.75	161	7.57		
Total	1227.79	164			
<u>Community</u>					
Between cat.	8.79	3	2.93	0.26	0.853
Within cat.	1805.36	161	11.21		
Total	1818.15	164			
<u>Campus</u>					
Between cat.	134.56	3	44.85	1.23	0.300
Within cat.	5859.70	161	36.40		
Total	5994.27	164			

TABLE 12.--Mean score comparisons obtained on the C.U.E.S. for all respondents grouped according to the population of their hometown.

Scale	Factor	"n"	Mean	S.D.
Practicality	Under 50,000	73	9.01	2.47
	Over 50,000	89	10.21	2.77
Scholarship	Under 50,000	73	7.01	3.84
	Over 50,000	89	8.42	4.09
Awareness	Under 50,000	73	9.48	4.64
	Over 50,000	89	10.81	3.98
Propriety	Under 50,000	73	5.90	2.77
	Over 50,000	89	5.60	2.75
Community	Under 50,000	73	8.23	3.37
	Over 50,000	89	8.93	3.31
Campus	Under 50,000	73	14.85	6.51
	Over 50,000	89	15.80	5.63

TABLE 13.--Analysis of variance of mean scores obtained on the C.U.E.S. for all respondents grouped according to the population of their hometown.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	57.90	3	19.30	2.78	0.043
Within cat.	1116.43	161	6.93		
Total	1174.33	164			
<u>Scholarship</u>					
Between cat.	110.12	3	36.71	2.33	0.077
Within cat.	2538.60	161	15.77		
Total	2648.73	164			
<u>Awareness</u>					
Between cat.	114.74	3	38.25	2.09	0.104
Within cat.	2952.47	161	18.34		
Total	3067.21	164			
<u>Propriety</u>					
Between cat.	5.53	3	1.84	0.24	0.866
Within cat.	1222.27	161	7.59		
Total	1227.79	164			
<u>Community</u>					
Between cat.	31.01	3	10.34	0.93	0.426
Within cat.	1783.14	161	11.08		
Total	1814.15	164			
<u>Campus</u>					
Between cat.	134.56	3	44.85	1.23	0.300
Within cat.	5859.70	161	36.40		
Total	5994.27	164			

Analysis of the Data for Black Respondents

Respondents were grouped according to race as a result of their indications on the personal data sheet. Their results were analyzed separately to determine the in-group differences in perceptions toward the university environment as influenced by the variables of sex, G.P.A., college major, socio-economic status, racial composition of high school attended, and population of hometown. The same statistical techniques, comparison of group mean scores, and analysis of variance of group means were used with the racial groups as were used with the total group. The results of those statistical tests for in-group differences among black students are presented in this section.

Relationship Between Sex and Perceptions Toward the University Environment Among Black Students

Hypothesis VIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

The results presented in Table 14 are the group mean scores for black respondents to the C.U.E.S. on the basis of sex. The results demonstrate slightly higher mean scores for black females than black male respondents on all of the scales except the Propriety scale.

Table 15 is the analysis of variance for group mean scores for all black respondents on the C.U.E.S. according

TABLE 14.--Mean score comparisons obtained on the C.U.E.S.
for black respondents grouped according to sex.

Scale	Factor	"n"	Mean	S.D.
Practicality	Male	27	9.96	2.36
	Female	43	10.63	2.84
Scholarship	Male	27	8.78	3.81
	Female	43	8.87	3.82
Awareness	Male	27	9.70	3.30
	Female	43	10.21	3.90
Propriety	Male	27	6.19	3.25
	Female	43	6.00	2.54
Community	Male	27	8.63	2.90
	Female	43	9.09	2.98
Campus	Male	27	14.00	4.70
	Female	43	14.81	7.50

TABLE 15.--Analysis of variance of mean scores obtained on the C.U.E.S. for black respondents grouped according to sex.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	7.33	1	7.33	1.03	0.313
Within cat.	483.01	68	7.10		
Total	490.34	69			
<u>Scholarship</u>					
Between cat.	0.11	1	0.11	0.01	0.930
Within cat.	991.83	68	14.59		
Total	991.94	69			
<u>Awareness</u>					
Between cat.	4.24	1	4.24	0.30	0.584
Within cat.	952.75	68	14.01		
Total	956.99	69			
<u>Propriety</u>					
Between cat.	0.57	1	0.57	0.07	0.791
Within cat.	544.07	68	8.00		
Total	544.64	69			
<u>Community</u>					
Between cat.	3.56	1	3.56	0.41	0.525
Within cat.	591.92	68	8.70		
Total	595.49	69			
<u>Campus</u>					
Between cat.	10.99	1	10.99	0.25	0.615
Within cat.	2934.51	68	43.15		
Total	2945.50	69			

to sex. No significant differences were found on any of the scales at the .05 level.

Relationship Between Academic Success
(G.P.A.) and Perceptions Toward the
University Environment Among
Black Students

Hypothesis IX

Within the same racial group, the perceptions of freshmen students toward the university environment will not differ significantly on the basis of academic success (G.P.A.).

The analysis showed a slightly higher mean score for the group of students in the 2.00 and under category on the scales of Practicality, Scholarship, Awareness, and Campus. On the Propriety scale, the 3.00 and over category had slightly higher mean scores, and finally, the 2.00-2.50 category mean score was slightly higher on the Community scale. However, the analysis of variance results showed no significance on any of the scales at the .05 level. Since no significance was found and the hypothesis not rejected, the results are not presented in table form.

Relationship Between College Major
and Perceptions Toward the University
Environment Among Black Students

Hypothesis X

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

The college major variable was not significant on any of the scales at the .05 level and, therefore, the hypothesis

was not rejected. The group mean scores did reveal a slightly higher score for the College 3 group on the scales of Practicality, Scholarship, Awareness and Campus. College 2 group had slightly higher mean scores on the Propriety scale and the Community scale.

Relationship Between Socio-Economic
Status and Perceptions Toward the
University Environment Among
Black Students

Hypothesis XI

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

Table 16 presents the mean scores for all black respondents on the C.U.E.S., on the basis of socio-economic status. The middle class group had slightly higher mean scores on the Practicality scale; the upper-middle class group had slightly higher mean scores on the Scholarship scale; the upper-middle class groups had the same but slightly higher mean scores on the Awareness scale; the lower class group had slightly higher mean scores on the Propriety scale; the lower class group also had the same, but slightly higher mean scores on the Community scale; and the upper class group had slightly higher mean scores on the Campus scale.

Table 17 presents the analysis of variance of mean scores on the C.U.E.S., on the basis of socio-economic status. Significance was found only on the Practicality

TABLE 16.--Mean score comparisons obtained on the C.U.E.S. for black respondents grouped according to socio-economic status.

Scale	Factor	"n"	Mean	S.D.
Practicality	Lower class	8	10.88	3.09
	Lower-middle class	20	10.80	2.33
	Middle class	14	11.57	2.34
	Upper-middle class	14	9.79	1.97
	Lower-upper class	6	8.83	2.93
	Middle-upper class	4	11.00	3.46
	Upper class	4	6.75	2.63
Scholarship	Lower class	8	9.38	2.50
	Lower-middle class	20	8.10	3.82
	Middle class	14	9.07	2.62
	Upper-middle class	14	10.00	3.86
	Lower-upper class	6	9.17	4.71
	Middle-upper class	4	8.50	5.92
	Upper class	4	6.25	6.08
Awareness	Lower class	8	9.88	2.47
	Lower-middle class	20	10.45	4.07
	Middle class	14	9.93	3.45
	Upper-middle class	14	10.50	4.54
	Lower-upper class	6	9.17	4.71
	Middle-upper class	4	8.50	5.92
	Upper class	4	9.25	3.59
Propriety	Lower class	8	6.88	3.52
	Lower-middle class	20	5.60	2.33
	Middle class	14	5.64	2.68
	Upper-middle class	14	7.29	2.81
	Lower-upper class	6	5.83	3.66
	Middle-upper class	4	3.25	2.06
	Upper class	4	7.25	1.71
Community	Lower class	8	9.50	2.33
	Lower-middle class	20	9.50	3.17
	Middle class	14	9.07	2.50
	Upper-middle class	14	8.36	2.17
	Lower-upper class	6	8.17	2.79
	Middle-upper class	4	8.25	6.85
	Upper class	4	8.00	2.71
Campus	Lower class	8	14.13	4.12
	Lower-middle class	20	15.75	7.68
	Middle class	14	15.07	5.82
	Upper-middle class	14	13.86	6.22
	Lower-upper class	6	10.50	5.75
	Middle-upper class	4	18.00	7.39
	Upper class	4	11.75	8.42

TABLE 17.--Analysis of variance of mean scores obtained on the C.U.E.S. for black respondents grouped according to socio-economic status.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	98.90	6	16.48	2.65	0.023
Within cat.	391.44	63	6.21		
Total	490.34	69			
<u>Scholarship</u>					
Between cat.	60.76	6	10.13	0.69	0.662
Within cat.	931.19	63	14.78		
Total	991.94	69			
<u>Awareness</u>					
Between cat.	34.98	6	5.83	0.40	0.877
Within cat.	922.00	63	14.63		
Total	956.69	69			
<u>Propriety</u>					
Between cat.	70.56	6	11.76	1.56	0.173
Within cat.	474.08	63	7.53		
Total	544.64	69			
<u>Community</u>					
Between cat.	22.76	6	3.79	0.42	0.865
Within cat.	572.73	63	9.09		
Total	595.49	69			
<u>Campus</u>					
Between cat.	217.98	6	36.33	0.84	0.544
Within cat.	2727.52	63	43.29		
Total	2945.50	69			

scale and the hypothesis was rejected at the alpha level of .02.

Relationship Between Racial Composition
of High School Attended and Perceptions
Toward the University Environment
Among Black Students

Hypothesis XII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school attended.

The racial composition of high school attended variable was not significant on any scale of the C.U.E.S. at the .05 level, and therefore, the hypothesis was not rejected. The group mean scores did reveal a slightly higher score for those respondents who attended high schools that had from 0-40% black students in attendance on the scales of Propriety, Community, and Campus. Those respondents who attended high schools of 40-70% black students had slightly higher mean scores on the Scholarship scale, while the respondents who attended high schools that had from 70-100% black students in attendance had higher mean scores on the scales of Practicality and Awareness.

Relationship Between Population of
Hometown and Perceptions Toward the
University Environment Among
Black Students

Hypothesis XIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

Table 18 presents the mean scores and standard deviations for black respondents on the variable of population of hometown. The mean scores for black students from urban areas was found to be slightly higher than those respondents from rural areas on the scales of Scholarship, Awareness, and Campus. The mean scores on the Practicality scale were approximately the same.

Table 19 presents the analysis of variance results for group means of black respondents on the variable of population of hometown. The Propriety scale was found to be significant at the .05 level and the hypothesis rejected while the scales of Practicality, Scholarship, Awareness, Community and Campus were not found to be significant at the .05 level and therefore, the hypothesis was not rejected on these five scales.

Analysis of the Data for White Respondents

As in sections A and B, similar methods of analyzing and comparing data are made in this section. The only difference being that the respondents in this section are white freshmen students at Michigan State University. The purpose of the analysis of the data presented here was to determine the in-group differences among white students as they perceive the university environment.

TABLE 18.--Mean score comparisons obtained on the C.U.E.S. for black respondents grouped according to the population of their hometown.

Scale	Factor	"n"	Mean	S.D.
Practicality	Under 50,000	19	10.37	2.29
	Over 50,000	51	10.37	2.81
Scholarship	Under 50,000	19	8.58	2.80
	Over 50,000	51	8.92	4.12
Awareness	Under 50,000	19	9.84	3.27
	Over 50,000	51	10.08	3.91
Propriety	Under 50,000	19	7.16	2.57
	Over 50,000	51	5.67	2.81
Community	Under 50,000	19	9.32	2.52
	Over 50,000	51	8.76	3.09
Campus	Under 50,000	19	14.21	7.43
	Over 50,000	51	14.61	6.25

TABLE 19.--Analysis of variance of mean scores obtained on the C.U.E.S. for black respondents grouped according to the population of their hometown.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	0.00	1	0.00	0.00	0.995
Within cat.	490.34	68	7.21		
Total	490.34	69			
<u>Scholarship</u>					
Between cat.	1.63	1	1.63	0.11	0.739
Within cat.	990.32	68	14.56		
Total	991.95	69			
<u>Awareness</u>					
Between cat.	0.77	1	0.77	0.05	0.815
Within cat.	956.21	68	14.06		
Total	956.98	69			
<u>Propriety</u>					
Between cat.	30.78	1	30.78	4.07	0.048
Within cat.	513.86	68	7.56		
Total	544.64	69			
<u>Community</u>					
Between cat.	4.20	1	4.20	0.48	0.489
Within cat.	591.28	68	8.70		
Total	595.49	69			
<u>Campus</u>					
Between cat.	2.19	1	2.19	0.05	0.823
Within cat.	2943.31	68	43.28		
Total	2945.50	69			

Relationship Between Sex and Perceptions
Toward the University Environment
Among White Students

Hypothesis VIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

The results of the statistical treatment of the data obtained from white respondents to the C.U.E.S. revealed no significant differences for white respondents based on the variable of sex at the .05 level on any of the scales.

The mean scores, however, were slightly higher for female respondents on the scales of Awareness, Propriety, Community, and Campus.

Relationship Between Academic Success
(G.P.A.) and Perceptions Toward the
University Environment Among
White Students

Hypothesis IX

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of academic success (G.P.A.).

The results of the statistical treatment of the data obtained from white respondents to the C.U.E.S. revealed no significant differences based on the variable of academic success at the .05 level.

The mean score results showed higher scores for the 2.00 and under group on the scales of Scholarship, Awareness, Community, and Campus. The 2.00-2.50 group had higher mean

scores on the Practicality scale. The only other scale, Propriety, was higher for the 2.50-3.00 group.

Relationship Between College Major
and Perceptions Toward the University
Environment Among White Students

Hypothesis X

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

Table 20 presents mean scores for white students on the C.U.E.S. as compared to the college major variable. The results show that students in the College 3 category had higher mean scores on all six of the scales.

Table 21 presents the analysis of variance of group mean scores. The results found the Practicality scale to be significant at the .02 level. Therefore, the hypothesis was rejected on this scale. The scales of Scholarship, Awareness, Propriety, Community, and Campus were not significant at the .05 level and for these scales the hypothesis was not rejected.

Relationship Between Socio-Economic
Status and Perceptions Toward the
University Environment Among
White Students

Hypothesis XI

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

TABLE 20.--Mean score comparisons obtained on the C.U.E.S.
for white respondents grouped according to college major.

Scale	Factor	"n"	Mean	S.D.
Practicality	College 1	21	9.67	2.39
	College 2	61	8.62	2.56
	College 3	10	10.60	2.07
Scholarship	College 1	21	5.57	1.34
	College 2	61	7.13	0.22
	College 3	10	8.80	1.88
Awareness	College 1	21	8.57	5.22
	College 2	61	10.38	4.81
	College 3	10	11.80	4.18
Propriety	College 1	21	4.62	2.27
	College 2	61	5.56	2.93
	College 3	10	6.20	2.49
Community	College 1	21	7.43	4.26
	College 2	61	8.44	3.47
	College 3	10	9.40	4.03
Campus	College 1	21	14.52	5.95
	College 2	61	16.00	5.94
	College 3	10	17.60	4.84

TABLE 21.--Analysis of variance of mean scores obtained on the C.U.E.S. for white respondents grouped according to college major.

Scale	Sum of Squares	Degree of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	62.57	3	20.86	3.38	0.022
Within cat.	562.06	91	6.18		
Total	624.63	94			
<u>Scholarship</u>					
Between cat.	80.97	3	26.99	1.72	0.169
Within cat.	1428.36	91	15.70		
Total	1509.33	94			
<u>Awareness</u>					
Between cat.	84.87	3	38.29	1.2	0.311
Within cat.	2127.07	91	23.37		
Total	2211.94	94			
<u>Propriety</u>					
Between cat.	23.16	3	7.72	1.04	0.379
Within cat.	676.27	91	7.43		
Total	699.43	94			
<u>Community</u>					
Between cat.	37.16	3	12.39	0.91	0.438
Within cat.	1235.26	91	13.57		
Total	1272.42	94			
<u>Campus</u>					
Between cat.	111.69	3	37.23	1.10	0.355
Within cat.	3091.64	91	33.97		
Total	3203.33	94			

The statistical treatment of the data obtained from white student respondents revealed no significance on any scale of the C.U.E.S. on the socio-economic status variable at the .05 level. Therefore, the hypothesis was not rejected.

The group mean scores showed that those students in the lower-middle class category had slightly higher scores on the Practicality, Awareness, and Community scales. The scores of those in the lower-class category were slightly higher on the Scholarship scale. On the Propriety scale, those in the lower and middle class categories had the same scores which were slightly higher than the other mean scores. The same was true on the campus scale between those in the lower and lower-middle class categories.

Relationship Between Racial Composition
of High School Attended and Perceptions
Toward the University Environment
Among White Students

Hypothesis XII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school attended.

The analysis of variance test of group mean scores obtained from white student respondents revealed no significance on any scale of the C.U.E.S. on the racial composition of high school attended variable at the .05 level. Therefore, the hypothesis was not rejected.

The group mean scores did depict slightly higher mean scores for the students who attended high schools that had from 70-100% black student enrollments on all six scales of the C.U.E.S.

Relationship Between Population of
Hometown and Perceptions Toward the
University Environment Among
White Students

Hypothesis XIII

Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

Table 22 presents mean scores for white students on the C.U.E.S. as compared to the population of hometown variable. The results reveal that students from urban settings, over 50,000 population, had higher mean scores on the scales of Practicality, Scholarship, Awareness, Community, and Campus than students from rural settings under 50,000 population. The only scale that students from population areas of less than 50,000 scored slightly higher on was the Propriety scale.

Table 23 presents the analysis of variance of group mean scores for white students on the C.U.E.S. as compared to the population of hometown variable. The results show the Practicality scale to be significant at the .05 level, the Awareness and Campus scales to be significant at the .01 level, and the Community scale to be significant at the .03 level.

TABLE 22.--Mean score comparisons obtained on the C.U.E.S. for white respondents grouped according to the population of their hometown.

Scale	Factor	"n"	Mean	S.D.
Practicality	Under 50,000	54	8.54	2.38
	Over 50,000	38	10.00	2.73
Scholarship	Under 50,000	54	6.46	4.02
	Over 50,000	38	7.74	4.00
Awareness	Under 50,000	54	9.35	5.05
	Over 50,000	38	11.79	3.91
Propriety	Under 50,000	54	5.46	2.72
	Over 50,000	38	5.50	2.70
Community	Under 50,000	54	7.85	3.57
	Over 50,000	38	9.16	3.61
Campus	Under 50,000	54	15.07	6.21
	Over 50,000	38	17.39	4.27

TABLE 23.--Analysis of variance of mean scores obtained on the C.U.E.S. for white respondents grouped according to the population of their hometown.

Scale	Sum of Squares	Degrees of Freedom	Mean Square	f	Probability
<u>Practicality</u>					
Between cat.	48.71	3	16.24	2.57	0.059
Within cat.	575.93	91	6.33		
Total	624.63	94			
<u>Scholarship</u>					
Between cat.	54.53	3	18.18	1.14	0.338
Within cat.	1454.79	91	15.99		
Total	1509.32	94			
<u>Awareness</u>					
Between cat.	282.81	3	94.27	4.45	0.006
Within cat.	1929.91	91	21.20		
Total	2211.94	94			
<u>Propriety</u>					
Between cat.	32.01	3	10.67	1.45	0.232
Within cat.	667.43	91	7.33		
Total	699.44	94			
<u>Community</u>					
Between cat.	114.05	3	38.02	2.99	0.035
Within cat.	1158.37	91	12.73		
Total	1272.42	94			
<u>Campus</u>					
Between cat.	466.54	3	155.51	5.17	0.002
Within cat.	2736.78	91	30.07		
Total	3203.33	94			

Summary

The major purpose of this study was to determine the perceptions of black and white freshmen students at Michigan State University toward the university environment, as tested by the College and University Environment Scale, and the influence on those perceptions of the variables: sex, academic success (G.P.A.), college major, socio-economic status, racial composition of high school attended, and population of hometown on those perceptions.

The first related hypothesis which studied the differences in perceptions toward the university environment between the two racial groups, yielded significant differences at the .01 level of confidence on the scales of Practicality and Scholarship. Therefore, the hypothesis was rejected on those two of the six scales.

The second hypothesis studied the total group (both black and white students) attitude toward the university environment as influenced by the academic success (G.P.A.) variable. The scales of Practicality and Scholarship were found to be significant at the .01 level, thereby, rejecting the hypothesis on two of the six scales.

The third hypothesis studied the total group attitude toward the university environment as influenced by the college major variable. The Practicality scale was significant at the .01 level, which allowed a rejection of the hypothesis on only this scale.

The fourth hypothesis which tested the influence of the variable of sex on the perceptions toward the university environment of the total group was not found to be significant at the .05 level for any of the scales.

The fifth hypothesis determined the influence of socio-economic status on the total group perception toward the university environment. The hypothesis was rejected on the Practicality scale at the .01 level of confidence.

The sixth hypothesis studied the influence of the racial composition of the high school attended variable on total group perceptions toward the university environment, and found the Practicality scale significant at the .02 level. Therefore, the hypothesis was rejected on this scale alone.

The seventh hypothesis was rejected on the Practicality scale at the .04 level of confidence. The hypothesis tested the influence of population of hometown on the total group perceptions toward the university environment.

The eighth hypothesis studied the influence of sex on student perceptions toward the university environment within the two racial groups. The hypothesis was not rejected at the .05 level on any of the scales for either of the two racial groups being studied.

The ninth hypothesis tested the influence of academic success (G.P.A.) on perceptions toward the university environment within racial groups. The statistical treatment

of data revealed no significance on any of the scales for either of the groups, therefore, not rejecting the hypothesis.

The tenth hypothesis tested the influence of college major on student perceptions toward the university environment within racial groups. The black student sample revealed no significant differences on any of the scales, while the white student group rejected the hypothesis on the Practicality scale at the .02 level of confidence.

The eleventh hypothesis studied the influence of socio-economic status on student perceptions toward the university environment within racial groups. The Practicality scale was found to be significant at the .02 level for black students, thereby rejecting the hypothesis on that scale. The white student group did not reject the hypothesis on any of the six scales at the .05 level of confidence.

The twelfth hypothesis studied the influence of racial composition of high school attended on student perceptions toward the university environment within racial groups. The hypothesis was not rejected at the .05 level for either of the two racial groups on any of the six scales.

The thirteenth hypothesis studied the influence of population of hometown on student perceptions toward the university environment within racial groups. For black respondents, the hypothesis was rejected on the Propriety scale at the .05 level. White respondents rejected the

hypothesis on the Practicality scale at the .05 level, the Awareness and Campus scales at the .01 level, and the Community scale at the .03 level.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to assess the perceptions of black and white freshmen students at Michigan State University toward the university environment, and the influence of several variables on those perceptions. Student perceptions toward the university were determined through the use of the College and University Environmental Scales and a personal data sheet constructed by the investigator. The necessity of such a study seems to be quite evident in light of the magnitude of student protest activities on college campuses throughout the country in the recent past.

In Chapter II, the Review of Literature clearly points out the pressing need for research related to the perceptions of black students toward the university environment, particularly if continuing efforts are to be made toward increasing the enrollments of black and other minority group youngsters at integrated colleges and universities.

The problem selected for this study attempted to test the following hypotheses:

- I. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of race.

II. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of their academic success (G.P.A.).

III. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of college major.

IV. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

V. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

VI. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school they attended.

VII. The perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

VIII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of sex.

IX. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of academic success (G.P.A.).

X. Within the same racial group, the perceptions of freshmen students toward the university environment will not differ significantly on the basis of college major.

XI. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of socio-economic status.

XII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the racial composition of the high school they attended.

XIII. Within the same racial group, the perceptions of freshmen students at Michigan State University toward the university environment will not differ significantly on the basis of the population of their hometown.

The population from which the sample for this study was obtained consisted of all freshmen students enrolled at Michigan State University during the Spring Term of 1970. Two samples of black and white students were secured by identifying five university courses containing high freshmen student enrollment. The sample consisted of 165 freshmen students: 70 black students and 95 white students.

The principal instrument used in this study was the College and University Environmental Scales, Second Edition, developed by C. Robert Pace. Most recent of the instruments designed to measure the college environment, it identifies those characteristics of the college which appear to be representative of the institutional environment. This instrument is the outgrowth of the College Characteristics Index developed by George Stern and C. R. Pace in 1958. In addition to the C.U.E.S. II, a personal data sheet was completed by each respondent. The purpose of this form was to collect personal and family data not available from other sources.

Findings and Conclusions

The design of this study allowed thirteen null hypotheses to be tested. Because of the three basic sets of data which were analyzed, the report of the findings is presented in three sections which are as follows:

- A. The perceptions of the total sample group.
- B. The perceptions of the black student sample group.
- C. The perceptions of the white student sample group.

The Perceptions of the Total Sample Group

Findings

The C.U.E.S. II was administered as the measuring instrument to obtain information concerning the perceptions of the total sample group toward the university environment as influenced by the variables of race, sex, academic success (G.P.A.), college major, socio-economic status, racial composition of high school attended, and the population of hometown. Significant differences were found to support the following statements:

1. Analyzed on the basis of race, black respondents viewed the university more favorably than white respondents on the scales of Practicality and Scholarship.

2. Analyzed on the basis of academic success, respondents in the 2.00-under category viewed the university more favorably than respondents in the other three categories on the scales of Practicality and Scholarship.

3. Analyzed on the basis of college major, respondents in the College 3 group viewed the university more favorably than did respondents in the College 1 and 2 groups on the Practicality scale.

4. Analyzed on the basis of sex, no significant differences were found in perceptions toward the university environment.

5. Analyzed on the basis of socio-economic status, respondents in the lower-middle class category perceived the university environment more positively than did respondents in the other six categories.

6. Analyzed on the basis of racial composition of high school attended, respondents in the 70-100% black student enrollment category perceived the university environment more positively than did respondents in the categories of 0-40% and 40-70%.

7. Analyzed on the basis of population of hometown, respondents in the urban category perceived the university environment more positively on the Practicality scale than did respondents in the rural category.

Conclusions

The findings of this study yield evidence to support the general conclusion that there are differences in the perceptions of students toward the environment of Michigan State University as reported by the freshmen students included in this investigation.

Several specific conclusions can be drawn from the findings; they are listed below.

1. Among freshmen students included in the study, those who are black perceived the university environment as being higher in Practicality and Scholarship than white students.

2. Among freshmen students included in the study, those who had grade point averages of 2.00 and under (the least successful students academically), perceived the university environment as being higher in Practicality and Scholarship than did students who were more successful academically.

3. Among freshmen students included in the study, those who were enrolled in the college of Natural Sciences, Veterinary Medicine, Engineering, or Business perceived the university environment as being more practically oriented than did students enrolled in the colleges of Arts and Letters, Communication Arts, Education, Social Science, or Home Economics.

4. Among freshmen students included in the study, those who were of the opposite sex did not perceive the university any differently.

5. Among freshmen students included in the study, those who were categorized as being from lower-middle class families perceived the university environment as being more practically oriented than did students from lower, middle,

upper-middle, lower-upper, middle-upper, or upper class families.

6. Among freshmen students included in the study, those who attended high schools that had between 70-100% black student enrollments perceived the university environment as being more practically oriented than did students who attended high schools with 0-40% or 40-70% black student enrollments.

7. Among freshmen students included in the study, those who were from cities that have a population of more than 50,000 people perceived the university as being more practically oriented than did students from cities or towns with populations of 50,000 or less.

The Perceptions of the Black Student Sample Group

Findings

The total group findings reported in the preceding section have been further divided to assess the perceptions of respondents of the same race, toward the university environment. Those perceptions as tested by the C.U.E.S. II were analyzed in terms of the influence of the variables of sex, academic success (G.P.A.), college major, socio-economic status, racial composition of high school attended, and the population of hometown. Significant differences were found to support the following statements:

1. Analyzed on the basis of sex, there were no significant differences in perceptions toward the university environment. However, black females perceived the university environment more positively on the scales of Practicality, Scholarship, Awareness, Community, and Campus than did black males.

2. Analyzed on the basis of academic success (G.P.A.), there were no significant differences in perceptions toward the university environment.

3. Analyzed on the basis of college major, there were no significant differences in perceptions toward the university environment.

4. Analyzed on the basis of socio-economic status, respondents in the middle class category perceived the university environment more positively on the Practicality scale than did respondents in the other six socio-economic class categories.

5. Analyzed on the basis of racial composition of high school attended, there were no significant differences in perceptions toward the university environment.

6. Analyzed on the basis of the population of hometown, respondents from urban areas perceived the university environment more positively on the Propriety scale than did respondents from rural areas.

Conclusions

The findings of this study yield evidence to support the general conclusion that while there are some differences in perceptions toward the university environment among students of the same racial group, those differences are not as great as those of students of different racial groups.

Several specific conclusions can be drawn from the findings and these are listed below.

1. Among freshmen students included in the study, those who were black, and categorized by sex, did not perceive the university environment significantly different.

2. Among freshmen students included in the study, those who were black, and had different grade point averages, did not perceive the university environment significantly different.

3. Among freshmen students included in the study, those who were black and enrolled in different colleges, did not perceive the university environment significantly different.

4. Among freshmen students included in the study, those who were black and in the middle class category perceived the university environment as being more practically oriented than did respondents in the other six socio-economic class categories.

5. Among freshmen students included in the study, those who were black and attended high schools of different racial compositions did not perceive the university environment significantly different.

6. Among freshmen students included in the study, those who were black and from urban areas, perceived the university environment as being higher in Propriety than did black freshmen students from rural areas.

The Perceptions of the White Student Sample Group

Findings

This section also assesses the perceptions of respondents of the same race toward the university environment, as influenced by the variables of sex, academic success (G.P.A.), college major, socio-economic status, racial composition of high school attended, and the population of hometown. Significant differences were found to support the following statements:

1. Analyzed on the basis of sex, there were no significant differences in perceptions toward the university environment. However, white females perceived the university environment more positively than did white males on the scales of Awareness, Propriety, Community, and Campus.

2. Analyzed on the basis of academic success (G.P.A.), there were no significant differences in perceptions toward the university environment.

3. Analyzed on the basis of college major, those students in the College 3 category perceived the university environment more positively than did students in the College 1 or College 2 categories.

4. Analyzed on the basis of socio-economic status, there were no significant differences in perceptions toward the university environment.

5. Analyzed on the basis of the racial composition of high school attended, there were no significant differences in perceptions toward the university environment.

6. Analyzed on the basis of the population of hometown, respondents from areas whose population was over 50,000 perceived the university environment more positively on the scales of Practicality, Awareness, Community, and Campus.

Conclusions

The findings of this study yield evidence to support the general conclusion that while there are some differences in perceptions toward the university environment among students of the same racial group, those differences are not as great as those found between racial groups.

Several specific conclusions, which are listed below, can be drawn from the findings.

1. Among freshmen students included in the study, those who were white, and categorized by sex, did not perceive the university environment significantly different on any of the scales.

2. Among freshmen students included in the study, those who were white and had different grade point averages did not perceive the university environment significantly different on any of the scales.

3. Among freshmen students included in the study, those who were white and enrolled in the colleges of Natural Science, Veterinary Medicine, Engineering, or Business perceived the university environment as being more practically oriented than did students enrolled in the colleges of Arts and Letters, Communication Arts, Education, Social Science, or Home Economics.

4. Among freshmen students included in the study, those who were white and from different socio-economic family backgrounds did not perceive the university significantly different on any of the scales.

5. Among freshmen students included in the study, those who were white and attended high schools whose racial compositions were vastly divergent did not perceive the university environment significantly different on any of the scales.

6. Among freshmen students included in the study, those who were white and from areas of 50,000 or more perceived the university as being higher in Practicality, Awareness, and Campus than did students from rural areas.

Summary

In order to make the findings more meaningful to the reader in terms of the worth of university or college environment studies, it is desirable, at this point, to make further interpretations and generalizations from the conclusions reached as a result of this research.

1. The results of this investigation demonstrated a higher regard on the part of black freshmen students for the practical orientation and the scholastic environment at Michigan State University than on the part of white freshmen students. These results suggest that black freshmen, specifically, have a higher degree of goal orientation and view their university experience as an opportunity to improve themselves economically and occupationally. In addition, there is a great possibility that the academic press at Michigan State University is so much greater than those experienced by black students in their previous educational backgrounds that they, thereby, perceive the environment as having a high scholastic orientation.

2. Sex was not found to have a significant influence on perceptions toward the university environment in any of the group comparisons made in this study. Males and females tended to perceive the university environment in much the same manner.

3. Academic success was found to be an influential variable on student perceptions only where total group

comparisons were made. The possible causes for these results are, as revealed in the personal data information, that a significantly larger number of black students are experiencing more academic difficulty at Michigan State University than are white students. This may be, at least partially, attributed to the poor educational opportunities provided for them in inner-city schools.

4. The college major variable was significant on the total group analysis and the white student group analysis. In both of these instances, those persons that were enrolled in the more technically oriented fields viewed the university more positively than did students enrolled in the social science oriented areas, suggesting that white students who were enrolled in these technical areas in significantly larger numbers, perceived the university as doing an adequate job of preparing them for specific occupations. Black students who were largely enrolled in the social science areas may be less optimistic about the university preparing them for dealing adequately with societal problems.

5. The socio-economic status variable was found to be significant for the total group and the black student group and not significant for the white student group. Again, the Practicality scale was the only one to be strongly influenced by this variable, suggesting race and the perceptions of black students toward education as the avenue to social equality is a dominant and overriding factor.

6. The racial composition of high school variable was found to be significant for only the total group on the Practicality scale. Those respondents who attended high schools with enrollments of 70-100% black students accounted for this significance. I would assume that white students in this category, along with blacks, are largely from lower-class families who reside in inner-city areas, consequently, having a great deal of concern for upward mobility.

7. Generally, for all three of the groups analyzed, those respondents from areas whose population was 50,000 and over perceived the university environment significantly more favorably than did respondents from rural areas.

Specifically for the total group, the environment was perceived as being higher in Practicality.

Black student respondents perceived the university environment as being higher in Propriety, which suggests that they perceive the university as being significantly less threatening than their home environments.

White student respondents perceived the university environment more positively on the scales of Practicality, Awareness, Community, and Campus, suggesting that because they are accustomed to interacting and relating to large numbers of people and massive institutions found in urban areas, they perceive the environment at Michigan State University as being less chaotic than do students from

rural areas. They view students as having a significant amount of concern for the livelihood and well-being of fellow students. They react positively to the amount of political consciousness and concern for the general welfare of mankind exhibited at Michigan State University. And finally, they view the intellectual climate as being commonly shared by the general university community and the faculty as being of a high caliber.

Recommendations

The results of this investigation demonstrate that freshmen students generally have a high regard for Michigan State University's ability to provide them with material benefits and view the environment as being extremely orderly. This is especially true of black student respondents. Therefore, in order to insure that these positive attitudes are maintained throughout the students' academic career, the following recommendations seem to be in order:

1. That university personnel explore strategies for minimizing the negative effects the large environment has upon students coming from areas of less than 50,000 population; for example: more intimate contact with persons responsible for supervision of dormitories, more frequent contact with academic advisors, and more intimate contact with teaching faculty.

2. That the university begin reallocating more of its resources toward the general solution of problems

associated with man's living in heavily populated environments, and strongly encourage the development of these skills on the part of students.

3. That tutorial assistance be equally provided for students, both to make up for academic deficiencies and to insure continued academic success.

4. The counseling services be made more accessible and the counseling personnel be capable of truly understanding students of different cultural and environmental backgrounds.

5. That opportunities for students to share and explore new ideas and concepts be provided for larger numbers of students, possibly using the residential college model.

6. That more cultural and social activities be provided for students who are seldom represented in university sponsored cultural and/or social functions.

Implications for Further Research

The first recommendation which must be given after reviewing this study is to encourage many more studies of this nature. Many studies must be completed which can serve as building blocks for the organization of meaningful research to be conducted in the future.

As a result of this research, several challenging and valuable studies are immediately apparent to the investigator. In this section two or three of these possibilities will be defined.

Universities recruiting minority group students should investigate the change in student perceptions toward the university environment over an extended length of time. Results of such research could be of great value to prospective students and to the institution in building a proper environment.

Colleges and universities could derive great value from studying the perceptions of students toward the environments who are enrolled in institutions which are vastly different environmentally. The results of this kind of research might assist college administrators in determining specific factors that contribute to positive attitudes toward university life on the part of these students.

Further investigation of the factors which determine the perceptions which students develop of the college environment and the methods which are effective in altering student perceptions is also of primary concern to the successful use of college environment measures. To accomplish these purposes, repetition of this research study under different circumstances would be valuable.

Researchers should have little difficulty finding adequate situations for valuable college environment measurement. The college environment promises to be an extremely valuable area of research.

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APPENDIX

TESTING INSTRUMENT

The College and University Environmental Scales, Second Edition, used as the measuring instrument in this study, is not included in the Appendix because of ethical considerations. It is a new, experimental instrument and, in the opinion of the investigator, it should not be available to the general public.

Individuals desiring to obtain a copy of the instrument should consult with a local college or university testing officer or write directly to:

Education Testing Service
Princeton, New Jersey

Dear Student:

Your assistance will be greatly appreciated in my efforts to complete a research project. The purpose of the research is to sample the attitudes of selected students toward the university environment. You should find the following materials in your packet:

- (1) A College and University Environment Scale Questionnaire
- (2) A Personal Data Form (inside CUES Folder)
- (3) An answer sheet (inside CUES Folder)
- (4) A scoring pencil

Instructions for answering the Questionnaire

- A. C.U.E.S.
 1. Please do not write on questionnaire.
 2. Answer all CUES questions on answer sheet--by darkening either T or F, depending upon your response to the statement.
- B. Personal Data
 1. Please answer all questions as accurately as possible.
 2. Indicate your race in top left hand corner.
- C. Answer Sheet
 1. In section designated for name, indicate your race; either black or white.
 2. Indicate your student number in all spaces designated for it.
 3. Indicate your sex by circling either M or F.

May I take this opportunity to thank you for your cooperation in this project.

Sincerely yours,

Gerald A. McIntosh

GAMcI/mm

PERSONAL DATA

Student number _____

1. Sex M _____ F _____

2. Check below your approximate Grade Point Average.

_____ 2.0 or under

_____ 2.0 - 2.5

_____ 2.5 - 3.0

_____ 3.0 or over

3. Check the college you are now or probably will be enrolled in.

_____ College of Agriculture and Natural Resources

_____ College of Arts and Letters

_____ College of Business

_____ College of Communication Arts

_____ College of Education

_____ College of Engineering

_____ College of Home Economics

_____ College of Natural Science

_____ College of Social Science

_____ College of Veterinary Medicine

4. In the square that comes closest to indicating the income-educational-level of the major bread-winner (mother, father, or guardian) in your family, write their occupation.

Income	Education			
	Less than 8th grade	12th grade	Some college	College graduate or higher
Less than \$5,000				
\$5,000 to \$9,000				
\$9,000 to \$13,000				
\$13,000 and over				

5. Racial composition of your high school: Blacks in attendance.

10% _____ 20% _____ 30% _____ 40% _____ 50% _____ 60% _____
70% _____ 80% _____ 90% _____ 100% _____

6. Population of the city or town in which you grew up:

_____ 10,000 or less
_____ 25,000
_____ 50,000
_____ 100,000 or more

MICHIGAN STATE UNIVERSITY

DATE _____

STUDENT NO. _____

SEX M F

NAME _____ COURSE NO. _____

INSTRUCTOR _____

OF TEST _____ FORM _____

BE SURE YOUR MARKS ARE HEAVY AND BLACK
ERASE COMPLETELY ANY ANSWER CHANGED



STUDENT NUMBER

1	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000
2	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000
3	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000
4	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000
5	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000
6	0 0000 1 0000 2 0000 3 0000 4 0000	5 0000 6 0000 7 0000 8 0000 9 0000

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153T 0000 F 0000	154T 0000 F 0000	155T 0000 F 0000	156T 0000 F 0000
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161T 0000 F 0000	162T 0000 F 0000	163T 0000 F 0000	164T 0000 F 0000
165T 0000 F 0000	166T 0000 F 0000	167T 0000 F 0000	168T 0000 F 0000
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