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STUDENT PERCEPTIONS OF RESIDENCE HALL ENVIRONMENT AT MICHIGAN STATE UNIVERSITY

Ву

David Allen Palmer

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Higher Education

ABSTRACT

STUDENT PERCEPTIONS OF RESIDENCE HALL ENVIRONMENT AT MICHIGAN STATE UNIVERSITY

Βv

David Allen Palmer

The purpose of this study was to: (1) measure the perceptions of selected students at Michigan State University towards university residence halls, (2) determine whether attitudinal differences exist between sex and racial groups of students towards their residence environment, (3) ascertain which groups of students are being the most and/or the least satisfied with the housing facilities and services provided them by the University, and (4) offer recommendations for the improvements suggested by the study.

Nature of the Study and Methodology

This study was conducted on the Michigan State
University campus during Spring term, 1974. The Southern
Illinois University Residence Hall Environment Scale
(S.I.U.R.H.E.S.), an instrument designed to measure eight
aspects of residence hall environment and survey opinions
regarding selected residence hall characteristics, was

administered to 3,914 students living in eight large coeducational residence halls. Completed and usable answer sheets were returned by 58 percent of the subjects, or 2,287 students.

The S.I.U.R.H.E.S. was constructed in 1972 and is composed of 116 items classified into seven scaled-item scales and one informational-items scale. The eight conceptual areas measured by the instrument are: (1) Individual Rights and Freedom, (2) Personal Conduct and Responsibility, (3) Assimilation and Homogeneity,

- (4) Academic emphasis, (5) Facilities, (6) Personnel,
- (7) Interpersonal relations and social interaction, and
- (8) Informational.

A summated rating scale, or Likert-type scale, was used to score the subjects' responses to the 116 items in the questionnaire. Subjects were asked to respond to an item (statement) in terms of their agreement with it, and were provided with five response options from which to choose (strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree).

Findings

Significant differences between sex groups were found on five of the eight scales (Responsibility, Homogeneity, Facilities, Interpersonal, and Informational), and on the total instrument. Difference in racial perception was found on one scale (Personnel).

Percentage of responses to individual items and scales by sex and racial groups and statistical treatment of the data lead to the following conclusions:

- 1. Females living in University residence halls on the Michigan State University campus exhibit a greater perception of student responsibility than do males.
- Females living in Michigan State University residence halls are more homogeneous than males.
- 3. Students living in Michigan State University residence halls do not perceive a strong academic press within the living environment.
- 4. Students residing in Michigan State University dormitories view their physical environment favorably and believe that the buildings are kept clean and sanitary by the maintenance staff.
- 5. Female students in the residence halls have a more positive attitude about their physical environment than do male students.
- 6. White students have a less favorable perception of residence hall and/or university staff effort and competency and the imposition of rules and regulations than do all other racial groups combined.
- 7. There is a high regard for and interest in personal/social interaction within the residence hall community.

- 8. Female students in University residence halls exhibit more satisfaction with their personal/ social relationships than do male students.
- 9. Female students are more satisfied with their total residence hall living experience than are male students.
- 10. Black students are not as satisfied as white students with the residence hall environment.

Recommendations

The primary recommendations suggested by this study are:

- 1. Resident staff should give increased attention to the needs and concerns of minority students as they relate to on-campus residence. Increased and continual cross-cultural educational programs are needed.
- 2. Housing alternatives to "24-hour visitation" and alternate-sex suites should be maintained, while substantial "quiet-hours" space should be provided.
- 3. Continual solicitation of student feedback on food quality and service is needed, as is the provision of realistic information to students on the costs to the University for room and board facilities and services provided them.

4. Continued recognition by the University of the vast amount of time most resident students spend in their residential environment is essential.
A corresponding commitment is needed on the part of the University to maintain, further develop, and improve the quality of residence hall life and its environment.

DEDICATION

This dissertation, the final requirement towards the completion of my doctorate, is dedicated to my parents, Jack and Vera Palmer, who have sacrificed, prayed, and waited for this moment for the past three decades.

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I give my sincere appreciation to the following individuals, without all of whom the completion of this study would not have been possible.

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CHAPTER I

THE PROBLEM

Introduction

The American system of higher education has developed a point of view that students' academic education can be enhanced by a supportive environment which contributes to students' academic, social and personal growth. Colleges and universities commit, to varying degrees, budgets, personnel, facilities and programs to institutional agencies or support systems which are intended and designed to assist students in their pursuit of a formal education. It is not uncommon for a college to operate a health facility, an office which lends financial assistance to needy students, an office which functions as a clearinghouse for work opportunities while students attend school and upon their graduation, a collection of trained counselors with whom students can discuss both academic and personal concerns, and a system of residence halls in which the student may live while attending classes.

That college residence halls play a vital part in the students' education has been espoused and verified by academicians and researchers. More than a half-century ago, Nicholas Murray Butler (1922), then president of Columbia University, said " . . . the provision of residence halls is quite as important and essential a part of the work of the University as is the provision of libraries, laboratories, and classrooms."

It is typically thought that a college education is obtained within the classroom setting. However, by virtue of and depending upon its environment, a residence hall may influence the resident students' attitudes, personal and social growth and academic achievement. Harold Riker (1965) noted that because students spend so much time in residence halls, it is likely that their behavior is influenced (by residence hall life) in many ways. Barger and Lynch emphasized the same idea by saying, "The residence hall is an educational setting which, if appropriately staffed, can become an excellent

¹N. M. Butler, Annual Report of the President and Treasurer to the Trustees of Columbia University for the Year ending June 30, 1922, p. 8.

Harold C. Riker, College Housing as Learning Centers (Washington, D.C.: American College Personnel Association, 1965).

laboratory in interpersonal competence and citizenship." 1
Such is the belief and attempt at Michigan State University.

College officials have been concerned for many years about the "quality of life" in campus residence halls, particularly as it pertains to the total collegiate experience. Michigan State University has sought, through its residence hall philosophy, programs, and management to augment and supplement the students' collegiate learning experience. The University has a major commitment to the provision of an extensive residence hall system, in terms of services and programs, staff and salary, and the physical plant. One of the underlying tenets of that residence hall system is the belief that a student's academic and personal experience at the University can and ought to be enhanced by living in a campus residence hall.

Early in its statement of the department's goals and objectives, the Residence Hall Programs Office declares its philosophy:

A major commitment of the residence hall program is to express the philosophy and objectives of the total University community. The program is dedicated to provide many opportunities for learning

¹B. Barger and A. Lynch, "University Housing: Toward a Healthy Learning Laboratory," in <u>Services to Students</u>, ed. J. Katz (San Francisco: Jossey-Bass, in press).

for individual students, while at the same time, meeting their physical, social and psychological needs. I

The department's primary objective, stated emphatically

. . . is to encourage the feeling on the part of students that education is a broadly based concept, that it is personal in nature, that it is a process involving their entire life, and that a student must exercise considerable initiative in the process of learning. Therefore, programs, activities, and approaches must always be assessed in terms of their educational value.²

A multi-purposed operation, the residence hall system seeks to "facilitate students' social/educational growth, provide emotional support for students as they adjust to University life and, by promoting a sense of community, to deter student feelings of isolation in the University through opportunities for involvement with people and programs of special interest." 3

These purposes are coupled with "every effort (to) provide comfortable housing, an atmosphere conducive to study, and an abundant variety of food at the lowest possible cost to the student."

Overview of Residence Hall Programs at Michigan State University, a publication of the Office of Residence Hall Programs, Michigan State University, East Lansing, Michigan, p. 1.

²Ibid.

³Ibid.

⁴Ibid., p. 2.

Clearly, the intent of the University's campus housing program is to assist and benefit the student while she/he pursues a formal academic education. It seems fitting and necessary, then, to seek an assessment of the University residence hall system by the students for whom the program is intended.

Purpose of This Study

The purpose of this study is to measure the perceptions of a select group of students at Michigan State University towards the residence halls in which they live and to determine whether any attitudinal differences exist between selected groups of students living in these residence halls.

The collected and analyzed data will reflect a composite assessment of resident student perceptions and attitudes toward University housing. The results of this study will make it possible to determine which groups of students are the most and/or the least satisfied with their living environment and the services and programs offered. Also noted will be the specific areas in which satisfaction is or is not being received.

The findings will serve as feedback for the University and its staff in the Office of Residence Hall programs and Residence Hall Management by: (1) measuring the general level of student agreement with theoretical conditions of an "ideal" residence hall environment,

(2) comparing residence halls with combined data to identify areas of potential inadequacy, (3) identifying specific values which may provide a basis for administrative or management changes, and (4) providing a basis for discussion within the residence halls or other University groups when considering alternative organization, services or programs.

Why This Study is Needed

Michigan State University, East Lansing, Michigan, operates one of the largest and most extensive residence hall systems in the country, housing more than 17,000 students in thirty-five residence halls. The retention rate from one year to the next approximates 55 percent, or about 9,500 students, which means that 7,000 to 8,000 new students move into campus residence halls each year. With such a high degree of turnover among the campus residents, a similar turnover rate among the staff who administer the individual residence halls (about 50% of the Advisory Staff, campus-wide, are replaced each year), and the changing, evolving needs of our society and its college-attending population, great flux exists in housing and at the University. There is good reason, then, to assess the residence hall system in terms of: (1) the priorities being set by those who administer the operation, (2) the services being rendered to the resident

students by the personnel who work in the residence halls, and (3) the needs of the residents living in those residence halls.

In studying perceptions of campus environment held by students and student personnel staff, Ivey,
Miller and Goldstein (1967) found that wide differences in perception of campus environment are possible among students and staff. They found that students perceive the environment as possessing a greater degree of environmental characteristics than do student personnel staff members. Just as important as the environment, then, is the awareness of it by students and university staff who may affect or change it.

It is accepted and expected that administrators of the University residence hall system have the obligation to investigate the implications and educational results of their activity in operating a collegiate residence. If the University residence hall staff members are to function effectively and if the needs of the University's resident students are to be met, clear perceptions and an understanding of student attitudes are needed.

¹A. E. Ivey, C. D. Miller, and A. D. Goldstein, "Differential Perceptions of College Environment: Student Personnel Staff and Students," <u>Personnel and Guidance Journal</u> 46 (September 1967): 17-21.

The potential for institutional self-analysis, information as to how resident students, themselves, perceive the environment in which they live, and a data-base of information with which similar studies can be compared all offer additional values to the study.

Nature of the Study

In this study the perceptions of various groups of resident students towards the environment of selected Michigan State University residence halls are examined. Responses of the total sample, and by sex and racialethnic groups, will be explored.

This study utilizes the Southern Illinois University Residence Hall Environment Scale (S.I.U.R.H.E.S.), developed in 1972. The instrument is designed to measure eight characteristics of residence halls and survey opinions regarding a number of residence characteristics. The survey, containing 116 items, examines the following seven conceptual areas and one of general information:

- (1) Individual Rights and Freedom; (2) Personal Conduct and Responsibility; (3) Assimilation and Homogeneity;
- (4) Academic emphasis; (5) Facilities; (6) Personnel;
- (7) Interpersonal relations and social interaction; and
- (8) Informational.

Subjects are asked to indicate their degree of agreement to each item on a five-point scale ranging from

"strongly disagree" to "strongly agree." The instrument and scales are fully described in Chapter III.

In addition to reporting student responses to selected items as they relate to each of the sub-scales, comparisons will be made between sex and racial-ethnic groups of students, calculating the means for all students comprising an aggregate or subgroup. This will permit interpretation of the group's measure of a single item or a group of items comprising a scale, and will determine if any differences in perception exist between the designated groups. Analysis of variance values will be computed and treated at the 5 percent level of confidence.

Operational Definitions

Several terms are used throughout this study which are understood by residence hall staff members at Michigan State and many other universities. However, for the larger public who may also read this study, explanation of the terms will be of value.

A <u>residence hall</u> refers to an individual unit or building on the M.S.U. campus housing two to six hundred students. It is not unusual for a residence hall to be referred to as a dormitory.

A <u>house</u> is used in the study to refer to a physical subdivision within the residence hall housing approximately fifty male or female students under the supervision

of a staff member called a Resident Assistant. It is not uncommon for a house to be referred to as a "floor" but this term will not be used in this study.

A Resident Assistant (R.A.) is typically an undergraduate student who is employed part-time by the University to help create and maintain a positive living environment for the students living in a house. Resident Assistants aid house residents in adjusting to college life, maintaining a semblance of order, and acting as an information resource.

Each residence hall is under the leadership of a Head Advisor who functions as the chief student personnel administrator of the unit. Head Advisors are full-time University employees who live in the residence hall, supervising the programs and activities of the hall which affect student life.

Management refers to the University employees of a residence hall who are responsible for the physical and fiscal operations of the building. A hall Manager and his or her staff are responsible for custodial services, the preparation and serving of food, physical repairs, and bookkeeping of a particular residence hall.

Theoretical Development

The purpose of college residence halls has changed over the decades. Beginning in the 1830s, colleges provided dormitories so that students could

live on the campus, isolated and "protected" from the environs of the nearby towns or cities. Early colleges were located in pastoral settings, "far from the madding crowd," and college officials believed that students were better off not being exposed to the more secular activities of nearby residential areas.

Colleges provide residence halls today for many different reasons. In today's economy, many students find group living on the campus to be more affordable, in terms of expenses and the amount of time saved through institutionally provided services. Residence hall students are typically provided linen, do not have to shop for or prepare food, clean dishes or kitchens, or carry on business with local utility companies. The convenience and cost savings of having these services is becoming more desirable for students today than was the case just five years ago.

Secure, clean, reasonably priced housing and good food are basic to any housing program; however, there is a greater purpose in the provision of on-campus housing than the institution's provision of bed and board for the student. It is firmly believed that the students' total educational experience is enhanced by living in college or university residence halls. The growth and development of an individual student comes from sources in-and in addition to-the classroom. It is from this

tenent that many universities place such great commitment in their residence hall program.

There are several philosophical and theoretical bases upon which Michigan State and most other colleges and universities residence hall systems rest. As stated earlier, the basic purpose of Michigan State University's residence hall program states that:

Residence halls aid in the facilitation of the student's growth by presenting opportunities for establishing reference groups and a sense of community through social proximity, learning tolerance for individual differences, and easing social relationships. Students' educational growth and development neither end as they leave the classroom nor begin when classes are brought into their living unit. Education, in its broadest sense, is an ongoing process that is enhanced by interpersonal relationships and everyday experiences. When one considers that students spend 65 to 70 percent of their time in a residence hall, then one may conclude that the residence halls provide an outstanding opportunity for fostering educational growth in the residents. 1

Arthur Chickering speaks a great deal about the educational and developmental value of residence hall living. He states that,

"... college residences do provide a significant context for student development. It is there that close associations with other students occur. The student's opportunities for contact with different kinds of persons can lead to increased ease and freedom in his relationships with others. Because in his residence hall a student observes the impact of his behavior on others and feels the force of the group's behavioral norms and standards, he can better develop a personal system of values that he can hold with integrity. And because the college

Overview of Residence Hall Programs, p. 1.

can control housing arrangements and the placement of students within the houses, it can create conditions that more effectively contribute to the freeing of interpersonal relationships and to the development of integrity. I

The interpersonal relationships, the close proximity of residents, and the influencial relationships which contribute to individual growth are not incidental by-products of residence hall living but, rather, intended outcomes. Because a college can exert control over interior design and structure, site planning and location of buildings, and at least the initial placement of students, conditions that foster such development can be established. Interior design and architectural arrangements involving the placement of living units and their locations in relation to one another influence the student's choice of friends, the groups he joins and the diversity of persons with whom he can have significant encounters. 3

In planning and building residential units that facilitate maximum growth for the student, Chickering hypothesizes that the following conditions must be incorporated:

 Each unit should be assigned persons of diverse backgrounds, differing interests, and differing values.

Arthur W. Chickering, Education and Identity (San Francisco: Jossey-Bass, Inc., 1971), p. 221.

²Ibid., p. 225.

³Ibid., p. 224.

- 2. The interior of each unit should be designed so as to foster association among students in the unit.
- 3. Members of each unit should be allowed to face meaningful decisions that require significant exchange.
- 4. Housing regulations should permit spontaneous, heated, and extended discussions that can be held without the imposition of arbitrary cut-off time and that are free from adult interruptions or surveillance. I

Such a setting, it is contended, may foster increased tolerance and respect for differences in background, belief and temperament.

Sherif and Sherif (1964) illustrate the relation—ship of reference group theory to collegiate residential living. Once a student identifies himself with the members of the house in which he lives, that house becomes both an anchor and a reference point. The group's values and norms provide a background against which the individual student's decisions about behavior, and his modification of values and attitudes, occur.

Reference group theory is very much a part of Michigan State's philosophy towards residence hall living. Again, particular mention is made in the University's statement of purpose:

This final point about reference groups is of special importance at Michigan State University. The absence of a feeling of "community" that is prevalent in the

¹Ibid., p. 225.

²M. Sherif and C. Sherif, <u>Reference Groups</u> (New York: Harper and Row, 1964).

multiversities today is a primary source of the frustration and alienation which many times manifests itself in unhealthy student behaviors. Residence halls can help promote a sense of community and deter student feelings of isolation in the University through opportunities for involvement with people and programs of special interest. 1

Chickering, in applying reference group theory, suggests further conditions which ought to be basic to residence hall structuring:

- 1. Let a student live in the same unit as long as he chooses. Let him change to a different unit if he wants to, and if space is available, but let the student's wish to remain take precedence over another's desire to enter.
- 2. Let the number of students per unit be small enough so that each student can know the others.
- 3. Let the members of each unit allocate to themselves the spaces within the unit.
- 4. Let each house have some funds to work with, and ask for an accounting at the end of each semester.²

Michigan State University residence halls are designed, staffed and operated in manners which do take into account human psychological, emotional and physical needs. Entering students are assigned locations on a random basis, with each residence hall and house containing mixes of students, in terms of race, ethnic identity, differing backgrounds, interests and values. There are no parietal rules or regulations which inhibit or obstruct spontaneous and free relationships and

Overview of Residence Hall Programs.

²Chickering, p. 229.

discussions among students. Students are permitted to live in their particular unit for as long as they want, or they may move to other locations anywhere on campus when space is available. A great deal of attention is given to the development of "community" among the residents of a unit such that those residents may know each other, and through behavior, can impact and be impacted by the group. Student governments within each unit are given responsibility for managing funds and determining, in part, the environment of that unit.

Residence halls, as "living-learning centers" espoused by Riker, have been in operation at Michigan State University for over a decade. Leach of the residence halls, or the geographical areas in which they are located, have been designed with such a model in mind. Resident students have access in the residence halls to (1) educational programs planned and implemented by staff; (2) faculty, through both classrooms in the halls and in faculty offices located in the halls; (3) recreational facilities; (4) physical facilities, such as meeting rooms, games rooms, multi-purpose rooms; and (5) University resources located in the halls, such as "satellite" offices of the Counseling Center, Financial Aids Office, and academic assistance opportunities.

¹Riker, p. 6.

The organization, structure and operation of Michigan State University residence halls notwithstanding, there is an on-going need to assess the attitudes and perceptions of the population living in these same residence halls. It is for this purpose that this study has been undertaken.

Overview

There is a great deal of previous research related to residence halls at the college level. However, Chapter II, the review of the literature, will concentrate primarily on residence hall life as it is perceived by students and college officers.

In Chapter III, procedure for the study, the methodology and procedures employed in this study will be reviewed, as will the methods of comparing data.

The results of the study are analyzed in the fourth chapter.

In Chapter V, the data are summarized and discussed, conclusions will be drawn, and recommendations will be made for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

College residence halls have been a significant factor in the American system of higher education since the Colonial period. Colleges and universities originally intended that institutional dormitories serve as a "home away from home"—a healthy and more desirable alternative, early college presidents thought, to students living in dwellings off the campus.

However, their purpose has changed in the past decade to outside-the-classroom learning in such areas as increased personal growth, socialization and the formulation of values. Just ten years ago, buildings which house students accounted for 36 percent of the total physical plant of American colleges and universities. At the beginning of this current academic year, 51 percent of 186,000 college freshmen surveyed indicated plans for

¹H. C. Riker, "The Changing Role of Student Housing," in College Student Personnel Work in the Years Ahead, ed. G. Klopf, A.C.P.A., Student Personnel Series No. 7, 1966.

residence in a college dormitory. For many students, then, living in a dorm is synonomous with going to college.

The topics about student housing, especially college and university residence halls, are quite varied, though related, and are very overlapping. Previous writings and research studies pertinent to this study include the following areas: the impact of residence halls upon students, comparisons of residence hall and nonresidence hall students (most frequently commuting or fraternity/sorority students), student perceptions of general campus and residence hall environments, and student perceptions of the college environment held by different sexual and racial groups. Obviously, none of these areas of study are completely independent and a study of the literature related to student perceptions of residence hall environment does necessitate investigation into all of the above areas.

Most of the more relevant research and literature has been conducted and written within the past twenty-five years, and a great percentage within the past decade. While textbook material does speak to the perceptions of students towards their living environments, the greater

¹ Chronicle of Higher Education, January 12, 1876, p. 4.

part of related research is reported in professional journals and in recent dissertation studies undertaken at various universities throughout this country.

Two General Reviews

The following two references provide a great amount of information, being, in themselves, reviews of the literature related to residence halls.

DeCoster and Mable (1974) provide a very thorough overview of residence halls, their purpose and mission. 1
While their book, an editorial collection of articles, seems to be largely intended as a review of staff responsibility for education and student development within residence halls, it also provides a historical outline of the changing role of residence halls and cites many previous (and "classic") research studies involving residence halls.

Williams and Reilley (1972) reviewed the literature from the twenty-year period of 1950-1970 on the impact of residence halls on students. They cite several studies in the areas of housing assignments and procedures, roommate relationships and living-learning environments. They summarize the literature with these findings: (1) that students who reside in living-learning residence halls perceive their environment as being less impersonal and

David A. DeCoster and Phyllis Mable, eds.,

Student Development and Education in College Residence

Halls (Washington, D.C.: American College Personnel

Association, 1974).

cold than those who reside in traditional halls, (2) that students nearing the end of their college career view the residence hall environment with discontent, and (3) that students view their residence hall environment and the total university environment in much the same way. 1

Other Instruments Assessing Perceptions of the College Environment

As indicated in Chapter I, this study uses the Southern Illinois University Residence Hall Environment Study (S.I.U.R.H.E.S.) to assess student perceptions of the Michigan State University residence halls, and that instrument is described fully in Chapter III.

The S.I.U.R.H.E.S. is only one of several known instruments devised and available for the measurement of college environments. Some other similar instruments are more popular and were used in research studies which will be referred to throughout this chapter. The following is a brief review of these other instruments.

For measuring college environments, Pace and Stern (1958) constructed the College Characteristics

Index (C.C.I.) as a way for administrators and faculty to analyze the institution. They suggest that a college

¹Don E. Williams and Robert R. Reilley, "The Impact of Residence Halls on Students," <u>Journal of College</u> Student Personnel 13 (1972): 402.

²Robert C. Pace and George C. Stern, "An Approach to the Measurement of Psychological Characteristics of

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 for higher education. The C.C.I. was organized into thirty ten-item scales and was based upon Murray's (1938) concept of personal needs and environmental press. 2

Perhaps the most frequently used instrument for assessing college environments is the College and University Environment Scales (CUES), developed by Pace in 1963. An outgrowth of the C.C.I., CUES attempts to systematically and objectively measure the prevailing atmosphere, the social and intellectual climate, and the style of life of a campus. The statements in the CUES sample the general atmosphere in the five areas of scholarship, awareness, practicality, community and

College Environments," <u>Journal of Educational Psychology</u> 49 (1958): 269.

Annamarie Gillespie Hayes, "How Black and White Students Compare in University Life-space Use" (Ph.D. dissertation, Michigan State University, 1971).

Henry A. Murray, <u>Explorations in Personality</u> (New York: Oxford University Press, 1938).

Robert C. Pace, CUES: College and University Environment Scales (Princeton, N.J.: Educational Testing Service, 1963).

⁴Hayes.

propriety. CUES will be referred to numerous times throughout this chapter as it has been the assessing instrument used by many researchers measuring residence hall and campus environment.

Thistlewaite (1959) revised the College Characteristics Index a year after its inception and developed the College Press Scales. One of the aims of this study was to find out from students what kinds of environments aided them in the realization of their studies. The findings revealed, however, that various college environments are associated with accomplishments in different academic disciplines.

Astin and Holland (1961) developed the Environmental Assessment Technique which attempts to assess the college environment in terms of eight student body characteristics. An assumption is made that the college environment is a product of institutional size, intelligence level of the student body, and characteristics of the student body.

Attempting to measure student and residence hall staff perceptions of a total residence hall program at Indiana University, Duvall (1969) developed the Residence

¹D. L. Thistlewaite, "College Press and Student Achievement," <u>Journal of Educational Psychology</u> 50 (1959): 5.

²A. W. Astin and J. L. Holland, "The Environmental Assessment Technique: A Way to Measure College Environment," The Journal of Educational Psychology 6 (1961): 308.

Hall Environment Scale. 1 An attitude scale measuring opinions regarding the desirability of certain residence hall conditions, this instrument resembles the S.I.U.R.H.E.S. as it measures strictly residence hall environment and its five scales, Group Living, Programming, Student Government, Counselor, and Physical Facilities are not unlike those of the S.I.U.R.H.E.S. Querying 1,100 students and 189 residence hall staff members, Duvall found that Group Living (types of learning situations that result from social interaction) was ranked fifth in desirability and Counselor (functions and purposes of the staff) ranked second. The students ranked Student Government first in desirability. Interestingly, favorable conditions within the residence halls existed frequently in the minds of staff members but less in the minds of residents. Duvall concluded that students become more disenchanted with their residence hall environment as they approach the end of their college careers.

The University Residence Environment Scale (URES) was developed by Moos and Gerst (1974) as a systematic evaluation of the psychological climates of university

¹W. H. Duvall, "Student-Staff Evaluations of Residence Hall Environment," The Journal of Student Personnel 10 (1969): 52.

student living groups. 1 It focuses on the measurement and description of student-student and student-staff relationships and on the type of organizational structure of the living group. It, too, was derived from the theoretical contributions of Murray (1938) and his conceptualization of environmental press. The ten subscales of the URES cover relationship dimensions, personal growth, and system maintenance and change, and the instrument can be used as a measurement of individual house climate and change over the academic year and to help understand complex environmental influences on students. 2

Other Studies of Campus Environment

The CUES has been used extensively to measure perceptions of different Groups on campus of the college environment. Administering CUES to nearly five hundred students at Michigan State University, Centra (1966) found that freshmen differed from upperclassmen in their environmental perceptions. Additionally, he found that

¹R. Moos and M. Gerst, <u>University Residence</u>
Environment Scale Manual (Palo Alto: Consulting Psychologists' Press, 1974).

²Allan J. DeYoung, Rudolf H. Moos, Bernice Van Dort, and M. M. Penny Smail, "Expectations, Perceptions and Change in University Student Residence Climates: Two Case Studies," <u>Journal of College and University Housing</u> 4 (Winter 1974): 4.

John A. Centra, Student Perceptions of Residence Hall Environments (East Lansing: Office of Institutional Research, Michigan State University, June, 1966).

students tended to see selected aspects of the University and their residence hall similarly and concluded that the residence hall environment colors student views of the total environment. How students feel about their residence halls, then, affects their feelings about their college or university.

Heskett and Walsh (1969) administered CUES to residence hall student personnel staff, managers and student government officers. They found that managers perceived a stronger press on all five scales.

Berdie (1968) compared the perceptions and expectations of new freshmen and returning sophomores and found a significant decrease in expectations between the first and second years of enrollment.²

Walsh and McKinnon (1969) also found that expectations of college decreased when they administered CUES to freshmen in an experimental curriculum at The Ohio State University.³

¹Sharon Heskett and W. Bruce Walsh, "Differential Perceptions of College Environment," <u>Journal of College Student Personnel</u> 10 (May 1969).

²Ralph Berdie, "Changes in University Perceptions During the First Two Years," <u>Journal of College Student</u> Personnel 9 (March 1968).

³W. Bruce Walsh and Richard D. McKinnon, "Impact of an Experimental Program on Student Environment Perceptions," The Journal of College Student Personnel 10 (September 1969).

Spence (1970) studied the perceptions of faculty and students of three different environments at Michigan State University. Comparing a general undergraduate residence hall, a residential college, and an undergraduate academic college, he found that students not connected to a residence hall demonstrated the lowest level of community (as defined by CUES) and campus morale.

To determine the administrative, faculty, and student perceptions of selected aspects of a complex university, Gibson (1973), using CUES II, found that (1) students and faculty differed in perception, (2) students and administrators differed in perception, and (3) differences in perception existed between faculty and administrators.²

Results were not dissimilar when Rousell (1974) used CUES II to determine the image perception of Dillard University, as held by freshmen and senior students,

Charles Calvin Spence, III, "Perceptions of Selected Faculty and Undergraduate Students of Three Different Environments at a Complex University Using the College and University Environment Scale: An Experimental Social Science Residential College, A Conventional Living-Learning Residence and a College of Social Science" (Ph.D. dissertation, Michigan State University, 1970).

²Baylor Price Gibson, Jr., "An Analysis of the Intellectual-Social-Cultural Environment of a Complex University" (Ph.D. dissertation, Northwestern University, 1973).

faculty, and administrators. He found that faculty and administrators tended to have a more exalted impression of that University than did experienced students.

Tvey, Miller, and Goldstein (1967) used the C.C.I. to study perceptions of the Colorado State University environment held by student personnel staff, dormitory head residents, and the student body. Their data suggest that wide differences in perception of campus environment are possible among students and staff. In their study they found that students perceived the environment as possessing a greater degree of environmental characteristics valued by the academic community (aspirational level, intellectual climate, and academic achievement) than did other reference groups.

Netusil and Hallenbeck (1975) sought to analyze the similarities and differences in students' reported level of satisfaction and that level of satisfaction as perceived by academic advisors and the professional student affairs staff at Iowa State University. Using

Norman Roussell, "Sub-Populations' Perceptions of Dillard University" (Ph.D. dissertation, Wayne State University, 1974).

²Ivey, Miller, and Goldstein.

Anton J. Netusil and Daniel A. Hallenback, "Assessing Perceptions of College Student Satisfaction," Journal of the National Association of Student Personnel Administrators 12 (Spring 1975): 263.

the College Student Satisfaction Questionnaire (CSSQ),
Form C, they sampled three hundred undergraduate students,
three hundred academic advisors, and ninety-two professional student affairs staff. The CSSQ is composed of
five scales: compensation (or amount of study), social
life, working conditions, recognition, and quality of
education. Students reported a higher level of satisfaction than was perceived by the academic advisors on
the two scales where significant differences were found,
social life and working conditions. When compared to
student affairs staff, students rated higher on the
recognition scale. Lastly, on the social life and working conditions scales, student affairs staff perceptions
more accurately resembled students' reported level of
satisfaction than the academic advisors' perceptions.

Different results were found by McPeek (1967) who administered CUES to students, faculty, and administrators at Millikin University and found that perceptions between the three groups were strikingly similar.

Hechenberger (1974) used CUES II to analyze perceptions of students, faculty, and student personnel staff

¹Beth L. McPeek, "The University as Perceived by Its Subcultures," The Journal of the National Association of Women Deans and Counselors 30 (Spring 1967): 129.

toward the college environment and found, like McPeek, no significant differences in perception between groups. 1

Research Relating to the Impact of Residence Halls Upon Students

A great deal of previous research exists on a multitude of aspects regarding the effects of residence halls upon students living in them. Research topics include housing assignment procedures, roommate compatibility, living-learning and traditional residence halls, effects of various housing assignments upon student satisfaction and academic success, limited-visitation and openvisitation halls, and so on.

There have been many studies which have dealt with the impact of housing assignments on students. DeCoster (1966), studying the effects of assigning high ability students to residence halls in a homogeneous manner, rather than randomly, found that high ability students living close together were more academically successful than high ability students scattered throughout a residence hall. ²

¹Nan D. Hechenberger, "Perceptions of a University Environment: Students, Faculty, and Student Personnel Staff" (Ph.D. dissertation, The Catholic University of America, 1974).

David A. DeCoster, "Housing Assignments for High Ability Students," The Journal of College Student Personnel 7 (1966): 19.

Studies by Beal and Williams in 1968, 1 Chesin in 1969, 2 and Schoemer and McConnell in 1970 were concerned with the effects of assigning students to residence halls by classification or year in school. None found differences between groups.

Centra (1968) studied the extent to which living-learning residence halls differed from conventional residence halls in selected dimensions of their environment. He found that large living-learning units were viewed by students as being as friendly and cohesive as small, conventional residence halls and that students in living-learning units did not perceive their residence environment as more intellectual than did students in conventional units.

¹P. E. Beal and D. A. Williams, An Experiment with Mixed-Class Housing Assignments at the University of Oregon, Student Housing Research, ACUHO Research and Information Committee, February, 1968.

²S. E. Chesin, "Effects of Differential Housing on Attitudes and Values," <u>College Student Survey</u> 3 (1969): 62.

³J. R. Schoemer and W. A. McConnell, "Is There a Case for the Freshmen Women's Residence Hall?" <u>Personnel</u> and Guidance Journal 49 (Summer 1970): 35.

⁴John A. Centra, "Student Perceptions of Residence Hall Environment: Living-Learning Vs. Conventional Units," The Journal of College Student Personnel 9 (1968): 266.

Brown (1968), however, found intellectual attitudes heightened as a result of a residence hall intellectual discussion program.

Olson (1964),² surveying five hundred students in a complex of living-learning residence halls at Michigan State University, found favorable student reaction, as did Pemberton (1968)³ and Rockey (1969).⁴

At St. Mary's College of Maryland, Goldsmith (1975) used Meador's Residence Hall Environment Scale (which measures administrative practices, group living, physical facilities, programming, student advisory staff and student government) and found that students in conventional halls had more positive perceptions of their

¹R. D. Brown, "Manipulation of the Environmental Press in a College Residence Hall," The Personnel and Guidance Journal 46 (1968): 555.

LeRoy A. Olson, "Student Reactions to Living-Learning Residence Halls," The Journal of College Student Personnel 9 (1968): 232.

³C. F. Pemberton, "An Evaluation of the 1967-68 Living-Learning Experiment at the University of Delaware," University Impact Study (Newark, Delaware: University of Delaware, November, 1968).

⁴M. C. Rockey, "Living and Learning at Central Washington State College" (paper presented at N.D.E.A. Institute for College Student Personnel Workers, Michigan State University, 1969).

environment than students in living-learning halls. He also found that students in single sex halls had more positive perceptions of the environment than did students in co-educational halls.

Nasatir (1963) found that students who are "out of context" with their residence hall (academic students in nonacademic halls, or vice-versa) are more prone to academic failure.²

Chickering (1969) speaks at length about reference group theory and how it operates within group living environments. An individual's relationship to the group of peers with whom she/he lives and the behavioral parameters imposed upon the group by the rules and regulations of the institution determine, in very large part, the growth and development of the students living in college residence halls. Using principles taken from research on reference groups, Chickering suggests, among others, the following two possibilities for the management of college housing which illustrate conditions that might foster development of students:

Harold D. Goldsmith, "The Relationship Between Selected Factors in the Residence Hall Environment and Residents' Perceptions of that Environment" (Ph.D. dissertation, Indiana University, 1975).

David A. Nasatir, "A Contextual Analysis of Academic Failure," The School Review 71 (1963): 290.

³Chickering.

- Let a student live in a particular unit as long as he chooses. Let him change to a different unit if he wants to, and if space is available, but let the student's wish to remain take precedence over another's desire to enter.
- 2. Let the members of each unit allocate to themselves the spaces within the unit. 1

(The housing arrangement procedures at Michigan State
University do, in fact, incorporate these principles of
reference group theory.)

Sommer (1968) compared student reactions to four types of living units (small, cluster-type halls containing 40-60 students, high-rise halls, apartments, and reconverted army barracks). He found that high-rise units (similar to the ones used in this current study at Michigan State University) were perceived as impersonal, institutional, boxlike, and not good for social relationships. Smaller units were more satisfactory for social relationships but apartments provided greater privacy and quiet.

Standing (1968) investigated the quality and character of group life within men's residence halls at Michigan State University and found that while the quality

¹Chickering, p. 229.

²Robert Sommer, "Student Reactions to Four Different Types of Residence Halls," <u>The Journal of College</u> Student Personnel 9 (1968): 232.

of learning did vary between houses of students, freshmen and older students perceived their house climate similarly.

Astin (1970), following the results of a very prominent study, concluded that living in a dormitory has very positive benefits on the student's education. He found, in studying 25,000 students, that those in residence halls were less likely to drop out of school and more likely to graduate in four years. Further, living in a dormitory increased the chances that a student would be satisfied with the overall college experience. This finding is similar to Centra's of 1966, when he found that students' views of their residence hall environment are similar to those of the total college environment.

Residence Hall Versus Nonresidence Hall

Of the numerous studies assessing the impact of college housing, a great many have considered differences between, rather than within types of housing. These next

George Robert Standing, "A Typological Approach to the Study of Men's Residence Groups" (Ph.D. dissertation, Michigan State University, 1968).

²Alexander W. Astin, "The Impact of Dormitory Living on Students," <u>Educational Record</u> 54 (Summer 1973): 204.

³Centra.

several paragraphs will be concerned about the effects of residence hall versus nonresidence hall living on the student.

In testing 1,400 students at Oklahoma State University, Dollar (1966) found that campus residence halls, living units off-campus, and fraternity houses seem to attract different types of students.

This is somewhat similar to Adams' (1965) findings when he investigated student subcultures on the Michigan State University campus. Using Trow's theory that four student subcultures are distinguishable on the campus (vocational, academic, collegiate, and nonconformist), he surveyed male students of a living-learning residence hall. He found that, after the sophomore year, students in the academic subculture elected to live in supervised housing and cooperative units, students identifying with the nonconformist subculture remained in residence halls, and those in the collegiate subculture moved to fraternities. ²

Robert Dollar, "A Study of Certain Psychological Differences Among Dormitory, Fraternity, and Off-Campus Freshmen Men at Oklahoma State University" (Ph.D. dissertation, Oklahoma State University, 1963).

²Donald V. Adams, "An Analysis of Student Subcultures at Michigan State University" (Ph.D. dissertation, Michigan State University, 1965).

In their near classic study of residence halls at the University of California-Berkeley, Van Der Ryn and Silverstein (1967) state that,

Traditional "dormitory conditions tend to filter out students whose presence adds diversity and a sense of intellectual dialogue to the (university) community. Residence halls, at least at Berkeley, cater to the "collegiate" type of student to a large extent because of the failure in the halls to adequately provide for independence, (and) a diversity of activities and friends . . . characteristics of successful living. And yet, it is the search for these conditions that drives many students out of the dormitory. I

In administering the C.C.I. to a small number of junior students, Baker (1966) found that: (1) dormitory students seem to be less aware of the press of the college environment as compared to those who reside with their families and (2) dormitory residents are more dependent upon the university for their need satisfactions than are family residents.²

Scott (1975) administered Shostrom's Personal Orientation Inventory to students living on- and off-campus and found that increases in self-actualization

lsim Van Der Ryn and Murray Silverstein, <u>Dorms</u> at Berkeley (Berkeley, Calif.: Center for Planning and Development Research, University of California, 1967), p. 27.

²S. R. Baker, "The Relationship Between Student Residence and Perception of Environmental Press," The Journal of College Student Personnel 7 (July 1966): 222.

occurred more often in residence hall students than students living off-campus or commuting from home.

Harnett (1963) found that residence hall living tended to be associated with positive changes in academic achievement in contrast to Greek living, which was associated with negative change.²

These findings are similar to those of Diener (1960) who found that residence halls had a higher proportion of over-achieving males while fraternities had a higher proportion of underachievers.³

Dollar (1963) found that residence hall students at Oklahoma State University tended to be higher in independent thought than those in fraternity housing. 4

Maston (1963) found that high prestige fraternities and residence halls both contribute to an atmosphere conducive to academic achievement.⁵

¹ Stephen H. Scott, "Impact of Residence Hall Living on College Student Development," The Journal of College Student Personnel 16 (May 1975): 214.

²Rodney T. Harnett, "Place of Residence as a Factor in Academic Performance Patterns of College Students" (Ph.D. dissertation, Michigan State University, 1963).

³Charles L. Diener, "Similarities and Differences Between Over-Achieving and Under-Achieving Students," Personnel and Guidance Journal 38 (1960): 396.

⁴Dollar.

⁵Robert E. Maston, "A Study of the Influence of Fraternity, Residence Hall, and Off-Campus Living," <u>Journal of the National Association of Women Deans and Counselors</u> 26 (1963): 24.

Surveying 1,400 students at Villanova University, Ryan (1970) found obvious differences between groups of students living on campus, at home, and off-campus, in their relation to degree of satisfaction with respective residence. He found that dormitory students study more, but have no closer faculty contact and that 41 percent of the on-campus population rated accommodations as poor (compared to 14 percent of the off-campus students and 1 percent of those living at home). The data suggest that significant variations in many dimensions of college life are related to types of residence.

Conducting research on commuter and residence hall students, Moore (1974) found that commuter students had a higher level of satisfaction and greater independence from their peers than residence hall students.²

In a recent study at Indiana University, Welty (1974) compared the impact of the residence halls, off-campus and commuter living situations on college freshmen.³

¹James T. Ryan, "College Freshmen and Living Arrangements," The Journal of the National Association of Student Personnel Administrators 8 (October 1970): 127.

²Richard L. Moore, "A Comparison of Student Attitudes at Commuter and Residential Universities" (Ph.D. dissertation, Memphis State University, 1974).

³John Donald Welty, "The Impact of the Residence Hall, Off-Campus and Commuter Living Situations on College Freshmen" (Ph.D. dissertation, Indiana University, 1974).

He found that the residence hall living situation, especially when combined with high levels of satisfaction with faculty and number of new student friendships formed, does have a greater positive impact than the other two living situations.

Hountras and Brandt (1970) experienced similar results when they tested 270 undergraduate males in different living environments. Their findings revealed that students residing off-campus and at home are deprived of the on-going stimulation present in campus residence halls, an interpersonal process which helps to develop the values, attitudes, and academic goals which are necessary for academic success in college.

In their study of students' reported level of satisfaction at Iowa State University, Netusil and Hallenback (1975) found though, that fraternity and sorority students had higher levels of satisfaction with working conditions than did residence hall or off-campus students.²

Similar Studies at Michigan State and Other Universities

There have been several similar attempts at other universities to assess student attitudes and opinions about the campus residence halls.

Peter T. Hountras and Kenneth R. Brandt, "Relation-ship of College Residence to Academic Performance in College," Journal of Educational Research 63 (April 1970): 351.

²Netusil and Hallenback.

Olson (1964) found that 528 students in Michigan State University's living-learning residence halls least liked the lack of privacy and the extent of rules and regulations. 1

At the University of Wisconsin (1971), 1,040 residence hall students were questioned concerning their attitudes about residence halls and their reasons for returning to or leaving the dormitories. Those who favored the residence halls enjoyed their convenient location, the services provided, and the friends and activities available to them in the dormitories. Those who left the residence halls to live elsewhere did so for more privacy, a freedom from regulations, and a lower cost of living.

Isom (1971) sought the views of 607 college students at the University of Mississippi. Sampling residence hall students and those living off-campus as to the advantages and disadvantages of the types of residences, he found the proximity of friends and closeness to campus

¹⁰¹son.

²John R. Nevin, "University Residence Hall Research Study" (paper presented to the Director of Residence Halls, University of Wisconsin, The University of Wisconsin, 1971), p. 31.

Robert Henry Isom, "Student Opinions of Advantages and Disadvantages of Living Accommodations at State Colleges and Universities in Arkansas" (Ph.D. dissertation, The University of Mississippi, 1971).

advantageous; noise and too many regulations were perceived as disadvantages.

In 1972, five hundred students at Western Michigan University were asked their opinions about the University residence halls. Respondents liked the location of residence halls, meal conveniences, and the opportunity to make friends. They disliked the rules and regulations, the lack of privacy, and what they considered to be the high cost.

Madsen, Kuder, and Thompson (1974) sampled 10 percent of the Colorado State University student population in 1969 (575 students) and again in 1972 (504 students) in an attempt to discern differences in attitude toward that University's residence hall system. While students were more satisfied in 1969 with the atmosphere of the campus dining facilities, they were more satisfied three years later with: the rules and regulations, room and board rates, room furnishings, janitorial services, the academic environment of the halls, the quality of food, recreational facilities, and the fact that they were treated as individuals and adults.

Western Michigan University, "Residence Hall Occupants Survey: Western Michigan University" (paper for Housing Office, Western Michigan University, 1972), pp. 3-6.

Dennis Madsen, James M. Kuder, and Tom T. Thompson, "How Satisfied Are Your Students? A Longitudinal Report," <u>Journal of College and University Student Housing</u> 4 (1974): 9.

Goldsmith (1975) concluded from his study at

Indiana (see earlier description of study on page 32) that
students in lower academic classifications (and, hence,
living in residence halls the shortest amount of time)
had the most positive perceptions of the halls. He
recommended that more emphasis be devoted to students
living in residence halls the longest. 1

In a sizable study at Michigan State University (1969), 4,500 students were queried regarding their attitudes about the campus residence halls. A total of 18,000 questionnaires were received as each student completed a questionnaire in each of four different areas (physical facilities, regulations, staffing, and living-learning environment). While students did not exhibit much concern about rules and regulations, they were displeased with the general maintenance of their residence hall, the inflexibility of room use, study facilities, the quality of food, and the feeling that their residence hall was cold and impersonal. ²

Titus (1970) sought to identify what students believed to be important elements of satisfactory housing arrangements at the University of Virginia. Responses

¹Goldsmith.

²Robert J. Dollar, "Student Characteristics and Choice of Housing," The Journal of College Student Personnel 7 (May 1966): 147.

from 555 male students indicated that residence hall students used their own room for study purposes while off-campus students used living rooms and the campus library more for study.

and female students at Michigan State University, found results which duplicated previous studies. Students did like the convenience of the residence halls, their proximity to classroom buildings, and the availability of staff. They disliked the general lack of privacy, the expense of the residence halls, and the high noise level. His findings indicated a slightly positive attitude toward the residence halls.²

Research Revealing Male/Female Perceptions of Environment, Particularly that of Residence Halls

A review of the literature with respect to male/ female perceptions of residence halls or even campus environment reveals a slight discrepancy.

Olson (1964), in determining student attitudes toward living-learning residence halls at Michigan State

¹Chester Randolph Titus, "Student Perceptions of Important Factors in Single Student Housing" (Ph.D. dissertation, Michigan State University, 1970).

²James Cattanach, "A Survey of Student Attitudes Toward the Michigan State University Residence Hall System" (M.A. thesis, Michigan State University, 1972).

University, found that women were more impressed than men with conditions in their rooms, though males were living in over-assigned conditions at the time of the study. 1

McPeek's study at Millikin University (1967) found that females believed the environment more friendly than did males and that more importance was placed on scholarship.²

At Southern Illinois University, Antes (1971) found that the quality of residence hall physical facilities which directly effect privacy and study environment is of importance primarily to females.³

In a University of Oklahoma study of environment, Black (1971) found that a more positive opinion towards the campus environment was held by females. 4

Similar results were found at Indiana University when Mangus (1972) surveyed 2,132 students to find that

^{1&}lt;sub>Olson</sub>.

² McPeek.

³Richard Louis Antes, "A Study of Freshmen Student Expectation and Satisfaction with the Privately Owned Off-Campus Residence Hall Environment at Southern Illinois University" (Ph.D. dissertation, Southern Illinois University, 1971).

⁴Kathleen Black, "The Effects of Field of Study, Classification, and Sex on Students' Opinions of Campus Environment" (Ph.D. dissertation, The University of Oklahoma, 1971).

female students responded more positively toward campus rule enforcement. 1

In examining students' perceptions of an urban education institution in relation to certain student characteristics, Sullivan (1973) found females demonstrating higher perceptions of faculty sensitivity and undergraduate teaching.²

Using CUES to describe the nature of campus environment as perceived by students and faculty, Spoor (1973) found that women tended to report a stronger press than men for scholarship, social, and aesthetic sensitivity. 3

Though only eighty male and female students were selected from Michigan State University's colleges of Natural Science and Social Science by Al-Taiey (1973),

Larry Lee Mangus, "The Role of Residence Hall Counselors as Perceived by Administrators, Resident Assistants, and Students" (Ph.D. dissertation, Indiana University, 1972).

²D. Bradley Sullivan, "An Analysis of Students' Perceptions of the Educational Environment in Relation to Certain Student Characteristics" (Ph.D. dissertation, Boston College, 1973).

³E. C. Spoor, "A CUES Assessment of the Perceived Environment of a Small Church-Related Liberal Arts College by the Various Groups Pertinent to Its Life" (Ph.D. dissertation, The University of Southern California, 1973).

females were found to be more satisfied with their environment than males.

In her study at Saint Louis University, Luckett (1973) found that females perceived the University as placing more emphasis on intellectual-aesthetic extracurriculum than males.²

Netusil and Hallenbeck (1975), in a study at Iowa State University (see page 28), found that females reported a higher level of satisfaction with social life than did males.³

In a recent study by Montgomery, McLaughlin, Fawcett, Pedigo, and Ward (1975), it was found that while convenience was a positive factor for both males and females living on campus, women preferred living in residence halls for the availability of interaction and men for the financial expense.

¹Sabah Bakir Al-Taiey, "Students' Satisfaction and Dissatisfaction with the Major Field Environment in Colleges of Natural Science and Social Science at Michigan State University (Ph.D. dissertation, Michigan State University, 1973).

²Amanda D. Luckett, "College Environment: Students' Perceptions of Institutional Functioning" (Ph.D. dissertation, Saint Louis University, 1973).

Netusil and Hallenbeck.

James R. Montgomery, Gerald W. McLaughlin, L. Ray Fawcett, Elizabeth A. Pedigo, and Susan S. Ward, "The Impact of Different Residence Hall Environments Upon Student Attitudes," Journal of College Student Personnel 16 (September 1975): 389.

In a study of 1,173 students at the University of Northern Colorado, Rudolph (1973) found that males were generally more liberal than females. 1

Though only 241 students were surveyed by Dear (1974) at Northern Illinois University, females perceived reading ability and the use of time to be more important in college success than males. Males, however, perceived ethnic group relations to be more important than did females. ²

In assessing the perceptions of 165 freshmen students towards the environment at Michigan State University, McIntosh (1971) found that sex did not have a significant influence on perceptions in any of the comparisons.³

Self (1971), when sampling 1,319 students at the University of Alabama, found no difference in male and female perceptions of the University environment.⁴

¹Shirley Marie Wiegman Rudolph, "Values of University of Northern Colorado Students, Faculty and Administrators" (Ph.D. dissertation, University of Northern Colorado, 1973).

²Robert Dear, "A Study of Certain Psychological Differences Among Dormitory, Fraternity, and Off-Campus Freshmen Men at Oklahoma State University (Ph.D. dissertation, Oklahoma State University, 1963).

³Gerald Alfred McIntosh, "A Study of the Perceptions of Black and White College Freshmen at Michigan State University Toward the University Environment" (Ph.D. dissertation, Michigan State University, 1970).

⁴Lee Vann Self, "A Study of Selected Environmental Factors of the Student Body at the University of Alabama, Tuscaloosa, 1970-71" (Ph.D. dissertation, University of Alabama, 1971).

When determining the differences in institutional impact on the attitudinal development of black students in both a predominantly black and a predominantly white institution of higher education, Pruitt (1974) found no significant differences between sexual groups on any of the scales measured.

Hechenberger (1974) also found that no significant differences in perception of the environment existed on the basis of the students' sex.²

Finally, Pace (1966), as a result of extensive research using CUES, summarized that men and women at the same institution had generally similar scores on all five scales measured.

Research Revealing Perceptions of the Campus and Residence Hall Environment by Racial Groups

The relevant research for this study involving racial group perceptions of the college environment has

lwilliam Nelson Pruitt, Jr., "A Comparison of the Developmental Differences Between Black Students Attending a Predominantly Black Institution and Black Students Attending a Predominantly White Institution" (Ph.D. dissertation, University of Michigan, 1974).

²Hechenberger.

Robert C. Pace, "Comparisons of CUES Results from Different Groups of Reporters," College Entrance Examination Board, Report #1, University of California, Los Angeles, July, 1966, p. 34.

come from the past five years and exclusively from previous dissertation findings.

In her identification of differences between black and white freshmen at Michigan State University in their life-space use, Hayes (1971) surveyed one hundred black and one hundred white freshmen. Her findings were both pragmatic and philosophical. White students prefer to live in dormitories, not apartments, and to have meals available on a scheduled basis. Black students would prefer to live in apartments, not dormitories, and to have unscheduled meals. Further, black students on the Michigan State University campus did not feel wanted or accepted while white students felt wanted and believed that black students were accepted. 1

Fabris (1972) set about to determine if selected groups of administrators, faculty, and black and white students differed in their perception of the Mississippi State University environment. Surveying only one hundred white and sixty black students, he found that white students scored higher on scales involving regulations, services offered, and social environment.²

^lHayes.

²Frank Stratton Fabris, "Selected Aspects of Campus Environment as Perceived by Groups Within the Environment" (Ph.D. dissertation, Mississippi State University, 1972).

McDonald (1972) used CUES to survey the entire black population (100 students) and a random sample of white students at the University of Miami to investigate and compare the perceptions of black and white graduate students. His results are varied and insightful. Black graduate students perceived the University more positively than white graduate students in areas of practicality, community, and awareness. 1

Black students on predominantly white campuses, according to Nolen (1972), perceived white administrators to be on the periphery of black students' life style. 2

Amprey (1973), surveying 450 black and white juniors and seniors on a predominantly black campus, found that racial background had no influence on evaluations of counseling and financial aid programs, but white students evaluated campus housing higher than black students. 3

¹Timothy R. McDonald, "Black and White Graduate Student Perceptions of University Environment" (Ph.D. dissertation, University of Miami, 1972).

²John Frank Nolen, Jr., "Student Personnel Administrators as Perceived by Black Students on Three Selected State University Campuses with Predominantly White Students and White Administrators" (Ph.D. dissertation, The Florida State University, 1972).

³Joseph Leonard Amprey, Jr., "An Evaluation of Student Personnel Services as Viewed by Black and White Students of Both Predominantly Black and Predominantly White Student Populated Campuses" (Ph.D. dissertation, The American University, 1973).

Lawyer (1974) surveyed 438 black and white students and employees at the University of Toledo and found that the black community had a lower positive image of the University. 1

Luckett (1973) found that black students at Saint Louis University perceived less freedom at the University than did white students. 2

At the University of Michigan, Pruitt (1974) sought to determine the differences in institutional impact on the attitudinal development of black students (see prior reference to study on page 49). He found that blacks in the predominantly black institutions felt significantly more negative toward our present educational system than blacks in the predominantly white institutions. 3

With only fifty respondents when he investigated the attitudes of Saint Louis University undergraduate black students, Collins (1974) concluded that black

¹Cyrus J. Lawyer, III, "Attitudes of the University of Toledo as Perceived by a Black Community and a White Community" (Ph.D. dissertation, University of Toledo, 1974).

²Luckett.

³Pruitt.

students' attitudes in a large, predominantly white university, whether rural or urban, state, private, or church-related, are similar.

Surveying 750 students in three Michigan Community Colleges, Decker (1974) found attitudes of black community college students towards overall faculty performance to be higher than white community college students.²

Walker (1974) sought to determine if a human relations education program caused any statistically significant difference in black and white students' inter-racial attitudes, between groups of race and sex. Testing one hundred black and white students, he found there to be no change in inter-racial attitude whether or not students participated in the program, nor did he find a change in attitude between any of the groups. 3

Summary

This chapter has reviewed other instruments and research studies which assess student perceptions of

¹William Collins, Jr., "Attitudes of Undergraduate Black Students at Saint Louis University" (Ph.D. dissertation, Saint Louis University, 1974).

²Edward H. Decker, "An Assessment of the Attitudes of Community College Students Towards Faculty with Comparisons by Age and Race" (Ph.D. dissertation, Michigan State University, 1974).

³Wilbur Perry Walker, "Attitude Change as a Function of Living in a Human Relations Residence Hall" (Ph.D. dissertation, The University of Oklahoma, 1974).

campus environment, particularly residence in campus dormitories. Perceptions of environment by different groups, sex and racial groups, and on- and off-campus students were also reviewed.

There are several instruments designed for assessing perceptions of the campus environment. The College Characteristics Index, devised by Pace and Stern (1958), was developed as a way for faculty and administrators to analyze the institution. Pace (1963) developed the College and University Environment Scales to measure the prevailing campus atmosphere and Duvall's (1969) Residence Hall Environment Scale measures opinions regarding the desirability of certain residence hall conditions. The University Residence Environment Scale, developed by Moos and Gerst (1974), measures campus atmosphere, social and intellectual climate, and the style of life on campus.

There are several specific findings in previously conducted studies which speak to students' perceptions of and relation to their residence while in college.

There is a decrease in college expectations and favor with residence halls as students progress through their college years (Centra, 1966; Berdie, 1968; Walsh and McKinnon, 1969; and Goldsmith, 1975).

Many writers have found that different campus groups (students, faculty, and administrative staff) perceive the same environment differently (Centra, 1966;

Ivey, Miller, and Goldstein, 1967; Standing, 1968; Heskett and Walsh, 1969; Spence, 1970; Gibson, 1973; and Rousell, 1974) while a few have found no significant differences between groups in their environmental perceptions (McPeek, 1967 and Hechenberger, 1974).

While DeCoster (1966) found differences in academic achievement when housing assignments were made on the basis of ability, several others found no differences in perception or achievement when students were assigned by class rank (Beal and Williams, 1968; Chesin, 1969; Schoemer and McConnell, 1970).

Several writers found very favorable student reactions to living-learning residence halls (Olson, 1964; Pemberton, 1968; Rockey, 1969), though Centra (1968) did not find living-learning halls intellectually different from traditional residence halls.

While Moore (1974) and Netusil and Hallenbeck (1975) found commuting and fraternity/sorority residents to be more satisfied with their living units, a host of writers have found distinct advantages to residence hall living, as opposed to living off-campus or at home (Drier, 1960; Harnett, 1963; Maston, 1963; Dollar, 1963; Astin, 1970; Hountras and Brandt, 1970; Welty, 1974; and Scott, 1975).

Students living in residence halls prefer them for their convenience, proximity and available social

interaction (Isom, 1963; McPeek, 1967; and Cattanach, 1972). Students disenchanted with residence hall life felt they were too noisy, had too many rules and regulations, and lacked privacy (Isom, 1963; Olson, 1964; Cattanach, 1972).

While some writers found no differences between male and female perceptions towards living environment (Pace, 1966; McIntosh, 1971; Self, 1971; and Pruitt, 1974), many more found that women had more positive attitudes towards their environment than did men (Olson, 1964; McPeek, 1967; Antes, 1971; Black, 1971; Mangus, 1972; Sullivan, 1973; Spoor, 1973; Al-Taiey, 1974; Luckett, 1973; and Netusil and Hallenbeck, 1975).

Walker (1974) found no differences between black and white perceptions of the living environment, and McDonald (1972) and Decker (1974) found that black students viewed their environment more favorably than white students. However, most writers investigating differences in racial perception found that white students were more satisfied with the living environment than black students (Hayes, 1971; Fabris, 1972; Nolen, 1972; Amprey, 1973; Luckett, 1973; Lawyer, 1974).

The previous data certainly are not conclusive in any direction with respect to student perceptions toward the college campus environment. However, some trends appear to surface which indicate that, while not all groups within the campus community do not perceive the

environment similarly, real educational/growth advantages exist for students living in campus residence halls. Women tend to view the environment more positively than do men, and white students are generally more satisfied with the living environment than are black students.

CHAPTER III

INTRODUCTION

This study was conducted on the Michigan State
University campus to determine the perceptions of
selected residence hall students about the environment
of University residence halls.

The purpose of the study is to provide University administrators and residence hall staff with feedback about student perceptions of the residence hall operation and to offer suggestions for whatever improvement may be suggested by the study.

Such information will advise University personnel as to which groups of students are being the most and/or the least satisfied with the housing facilities and services provided them by the University. Based upon the information found, the University can determine whether changes are necessary or desirable regarding personnel, staff priorities and emphases, programs, or in the system in general.

This chapter will describe the sample population used for the study, the instrument used to measure

residents' attitudes about their residence halls, the method of data collection, and how the data will be examined.

Sample

This study was conducted during Spring term, 1974, on the Michigan State University campus. At that time, 14,913 students were living in thirty-three residence halls.

The subjects for this study included all of the resident students living in eight residence halls located in South Complex, one of the four geographical areas of the campus. The subjects lived in North Case Hall, South Case Hall, East Holden Hall, West Holden Hall, East Wilson Hall, West Wilson Hall, North Wonders Hall and South Wonders Hall, and numbered 3,914 persons.

The South Complex residence halls were chosen for this study because they are representative of all halls across campus and because it would have been prohibitive in this study to examine the attitudes of all students (nearly 15,000) living in the thirty-three halls.

There was no basis to suspect that the populations of those residence halls differed in any appreciable manner from the populations of students living in other areas of campus or from across the total campus. All students new to the University are assigned randomly to all residence halls. Each Spring term students desiring

to return to University residence halls the following year may designate the residence hall in which they want to live and the preceding Spring term the "return sign-up rate" approximated 55 percent across campus and was constant from one complex of residence halls to the next.

Neither race or religion are factors in the assignment of residents, and the distribution of sexes is fairly even within the complexes. Other than for the performance of University personnel assigned to work in the respective residence halls, and the differing physical structure of the residence halls, there is no reason to expect that groups of students across campus would perceive their environment differently.

The physical living arrangement in the residence halls in this study is comprised of students living in a four-person "suite," that is, two persons in one room sharing a bathroom facility with two persons in another room. This living arrangement is one of two patterns through the residence hall system. The other finds approximately twenty-five rooms per house, two persons per room, and one large "community" bathroom facility per house.

The 3,914 students living in the eight residence halls included 2,113 males and 1,801 females living on ninety-three houses. It was not possible to know prior to the study numbers of residents comprising racial-ethnic

groups, as this information is not kept in any manner by the residence hall system. Students were asked on the questionnaire to identify their sex and racial-ethnic identity.

This population was asked to respond to the Southern Illinois University Residence Hall Environment Scale (S.I.U.R.H.E.S.), an instrument designed to measure several distinct characteristics of the residence hall environment as perceived by residents. The completed and usable responses returned numbered 2,287, for a 58.4 percent return.

Method of Collecting Data

Each "house" in University residence halls has an undergraduate staff member, a Resident Assistant, employed to assist and work with the students living in that residential unit. The ninety-three R.A.'s in the eight residence halls being studied were provided S.I.U.R.H.E.S. questionnaires and answer sheets for the students living in their respective units. Prior to distribution of the instrument, the author met with each residence hall staff to explain the purpose of the study and the procedures for distributing and collecting the data. Two weeks after distributing the questionnaires and answer sheets, the R.A.'s returned the collected materials to their respective Head Advisors who, in turn, forwarded the materials to the author.

Because this study took place during Spring term, many students were, admittedly, "questionnaired out," having received and completed several questionnaires and information blanks during the preceding Fall and Winter terms. So as to increase participation in the study, additional time (one or, in some cases, two weeks) was given in some units for completion of the questionnaire.

The following table itemizes the number of students contacted in each residence hall and the number and percentage of return:

TABLE 3-1.--Number and percentage of responses by residence hall

Residence Hall	Number of Residents Contacted	Number of Returns	Percentage Return
North Case	424	261	61.6%
South Case	392	246	62.7%
East Holden	549	295	53.7%
West Holden	558	287	51.4%
East Wilson	478	276	57.7%
West Wilson	500	318	63.6%
North Wonders	508	311	61.2%
South Wonders	505	293	58.0%
Total	3,914	2,287	58.4%

Instrument

The instrument used in this study was the Southern Illinois University Residence Hall Environment Scale (S.I.U.R.H.E.S.), developed by that University's Counseling Center (under the direction of William G.

Miller) and Research and Testing Center (under the direction of James Moore) in 1972.

The instrument, as constructed by Southern

Illinois University, is composed of 116 items classified into seven scaled-item scales and one informationalitems scale. It was originally administered on that University's campus to 2,400 dormitory students eighteen months prior to this study.

The items were constructed to measure aspects of residential life and to provide specific opinions on additional areas of interest to residence hall administrative personnel. The eight conceptual areas measured by the S.I.U.R.H.E.S. are:

- Individual <u>Rights</u> and Freedom, i.e., the sense of personal <u>freedom</u>, and right to act independently in a living unit.
- Personal Conduct and <u>Responsibility</u>, i.e., acceptance of the consequences of personal actions affecting self and other persons in the living unit.
- 3. Assimilation and homogeneity, i.e., the perceived pressure to adapt to group goals and attitudes and commonality of perception, background, interests and attitudes among residents.
- 4. Academic emphasis, i.e., perceived emphasis on academic success, combining of living with learning and group involvement with ideas and intellectual pursuits.
- 5. <u>Facilities</u>, i.e., perception of the physical characteristics of the residence hall and its administrative arrangements.
- 6. Personnel, i.e., reactions of residents to resident staff and interactions with university personnel.
- 7. Interpersonal relations and social interaction, i.e., social and personal interaction among residents in a living unit.

8. <u>Informational</u>, a collection of non-scaled items providing specific information on student opinions regarding services, costs, conveniences, etc. 1

In the construction of the instrument, the items in these scales were submitted to six professional staff members in the Student Affairs Division of Southern Illinois University with the instructions to classify the items according to concept measured, using the descriptions of each scale. Items correctly classified by four or more judges were retained. Items were then scaled by submitting them to twelve additional Student Affairs professionals. These judges were instructed to indicate the "degree of desirability for residence living," on a five-point scale, ranging from "highly undesirable" to "highly desirable" assuming a student were to agree with the content of each item. which the mean scale point did not deviate from the expected random mean value of three, beyond that expected by chance alone, were eliminated. The .05 level of significance was utilized using the "student" t-test. finally selected were included with informational items to provide an instrument with a total length of 116 items. 2

William G. Miller and James Moore, <u>Measuring</u>
Student Perceptions of a Residence Hall Environment
(Southern Illinois University, July, 1973), p. 2.

²Ibid., p. 3.

The Southern Illinois University instrument was adapted only slightly to fit the Michigan State University residence hall system, and only after consultation with University test construction experts who assured that validity was being maintained. The adaptation consisted largely of changing the job titles of Southern Illinois residence hall staff to the titles of Michigan State staff in similar positions. In some instances, terminology pertinent to the Southern Illinois system was adjusted so as to be in context with the Michigan State system.

A copy of the printed instrument is located in Appendix A. It should be noted that the instrument used in this study contained an additional fourteen questions (items 117 through 130) beyond the 116 questions employed in the original Southern Illinois instrument. These questions were added to gain additional information about the Michigan State residence hall system. The responses from these questions were not tallied for or used in this study but only used internally and informally by the University.

Scoring

As with the original study at the University of Southern Illinois, a summated rating scale, or Likert-type scale, was used to score the subjects' responses to the 116 items in the questionnaire. Characteristic of this type of attitude scale, subjects were asked to

respond to a statement in terms of their agreement with it. 1 An Op-Scan machine scorable answer sheet was provided which allowed for five responses, ranging from 1 to 5, or 0 to 4 for computer scoring purposes. The five options paralleling the numerical values were strongly disagree, disagree, neither agree or disagree, agree, and strongly agree. Hence, any composite score (for the total questionnaire or for an individual scale score) above 3.0 would reflect a positive perception of residence hall life.

S.I.U.R.H.E.S. Reliability and Validity

The use of this instrument had been limited prior to this study so information about its reliability and validity is based upon the initial administration of the instrument on the S.I.U. campus in 1972. The instrument and all related data were examined by the M.S.U. Office of Institutional Research and they determined that the instrument was suitable for use on this campus.

In the original study at Southern Illinois University, a Guttman Image Analysis and Harris Scaled Image Analysis factor analyses were performed on scales and items respectively. In addition, internal consistency

Pred Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), pp. 484-85.

reliabilities (Chronbach Alpha) and test-retest correlations were obtained for each scale. New scales were created from the Harris Scaled factor analyses and reliabilities obtained. Results indicated that obtained scales had relatively high reliability but low test-retest consistency. The scales were also found to possess validity for discriminating "good" from "poor" residence units. Finally, one scale, the academic scale, was found to correlate low but significantly with college grade point average. 1

There was evidence that the originally defined scales and the total Residence Hall Environment Scale measured student opinion with an acceptable degree of internal consistency. However, factor analysis of the intercorrelations among the subscores did not indicate heterogeneity of concepts measured.²

When the means for the residence halls in the S.I.U. study were converted to standardized Z scores (mean 0, standard deviation 1) contrast between units was possible. For instance, there were differences, particularly on the Rights, Homogeneity, Personnel, and

¹Miller and Moore.

²Ibid., p. 7.

Interpersonal scales, giving evidence of the scales' validity to differentiate good from poor residence halls.

Speaking to the correlation between the academic scale and grade point average, Miller and Moore cite that:

Britton (1973) obtained a correlation of -.224 between the Academic subscore of the Residence Hall Environment Scale and grade point average for a sample of 96 subjects selected at random from the 707 subjects reporting their social security number thus allowing identification of their grade point average. The implication is that lower achieving students rated the academic environment of the residence hall higher than high achieving students. One may speculate, therefore, that the "better" student finds the residence environment more distracting for study purposes, less stimulating in opportunity for academic activities and placing less emphasis on academic achievement than students performing at lower levels.²

The following table provides the intercorrelations and reliabilities between scales (see page 69).

Examination of the Data

There were several methods by which the data accumulated in this study were analyzed. Each subject responded to the questionnaire on an Opscan machine-scorable answer sheet. Using an Opscan 100 optical reader, the Office of Evaluation Services, Michigan State University, read the answer sheets, transposed the information from magnetic tape to data processing cards, and provided a "distribution count" of all responses to each of the questionnaire's items, by the

¹Ibid., pp. 7-8.

²Ibid., p. 8.

TABLE 3-2.--Individual scale intercorrelations and reliabilities

	Scale	1	2	3	4	5	6	7	8
1.	Rights	(.72)	.64	.67	.53	.68	.63	.71	.71
2.	Responsibility		(.74)	.68	.66	.64	.64	.67	.53
3.	Homogeneity			(.78)	.60	.56	.60	.71	.57
4.	Academic				(.77)	.53	.57	.55	.41
5.	Facilities					(.74)	.64	.63	.59
6.	Personnel				•		(.83)	.59	.43
7.	Interpersonal							(.65)	.63
8.	Information								(.85)

total sample and by each group being studied. As will be reported in Chapter IV, the number and percentage of responses to each alternative (Strongly Disagree to Strongly Agree) of each item will be reported by sex and racial groups, and the total sample.

The data were treated statistically by the computation of a mean score and standard deviation for each group's response to all the items comprising an individual scale. Finally, analysis of variance scores were computed (because that technique is a continuous dependent measure and effectively controls the probability of error) to test differences between groups on each of the eight scales at the .05 level of significance.

Summary

Nearly four thousand students living in eight Michigan State University residence halls were administered the S.I.U.R.H.E.S. in order to determine their perceptions of University residence halls. Differences between sexes and racial-ethnic groups were also measured. The validity and reliability of the S.I.U.R.H.E.S. instrument was determined to be sufficiently high for the purposes of this study. The resulting data were analyzed by examining the differences, by group, to the individual items on the questionnaire and to the eight scales comprising the instrument.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

This chapter contains a presentation and analysis of data gathered when selected students living in Michigan State University residence halls were surveyed for their perceptions about their living environment. All of the 3,914 students living in the South Complex residence halls (North Case Hall, South Case Hall, East Holden Hall, West Holden Hall, East Wilson Hall, North Wonders Hall, and South Wonders Hall) were asked to complete an adaptation of the Southern Illinois University Residence Hall Environment Scale. The 2,287 usable responses returned comprised a 58.4 percent return.

The number and percentage of responses to each item in the scale were obtained and are available in Appendices A-H. The findings of selected items as they relate to the subscales measured will be reported here by the total sample, sex, and racial grouping. Lastly, analysis of variance scores have been computed and the differences between groups of students and living units on each of the eight scales will be presented.

The major findings of the study are presented in descriptive, statistical, and table form. Chapter V will present an interpretation and summary of the data analysis, the study's limitations, and recommendations for further research.

Review of the Instrument

The S.I.U.R.H.E.S. is composed of 116 items which measure aspects of residential life in eight conceptual areas. Following are the eight areas (or subscales) which are measured and the items in the instrument which relate to each of the individual subscales:

1. Individual <u>Rights</u> and Freedom, i.e., the sense of personal freedom, and right to act independently in a living unit.

Items included: 16, 17, 18, 42, 47, 56, 57, 66, 79, 81, 100, 101, and 108.

2. Personal Conduct and Responsibility, i.e., acceptance of the consequences of personal actions affecting self and other persons in the living unit.

Items included: 4, 12, 21, 46, 48, 51, 58, 59, 62, 64, 69, 77, 90, 102, and 110.

3. Assimilation and homogeneity, i.e., the perceived pressure to adapt to group goals and attitudes and commonality of perception, background, interests, and attitudes among residents.

Items included: 1, 3, 5, 10, 15, 22, 24, 30, 50, 54, and 67.

4. Academic emphasis, i.e., perceived emphasis on academic success, combining of living with learning and group involvement with ideas and intellectual pursuits.

Items included: 7, 9, 19, 23, 33, 36, 37, 40, 49, 68, 71, and 74.

5. Facilities, i.e, perception of the physical characteristics of the residence hall and its administrative arrangements.

Items included: 8, 14, 25, 26, 27, 34, 43, 70, 75, 76, 88, 91, 109, 111, 113, 114, 115, and 116.

6. Personnel, i.e., reactions of residents to resident staff and interactions with university personnel.

Items included: 6, 11, 13, 20, 28, 31, 32, 38, 39, 41, 55, 73, 80, 87, and 104.

7. Interpersonal relations and social interaction, i.e., social and personal interaction among residents in a living unit.

Items included: 2, 35, 45, 52, 60, 65, 72, and 106.

8. <u>Informational</u>, a collection of nonscaled items providing specific information on student opinions regarding services, costs, conveniences, etc.

Items included: 29, 44, 53, 61, 63, 78, 82, 83, 84, 85, 86, 89, 92, 93, 94, 95, 96, 97, 98, 99, 103, 105, 107, and 112.

Fourteen additional questions were added to the end of the instrument, making the total number of questions 130. The additional items merely sought student response to particular aspects of the residence

hall operation at Michigan State University. The answers served only to educate that University's administrative staff with respect to these particular aspects and do not have a part in the findings of this study. The complete questionnaire may be found in Appendix A.

A summated rating scale, or Likert-type scale, was used to score the subjects' responses to the questionnaires' 116 items. Characteristic of this type of attitude scale, subjects were asked to respond to a statement in terms of their agreement with it. 1 The answer sheet provided for five responses, ranging from 1 to 5 (or 0 to 4 for computer scoring purposes). The five options paralleling the numerical values were strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. Since the statements in the instrument were worded in both "positive" and "negative" ways, answers to the "negatively" worded questions had to be reverse-scored in the computer and, hence, any composite score (for the total questionnaire or for any individual scale score) above 3.0 would reflect a positive perception of residence hall life.

Review of the Sample

From the 3,914 students contacted with questionnaires, 58.4 percent, or 2,287, returned usable answer

¹Kerlinger, pp. 484-85.

sheets. A breakdown of the number of responses comprising the data for this study, by sex and racial group, is as follows:

Sex Group		Racial/Ethnic Group				
<u>Males</u> (1,0	54)	Blacks (124)				
White:	1,055	Male: 49				
Black:	49	Female: 75				
Females (1	,036)	<u>Whites</u> (1,966)				
White:	961	Male: 1,005				
Black:	75	Female: 961				
(Total)	2,090	(Total) 2,090				

Addition of the two groups of sexes or races yields a sum of 2,090 subjects, or 197 fewer than the 2,287 who returned usable answer sheets. These 197 subjects are those who, on the answer sheet where such voluntary information was requested, identified themselves as belonging to a particular racial/ethnic group or sex, but who did not identify both their race and sex. Hence, they could not be included in one of the four sex/racial groups but are included in the total sample. Also, sixteen Chicano students (and fifty students who identified their race as "other") completed and returned answer sheets. However, since both groups comprised such a small percentage of the sample (Chicano sample equalled one-half of 1 percent, or .006, "others" equalled .02),

their responses were tallied with the total sample, but not with any racial/ethnic or sex group.

This section will report the major findings in each of the conceptual areas of residence hall life as measured by the S.I.U.R.H.E.S. The distribution and percentage of responses by the total sample, racial and sex groups will be presented here. Statistical significance between groups on each of the subscales will follow.

Scale 1: Rights

The first scale, labelled Individual Rights and Freedom (or Rights), is interpreted as a "sense of personal freedom, and right to act independently in a living unit." The Rights scale, containing thirteen questions, is concerned with privacy, residence hall rules and regulations, individual rights and visitation in rooms by members of the opposite sex.

All three questions pertaining to individual freedom (numbers 16, 18, and 66) yielded similar responses. Eighty-nine percent (89%) of the respondents agreed or strongly agreed that "respect for others' rights is important, even if those rights are unpopular" (question no. 16). Eighty-one percent (81%) of the sample agreed or strongly agreed that "individual rights must be compromised in a group living situation" (question no. 18). There was virtually no difference in responses between male and female students in this

area and only slight difference between racial groups. Eighty-two percent (82%) of the whites agreed or strongly agreed that individual rights must be compromised in group situations, compared to 76 percent of the blacks expressing the same opinion.

Eighty-five percent (85%) of the sample felt that "people in their residence hall had a good deal of freedom to do as they pleased" (question no. 66). Whites tended to perceive a little greater freedom (88%) than blacks (79%). Women tended to perceive greater freedom (89% agreed or strongly agreed that people had a good deal of freedom) than did men (81% of whom responded the same way).

With respect to the question of privacy, 38 percent of the sample agreed or strongly agreed that "it is impossible to have much privacy" in their residence hall (question no. 47). Only 46 percent indicated sufficient privacy by disagreeing or strongly disagreeing with that statement. Male and female responses were similar, though a greater percentage of black females (57%) than any other sex/racial group felt privacy to be lacking. All students, regardless of sex or race, felt similarly (about 21%) that "students don't care about other people's privacy" (question no. 42).

Items 17, 56, and 81 pertained to University rules and regulations within the residence halls.

Fifty-one percent (51%) of the sample agreed that the "restrictions imposed upon people in the residence halls are reasonable" (question no. 17), and that percentage was constant for all sex and racial groups. The percentage of those strongly agreeing varied by sex and racial group. A high of 33 percent strongly agreed that the restrictions were reasonable (white females) while a low of 16 percent strongly agreed (black males). Overall, 90 percent of the white population saw the restrictions as reasonable, while 71 percent of the black population did.

While 13 percent of the white population thought there were "too many rules and regulations" (question no. 56), 24 percent of the black students agreed or strongly agreed to that statement. Nearly twice the percentage of men (17%) agreed or strongly agreed that there are too many rules and regulations than did women (9%) and women disagreed or strongly disagreed more than men (68% to 47%) with the statement.

Blacks and whites and males and females responded similarly to the question (no. 81) regarding "the University's right to regulate personal conduct of campus residents." For all groups and the total sample, about 22 percent agreed in some manner that the University does have such a right, about 54 percent disagreed.

Two items were related to males and females living (question no. 79) or visiting (question no. 101) in the same house. Of the total sample, 24 percent, nearly a fourth, agreed or strongly agreed that "men and women living in suites or rooms side by side would be an inconvenience and occasional embarrassment, once the novelty wore off." Sixty percent (60%) of the sample disagreed to that statement. Both of these percentages were reasonably constant for each racial and sex group though white women were less inclined towards this kind of living arrangement (33% agreed or strongly agreed that such an environment would eventually prove inconvenient or embarrassing) than any of the other groups and more white men favored this arrangement than any other group (66% disagreed or strongly disagreed that such a housing arrangement would be inconvenient or embarrassing).

The above findings are similar to those found regarding student opinion of the 24-hour, seven-day-a-week visitation provision within the residence halls.

Only 10 percent of the total sample agreed or strongly agreed that "there should not be a 24-hour visitation every day of the week" (question no. 79). Those favoring the 24-hour visitation provision numbered 82 percent.

These same percentages are nearly identical for all racial and sex groups.

Three other questions of an independent nature were included in the Rights scale. In choosing between their dormitory or the library for studying, 58 percent of the total sample would stay in their dorm (question no. 57). Thirty percent (30%) would opt for the library's study facilities. Again, these two figures are approximated for each sex and racial grouping.

About a third of the sample felt that "regulations imposed on decorating one's own room are unreasonably restrictive" (question no. 100). Thirty-six percent (36%) of the sample agreed or strongly agreed to that statement, while 43 percent disagreed with it. There was only slight variance in the responses of the different sex and racial groups.

for a 'loner' to live" (question no. 108), slightly more than a quarter (28%) of the sample agreed or strongly agreed and nearly a third (31%) disagreed or strongly disagreed. With 41 percent neither agreeing or disagreeing, it would seem that two-thirds of the sample believe that an individual living in a campus residence hall is free to be as she/he chooses.

Scale 2: Personal Conduct and Responsibility

The second scale, labelled Personal Conduct and Responsibility (or Responsibility), is interpreted as

"acceptance of the consequences of personal actions affecting self and other persons in the living unit."

This Responsibility scale, comprised of fifteen items, is concerned with students' respect towards others and others' property, concern and protection of others and the building in which students live, and the individual's responsibility towards the group. Several items relate to the individual's respect for other persons and their property.

For the total sample, 40 percent agreed or strongly agreed with the statement that "a person who isn't concerned about others won't be accepted very well in this hall" (question no. 90). About a fourth of the sample (24%) disagreed or strongly disagreed with the statement. More than half of the sample (52%) agreed or strongly agreed that "students respect the property of others" (question no. 59), while an even quarter of the sample (25%) disagreed or strongly disagreed. responses of each sex or racial group closely approximate these same findings. Eighteen percent (18%) of both the total and white student sample agree or strongly agree that "students (in their residence hall) haven't learned about respecting others' property" (question no. 62), while even more (25%) of the black student sample believe that.

Fifty six percent (56%) of the total sample felt otherwise--that students in their dorm had learned respect for the property of others--and this figure was approximated for each sex and racial group.

Similar results were found in student opinion towards the need to lock their room door (presumably when leaving the room or area). While 56 percent of the sample felt that students respected the property of others, 51 percent of the sample—and of every sex or racial group—indicated they would worry about their belongings being taken if they left their room unlocked (question no. 64). About a third of every group would not worry about their belongings being taken from their unlocked room.

Additional questions are raised by the answers to item #4, which states that "I would feel the responsibility to warn everyone on my floor if I were to find out, someway, that a drug raid were going to take place here." Half the sample, 50 percent, agreed or strongly agreed and 28 percent disagreed or strongly disagreed. The responses between sex and racial groups were generally similar, with two exceptions. Thirty-seven percent (37%) of the black females disagreed or strongly disagreed with the responsibility to alert house members to a possible drug raid, and 57 percent of the white males would alert fellow floor members of such an activity.

Some variance exists with regard to students' perceived responsibility toward the building in which they live and their perception of others' responsibility toward the hall itself. Fifty-eight percent (58%) of the total sample believe "that most students they know realize the need to keep the building in good repair" (question no. 48). Variance by sex and racial group is found in white females (69%) who agree with the statement and black males, of whom 39 percent feel the students they know realize the need for good building repair. Correspondingly, a fifth of the sample, 20 percent, disagree or strongly disagree that the need for good building repair is realized among students. There is more variance between black men and women on this item than between black and white men, with black females approximating the responses of the total sample.

More than half of the sample (55%) feel "that their residence hall is subject to deliberate damage or defacement by other residents" (question no. 69). Only 48 percent of the black sample expressed that opinion (and 44% of the black females), while 63 percent of the white males expressed that opinion. A greater percentage of white females than any other group agreed or strongly agreed that "no one living here would deliberately damage or deface this building" (35%).

Fifty-seven percent (57%) of the total sample would "either stop someone who was damaging the building or would find someone else who would" (question no. 12). This figure is approximated by each of the sex and racial groups, save for white females, 62 percent of whom would take some sort of action. The group least inclined to take action against someone else damaging or defacing the building is black females. Twenty-five percent (25%) of that group would take no action, while the percentage of other groups not taking action ranges from 9 percent to 20 percent.

Only about a third of the total sample and each sex/racial group thinks that "every student here feels a responsibility to make this a decent place to live" (question no. 21). A few more, 38 percent of the total, believe that "the University would do away with a lot of the existing restrictions if everyone acted in a responsible manner" (question no. 46). Only 32 percent of the total sample feel that that would not happen.

Forty-three percent (43%) of the total sample feel that "residence hall occupants interpret individual freedom as the right to do whatever they please" (question no. 58). That figure is represented by nearly every sex/racial group, except for white males, 54 percent of whom express that opinion. About a fourth of every group does not think that students feel a right to do as they please.

The remaining questions in the Responsibility scale relate to the individual's responsibility to others, as a person, and staff responsibility to occupants.

The question (no. 102), "I wouldn't mind living with a homosexual" found 78 percent of the sample in disagreement (59% strongly disagreed, 19% disagreed). Only 8 percent of the sample agreed or strongly agreed with the statement. These results are not too unlike those for each sex and racial group. White females are the least accepting of a homosexual roommate (82% disagreeing or strongly disagreeing) and black males are the most accepting (16% agreeing or strongly agreeing to a homosexual roommate, compared to a range of 7%-13% for the other groups). Females seem to be less willing to live with homosexual roommates than males, but by only a small margin. Eighty-one percent (81%) of the females would disagree or strongly disagree, while 4 percent would agree or strongly agree to a homosexual roommate. Seventy-nine percent (79%) of the males would disagree or strongly disagree and 9 percent would agree or strongly agree to a similar housing arrangement.

Eighty-three percent (83%) of the sample agree or strongly agree that "roommates should be able to work out problems created by 24-hour visitation" (question no. 110), with black females most in agreement (88%) and black males least in agreement (74%). By sex

group alone, 86 percent of the females believe roommates should work out problems created by 24-hour visitation and 81 percent of the males feel that way.

Nearly a third of the total sample (31%) agree or strongly agree that "nobody cares enough to compete for leadership in this residence hall" (question no. 51). Forty-eight percent (48%) of the blacks disagree or strongly disagree with the statement, hence, they believe that somebody does seek leadership, while only 36 percent of the whites disagree with the statement. The perception of others' desire for leadership is similar for males and females.

The final item reviewed in this scale found that 34 percent of the total sample would agree or strongly agree that "residence hall staff make a sincere effort to help new students adjust to dorm life" (question no. 77). The response of each sex/racial group is similar, though black females give the most favorable response (43%).

Nearly a third (31%) of the white males disagree in some manner that staff make a sincere effort to help in the adjustment of new students. For the total sample, more students strongly disagree (6.7%) than strongly agree (4.5%) with the statement.

Scale 3: Assimilation and Homogeneity

The third scale is labelled Assimilation and Homogeneity (or Homogeneity) and is interpreted as "the

perceived pressure to adapt to group goals and attitudes and commonality of perception, background, interests, and attitudes among residents." Comprised of eleven items, the Homogeneity scale is concerned with the individual's relation to the group, group participation, conformity, group identity, and adaptation to residence hall life.

One-fourth of the sample (26%) reported the opinion that "most students don't really care about belonging to a group" (question 1). More than half of the sample (55%) disagreed or strongly disagreed with the statement. While both these figures are similar for white males and females, black students, male and female, are in greater agreement (about 32%) that students don't care about floor "identity."

Two-thirds of the sample (66%) disagreed or strongly disagreed that "nearly everyone in the residence hall is solely for him/herself" (question 3). Only 14 percent of the sample believe that to be the case. Again, this figure represents a majority viewpoint, as 24 percent of the black students agree in some manner that individuals in the hall are solely for themselves. While two-thirds of the whites disagree that this was the case, slightly more than half (53%) of the blacks disagreed to this being the case.

Variance occurred with respect to the notion of group participation on the students' houses (question 30).

Thirty-six percent (36%) of both the total and the white population agreed or strongly agreed that good group participation existed among house members. The percentage feeling similarly was lower for black students (28%) and even moreso for black females (23%). White males perceived the greatest extent of group participation, with 41 percent of them agreeing or strongly agreeing that a good effort was present among house members. A noticeable difference was found between the perception of males and females on this item. Half of the women (49%) disagreed that good participation existed on the floor(s) while 33 percent of the men felt that way. Forty-three percent (43%) of the men felt floor participation to be good, but only 30 percent of the women did.

Slightly more than a fourth (27%) of the sample thought that students in the hall (were) "too independent for any Hall organization to succeed" (question 50). All sex and racial groups had similar perceptions, though black males perceived a greater independence among students (30%) than did black females (21%).

Several questions were concerned with individual adjustment to residence hall life. More than two-thirds (68%) of the sample did not feel that "residence hall life had reduced them to just a number" (question 5). Only 13 percent of the sample felt that it had. Blacks and whites felt somewhat differently on the matter. While

12 percent of the white population agreed that residence hall life reduced one to a number, 23 percent of the black population felt that. Nine percent (9%) of the white females expressed this opinion, but 21 percent of the black females did.

All of the residence halls used in this study are large, co-educational types, housing about 600 students each. However, only 17 percent of the sample thought they "could adjust to a smaller dorm easier" (question 15). Fifty-seven percent (57%) of the white males disagreed or strongly disagreed that adjustment would be easier in a smaller hall, but 75 percent of the black females felt this same way. Some difference between males and females existed, as 69 percent of the females did not feel adjustment to a smaller hall would be easier, and 56 percent of the males shared that opinion.

Seventy percent (70%) of the population agreed or strongly agreed that "some conformity is necessary in a group living situation" (question 22), though only 54 percent of the black males offered that opinion.

Men differed from women on this issue as two-thirds of them (66%) agreed or strongly agreed that some conformity is necessary, but three-fourths (76%) of the women thought so.

only 15 percent of the sample agreed or strongly agreed that "it's hard to identify with a group in the hall" (question 24). Sixty percent (60%) disagreed or strongly disagreed that it's difficult to identify with a group, and these figures are similar for all sex and racial groups, except within the black population. Only 9 percent of the black males find group identity difficult to achieve, but 24 percent of the black females do.

Sixty-two percent (62%) of the total population thought that it was "easy to fit in to residence hall life" (question 54). More whites (64%) thought that than blacks (52%), and more females found "fitting in" easier (66%) than males (59%).

Only 13 percent of the sample agreed or strongly agreed that "to be happy on my floor, one must do as the crowd pleases" (question 67). Seventy percent (70%) disagreed or strongly disagreed, and both these figures are constant for all sex and racial groups.

Sixty-four percent (64%) of the sample agreed or strongly agreed that they'd "really want to help out if they knew someone on their floor had a personal, social or academic problem" (question 10). Females were more inclined to "help out" as 70 percent of them agreed with the statement while 58 percent of the males offered that opinion. Only 7 percent of the females disagreed or strongly disagreed with the idea of "helping out," but

12 percent of the men did. The same percentage of black females as males (58%) agreed or strongly agreed to "help out," while 47 percent of the black males agreed to doing so.

Scale 4: Academic Emphasis

The <u>academic</u> scale is interpreted as the "perceived emphasis on academic success, combining of living with learning and group involvement with ideas and intellectual pursuits." Twelve items are included within the scale, which is concerned with the opportunities for learning within the residence halls, intellectual environment within houses, and the prevailing academic press.

only 15 percent of the sample agreed or strongly agreed that "the group of students with whom they associated are 'deep' thinkers and intellectual" (question 7). Only 3 percent of the sample strongly agreed to having very intellectual associates. Half of the sample (50%) disagreed or strongly disagreed that they had very intellectual associates. These figures are true between the sexes, but not between races. While only 13 percent of the whites agreed that they had "deep" thinking associates (2% strongly agreed), more than twice the percentage of blacks (27%) perceived their associates as "deep" thinkers, and 7 percent strongly felt them so.

About one-fourth (26%) of the sample agreed that "serious bull sessions occur frequently on their house" (question 9), and this figure is similar for all sex and racial groups (except black females, 16% of whom offered that opinion). More men agreed or strongly agreed (29%) that serious bull sessions took place on their house than women (23%) and more women disagreed or strongly disagreed (54%) than men (46%) that they took place frequently.

A third of the sample (33%) and of all sex and racial groups agreed that the "students where they live frequently discuss war, ecology, race relations, religion, etc." (question 19) and about 40 percent of each group disagreed that such discussion takes place frequently.

A congruently strong disagreement was recorded by the sample and each sex and racial group when asked about the serious learning taking place in the house. Seventy-nine percent (79%-33% strongly) disagreed that "no one gives a damn about serious learning" (question 33). Only 9 percent agreed to this statement. Each sex and racial group responded similarly.

Only a fourth (26%) of the sample (and 15% of the black females) thought there was "enough competition for grades in the Hall" (question 37), and only 30 percent of each sex and racial group disagreed that there was sufficient competition for grades.

Similarly, only 13 percent of the sample agreed (2% of which strongly agreed) that "there is good competition to earn the highest grade point average" (question 71), while 57 percent disagreed that competition for the highest grade point was healthy. A higher percentage of the black male population (20%) supported the notion of good academic competition. Fourteen percent (14%) of the men feel there is good academic competition, but only 11 percent of the women do.

Only 13 percent of the total sample and of the white population agree that "there is little interest on the part of the group to do well in their studies" (question 49). Only 7 percent of the black population felt this (compared to 13% of the white) and only 9 percent of the females reported that students don't want to do well academically, while 15 percent of the males felt that way.

Slightly more than a third (35%) of the sample agreed or strongly agreed that "University housing is an important means of introducing freshmen to an intellectual climate" (question 23). Half the blacks (50%) and 39 percent of the whites disagreed with this statement.

Only 12 percent of the sample and of each racial group strongly agreed that their "dorm was a good place to learn, rather than just a place to eat and sleep" (question 40). Fifty-six percent (56%) of the total

sample agreed or strongly agreed to the learning value of residence halls. A fourth of the sample (24%) disagreed, thereby expressing the opinion that they viewed their dorm as (only) a place to eat and sleep.

reported that they "could not study in their room without noise and disruption" (question 36), while 40 percent reported that they could study adequately in their room.

Men and women and blacks and whites felt similarly.

"those more interested in studying than socializing should be housed together" (question 68), while 43 percent of the sample rejected this idea. Again, there was no difference in the opinions of sex or racial groups. About two-thirds of the sample (66%) and of each group, sex and racial, disagreed that "their hall was not conducive to serious study" (question 74). Thirteen percent (13%) of each group agreed that "a student serious about his studies shouldn't live in this Hall." Females exhibited a higher perception of their Hall's academic climate than men.

Scale 5: Facilities

The <u>Facilities</u> scale is comprised of eighteen items and is interpreted as the "perception of the physical characteristics of the residence hall and its administrative arrangements." The items consider various

aspects of the residence halls' physical facilities, cleanliness, maintenance, and student preferences for physical accommodations.

More than three-fourths of the sample agreed or strongly agreed that "janitorial personnel do a good job" (question 8), while only 13 percent disagreed or strongly disagreed. White females thought the highest of janitorial personnel, with 85 percent agreeing or strongly agreeing that they do a good job.

Another version of the same question ("I think the janitorial workers do a good job of keeping the dorm clean and sanitary"--question 114) yielded similar results-73 percent agreement. However, more than twice the percentage of black males (29%) than white males (14%) strongly agreed that janitorial workers did a good job.

Nearly three-quarters of the sample (73%) also were in agreement that "workmen making repairs in my dorm have been very cooperative and pleasant" (question 116). Only 6 percent disagreed with the statement. While only 4 percent of the white women disagreed, 11 percent of the black women disagreed that workmen were cooperative and pleasant.

Only 29 percent of the population thought that

"it takes too long to get things repaired in the dorm"

(question 111). Nearly half (45%) disagreed or strongly disagreed with this statement. Again, white females were

the most positive on this matter, with 50 percent disagreeing that repairs are too long in coming and 26 percent agreeing that they are.

Several questions sought opinion about the food service. Thirty-nine percent (39%) of the sample agreed that "the quality of food is good" (question 14), but disagreed that the food quality was good and another 20 percent strongly disagreed. Black students were even less pleased, with 57 percent disagreeing (35% strongly) that food quality was good and only 31 percent offering a positive opinion.

Overall, 83 percent of the sample indicated that they thought "meals are available at a reasonable time" (question 91), though males and females differed in their perception, as did blacks and whites. For the males, 80 percent thought that meals are available at convenient times and 14 percent didn't. For the females, 87 percent thought meal times convenient, and 9 percent didn't. For whites, 84 percent thought meal times convenient while 11 percent thought differently, and 71 percent of the blacks thought meals were conveniently served, but 20 percent didn't.

Student opinion on hall study facilities was mixed. While 43 percent of the sample agreed that they would prefer to study in a quiet study room within their residence hall, 36 percent indicated that they would

rather study in their room (question 34). Differences between black and white students were apparent here, as 44 percent of the white students would prefer a quiet study room facility within the hall, but 32 percent of the black students would.

Less than a third of the black sample thought

"enforcement of quiet hours is adequate" (question 43),

but 41 percent of the white sample did, as did the total

sample. Twenty-eight percent (28%) of the sample did not

think quiet hours enforcement was adequate, but 42 percent

of the black sample thought it inadequate. More black

students thought quiet hours to be inadequately enforced,

with the converse opinion expressed by white students.

All groups (approximately 85%) agreed (35% strongly) that "it's a good idea for a dorm to have a library" (question 109). Only 6 percent of the sample disagreed with this idea.

Several items were concerned with student reaction to the physical surroundings. There were no differences between any of the sex or racial groups on the question of whether "students should be included in the planning and selection of room furnishings" (question 26). Seventy-eight percent (78%) of each group and the total sample agreed, 34 percent of them strongly. Only 9 percent disagreed that students should be included in room furnishing planning.

Seventy percent (70%) of the sample disagreed that the "dorm is in lousy physical condition" (question 70), and only 12 percent thought it was. Similar figures exist for each of the groups.

A concurring opinion was rendered when only 14 percent of the sample did not agree that "the University tries to make the Hall an attractive place (in which) to live" (question 76). Sixty-two percent (62%) thought that the University does try hard to make the Halls attractive. These figures approximate sex and racial group responses, except for white females, 72 percent of whom expressed pleasure in this area.

When asked whether they "pay a fair price for residence hall services and facilities received"

(question 113), 52 percent of the blacks disagreed and only 24 percent agreed. For whites, 41 percent thought room and board fees were fair and 38 percent differed.

For the total sample, 38 percent thought they were paying fair prices, while 39 percent did not.

Sixty-three percent (63%) of the respondents disagreed that "students want to move out of the Hall" (question 25), and only 13 percent agreed that this was the case. The percentage agreeing was similar for each sex and racial group, though 70 percent of the white women did not think students wanted to leave the Halls, while only 49 percent of the black women felt that.

room than males, as 83 percent of them agreed (42% strongly) that they "should be able to have a room by themselves, if willing to pay a higher room fee" (question 75). While 77 percent of the males thought similarly, only 63 percent of the black males expressed that opinion. Seventy-nine percent (79%) of the total sample agreed or strongly agreed to a desire for access to a single room.

Hall arrangement where students could choose to live together because of common interests" (question 88).

Less than a fourth (24%) agreed with such a housing preference. Differences between sexes and races were not great, though, on a percentage basis, more black females (57%) than any other group would prefer housing based upon similar interests.

Lastly, more than half (55%) of the sample

"desires more recreational and social facilities"

(question 115). Blacks (62%) desire more recreational and social facilities than whites (55%), and males desire them (57%) more than females (54%).

Scale 6: Personnel

The <u>Personnel</u> scale is interpreted as the "reactions of residents to resident staff and interactions with university personnel," and contains fifteen

items. This scale solicits student opinion towards staff effort and competency, and rules and regulations.

Only 20 percent of the sample agreed or strongly agreed that "no one in the University administration has shown any concern for improving dorm life" (question 6).

Nearly half (48%) of the sample disagreed or strongly disagreed with that statement. Thirty-five percent (35%) of the black males agreed that the administration showed little concern, but no other differences existed between races or sex groups.

Slightly more than a third (34%) of the sample agreed that the "dorm staff does a good job in helping a new student feel at home here" (question 28), and 27 percent disagreed. A greater percentage, 39 percent, neither agreed nor disagreed. All of these figures parallel those for sex and racial groups.

"noticed that Hall staff makes a real effort to provide

a good student government" (question 32). Twenty-four

percent disagreed with this effort, but 40 percent

neither agreed nor disagreed. Again, no differences

existed between sex or racial groups on this item.

To one question, "My Advisory Staff really tries hard to respect the individuality of the people in this dorm" (question 11), 43 percent of the total sample were in agreement, while only 16 percent disagreed. To a

viduality of people on my floor" (question 20), 80 percent of the sample agreed, while only 8 percent disagreed. While 8 percent of the white population did not think their R.A. respected students' individuality, 13 percent of the black population shared that opinion.

More than half (59%) of the sample agreed or strongly agreed that "R.A.'s are genuinely sensitive to the needs and desires of students in this Hall" (question 41), while 20 percent felt differently. Females thought higher of R.A. sensitivity (63%) than males (55%) and whites higher (60%) than blacks (52%).

More than three-fourths of the sample thought their R.A. "treated the students like adults" (question 55). Only 10 percent disagreed, though whites exhibited a slightly greater feeling of being treated like adults (79%) than blacks (73%).

Nearly three-fourths of the sample also thought their R.A. was "competent and helpful" (question 87).

Thirty percent (30%) strongly agreed to their R.A.'s competence, while only 12 percent disagreed to it.

Differences were expressed between both sexes and races on this item. While 77 percent of the females thought that their R.A.'s were competent and helpful, 70 percent of the men did. Seventy-three percent (73%) of the

whites thought their R.A.'s were competent and helpful compared to 61 percent of the blacks.

Only 15 percent of the sample felt "unable to talk with a higher University source if they didn't like or disagreed with their R.A." (question 104). More than half of the sample (52%) felt they could discuss their R.A. with someone "up the line," and both of these figures are similar to those expressed by both sexes and races.

Three questions spoke to the presence and enforcement of rules and regulations. As many students disagreed as agreed (39%) that the "University has to impose rules and regulations on those living in college-owned housing because of its responsibility to parents and the public" (question 31). Both sexes and races answered similarly.

Forty-two percent (42%) of the sample felt that "Advisory staff have been working to make regulations more reasonable and enforceable" (question 38), and 15 percent disagreed. This response is quite similar to those of sex and racial groups.

Half the students (49%) thought their "residence hall rules were fair and impartial" (question 73), while 18 percent thought differently. Males and females differed, as 42 percent of the men agreed that the rules were fair and reasonable, compared to 58 percent of the women expressing that opinion.

Exactly half (50%) the sample "would not get more studying done if R.A.'s enforced quiet hours" (question 13), though 27 percent thought they would.

All sex and racial groups agreed, by 73 percent, that they "spend most of their time in their residence hall, when not in class" (question 80).

Scale 7: Interpersonal Relations and Social Interaction

The seventh scale is labelled Interpersonal relations and social interaction (or <u>Interpersonal</u>) and is interpreted as the "social and personal interaction among residents in a living unit." Comprised of eight items, this scale probes students' feelings about living with one another and the interpersonal relations among those students living together in a housing unit.

Fifty-nine percent (59%) of the sample agreed (21% strongly) that "it is important to me to get to know everyone living close to my room" (question 2). A fourth of the sample disagreed. These figures are congruent for white students, but black students feel less need to know those living in rooms near theirs. Forty-seven percent (47%) agreed (15% strongly) with the importance of knowing nearby residents.

Two-thirds (66%) of the sample agreed that "there is a real effort by people living here to get along with each other" (question 65), while 12 percent

disagreed. Whites responded similarly, but less blacks, in terms of percentage, appreciated that effort (53%) and more disagreed (16%) that the effort existed.

More than half the sample thought that there were "sufficient social events or opportunities to meet the opposite sex" (question 60), though 25 percent disagreed. The results for each sex and racial group were similar to those of the total sample though a greater percentage of women (62%) than men (53%) thought there were sufficient opportunities to meet the opposite sex.

To a lone question about <u>homosexual behavior</u> on the part of other students (question 35), 74 percent of the sample indicated (41% strongly) that it <u>did not present a frequent problem</u>. Five percent (5%) expressed the opinion that homosexual behavior did present frequent problems. Responses were similar between males and females but, whereas 4 percent of the whites indicated the problems were caused by homosexual behavior, 11 percent of the blacks did.

Nineteen percent (19%) of the total sample (18% of the white and 26% of the black) agreed that they "heard too much foul language" (question 45). More than half (53%) denied foul language to be excessive, though only 41 percent of the blacks felt that way. Males and females did not differ in their opinions on this matter.

Nearly three-fourths (74%) of the sample indicated that they "had very few conflicts with people who live here" (question 52), while 15 percent disagreed.

The responses for all sex and racial groups were similar.

Nine percent (9%) of the sample agreed that "most of the characters that live here really bother me" (question 72), though 73 percent denied that. A greater percentage of blacks than whites agreed (16%) with the statement and less disagreed (61%). More females disagreed to being bothered by "characters" in the hall (77%) than males (72%).

More than half (59%) of the sample disagreed (36% strongly) with the idea of living with a drug user, while 24 percent indicated that they "would not mind living with a drug user" (question 106). These figures parallel those of the black male and white populations, but black females more strongly rejected the idea of living with a drug user (9% agreed and 75% disagreed--57% strongly). Males were more accepting than females at the prospect of living with a drug user, as 64 percent of the females and 51 percent of the males disagreed or strongly disagreed that they would not mind such a housing assignment.

Scale 8: Informational

Twenty-four items make up the <u>Informational</u> scale, a collection of unrelated, unscaled questions providing

specific information on student opinions regarding services, costs, conveniences, etc.

The first group of questions to be considered here has to do with student perceptions of rules and regulations and their enforcement. More than half the sample (55%) agreed that "students living in the unit should formulate and enforce their own rules and regulations" (question 93). Blacks were not as supportive, as 45 percent of that population agreed with the statement. Only 18 percent of the sample disagreed with the idea of students formulating and enforcing their own rules and regulations, and only 12 percent agreed that "better regulation enforcement is needed by staff" (question 95). Sixty-one percent (61%) of the sample disagreed or strongly disagreed. Men disagreed that better regulation enforcement was needed by 57 percent, compared to 67 percent of the women, and 53 percent of the blacks disagreed, compared to 62 percent of the whites.

Only a third (34%) of the sample thought there should be enforceable "quiet hours" (question 87), while half (50%) of the sample did not want quiet hours.

Every sex and racial group responded similarly.

Forty-four percent (44%) of the sample "did not want quiet hours enforced" (question 112), while only 34 percent did. Again, sex and racial groups offered similar opinions.

More than half (54%) the sample would not "prefer living in a cooperative dorm where individual cooking could be done" (question 44), while 28 percent would prefer that arrangement. Responses were generally similar for sex and racial groups, save for black females, who would be more inclined (47%) to live in a cooperative dorm.

Only 18 percent of the sample felt "rooms should be built more comfortably, even at a higher room fee" (question 99), while 59 percent disagreed. Females disagreed more than males that rooms should be built more comfortably (66% to 55%), and whites disagreed to greater room comfort more than blacks (61% to 44%).

Forty-one percent (41%) of the sample thought they "were required to pay too much--less furnished, but cheaper, rooms should be available" (question 89).

Nearly a third (31%) disagreed. Black females, more than any other group (55%), agreed that "rent" was too high, and females (42%) thought that more than males (39%).

More than half (54%) of the sample disagreed that "in this dorm, tradition is important and should be sustained" (question 85), while 11 percent agreed with the statement. Sex and racial groups responded similarly.

Several items sought opinion on the academic relation to residence halls. Seventy percent (70%) of

as tutors to aid students needing help" (question 63), while only 10 percent did not see that as a residence hall service. Blacks desired resident tutors more than whites (81% to 70%) and females did more than males (77% to 62%).

A large percentage (79%) of the sample disagreed that "students on academic probation should be restricted to supervised study hours" (question 83), and only 8 percent agreed. These results paralleled those for sex and racial groups, except for black males, 14 percent of whom agreed with supervised study hours for those on academic probation.

More than three-fourths (76%) of the sample and of each sex and racial group (85% of the black females) favored "the idea of attending classes in their residence hall" (question 107). Women favored such an arrangement more than men (80% to 75%).

Thirty-eight percent (38%) of the sample would not "prefer a living arrangement where students interested primarily in getting good grades can choose to live together" (question 29), while 30 percent preferred such an arrangement. Similarly, 28 percent agreed that "rooms should be assigned so as to match persons that have similar academic interests" (question 94), though 47 percent disagreed to such an arrangement. More than half (58%) of the sample did not think "they would make better

grades if their roommate had the same major" (question 96).

Women expressed more opposition to this idea than men

(71% to 47%).

Eighty-six percent (86%) of the total sample disagreed or strongly disagreed that "students with the best grade-point average should have the first choice of rooms" (question 84). Women were more opposed to this idea (90%) than men (84%) and blacks were more opposed (90%) than whites (86%).

Thirty percent (30%) agreed and 29 percent disagreed that "an educational program was needed to help students do better academic work" (question 86), though blacks supported such a program (48%) more than whites (29%).

That "groups of students in the Hall should be encouraged to compete for the best grade-point average" (question 92) was disagreed to by more women (70%) than men (57%), and more whites (63%) than blacks (53%). Only 12 percent of the total sample felt that encouragement should be given to groups for the best grade-point average.

More than half (57%) of the total sample agreed or strongly agreed that "my approval should be asked before assigning me to a room with a person of a different race" (question 78). Twenty-seven percent (27%) disagreed with this statement. Responses were similar

between sex and racial groups, though whites were slightly more in favor of their approval being asked prior to a racially mixed room assignment than were blacks (57% to 53%).

More women than men (84% to 79%) thought they "should be able to choose who they live with, just as they would if they were not in college" (question 105).

Lastly, 80 percent of the sample disagreed that "students should be grouped in housing by their year in school" (question 61). Twelve percent (12%) agreed to this method of assignment, though black males were more in agreement (22%) than any other group.

Differences Between Groups

This section of the analysis examines the differences between groups of residents as they responded to the question comprising the subscales measured by the S.I.U.R.H.E.S.

One-way analysis of variance was the statistical technique used to measure differences between racial and sex groups. Where significant differences between racial groups were found, Scheffé post hoc comparisons were computed to determine specific differences between the four racial groups (white, black, Chicano, and "other"). Since sex is a dichotomous variable, visual inspection of the data revealed the direction of any significant difference between male and female groups.

responses to each of the subscales. Each of the subscales will be discussed individually. A review of the range of scores for each scale will be presented, followed by a review of each racial and sex group's means. Lastly, analysis of variance tests on each scale will be presented, by racial and sex groups.

Chapter V will contain a summary of the findings, the limitations of this study, and recommendations for further research.

Scale 1: Rights

The Rights scale is interpreted as a "sense of personal freedom, and right to act independently in a living unit." The following table, 4-1, describes the range of scores for all the items comprising the scale.

TABLE 4-1.--Range of scores for Rights scale

Items: 13	
Possible minimum value (if any subject "strongly disagreed" to each item):	13
Possible maximum value (if any subject "strongly agreed" to each item):	65
Actual minimum value (by any subject):	25
Actual maximum value (by any subject):	58

A table providing this sort of information will be presented for each of the remaining scales throughout

the rest of this chapter. This table tells how "high" or how "low" at least any one subject scored for all the items in the scale. The reader may remember that subjects were asked on the instrument to respond to a statement or item in terms of their agreement with it. Five alternatives were available from which to choose and, for scoring purposes, each alternative had a numerical value assigned to it. The values for each alternative were:

Likert-type response numerical values:

Strongly disagree = 1

Disagree = 2

Neither agree nor disagree = 3

Agree = 4

Strongly agree = 5

As an example, then, if a scale had ten questions and a subject answered "strongly disagree" (a value of "1") to each of them, she/he would have scored a "10" for that scale. Likewise, a "strongly agree" response (value of "5") to each of the ten questions would yield a scale score of 50.

In Table 4-1, then, there were thirteen items, which could have, theoretically, yielded a "low" of 13 (all "strongly disagree" responses) or a "high" of 65 (all "strongly agree" responses). Inspection of the

table reveals that the actual minimum value scored by any subject(s) was 25 and, obviously, many different combinations of responses could produce such a scale score. It might be thought, for instance, that the subject(s) scoring 25 on the first scale of thirteen items responded to half (or seven) of the items with a "strongly disagree" (for a score of 7) and to the other six with a "neither agree nor disagree" response (for an additional eighteen "points"), for a total scale value of 25. A more useful interpretation of this table is to divide the actual minimum value (or the actual maximum value) by the number of items in the scale, to find the lowest (or highest) average item value scored by any subject(s).

Such a procedure for this scale would find that (at least) one subject averaged 1.92 for the items in this scale, or that no one averaged less than 1.92 for the items in this scale. The 1.92 average item value would be slightly less than 2.0, the numerical value of "disagree," and would be indicative of a reasonably negative response to the scale's items and, correspondingly, a negative perception of the environment spoken to in the Rights scale.

Likewise, (at least) one subject averaged 4.46, a score in between "agree" and "strongly agree." Such an average value would indicate a positive attitude towards the environment, with respect to the items comprising the Rights scale.

Table 4-2 presents the means of the different racial and sex groups, first on the total Rights scale, and then for each group's average item value.

TABLE 4-2.--Group means on Scale 1 (Rights) by race and sex

Race White (n = 2,076) 37.90 2.92 Black (n = 121) 37.76 2.91 Chicano (n = 15) 35.93 2.76 "Other" (n = 50) 38.42 2.96 Sex Male (n = 1,162) 37.93 2.92 Female (n = 1,100) 37.85 2.91 Total sample (n = 2,262) 37.89 2.91				
White (n = 2,076) 37.90 2.92 Black (n = 121) 37.76 2.91 Chicano (n = 15) 35.93 2.76 "Other" (n = 50) 38.42 2.96 Male (n = 1,162) 37.93 2.92 Female (n = 1,100) 37.85 2.91	Group			_
Black (n = 121) 37.76 2.91 Chicano (n = 15) 35.93 2.76 "Other" (n = 50) 38.42 2.96 Sex Male (n = 1,162) 37.93 2.92 Female (n = 1,100) 37.85 2.91	Race			
Male $(n = 1,162)$ 37.93 2.92 Female $(n = 1,100)$ 37.85 2.91	Black Chicano	(n = 121) (n = 15)	37.76 35.93	2.91 2.76
Female $(n = 1,100)$ 37.85 2.91	Sex			
Total sample $(n = 2,262)$ 37.89 2.91				
	Total sample	(n = 2,262)	37.89	2.91

It is evident that the total sample scored slightly lower than 3 ("neither agree nor disagree") for all the items in the Rights scale. The "Other" racial group (all nonwhite, nonblack, and non-Chicano) revealed the highest perception of student rights (2.96), though that value was only slightly higher than either the value for whites (2.92) or blacks (2.91). While males scored slightly higher than females on the total scale, the difference is so slight that virtually no difference exists between the two groups' average item value. Both groups, at a 2.91 value, expressed a perception of student rights to be slightly below a "neutral" response.

Tables 4-3 and 4-4 report the results of the one-way analysis of variance tests, used to denote whether a significant difference exists between the groups' responses to the items comprising Scale 1 (Rights). Race and sex are used as independent variables. (See page 116).

As evidenced in both Tables 4-3 and 4-4, the overall values of F are not significant, indicating that by race and sex, students do not have significantly different perceptions of their residence hall environment as reflected in Scale 1 (Rights).

Scale 2: Responsibility

The Responsibility scale is interpreted as the "acceptance of the consequences of personal actions affecting self and other persons in the living unit."

Table 4-5 (page 117) describes the range of scores for all the items comprising the scale. Inspection of this table reveals the following information:

Average maximum item value: 1.80
Average maximum item value: 4.33

Table 4-6 (page 117) presents the means of the different racial and sex groups, for both the total scale, and for each group's average item value.

As reflected in Table 4-6, the total sample's mean score for the Responsibility scale of 49.42 yielded an average value of 3.29 for the scale, reflecting a

TABLE 4-3.--One-way analysis of variance test between racial groups on Scale 1 (Rights)

Analysis of Variance
Dependent variable: Scale 1 (Rights)
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	73.61	3	24.53	1.01 ^a	.386
Within Categories	54,694.55	2,258	24.22		
Total	54,768.16	2,261			

^aNot significant at the .05 level.

TABLE 4-4.--One-way analysis of variance test between sex groups on Scale 1 (Rights)

Analysis of Variance Dependent variable: Scale 1 (Rights) Category (independent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	4.37	1	4.37	.18 ^a	.671
Within Categories	54,763.78	2,260	24.23		
Total	54,768.16	2,261			

^aNot significant at the .05 level.

TABLE 4-5.--Range of scores for Responsibility scale

Items: 15	
Possible minimum value (if any subject "strongly disagreed" to each item):	15
Possible maximum value (if any subject "strongly agreed" to each item:	75
Actual minimum value (by any subject):	27
Actual maximum value (by any subject):	65

TABLE 4-6.--Group means on Scale 2 (Responsibility) by race and sex

Group		Scale Mean	Average Item Value	
Race				
	Chicano	(n = 2,076) (n - 121) (n = 15) (n = 50)	49.47 48.74 48.53 48.98	3.29 3.24 3.23 3.26
Sex				
	Male Female	(n = 1,162) (n = 1,100)	48.71 50.16	3.24 3.34
Total	sample	(n = 2,262)	49.42	3.29

perception of responsibility (to others) slightly above a "neutral" response. In fact, such were the responses for each racial and sex group. Females responded more "positively" toward the idea of responsibility (average value: 3.34) than did males (average item value: 3.24), and, racially, whites responded more "positively" than did any other group.

Tables 4-7 and 4-8 report the results of the one-way analysis of variance tests, used to denote whether a significant difference exists between the groups' responses to the items comprising Scale 2 (Responsibility). Race and sex are used as independent variables. (See page 119.)

As indicated in Table 4-7, the overall F value of 1.60 is not significant, indicating that, by race, students do not have differing perceptions of residence hall environment as reflected in Scale 2 (Responsibility).

As evidenced in Table 4-8, the overall F value of 70.57 is significant at the 95 percent level of confidence. On the basis of sex, students do have different perceptions of residence hall environment as reflected in Scale 2 (Responsibility). Visual inspection of the data reveals that the female mean value of 50.16 is a significantly more "positive" perception of responsibility (to others) than the 48.71 value scored by males.

TABLE 4-7.--One-way analysis of variance test between racial groups on Scale 2 (Responsibility)

Analysis of Variance
Dependent variable: Scale 2 (Responsibility)
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	83.51	3	27.83	1.60	.187
Within Categories	39,263.63	2,258	17.38		
Total	39,347.17	2,261			

a Not significant at the .05 level.

TABLE 4-8.--One-way analysis of variance test between sex groups on Scale 2 (Responsibility)

Analysis of Variance
Dependent variable: Scale 2 (Responsibility)
Category (independent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	1,191.47	1	1,191.47	70.57 ^a	<0.000
Within Categories	38,155.69	2,260	16.88		
Total	39,347.17	2,261			

^aSignificant at the .05 level.

Scale 3: Homogeneity

The Homogeneity scale is defined as "the perceived pressure to adapt to group goals and attitudes and commonality of perception, background, interests, and attitudes among residents." Table 4-9 describes the range of scores for all the items comprising the scale.

TABLE 4-9.--Range of scores for Homogeneity scale

Items: 11	
Possible minimum value (if any subject "strongly disagreed" to each item):	11
Possible maximum value (if any subject "strongly agreed" to each item):	55
Actual minimum value (by any subject):	21
Actual maximum value (by any subject):	51

Inspection of Table 4-9 reveals the following information:

Average minimum item value: 1.90

Average maximum item value: 4.63

Table 4-10 presents the means of the different racial and sex groups, first on the total Homogeneity scale, and secondly for each group's average item value.

Table 4-10 shows that the total sample placed an average value of 3.07 on the Homogeneity scale, slightly above a "neutral" perception. Differences between groups

are extremely slight. Females responded more positively than males, by a slight margin. Black and white students had nearly identical scores (3.08 and 3.07, respectively) while Chicano students were the only group below the neutral response of 3 (they were 2.92).

TABLE 4-10.--Group means on Scale 3 (Homogeneity) by race and sex

	Group			Scale Mean	Average Item Mean
Race					
	White Black Chicano "Other"	(n = (n =	15)	33.81 33.94 32.13 34.34	3.07 3.08 2.92 3.12
Sex					
	Male Female		1,162) 1,100)	33.56 34.09	3.05 3.09
Total	Sample	(n =	2,262)	33.82	3.07

Tables 4-11 and 4-12 report the results of the one-way analysis of variance tests, used to denote whether a significant difference exists between the groups' responses to the items comprising Scale 3 (Homogeneity). Race and sex are used as independent variables. (See page 122.)

As reported in Table 4-11, the overall F value of 1.356 is not significant, indicating that, by race,

TABLE 4-11.--One-way analysis of variance test between racial groups on Scale 3 (Homogeneity)

Analysis of Variance
Dependent variable: Scale 3 (Homogeneity)
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f P
Between Categories	58.08	3	19.46	1.356 ^a .254
Within Categories	32,236.40	2,258	14.27	
Total	32,294.48	2,261		-

a Not significant at the .05 level.

TABLE 4-12.--One-way analysis of variance test between sex groups on Scale 3 (Homogeneity)

Analysis of Variance
Dependent variable: Scale 3 (Homogeneity)
Category (independent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	156.04	1	156.04	10.97 ^a	.001
Within Categories	32,138.43	2,260	14.22		
Total	32,294.48	2,261			

^aSignificant at the .05 level.

students do not have a differing perception of residence hall environment as reflected in Scale 3 (Homogeneity).

As reported in Table 4-12, the overall F value of 10.97 is significant at the 95 percent level of confidence. This indicates that, by sex, students do have differing perceptions of residence hall environment as reflected in Scale 3 (Homogeneity). Visual inspection of the data reveals that females, with a scale mean of 34.09, have a greater perception of homogeneity among residents than do males, whose scale mean was 33.56.

Scale 4: Academic

The Academic scale is defined as the "perceived emphasis on academic success, combining of living with learning and group involvement with ideas and intellectual pursuits." Table 4-13 presents the range of scores for all the items comprising the scale.

TABLE 4-13.--Range of scores for Academic scale

Items: 12	
Possible minimum value (if any subject "strongly disagreed" to each item):	12
Possible maximum value (if any subject "strongly agreed" to each item):	60
Actual minimum value (by any subject):	19
Actual maximum value (by any subject):	50

Inspection of Table 4-13 reveals the following information:

Average minimum item value: 1.58

Average maximum item value: 4.16

Table 4-14 presents the means of the different racial and sex groups, first on the total Academic scale, and secondly for each group's average item value.

TABLE 4-14.--Group means on Scale 4 (Academic) by race and sex

	Group			Scale Mean	Average Item Value
Race					
	White Black Chicano "Other"	(n = (n =	15)	34.58 35.04 33.20 34.26	2.88 2.92 2.76 2.85
Sex					
	Male Female	-	1,162) 1,100)	34.49 34.70	2.87 2.89
Total	sample	(n =	2,262)	34.59	2.88

Table 4-14 reveals that the total sample placed an average value of 2.88 on the Academic scale, somewhat below the "neutral" level of 3. Similar results are found for each race and sex group. Females perceived a slightly greater academic press than males (2.89 to 2.87), black students perceived academics with a higher

attitude than whites (2.92 to 2.88), and Chicano students reflected the lowest academic perception of any of the groups (2.76). However, none of the groups exhibited a positive perception of academic emphasis either at the University or within the residence halls.

Tables 4-15 and 4-16 report the results of the one-way analysis of variance tests, used to denote whether significant differences exist between the groups' responses to the items comprising Scale 4 (Academics). Race and sex are used as independent variables. (See page 126.)

As evidenced in both Tables 4-15 and 4-16, the overall values of F are not significant, indicating that by race and sex, students do not have differing perceptions of their residence hall environment as reflected in Scale 4 (Academic).

Scale 5: Facilities

The Facilities scale is defined as the "perception of the physical characteristics of the residence hall, and its administrative arrangements." Table 4-17 (page 127) presents the range of scores for all the items comprising the scale.

Inspection of Table 4-17 reveals the following information:

Average minimum item value: 2.00

Average maximum item value: 4.33

TABLE 4-15.--One-way analysis of variance test between racial groups on Scale 4 (Academic)

Analysis of Variance
Dependent variable: Scale 4 (Academic)
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	59.00	3	19.66	1.21 ^a	.304
Within Categories	36,659.68	2,258	16.23		
Total	36,718.68	2,261			

a Not significant at the .05 level.

TABLE 4-16.--One-way analysis of variance test between sex groups on Scale 4 (Academic)

Analysis of Variance
Dependent variable: Scale 4 (Academic)
Category (independent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	24.00	1	24.00	1.47 ^a	.224
Within Categories	36,694.67	2,260	16.23		
Total	36,718.68	2,261			

a Not significant at the .05 level.

TABLE 4-17.--Range of scores for Facilities scale

Items: 18	
Possible minimum value (if any subject "strongly disagreed" to each item):	18
Possible maximum value (if any subject "strongly agreed" to each item):	90
Actual minimum value (by any subject):	36
Actual maximum value (by any subject):	78

Table 4-18 presents the means of the different racial and sex groups, first on the total Facilities scale, and secondly for each group's average item value. (See page 128.)

Table 4-18 reveals that the total sample's mean of 55.92 yielded a value of 3.1 for Scale 5 (Facilities), slightly higher than a "neutral" score of 3.0. Means of the racial and sex groups are very similar to that of the total sample, and are all above 3.0. White students responded to the items on the Facilities scale more positively than any other racial group, while black students were the least positive about Facilities. The females' mean of 56.15 was slightly higher than the 55.69 mean scored by the males.

TABLE 4-18.--Group means on Scale 5 (Facilities) by race and sex

	Group			Scale Mean	Average Item Value
Race					
	White Black Chicano "Other"	(n = (n =	121) 15)	55.95 55.08 55.46 56.50	3.10 3.06 3.08 3.08
Sex					
	Male Female	-	1,162) 1,100)	55.69 56.15	3.09 3.11
Total	sample	(n =	2,262)	55.92	3.10

Tables 4-19 and 4-20 report the results of the one-way analysis of variance tests, used to denote whether a significant difference exists between the groups' responses to the items comprising Scale 5 (Facilities). Race and sex are used as independent variables. (See page 129.)

As reported in Table 4-19, the overall F value is not significant, indicating that, by race, students do not have differing perceptions of residence hall environment as reflected in Scale 5 (Facilities).

As reported in Table 4-20, the overall value of F (5.75) is significant at the 95 percent level of confidence. This indicates that, by sex, students do have a significant difference in perception of residence hall environment as reflected in Scale 5 (Facilities). Visual

TABLE 4-19.--One-way analysis of variance test between racial groups on Scale 5 (Facilities)

Analysis of Variance
Dependent variable: Scale 5 (Facilities)
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	113.75	3	37.91	1.82 ^a	.140
Within Categories	46,833.91	2,258	20.74		
Total	46,947.67	2,261	-		

a Not significant at the .05 level.

TABLE 4-20.--One-way analysis of variance test between sex groups on Scale 5 (Facilities)

Analysis of Variance
Dependent variable: Scale 5 (Facilities)
Category (independent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	119.20	1	119.20	5.75 ^a	.017
Within Categories	46,828.47	2,260	20.72		
Total	46,947.67	2,261			

^aSignificant at the .05 level.

inspection of the data reveals that females view the residence hall facilities more positively than do males.

Scale 6: Personnel

The Personnel scale is defined as the "reactions of residents to resident staff and interactions with university personnel." Table 4-21 presents the range of scores for all the items comprising the scale.

TABLE 4-21. -- Range of scores for Personnel scale

Items: 15	
Possible minimum value (if any subject "strongly disagreed" to each item):	15
Possible maximum value (if any subject "strongly agreed" to each item):	75
Actual minimum value (by any subject):	28
Actual maximum value (by any subject):	68

Inspection of Table 4-21 reveals the following information:

Average minimum item value: 1.86

Average maximum item value: 4.53

Table 4-22 presents the means of the different racial and sex groups, on both the Personnel scale and for each group's average item value.

TABLE 4-22.--Group means on Scale 6 (Personnel) by race and sex

	Group			Scale Means	Average Item Value
Race					
	White Black Chicano "Other"	(n = (n =	121) 15)	45.93 47.10 46.00 47.14	3.06 3.14 3.06 3.14
Sex					
	Male Female	•	•	45.88 46.18	3.05 3.07
Total	sample	(n =	2,262)	46.02	3.06

Table 4-22 points out that the total sample's average value for Scale 6 (Personnel) is 3.06, slightly above a "neutral" response of 3.0. Each racial and sex group also responded to the scale's items positively enough to yield an average value higher than 3.0. Females had a slightly higher perception of Personnel than did males (3.07 to 3.05), and black and "other" students returned a higher value (3.14 each) than did white or Chicano students.

Table 4-23 reports the results of the one-way analysis of variance test, used to denote whether significant difference exists between the racial groups' responses to the items comprising Scale 6 (Personnel).

As reported in Table 4-23, the overall F value of 2.99 is significant at the 95 percent level of

confidence. This indicates that difference in perception towards the residence hall personnel does exist between racial groups of students, as reflected through the items comprising Scale 6.

TABLE 4-23.--One-way analysis of variance test between racial groups on Scale 6 (Personnel)

	Analysis of V	ariance	
Dependent	variable: Sc	ale 6 (Pers	onnel)
Category	(independent)	variable:	RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	218.97	3	72.99	2.99 ^a	.030
Within Categories	55,101.09	2,258	24.40		
Total	55,320.07	2,261			·

aSignificant at the .05 level.

Because the number of treatment levels (white, black, Chicano, and "other") exceeded two (where visual inspection could reveal the difference between dichotomous groups), the Scheffé post hoc comparison technique was employed to determine where the difference(s) between the groups existed.

Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences (Belmont, Calif.: Brooks/Cole Publishing Company, 1968), pp. 90-91.

The Scheffé post hoc technique is a method of computing confidence intervals to determine if a sample mean deviates significantly from the population mean.

A significant difference is obtained with the computed confidence interval does not cross zero.

The (Scheffé) formula used to compute the confidence intervals is:

$$\hat{\psi} - \sqrt{(J-1)} F_{\alpha} \sqrt{MS_{e} \begin{bmatrix} \frac{i}{\Sigma} & (C_{j})^{2} \\ J=1 & \frac{i}{n_{j}} \end{bmatrix}} \leq \psi \leq \hat{\psi}$$

$$+ \sqrt{(J-1)} F_{\alpha} \sqrt{MS_{e} \begin{bmatrix} \frac{i}{\Sigma} & (C_{j})^{2} \\ J=1 & \frac{i}{n_{j}} \end{bmatrix}}$$

where:

 $\hat{\psi}$ = the sample comparison (based upon the difference between the means of the groups being tested

J = the number of treatment levels

 F_{α} = the tabled value of F at the desired α for given degrees of freedom. (2.61 is an approximate value in this case, as the value of F for 1,000 degrees of freedom is 2.61 and for infinity is 2.60)

¹Gary B. North, "A Study of Expectations Held by Significant Reference Groups for the Position of Head Resident Advisor at Michigan State University" (Ph.D. dissertation, Michigan State University, 1972), p. 78.

 MS_e = the means square error (for "within groups")

 $C_{\dot{1}}$ = the coefficient of the contrast

n = the number of scores in the j-th treatment
levels

 ψ = the population comparison

When the confidence interval fails to cover zero, the comparison is said to be significant and identifiable as one possible contribution to the overall significance of F.

Two such confidence levels were computed. In the first, black vs. white, ψ was set at 1.17 (the difference between the mean of black students and the mean of white students on Scale 6). Following is a presentation of that computation:

$$\hat{\psi} - \sqrt{(J-1)} \quad F_{\alpha} \quad MS_{e} \begin{bmatrix} \frac{i}{\Sigma} & (C_{j})^{2} \\ J=1 & \frac{i}{n_{j}} \end{bmatrix}^{2} \le \psi \le \hat{\psi}$$

$$+ \sqrt{(J-1)} \quad F_{\alpha} \quad MS_{e} \begin{bmatrix} \frac{i}{\Sigma} & (C_{j})^{2} \\ J=1 & \frac{i}{n_{j}} \end{bmatrix}$$

$$= 1.17 - \sqrt{(4-1)} \quad 2.61 \quad \sqrt{24.4026} \left[\frac{(+1)^{2}}{121} + \frac{(-1)^{2}}{2076} \right]$$

$$\le \psi \le 1.17 + \sqrt{(4-1)} \quad 2.61 \quad \sqrt{24.4026} \left[\frac{(+1)^{2}}{121} + \frac{(-1)^{2}}{2076} \right]$$

$$= 1.17 - \sqrt{7.83} \quad \sqrt{24.4026} \quad (.0086) \le \psi \le 1.17$$

+
$$\sqrt{7.83}$$
 $\sqrt{24.4026}$ (.0086)
= 1.17 - (2.79) (.4581) $\leq \psi \leq 1.17$ + (2.79) (.4581)
= 1.17 - 1.28 $\leq \psi \leq 1.17$ + 1.28
= -.11 $< \psi < 2.45$

The confidence interval of -.11 $\leq \psi \leq$ 2.45 does cross zero, hence, significance between black and white students on the Personnel scale does not exist.

The other confidence interval computed was between a composite of black, Chicano, and "other" students and white students. Following is a presentation of that computation:

$$\hat{\psi} - \sqrt{(J-1)} \quad F_{\alpha} \quad MS_{e} \left[\frac{i}{\Sigma} \frac{(C_{j})^{2}}{n_{j}^{2}} \right] \leq \psi \leq \hat{\psi}$$

$$+ \sqrt{(J-1)} \quad F_{\alpha} \quad MS_{e} \left[\frac{i}{\Sigma} \frac{(C_{j})^{2}}{n_{j}^{2}} \right]$$

$$= .81 - \sqrt{(3)} \quad 2.61 \quad 24.4026 \left[\frac{1}{2076} + \frac{(-1/3)^{2}}{121} \right]$$

$$+ \frac{(-1/3)^{2}}{15} + \frac{(-1/3)^{2}}{50} \right] \leq \psi \leq$$

$$= .81 + \sqrt{(3) \cdot 2.61} \sqrt{24.4026 \left[\frac{1}{2076} + \frac{(-1/3)^2}{121} \right]^2} + \frac{(-1/3)^2 + (-1/3)^2}{15}$$

$$= .81 - (2.79) \cdot (.24) \le \psi \le .81 + (2.79) \cdot (.24)$$

$$= .81 - .66 \le \psi \le .81 + .66$$

$$= .15 \le \psi \le 1.47$$

Since the confidence interval of .15 $\leq \psi \leq$ 1.47 does not cross zero, significant differences do exist between the perceptions of white students and all other students, as they relate to the personnel staff working within the residence halls.

It should be noted that significance between white students and all others is only one possible contribution to the significance of F on this scale.

Table 4-24 reports the results of the one-way analysis of variance test, used to denote differences between sex groups as they responded to the items comprising Scale 6 (Personnel).

As reported in Table 4-24, the overall F value of 2.16 is not significant, indicating that, by sex, students do not have differing perceptions of residence hall staff personnel, as reflected through Scale 6.

TABLE 4-24.--One-way analysis of variance test between sex groups on Scale 6 (Personnel)

Analysis of Variance	
Dependent variable: Scale 6 (Per	sonnel)
Category (independent) variable:	SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f.	Р
Between Categories	52.90	1	52.90	2.16 ^a	.141
Within Categories	55,267.16	2,260			
Total	55,320.07	2,261			

^aNot significant at the .05 level.

Scale 7: Interpersonal

The Interpersonal scale is interpreted as the "social and personal interaction among residents in a living unit." Table 4-25 presents the range of scores for all the items comprising the scale. (See page 138.)

Inspection of Table 4-25 reveals the following information:

Average minimum item value: 1.87

Average maximum item value: 4.75

Table 4-26 presents the means of the different racial and sex groups, for both the total Interpersonal scale and each group's average item value.

TABLE 4-25.--Range of scores for Interpersonal scale

Items: 8	
Possible minimum value (if any subject "strongly disagreed" to each item):	8
Possible maximum value (if any subject "strongly agreed" to each item):	40
Actual minimum value (by any subject):	15
Actual maximum value (by any subject):	38

TABLE 4-26.--Group means on Scale 7 (Interpersonal) by race and sex

				
	Group		Scale Mean	Average Item Value
Race				
	Chicano	(n = 2,076) (n = 121) (n = 15) (n = 50)	26.69 26.88 25.60 25.96	3.33 3.36 3.20 3.24
Sex				
	Male Female	(n = 1,162) (n = 1,100)	26.27 27.11	3.28 3.38
Total	sample	(n = 2, 262)	26.68	3.33

Table 4-26 reveals that the total sample's mean for this scale is 26.68, yielding an average value of 3.33, somewhat above the "neutral" position of 3.0. Females, with an average value of 3.38, indicate a higher perception (level or interest in) interpersonal relations than do males, whose average value for the items in the scale is 3.28. Black students express a greater perception or feeling of interpersonal relations (3.36) than any other racial group, though the differences between racial groups are not great.

Table 4-27 reports the results of the one-way analysis of variance test, used to denote whether a significant difference exists in the racial groups' responses to the items comprising Scale 7 (Interpersonal).

TABLE 4-27.--One-way analysis of variance test between racial groups on Scale 7 (Interpersonal)

	Analysis	of Varia	ance	
Dependent v	ariable:	Scale 7	(Interp	ersonal)
Category	(independ	dent) var	riable:	RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	48.90		16.30	1.51 ^a	.208
Within Categories	24,280.27	2,258	10.75		
Total	24,329.18	2,261			

^aNot significant at the .05 level.

As reported in Table 4-27, the overall F value of 1.51 is not significant, indicating that, by race, students do not have differing perceptions of interpersonal relations within the residence hall environment, as reflected through Scale 7 (Interpersonal).

Table 4-28 reports the results of the one-way analysis of variance test, used to denote whether a significant difference exists in the sex groups' responses to the items comprising Scale 7 (Interpersonal).

TABLE 4-28.--One-way analysis of variance test between sex groups on Scale 7 (Interpersonal)

Analysis	of Variance
Dependent variable:	Scale 7 (Interpersonal)
Category (indepe	ndent) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	403.69	1	403.69	38.13 ^a	<0.0005
Within Categories	23,925.48	2,260			
Total	24,329.18	2,261			

^aSignificant at the .05 level.

As reported in Table 4-28, the overall F value of 38.13 is significant at the 95 percent level of confidence. This indicates that difference in the perception of interpersonal relations does exist between sex groups.

Visual inspection of the data reveals that females view the existence of interpersonal relationships more strongly than males.

Scale 8: Informational

The Informational scale is a collection of non-scaled items which provide specific information on student opinions regarding services, costs, conveniences, etc., of university residence halls. Table 4-29 reports the range of scores for all the items comprising this scale.

TABLE 4-29.--Range of scores for Informational scale

Items: 24	
Possible minimum value (if any subject "strongly disagreed" to each item):	24
Possible maximum value (if any subject "strongly agreed" to each item):	120
Actual minimum value (by any subject):	51
Actual maximum value (by any subject):	100

Inspection of Table 4-20 reveals the following information:

Average minimum item value: 2.12

Average maximum item value: 4.16

Table 4-30 presents the means of the different racial and sex groups for both the total Informational scale and for each group's average item value.

TABLE 4-30.--Group means on Scale 8 (Informational) by race and sex

	Group			Scale Mean		erage Value
Race				,		
	White Black Chicano "Other"	(n = (n =	15)	74.11 74.08 73.86 73.18	3	.08 .08 .07
Sex						
	Male Female	-		74.42 73.74		.10
Total	sample	(n =	2,261)	74.09	3	.08

Table 4-30 reveals very little difference between the total sample's mean of 74.09 (average value of 3.08 for the scale) and the means for racial and sex groups. Black and white students responded identically to the scale, while males were slightly more positive (3.10) than females (3.07). In sum, each of the groups indicated a scale value slightly higher than the neutral position of 3.0.

The following table, 4-31, reports the results of the one-way analysis test, used to denote whether

significant difference exists in the racial groups' responses to the items comprising Scale 8 (Informational).

TABLE 4-31.--One-way analysis of variance test between racial groups on Scale 8 (Informational)

	Analysis	of Va	aria	ance	
Dependent	variable:	Scale	8 e	(Inform	ational)
Categor	y (independ	dent)	var	iable:	RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	43.80	3	14.60	.40 ^a	.747
Within Categories	80,819.13	2,258	35.79		
Total	80,862.94	2,261			

^aNot significant at the .05 level.

As reported in Table 4-31, the overall value of F (.40) is not significant, indicating that, by race, students do not have differing perceptions of residence hall environment as reflected in Scale 8 (Informational).

Table 4-32 reports the results of the one-way analysis of variance test, used to denote whether significant difference exists in the sex groups' responses to the items comprising Scale 8 (Informational).

As reported in Table 4-32, the overall F value of 7.30 is significant at the 95 percent level of

confidence. This indicates that difference in the perception of sex groups does exist, with respect to this particular scale. Visual inspection of the data reveals that males are slightly more positive than females about the informational items comprising this eighth scale.

TABLE 4-32.--One-way analysis of variance test between sex groups on Scale 8 (Informational)

Analysis of	Variance
Dependent variable: Sca	le 8 (Informational)
Category (independen	t) variable: SEX

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	Р
Between Categories	260.38	1	260.38	7.3 ^a	.007
Within Categories	80,602.56	2,260	35.66		
Total	80,862.94	2,261			

^aSignificant at the .05 level.

Scale 9: The Total Instrument

The ninth scale is actually a combination of the previous eight scales and encompasses the total instrument used in this study. Table 4-33 presents the range of scores for all the items in the instrument.

TABLE 4-33.--Range of scores for the S.I.U.R.H.E.S.

Items: 116	
Possible minimum value (if any subject "strongly disagreed" to each item):	116
Possible maximum value (if any subject "strongly agreed" to each item):	580
Actual minimum value (by any subject):	279
Actual maximum value (by any subject):	500

Inspection of Table 4-33 reveals the following information:

Average minimum item value: 2.40

Average maximum item value: 4.30

Table 4-34 presents the means of the different racial and sex groups, first on the total instrument and then for each group's average instrument value. (See page 146.)

It is evident from Table 4-34 that only slight differences exist in the group's means as they responded to the total instrument. The total sample, with a 358.45 mean and a 3.09 average value, responded slightly higher than the neutral position of 3.0. Females were slightly more positive on the total instrument (3.10 value) than were males (3.07). Black and white students' means were quite similar (358.58 and 358.49, respectively) causing

each group's average Instrument value to be identical.

The mean for Chicano students was slightly lower, at

350.73, while "other" students responded to the instrument similarly to the black and white students.

TABLE 4-34.--Group means on Scale 9 (the S.I.U.R.H.E.S.) by race and sex

Group				Scale Mean	Average Item Value
Race					
	White Black Chicano "Other"	(n =]	L21) L5)	358.49 358.65 350.73 358.88	3.09 3.09 3.02 3.09
Sex					
	Male Female	(n =] (n =]	•	356.98 360.01	3.07 3.10
Tota1	sample	(n = 2	2,261)	358.45	3.09
				•	

The following table, 4-35, reports the results of the one-way analysis of variance test, used to denote whether significant difference exists in the racial groups' responses to the items comprising Scale 9, the S.I.U.R.H.E.S. (See page 147.)

As evidenced in Table 4-35, the overall F value of .846 is not significant, indicating that, by race, students do not have differing perceptions of residence hall environment as reflected in the S.I.U.R.H.E.S.

TABLE 4-35.--One-way analysis of variance test between racial groups on the S.I.U.R.H.E.S.

Analysis of Variance
Dependent Variable: The S.I.U.R.H.E.S.
Category (independent) variable: RACE

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	f	P
Between Categories	910.93	3	303.64	.846	.468
Within Categories	809,482.49	2,258	358.49		
Total	810,393.42	2,261			

a Not significant at the .05 level.

Table 4-36 (page 148) reports the results of the one-way analysis of variance test, used to denote whether significant difference exists in the sex groups' responses to the items comprising Scale 9, the S.I.U.R.H.E.S.

As evidenced in Table 4-36, the overall F value of 14.53 is significant at the 95 percent level of confidence. This indicates that, by sex, students do have differing perceptions of residence hall environment as reflected in the S.I.U.R.H.E.S. Visual inspection of the data reveals that females have a more positive opinion of their residence hall environment than do males.

TABLE 4-36.--One-way analysis of variance test between sex groups on the S.I.U.R.H.E.S.

Analysis of	Variance
Dependent Variable:	the S.I.U.R.H.E.S.
Category (independe	nt) variable: SEX

Source of Variation	Sum of Squares	- 3	Mean Square	f	Р
Between Categories	5,178.57	1 5,	178.85	14.53 ^a	<0.0005
Within Categories	805,214.57	2,260			
Total	810,393.42	2,261			

^aSignificant at the .05 level.

Table 4-37 summarizes the actual average minimum and maximum values on each of the scales. (See page 149.)

It can be seen from Table 4-37 that with two exceptions (Facilities and Information) the average minimum value by (at least one) subject(s) for the subscales was less than 2.0, indicating a reasonably low or negative perception of the environmental aspects addressed in those scales. The actual maximum value by (at least one) subject(s) for each of the subscales was above 4 ("agree") and as high as 4.75 (for the Interpersonal scale).

Table 4-38 presents a summary of each racial and sex group's mean and average item value, by scale. (See page 150.)

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TABLE 4-37.--Average minimum and maximum scale values

	Scale	Actual Minimum Value	Actual Maximum Value	Number of Items	Minimum Average Item Value	Maximum Average Item Value
1.	Rights	25	58	13	1.92	4.46
2.	Responsibility	27	65	15	1.80	4.33
3.	Homogeneity	21	51	11	1.90	4.63
4.	Academic	19	50	12	1.58	4.16
5.	Facilities	36	78	18	2.00	4.33
6.	Personnel	28	68	15	1.86	4.53
7.	Interpersonal	15	38	8	1.87	4.75
8.	Informational	51	100	24	2.12	4.16
9.	S.I.U.R.H.E.S.	279	500	116	2.40	4.30

TABLE 4-38.--Summary of group means and average item values, by scale*

	Scale	White	Black	Chicano	Other	Male	Female	Total
1.	Rights	37.90 (2.92)	37.76 (2.91)	35.93 (2.76)	38.42 (2.96)	37.93 (2.92)	37.85 (2.91)	37.89 (2.91)
2.	Responsibility	47.47 (3.29)	48.74 (3.24)	48.53 (3.23)	48.98 (3.26)	48.71 (3.24)	50.16 (3.34)	49.42 (3.29)
3.	Homogeneity	33.81 (3.07)	33.94 (3.08)	32.13 (2.92)	34.34 (3.12)	33.56 (3.05)	34.09 (3.09)	33.82 (3.07)
4.	Academic	34.58 (2.88)	35.04 (2.92)	33.20 (2.76)	34.26 (2.85)	34.49 (2.87)	34.70 (2.89)	34.59 (2.88)
5.	Facilities	55.95 (3.10)	55.08 (3.06)	55.46 (3.08)	56.50 (3.08)	55.69 (3.09)	56.15 (3.11)	55.92 (3.10)
б.	Personnel	45.93 (3.06)	47.10 (3.14)	46.00 (3.06)	47.14 (3.14)	45.88 (3.05)	46.18 (3.07)	46.02 (3.06)
7.	Interpersonal	26.69 (3.33)	26.88 (3.36)	25.60 (3.20)	25.96 (3.24)	26.27 (3.28)	27.11 (3.38)	26.68 (3.33)
8.	Informational	74.11 (3.08)	74.08 (3.08)	73.86 (3.07)	73.17 (3.04)	74.42 (3.10)	73.73 (3.07)	74.09 (3.08)
9.	S.I.U.R.H.E.S.	358.49 (3.09)	358.65 (3.09)	350.73 (3.02)	358.88 (3.09)	356.98 (3.D7)	360.01 (3.10)	358.45 (3.09)

^{*}The four-digit number under the racial or sex group's name is that group's mean for the designated scale. The number in parentheses under the group's mean is that group's average item value for the designated scale.

Inspection of Table 4-38 yields a great deal of information, most of which will be discussed in Chapter V. By examining the table horizontally, one may determine which racial and/or sex group scored the highest or lowest mean or average item value, for each scale. Vertical examination of the table reveals how each racial and sex group responded to each scale. It is possible, then, to determine which group perceived their residence hall environment the most or least favorably, as defined by the scales. Also possible is the determination of which scales were perceived the most and/or least favorably by each of the groups.

Close examination of the table reveals that students comprising the "other" racial group (nonwhite, non-black, and non-Chicano) scored highest on the Rights scale, while Chicanos scored lowest. Males scored higher than females on this scale.

The <u>Responsibility</u> scale was responded to more positively by whites, while Chicanos were the least positive in their perception on this scale's items. Females scored higher on the Responsibility scale than did males.

The "other" racial students and females scored higher than the other groups on the <u>Homogeneity</u> scale, while Chicanos scored lowest on this scale.

Blacks and females scored highest and Chicanos and males lowest on the <u>Academic</u> scale while whites and females scored highest and blacks and males lowest on the Facilities scale.

Blacks exhibited the most favorable perception of Personnel staff, while females scored higher than males in this area.

Blacks perceived greater <u>Interpersonal</u> relationships than the other racial groups, and females' perception in this area was more positive than males'.

Black and white students scored higher on the <u>Informational</u> items than Chicano and "other" students, and males responded more positively than females. On the <u>total instrument</u>, blacks and whites revealed similar overall perceptions of the residence hall environment, while females' responses to the environment were more favorable than the males'.

Table 4-39 presents a summary of the analysis of variance tests on each scale, by race and sex. (See page 153.)

Examination of Table 4-39 finds significant differences between racial groups on only one scale, Personnel. In that instance, white students exhibited a less positive perception of residence hall staff than students in all other racial groups.

TABLE 4-39.--Summary of analysis of variance tests on each scale, by race and sex

	Scale	Group	f	P	Significance (.05 level)
1.	Rights	Race Sex	1.01	.386 .671	
2.	Responsibility	Race Sex	1.60 70.57	.187 <0.0005	*
3.	Homogeneity	Race Sex	1.36 10.97	.254 .001	*
4.	Academic	Race Sex	1.21 1.47	.304	
5.	Facilities	Race Sex	1.82 5.75	.140 .017	*
6.	Personnel	Race Sex	2.99 2.16	.030 .141	*
7.	Interpersonal	Race Sex	1.51 38.13	.208 <0.0005	*
8.	Informational	Race Sex	.40 7.30	.747 .007	*
9.	S.I.U.R.H.E.S.	Race Sex	.846 14.53		*

Significant differences between the attitudes of males and females were found on the Responsibility, Homogeneity, Facilities, Interpersonal, and Informational scales, and on the total instrument. Males exhibited a more positive attitude toward residence hall environment as reflected through the Informational scale, but females' perception of the environment was greater on all the other scales where significance was established and on the total instrument.

Chapter V will present an interpretation and summary of the data analysis, the study's limitations, and recommendations for further research.

CHAPTER V

SUMMARY OF THE DATA ANALYSIS, DISCUSSION OF FINDINGS, AND RECOMMENDATIONS

This chapter will briefly review the study's purpose and nature, summarize the analysis of the data, discuss the major findings, and make recommendations suggested by the study.

Purpose of the Study

The purpose of this study was to measure the perceptions of selected students at Michigan State University towards residence halls and to determine whether attitudinal differences exist between sex and racial groups of students towards their residence environment. All of the students living in eight large coeducational residence halls were asked to respond to the Southern Illinois University Residence Hall Environment Scale, an instrument designed to measure eight aspects of residence hall environment and survey opinions regarding selected residence hall characteristics. The intent of the study was to gather feedback about student perceptions of the

residence hall operation, ascertain which groups of students are being the most and/or the least satisfied with the housing facilities and services provided them, and to offer recommendations for whatever improvement may be suggested by the study.

Nature of the Study and Methodology

This study was conducted on the Michigan State
University campus during Spring term, 1974. The
S.I.U.R.H.E.S. was administered to 3,914 students, and
58 percent of the subjects, or 2,287, returned completed
and usable answer sheets. Students were asked to
identify their sex and racial-ethnic identity and it
was in this manner that the sex and racial groups were
composed.

The instrument used in this study (the S.I.U.R.H.E.S.) was constructed in 1972 and is composed of 116 items classified into seven scaled-item scales and one informational-items scale. The eight conceptual areas measured by the S.I.U.R.H.E.S. are:

- (1) Individual <u>Rights</u> and Freedom, (2) Personal Conduct and Responsibility, (3) Assimilation and Homogeneity,
- (4) Academic emphasis, (5) Facilities, (6) Personnel,
- (7) Interpersonal relations and social interaction, and
- (8) Informational.

The Southern Illinois University instrument was modified slightly to fit the Michigan State University residence hall system, though University test construction experts assured that test validity had been maintained.

Scoring and Analysis Techniques

A summated rating scale, or Likert-type scale, was used to score the subjects' responses to the 116 items in the questionnaire. Subjects were asked to respond to an item (statement) in terms of their agreement with it, and were provided five alternative responses from which to choose. The five response options and the numerical value assigned to each of them are: (1) strongly disagree = 1, (2) disagree = 2, (3) neither agree nor disagree = 3, (4) agree = 4, and (5) strongly agree = 5.

Any composite score (for the total questionnaire or for an individual scale score) equal to 3.0 would reflect a "neutral" (neither agree nor disagree) response, while a composite score above 3.0 would reflect a positive perception of residence hall environment.

The data were examined in several ways. The University's Office of Evaluation Services provided a "distribution (or frequency) count" of all responses to each of the questionnaire's items. The percentage of responses to each item, by sex and racial groups, yielded extensive information. Statistical treatment of the data

computed mean scores for each group's response to all items comprising an individual scale and analysis of variance scores, testing differences between groups on each of the eight scales.

Summary of the Scales

This section of the chapter will summarize the findings for each scale, with attention devoted to the responses of the different sex and racial groups, and the total sample.

Scale 1: Individual Rights and Freedom

The items in this scale measure student opinion about "the sense of personal freedom, and right to act independently in a living unit." Persons agreeing with or favorably supporting the items in this scale express a belief that a sense of right or freedom does exist. The findings seem to reflect two strains of thought held by students when responding to this scale's items—student rights (or respect) among each other, and rights afforded them by the University. Students strongly supported the idea that students respect each other and each other's rights. A large proportion of the sample (85%) believe that students in residence halls have a good deal of freedom and even more (89%) think that respect for others' rights is important. Students seem to be expressing the

willingness to defer to others' rights, and hold the expectation, in return, that other students would willingly defer to their rights.

More than half the sample think their own room is suitable for study, while less than one-third express the need to use the library for study.

A vast majority (82%) favor 24-hour visitation by the opposite sex, and 60 percent of the sample do not think that alternating suites of males and females would prove inconvenient or embarrassing. The other side of those issues is taken by 10 percent of the sample who do not support 24-hour visitation and 24 percent who agree that alternating male-female suites would be inconvenient. A third of the female sample is opposed to alternating suites, compared to 18 percent of the male sample.

Slightly more than half the sample think that university rules and regulations are reasonable, though a fourth of the black students think there are too many rules and regulations, though particular areas are not specified. Less than half (46%) of the sample think privacy is sufficient, though more than half (57%) of the black females think privacy is lacking.

Summarizing the responses to the items in the Rights scale, students, while they do feel that they have a good deal of freedom, have concerns about (the number and enforcement of) rules and regulations imposed upon

them. They favor the 24-hour visitation privileges, have a "luke warm" appeal for alternating male/female suites, and express concern over a lack of privacy.

Statistically, there is no difference between racial or sex groups as they perceived their rights within a residence hall setting. Overall, the sample's 2.91 average item value for the Rights scale reflects a slightly less than neutral perception, indicating that students do not feel they're being given quite the extent of rights and freedom to which they're entitled. This area may merit further exploration.

Scale 2: Personal Conduct and Responsibility

The items on this scale pertain to the acceptance of the consequences of one's personal actions when living within a group situation. "Higher" scores or agreement reflect an acceptance of responsibility for one's self and in others.

Students give the Responsibility scale a higher than neutral response, that of 3.29, indicating a belief that some degree of responsibility is in existence. However, responses to questions in various areas present concern about how students view their peers' values or sense of responsibility.

Only about one-half the sample (52%) believe that students respect the property of others and, in fact, a

fourth believe that students do not respect the property of others. This response is supported by the finding that more than half (51%) of the sample would worry about their personal belongings (being taken) if their room were left unlocked. Only one-third of the sample would not worry about their unlocked room.

More than half the sample (58%) believe students realize the need to keep the building in good repair, but nearly as many (55%) believe their building is subject to deliberate damage. White males, more than any other group, agree with the deliberate damage propensity among students, though blacks subscribe to that thought less than other groups.

At the same time, 57 percent of the sample would initiate action against someone who deliberately damaged the building, with white females (62% of that sample) expressing the greatest inclination toward taking such action. Implications of this response follow in this section's last paragraph.

Contrary to an earlier thought, only one-third of the sample believes that every student feels a responsibility to make (their dorm) a decent place in which to live.

A reasonable proportion of the sample, 43 percent, believe other occupants interpret personal freedom as the right to do whatever they please. More than half the white males express this thought.

More than three-fourths of the sample would not want a homosexual roommate and only a third believe that the residence hall staff makes a sincere effort to help new students in their adjustment to college.

A general summary of the Responsibility scale's items indicates that slightly more than half the sample:

(1) believe that other students respect the property of others, (2) believe that their building is in good repair, but subject to intentional damage, and (3) would initiate action against someone purposely damaging the Hall. Less than 10 percent of the sample would have interest in or be willing to have a homosexual roommate.

The sample's average item value of 3.29 indicates a perception of responsibility on the part of students reasonably above the neutral position. While there is no significant difference exhibited between racial groups with regard to a sense of responsibility, females displayed a significantly greater sense of responsibility than did males.

Scale 3: Assimilation and Homogeneity

This scale speaks to the pressure to adapt to the group (its goals and attitudes) and the commonality of perception, interests and attitude among residents.

"High" or favorable responses to the items in this scale indicate a perception of commonality among residents.

Feelings among students as to their perceived similarity or acceptance of each other is reasonably healthy. More than half the sample (55%) believe that students do want to "belong" to the group. Two-thirds of the sample disagree that students are really "out for themselves," though 14 percent of the whites and 24 percent of the blacks believe that students are "out for themselves."

More than two-thirds of the sample (68%) disagree that dorm life "reduces them to a number," though again, blacks, more than whites, express the thought that they're reduced to a number in their dorm.

Only 17 percent of the sample think they would adjust more easily to a small dorm (everyone sampled lived in a large hall), thus supporting the contention that they feel they "have a place" in the group.

Males, more than females, expressed interest in a smaller dormitory, but black females expressed great favor with their large hall setting.

More than two-thirds of the sample (70%) agree that conformity is necessary in a group living situation, though women seem more willing to conform than men, and black males are the least interested in conformity.

Sixty percent (60%) of the sample relate that they could easily find others in the hall with whom to identify and, similarly, 62 percent find "fitting in" easy.

Seventy percent (70%) think that one does not have to do what the crowd pleases in order to be accepted.

Almost two-thirds (64%) express a desire to really help someone out who's in personal or academic trouble, though females are more of that persuasion than males.

A general summary of the responses to the Homogeneity scale's items shows that more than half of the sample believe that students do want to "belong" to a group, and two-thirds of the sample do not think that other students are out for themselves. Generally, the sample prefers living in their large dormitories and do not feel that they have been "reduced to numbers."

While two-thirds of the sample agree that some conformity is necessary in a large group living situation, they also believe that the individual is not compelled to do "what the group pleases." Two-thirds of the sample also indicate a real interest and willingness to "help out someone else" who is having academic or personal problems.

The sample's average item value for the scale is 3.07, only slightly above a neutral position. No difference between race was found on this scale, but females were found to be significantly more homogeneous than males.

Scale 4: Academic Emphasis

The Academic scale examines the perceived emphasis on academic success and the combining of living with learning. "High" scores or positive responses would reflect strong academic emphasis.

Generally, students do not exhibit a perception of a strong academic press within their living environment. Only 15 percent agree that they have friends or associates who are either "deep thinkers" or intellectual. Half the sample, in fact, say that they do not have intellectual associates. Blacks, more than whites, though, indicate relationships with "intellectual friends."

Only one-fourth of the sample relate that, where they live, serious "bull sessions" occur frequently. It seems that more serious bull sessions occur among male groups, though, than female groups. Similarly, only one-third of the sample relate that students frequently discuss such topics as war, ecology, religion, or race relations.

Less than a third of the sample (30%) express the belief that there is enough competition for good grades and 57 percent of the sample disagree that competition for the highest grade point is healthy. More men than women experience good academic competition.

Slightly more than a third (35%) of the sample believe that dormitories are an important means of

introducing new students to an intellectual climate.

Only one student in eight expresses the feeling that
his/her dormitory is a good place to learn--rather than
just a place to eat and sleep.

Only 40 percent of the sample report that they could study in their room without noise and distraction.

When students express the above perceptions of academic activities and priorities within their residence hall, they paint a negative picture of academic emphasis within the environment. However, two glaring contrasts are revealed within the scale. More than three-fourths of the sample (79%) disagree (33% of the strongly) that "no one gives a damn about serious learning." Similarly, two-thirds disagree that "their hall is not conducive to serious study."

Generally, then, students do not indicate that an academic learning experience takes place in the residence halls. While they express the opinion that individual or group competition for "the highest grade-point average" should not be encouraged, they strongly assert that, as students, they are interested in a serious education. Less than half the sample study in their rooms and two-thirds do not believe that the residence halls are the most effective means of introducing new students to an intellectual climate.

The sample population places a 2.88 value on the average item in the academic scale, less than a neutral position. This would indicate that, overall, and despite how they respond when charged with not being serious about academics, students indicate that the academic environment is not strong. While neither finding approaches significance, males exhibit less academic inclination than females and whites less than blacks.

Scale 5: Facilities

The Facilities scale measures the perception of students towards the physical characteristics of their residence hall and its administrative arrangements. High or positive perceptions would reflect satisfaction with the hall's physical facilities, maintenance, upkeep, and services.

Responses by students to this scale indicate a positive perception of their residence hall physical environment. Seventy percent (70%) of the sample disagree that their dormitory is in "lousy" physical condition and 62 percent think that the University tries to make the Hall an attractive place in which to live. White females, more than any other group, express pleasure with the physical appearance and condition of the Hall. Only 15 percent of the sample disagree that

the janitorial staff does a good job and, again, white females are the group with the highest rating of the janitorial staff's performance.

Nearly three-fourths (73%) of the sample express the perception that the janitors keep their building clean and sanitary. Fourteen percent (14%) of the white males strongly agree that the Hall's janitors keep the building clean and sanitary, while the same opinion is expressed by 29 percent of the black males.

Nearly three-fourths of the sample (73%) reflect that workmen who have made repairs in their room have been pleasant and cooperative, though 4 percent of the white females disagree with the workmen's cooperative spirit, while 11 percent of the black females disagree.

With respect to food, 39 percent of the sample (and 31% of the blacks) agree that the quality of food is "good." Forty-two percent (42%) of the sample (and 57% of the blacks) think that the food quality is not good. Eighty percent (80%) of the males and 87 percent of the females agree that meals are served at convenient times. Whites, more than blacks, think meal serving times are convenient.

Most of the sample (85%) favor the idea of a dormitory library. By percentage, fewer blacks than whites think that the enforcement of quiet hours is adequate. For the total sample, 41 percent think quiet hours are adequately enforced.

Students express the desire to have greater control or direction over their room facilities and assignment. More than three-fourths of the sample (78%) think that students should be included in the planning and selection of room furnishings. Females, more than males, think they should be able to rent a single room to themselves (83% did), while black males, by group, express the least desire (63%) for a single room.

Only 38 percent of the sample think that they are paying a fair price for the room, board, and services provided. A greater percentage of whites (41%) think room and board fees fair than blacks (24%).

Lastly, more than half the sample (55%) express the desire for more recreational and social facilities, a preference expressed by 62 percent of the black students.

A general summary of the responses to the Facilities scale's items indicates that, for the most part, students regard their halls as being in good physical condition, and believe that the maintenance staff keep the buildings in clean and sanitary condition. They would choose to have more control over the use of their room and the assignment of their roommates. Mixed opinion is expressed over the enforcement of quiet hours, food quality and service, and costs charged for room and board.

The sample scored an average item value of 3.10 for the Facilities scale, a mark comfortably above the

neutral position. While whites indicate a higher perception of the residence hall's physical facilities than blacks, the difference is not significant. Females do express a significantly more positive perception of the physical environment than do the males.

Scale 6: Personnel

The Personnel scale measures student reactions to resident staff and interactions with university personnel. High or positive responses would indicate a favorable attitude toward staff effort and competency, and rules and regulations.

Only 20 percent of the sample think that no one in the University administration has shown concern for improving residence hall life. More than a third of the black students (35%) think little concern for dorm life has been shown by the University.

A third (34%) of the sample thinks the staff is doing a good job in helping students to feel at home in the residence hall.

Forty-three percent (43%) of the sample express the belief that the staff tries hard to respect the individuality of the people in the dormitory and four out of five residents believe that their R.A. respects the individuality of floor members.

Females think that R.A.'s are more sensitive to student needs and desires than males, and white students

think that more than black students. For the whole sample, 59 percent perceive R.A.'s as being sensitive to student needs and desires.

More than three-fourths of the sample regard their R.A. as competent and helpful, though perceptions differ by sex and race. While 77 percent of the women think their R.A. competent and helpful, 70 percent of the men did. Seventy-three percent (73%) of the whites think their R.A. competent and helpful, compared to only 61 percent of the blacks.

Only 10 percent of the sample do not feel as though they are being treated as adults by staff. White students feel that they are treated as adults more than are black students.

Nearly half (49%) of the sample think that residence hall rules are fair and impartial, though women do more than men (58% to 42%). About two students out of five think that the University has to impose rules and regulations on those living in college-owned housing because of its responsibility to parents and the public.

Exactly half the students in the sample say they would not study more if R.A.'s enforced quiet hours.

Nearly three-quarters of the sample (73%) reveal that they spend most of their outside-the-classroom time in their residence hall.

A general summary of the Personnel scale's items finds that, while only about a third of the sample think that staff do a good job helping students to feel at home, three-quarters believe that their R.A. is competent and helpful. Women and whites have a higher opinion of staff competency than do males and blacks. Students are pleased that their individuality is respected by staff and that they are treated as adults. There is concern about the fairness and impartiality of rules, though half the sample would not study more if quiet hours were more consistently enforced. Most of the students spend most of their non-class time in the halls.

The total sample's mean of 3.06 per average item value on this scale indicates a slightly positive perception of the residence hall staff and/or University administration, but one not much above a neutral position. No difference in attitude toward staff is revealed between sex groups, but whites express a significantly lower perception of staff/administration than all other groups combined.

Scale 7: Interpersonal Relations and Social Interaction

The Interpersonal scale measures the perceived social and personal interaction among residents in a living unit. Positive scores on this scale or its items indicate a high degree of social/personal interaction.

For more than half the students in the sample (59%), it is important to know everyone living close to their room. A quarter of the sample do not feel this way. For the black sample population, only 47 percent need and want to know everyone living close to their room.

Two-thirds of the sample notice a real effort by residents to get along with each other, though such an effort is appreciated by only 53 percent of the black sample population. Nearly three-fourths of the sample (74%) relate that they have very few conflicts with people in their residence hall, though 15 percent admit to having such conflicts.

More than half the sample believe residence hall life provides sufficient social events or opportunities to meet members of the opposite sex, though 25 percent of the sample disagree. Women are more content with opportunities to meet men than men are with the opportunities to meet women.

Earlier in this chapter (Summary of the Responsibility scale), it is stated that more than three-fourths of the sample would not want a homosexual roommate.

Through a question in this scale, 74 percent of the sample indicate that homosexual behavior does not present a frequent problem.

The idea of a drug-using roommate is rejected by 59 percent of the sample, and by 75 percent of the black

females. Whereas 64 percent of the females would not want a drug-using roommate, 51 percent of the males express such a preference. Slightly less than a fourth (24%) of the sample indicate they would not mind living with a drug-using roommate.

More than half the sample (53%) do not believe that they hear too much "foul language" in the residence hall, but 19 percent (and 26% of the blacks) do express displeasure at the amount of foul language they hear.

In summary, the responses to this scale's items demonstrate that, for the most part, students get along well with each other in the residence halls, and want to get to know each other, though this attitude is expressed less by blacks than whites. More than three-fourths of the sample indicate that there are few conflicts arising out of their group living. Opportunities for meeting the opposite sex are satisfactory to most students, and most would not want a drug-using roommate.

For the total sample, a 3.33 average item value reflects a degree of social/personal interaction somewhat above the neutral position. It is this scale, in fact, that receives the most positive response from the sample population. Women, averaging 3.38 per average item value, express a significantly more positive attitude toward social/personal interaction within the residence hall than do men, who place a 3.28 value per average item in

the scale. Blacks express a slightly, but not significantly, higher perception of social/personal interaction among residents.

Scale 8: Informational

The Informational scale is a collection of unrelated, unscaled questions providing information on student opinion regarding services, costs, housing assignments, and other related aspects of residence hall life.

The first area of questions in this scale has to do with student perceptions of rules and regulations and their enforcement. While 55 percent of the sample (and 45% of the blacks) think that students living in the unit should formulate and enforce their own rules and regulations, only 12 percent of the sample think that better regulation enforcement is needed. Women express more satisfaction than men with current regulation enforcement, and whites are more satisfied than blacks. Only one-third of the sample think that there should be enforceable "quiet hours," while exactly half the sample do not want quiet hours at all.

The next area of questions concerns student preference for living accommodations. More than half (54%) of the sample would not prefer living in a cooperative housing arrangement where individual cooking could be done. About one-fourth of the sample would prefer such an arrangement. While only 18 percent of the sample

would want to pay more money for more comfortable rooms, females reject the idea of greater room comfort more than males, and whites do so more than blacks. Most of the students (80% of the sample) would not want housing assignment to be based upon students' academic rank or year in school.

Most students think that they should be able to choose the person with whom they want to live, an idea that is favored more by women than men. Only 27 percent of the sample express a willingness to live with a person of a different race without any prior approval being sought. More than half the sample (57%) would want their prior approval sought before being assigned a racially different roommate (53% of the black students express this preference, compared to 57% of the white students).

Several items seek opinion on the academic relation to residence halls. Seventy percent (70%) of the sample think there should be residents available for the purpose of tutoring. Black students desire resident tutors more than whites, and females do so more than males. A large percentage (79%) of the sample disagree that students on academic probation should be restricted to supervised study hours.

The idea of attending classes in their residence hall appeals to more than three-fourths of the sample,

to women more than men, and to black females more than any other group. The sample greatly disagrees (86%) that students with the best grade point average should have the first choice of rooms. Women are more opposed to this idea than men and blacks more than whites.

While less than a third of the sample would support an educational program in the residence hall which would help students do better academic work, almost half the black students think this a worthy idea. Less than a third of the sample would prefer a living arrangement where students interested in getting good grades could live together; more than half do not think they would make better grades if their roommate had the same major. Only one student in eight believes that encouragement should be given to groups for the best grade-point average.

Summarizing the many unrelated questions in this scale, one finds opinion mixed on rules and regulations and their needed enforcement. Students like being able to attend classes in their residence halls and would be receptive to the idea of resident tutors. Generally, they prefer their current room facilities, would not prefer to have to cook their own meals and would not want to pay more money for more comfortable surroundings.

They would want to be able to exercise more control over

the person who's assigned to live with them, but enjoy the current method of assigning students randomly by academic rank.

The average item value on this scale of 3.08 reflects a perception of environment slightly above the neutral position. Differences in the responses of racial groups are not noted on this scale, but the mean scored by males is significantly higher than the mean scored by females.

Differences Between Groups

Differences between sex group responses are found to be significant on five of the eight scales. Males exhibit a more positive perception of residence hall environment on the Informational scale, but females exhibit a more positive perception of their environment on the Responsibility, Homogeneity, Facilities, and Interpersonal scales.

Significant differences between racial groups are found only on the Personnel scale, where whites are found to have a less positive perception of resident staff than the other racial groups combined.

For the 116 items on the total instrument, the sample response has an average item value of 3.09, slightly above the neutral position. Black, white, and "other" students' means are identical and, though, the response of the Chicano students is slightly lower

to the items, differences are not significant between the racial groups. The female mean of 360.01 is significantly higher than the male mean of 356.98, indicating that females respond more positively to their residence hall environment than do males.

Conclusions

The results of statistical treatment of the data plus insights gained when reviewing the findings and responses to the item throughout the instrument lead to several conclusions. These conclusions are presented in the following paragraphs and, where appropriate, are related to the research discussed in Chapter II.

Females living in University residence halls on the Michigan State campus exhibit a greater perception of student responsibility than do males. Significant difference between the means of female and male groups was found and, of the eight scales comprising the instrument used, females scored their second highest mean on the Responsibility scale.

Females living in Michigan State University residence halls are more homogeneous than males. That is, they are more concerned with the individual's relation to the "group," group identity and participation, and adaptation to residence hall life.

Students living in Michigan State University residence halls do not perceive a strong academic press

within the living environment. The sample studied revealed their lowest mean on the Academic scale and exhibited little interest or activity in the possible or potential academic nature of the on-campus residential environment.

Students residing in Michigan State University dormitories view their physical environment favorably and believe that the buildings are kept clean and sanitary by the maintenance staff.

Female students in the residence halls have a more positive attitude about their physical environment than do male students. The findings in this area are similar to those of Olson (1964) who, ten years earlier at the same University, found female students to be more impressed than male students with the physical condition of their residence hall rooms. 1

White students have a less favorable perception of residence hall and/or university staff effort and competency and the imposition of rules and regulations than do all other racial groups combined. This is supported by the statistical significance found between racial groups on the Personnel scale.

lolson.

There is a high regard for and interest in personal/social interaction within the residence hall community. The sample population responded more positively to this scale than to any of the others.

Female students in the University residence hall exhibit more satisfaction with their personal/social relationships than do male students. Two studies reported a year ago yielded similar results. Netusil and Hallenbeck (1975) found that females reported a higher level of satisfaction than males with campus social life¹ and Montgomery, McLaughlin, Fawcett, Pedigo, and Ward (1975) found that females preferred living in residence halls for the availability of interaction.²

Female students are more satisfied with their residence hall living experience than are male students. Significant differences were found between male and female group means on the total instrument. The findings in this area are similar to those of Black (1971), 3 Mangus (1972), 4 and Al-Taiey (1973), 5 all of whom found

¹Netusil and Hallenbeck.

²Montgomery, McLaughlin, Fawcett, Pedigo, and Ward.

³Black.

⁴ Mangus.

⁵Al-Taiey.

females to be more positive than males in their perception of residence and/or campus environment.

Black students are not as satisfied as white students with the residence hall environment. Significant differences were not found between black and white students on any of the scales. However, questions relating to academic emphasis within residence halls, rights and freedom, enforcement of rules and regulations, residence hall costs, food quality and service, and housing assignments repeatedly found black students to be less satisfied than white students with current residence hall conditions. The indications in this study that white students are more satisfied than black students with the residential environment are similar to the findings of Hayes (1971), Fabris (1972), and Luckett (1973), all of whom found more satisfaction among white students than black students with the college environment.

Recommendations

There are several recommendations which are suggested by the general findings of the study and student responses to many of the items in the instrument. They are as follows:

l_{Hayes.}

²Fabris.

³ Luckett.

- of students and staff to the academic concerns of many students living in residence halls.

 Effort should be made to reduce noise and distraction to study, and programs should be initiated which assist students in their academic endeavor. Thought toward the provision of resident tutors would be appropriate, as it would be toward the establishment of residence libraries or, where existent, their continued maintenance.
- 2. Programs should be implemented in the residence halls which help to increase student sensitivity and awareness of responsibility, particularly on the part of white male students, to the physical environment of the residence halls.
- 3. Activities, services, and programs which contribute to a "sense of belonging" and which may negate one's "feeling like a number" should be reinforced and continued, particularly if initiated by resident staff. Activities should be encouraged and facilitated which assist students in a living unit to "get to know each other" on a personal basis.
- 4. Resident staff should give increased and on-going attention to the needs and concerns of minority

students as they relate to living on-campus.

Increased and continual cross-cultural educational programs are needed.

- 5. Housing alternatives to "24-hour visitation" and alternate-sex suites should be maintained, while substantial "quiet-hours" space should be provided.
- 6. A strong management commitment to an effective physical maintenance and upkeep program should be continued.
- 7. Continual solicitation of student feedback on food quality and service is needed, as is the provision of realistic information to students on the costs to the University for room and board facilities and services.
- 8. Recognition on the part of the University should be directed to the great interest on the part of students in being able to inhabit single rooms—a housing arrangement which would increase a sense of privacy among residents.
- 9. Continued recognition by the University of the vast amount of time most resident students spend in their residential environment is essential. A corresponding commitment is needed on the part

of the University to maintain, develop and improve the quality of residence hall life and its environment.

Implications for Further Research

The purpose of this study was to determine the perceptions of students towards their residence hall environment and to determine if any differences existed between the perceptions of sex and racial groups within Michigan State University residence halls.

Significant differences between sex groups were found on five of the eight scales comprising the instrument used, and difference in racial perception was found on one scale. More data regarding sex and racial group differences of perception should be gathered and continued research in this area is suggested.

The findings of this study might serve as an initial data-base of information with which similar and on-going research at this University could be compared, offering additional value to the residence hall operation.

Similar study, comparing student perceptions of environment between living units, either within the same residence hall or between different halls on campus, would yield valuable information about staff goals and priorities and would point out specific needs within the total program.

Other areas of research are suggested in: (1) the measurement of attitudinal change over periods of time within the same residential setting at this University, and (2) the determination of whether perceptual difference exists between those students who do and those who do not participate in an assessment of the environment.

Limitations of the Study

There were limitations in this study which should prevent its being replicated in other times and places in the manner in which it was here.

The results of this study should not be generalized beyond the population studied in the South Complex residence halls during Spring term, 1974. The student bodies, staff priorities and emphases, program goals and resulting hall environment vary greatly within and among institutions of higher education.

It cannot be assumed that those who failed to return completed questionnaires did so for any particular reason or that they would have responded similarly or differently from those included in the study.

The instrument used in this study, the S.I.U.R.H.E.S., was in its near-infancy, and has since been modified by its authors.

Were this study to be repeated in similar fashion, several changes should be made. The instrument, itself,

was too long and required too much time to complete.

A higher percentage of return may have resulted had
less time been required to complete the questionnaire.

Additionally, Spring term is not recommended as the most conducive time period for soliciting student thought.

While it may not be expected that a thorough assessment of the environment can be perceived and reported shortly after the "school year" begins, Spring term was too late in the year for a large population without seeming vested interest to contribute participatory time and energy into a study of this magnitude.

Lastly, the minority sample population is not congruent with the minority resident population in the residence halls studied, and this, admittedly, detracts from the significance of the findings between racial group perceptions. It is recommended that a more formal and controlled method of minority student assessment be incorporated into any similar study.

Concluding Statement

The purpose of this study was to determine the perceptions of students towards their residence hall environment and to determine if differences in perception existed between selected groups of students. That was done, and the findings and conclusions of this study support much of the philosophy, theory, and previous

research on residence hall environment. Students living in Michigan State University residence halls indicated that they spend a great deal of their outside-the-classroom time in their residence halls. They profit from the personal/social exposure to other individuals and, by interacting within the total residential environment, seek to have their physical, social, and psychological needs Clearly, the student's academic and personal growth experience can be greatly augmented and enhanced by the group living experience available through campus residence Realizing the complementary effect that a welldeveloped residence hall program can have upon a student, colleges and universities should strive to insure that exposure to such an experience is an opportunity available It is hoped that this study's findings will to students. be of insight and assistance to those concerned with and having responsibility for college residence hall operations.



APPENDIX A

THE INSTRUMENT USED--AN ADAPTATION
OF THE S.I.U.R.H.E.S.

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THE INSTRUMENT USED--AN ADAPTATION OF THE S.I.U.R.H.E.S.

Residence Hall Programs Office East Lensing, Michigan 48824
Michigan State University

April, 1974

Dear Residence Hall Student:

The office of Residence Hall Programs and Residence Hall Management are very interested in finding out how students living on campus perceive their environment.

Hence, we are asking you -- and EVERY student on campus -- to respond to the following questionnaire which asks a variety of questions about the residence hall in which you live. The purpose of this project is to gather the responses of all the students we house to the programs and services we offer. The information we receive will help us to determine the directions we need to go and the changes we might need to make to improve programs and services.

You do not have to give your name or student number. On the enclosed answer sheet, though, we would like you to identify your sex, major, race-ethnic identity, and the number of terms (including this Spring term) that you have lived in M.S.U. residence halls. Your answer sheet will be coded as to the dorm and floor you live on (for instance, "Smith Hall, 3rd floor, North"). With this data, we will be able to compare groups and living units across campus to see what programs and services provide the most and/or the least satisfaction for students.

Please take the time (about 45 minutes) to honestly answer the questions on the next three pages. When you have finished, please return the answer sheet, inside the questionnaire, to your R.A. If you don't return it to your R.A., he or she will ask you for it at the end of the week -- because we sincerely want to hear from everyone.

- Thank you very much -

INSTRUCTIONS

- 1. Please use only a soft-lead (No. 2) pencil on the answer sheet. Please do not mark on the questionnaire.
- 2. Ignore the places which as for name, course, or student number.
- 3. Please indicate your sex in the box near the bottom right hand corner of the answer sheet.
- 4. In the column labelled "MO" (bottom right of answer sheet) indicate the <u>number of terms</u> (including this Spring term) you have lived in M.S.U. residence halls.

For instance, if you began as a freshman last Fall, this would be your third term and you would blacken [MAR].

5. In the comumn labelled "DAY," write in the two numbers and blacken the appropriate spaces under them which indicate the College in which you're enrolled. Use the following legend:

01 - Agriculture & Natural 07 - Human Ecology 13 - Osteopathic Medicine 14 - Social Science 15 - University College-NO PREF. Resources 08 - Human Mdeicine 02 - Arts and Letters 09 - James Madison 16 - Urban Development 03 - Business 10 - Justin Morrill 11 - Lyman Briggs 04 - Communication Arts 17 - Veterinary Medicine 05 - Education 12 - Natural Science 18 - Honors College 06 - Engineering 19 - Other

For example, if you're in University College, write a 15 in the boxes under "DAY" and blacken the spaces which correspond underneath the one (1) and the five (5) that you write.

- 6. In the box labelled "FORM," indicate your race/ethnic identity. Use this legend: [A] White
 - [B] Black [C] - Chicano/Latin American [D] - other
- 7. Turning the page, you will find a variety of questions about the residence hall in which you live. There are five possible response options for each question. The values of the five options are as follows:
 - 1. I STRONGLY DISACRES with this statement.
 - 2. I DISAGREE with this statement.
 - 3. I can NEITHER agree nor disagree with this statement.
 - 4. I ACREE with this statement.
 - 5. I STRONGLY ACREE with this statement.

Turn you answer sheet length-wise and for each question, indicate your response by blackening the appropriate box, [1], [2], [3], [4], or [5].

Remember that [5] is the strongest feeling of agreement and [1] is the strongest feeling of disagreement.

When finished, please return to you R.A.

Again, thanks very much -

- [1] I STRONGLY DISAGREE with this statement.
 [2] I DISAGREE with this statement.
 [3] I can NEITHER agree nor disagree with thi
- DISAGREE with this statement.
 I can NEITHER agree nor disagree with this statement.
 I AGREE WITH THIS STATEMENT.
 I STRONGLY AGREE with this statement.
- 1. I doubt if most students living in this residence hall really care about floor "solidarity" or belonging to a group.
- 2. It is important to me to get to know everyone living close to my room.
- 3. Nearly everyone is solely for himself/herself in this residence hall.
- I would feel the responsibility to warn every-one on my floor if I were to find out, someway, that a drug raid were going to take place here.
- 5. Residence hall life reduces you to just a
- 6. No one in the University administration has shown any concern for improving dorm life here.
- 7. The group of students I associate with are really "deep" thinkers -- very intellectual.
- 8. Janitorial personnel do a good tob in this dorm.
- Bull sessions about serious topics are a frequent occurrence on my house.
- If I knew someone on my floor had a personal, social or academic problem, 1'd really want to help out.
- My Advisory Staff really tries hard to respect the individuality of the people in this dorm.
- 12. If I saw somebody messing up the building, I would stop him/her or find someone who would.
- 13. If R.A.'s enforced quiet hours, I could get a lot more studying done.
- 14. I think the quality of food served in my residence hall is good.
- 15. I think I could adjust to a smaller dorm easier because there are too many people in this Hall.
- 16. A very important thing in group living is respect for the rights of others, even if their view is unpopular at the moment.
- 17. I don't really think there are any unreasonable restrictions on people in this Hall.
- Individual rights must be compromised, to a degree, when a group lives together.
- 19. Where I live, students frequently discuss war, ecology, race relations, religion, etc
- I think my R.A. respects the individuality of people on my floor.
- 21. Nearly every student here feels a responsibility to make this a decent place to live.
- 22. There has to be some conformity if a lot of people are to live together without friction.

- University housing is an important means of introducing freshmen to an intellectual climate.
- 24. It's hard for a student to identify with a group in this residence hall.
- 25. Everybody's chief ambition in this Hall is to move out.
- 26. If a residence hall is to be refurnished students should be included in the planning and selection of furnishings.
- 27. Students in this Hall bitch about the food even though it's not bad for food prepared in large quantities.
- The dorm staff does a good job in helping a new student feel at home here.
- 29. I would prefer a living arrangement where students interested primarily in getting good grades can choose to live together.
- We have good group participation in our house in projects that require group effort.
- 31. The University has to impose rules and regulations on those living in college-owned housing because of its responsibility to parents and the public.
- 32. I've noticed the Hall staff makes a real effort to provide a good student environment.
- 33. No one in my house gives a damn about serious
- 34. If this Hall had a large study room that was kept absolutely quiet, I would go there to study rather than studying in my room.
- 35. Homosexual behavior presents a particularly frequent problem in this dorm.
- 36. I am able to study in my room in the evening without having to put up with noise and a lot of screwing around.
- There is enough competition for grades in this Hall to make it interesting.
- Generally, I feel that the Advisory staff have been working to make regulations more reasonable and enforceable.
- 39. Hall groups should be organized with a representative form of self-government.
- I think of our dorm as a good place to learn --rather than just a place to eat and sleep.
- I really think the R.A.'s are genuinely sensitive to the needs and desires of students in this Hall.
- 42. Students here don't give a damn about other people's
- 43. I think the enforcement of quiet hours in my dorm is adequate.

- 1] I STRONGLY DISAGREE with this statement.
- [2] I DISAGREE with this statement.
 - I can NEITHER agree nor disagree with this statement.
- [4] I AGREE with this statement.
 - I STRONGLY AGREE with this statement.
- I would prefer living in a cooperative dorm where we could do our own cooking.
- 45. I hear too much foul language in this dorm.
- 46. If everyone here acted in a responsible manner, I am sure the University would do away with a lot of the restrictions presently existing.
- 47. It's impossible to have much privacy in this dorm.
- 48. Most students I know in this Hall realize the need to keep the building in good repair.
- 49. In this Hall, there is little interest on the part of the group to do well in their studies.
- Students living here are too independent for any Hall organization to succeed.
- 51. Nobody cares enough to compete for leadership in this Hall.
- I've had very few conflicts with people who live here.
- Housing units should be represented in student government.
- 54. I found it was easy to fit right in here.
- 55. My R.A. treats the students living here like adults.
- There are too many rules and regulations in the dorm.
- 57. If I had to decide between studying in the library or the dorm, I would choose the dorm.
- 58. Students in this residence hall interpret individual freedom as the right to do whatever they please.
- Students living here behave socially in a mature manner; for example, they respect property of others.
- There is not much attempt in our Hall to arrange social events or opportunities to meet the opposite sex.
- 61. If possible, students should be grouped in housing by their year in school.
- Students living here haven't learned about respecting other peoples' property.
- 63. In our Hall, there should be residents available as tutors in certain subjects to aid students needing help.
- 64. If 1 leave my room unlocked, I don't have to worry about my things being taken.
- 65. There is a real effort by people living here to get along with each other.
- 66. People in this Hall really have a good deal of freedom to do as they please.
- To be happy on my floor, one must do as the crowd pleases.

- 68. Those who are more interested in studying than in socialization should be housed in a special living area.
- 69. No one living here would deliberately damage or deface this building.
- 70. This dorm is in lousy physical condition.
- There is good competition in this Hall to earn the highest grade-point average.
- Most of the characters that live here really bother me.
- 73. In this Hall, the enforcement of rules and regulations is fair and impartial.
- A student serious about his studies shouldn't live in this Hall.
- 75. I should be able to have a room by myself if I were willing to pay a higher room fee.
- 76. The University tries hard to make the Hall an attractive place to live.
- 77. I notice a sincere effort by the staff in this residence hall to help new students adjust to dorm life.
- 78. My approval should be asked before assigning me to a room with a person of another race.
- 79. I don't think there should be 24-hour visitation in this Hall every day of the week.
- When not in class, I spend most of my time in my residence hall.
- 81. The University has the right to regulate my personal conduct if I live in university housing.
- 82. There should be more effort to draw people together in my Hall to work on things as a team.
- Students living in this Hall who are on academic probation should be restricted to specified study hours under supervision.
- 84. Students with the best grade-point average should have the first choice of rooms.
- In this dorm, tradition is important and should be sustained.
- 86. We need an educational program in my dorm to help students do better academic work.
- 87. My R.A. is competent and helpful.
- 88. I prefer a Hall arrangement where students could choose to live together because of common interests.
- They make you pay for too much here -- students should be able to rent rooms with less things furnished.
- A person who isn't concerned about others won't be accepted very well in this Hall.

[1] I STRONGLY DISAGREE with this statement.

[2] I DISACREE with this statement. [3] I can NEITHER agree nor disagree with this statement.

I AGREE with this statement.

[5] I STRONGLY AGREE with this statement.

- 91. Meals are available at reasonable times.
- Groups of students in this Hall should be encouraged to compete for the best grade-point average.
- Students in this living unit should formulate and enforce their own rules and regulations.
- Rooms should be assigned so as to match persons together that have the same academic interests.
- 95. What we need in this residence hall is better regulation enforcement by Advisory Staff and R.A.'s.
- 96. I think I would make better grades if my roommate had the same major as I had.
- 97. I think formal residence hall organizations dafeat the purpose of living in a Hall.
- 98. There should be enforceable "quiet hours" for study purposes on my floor from, say, 7 p.m. to 10 p.m.
- 99. Rooms should be built to be more comfortable even if it means a higher room fee.
- 100. Regulations imposed on decorating one's own room are unreasonably restrictive here.
- 101. Once the novelty wore off, I would find men and women living side by side on a floor to be an inconvenience and an occasional embarrassment.
- 102. I wouldn't mind living with a homosexual.
- 103. We need to have better intramural programs between residence halls.
- 104. If I don't like or disagree with my R.A., I feel blocked from talking about it with someone "up the line."
- 105. I should be able to choose who I live with just as I would were I not in college.
- 106. I would not mind living with a drug user.
- 107. The idea of attending classes in my own hall appeals to me.
- 108. This Hall is a good place to live for a person who is basically a "loner."
- 109. It's a good idea for a dorm to have a library.
- 110. Roommates should be able to work out any problems created by 24-hour visitation.
- 111. It takes too long to get things repaired in the
- 112. I really don't want to see quiet hours enforced in this dorm.
- 113. Considering the services and facilities available, I think I pay a reasonable price for my room.
- 114. I think the janitorial workers do a good job of keeping the dorm clean and sanitary.

- 115. I think our Hall needs more recreational and social facilities.
- 116. Workmen making repairs in my dorm have been very cooperative and pleasant.
- 117. The option of single rooms should remain, even if it results in "tripling" during Fall term.
- 118. The possession and consumption of alcohol in residence halls generally creates a lot of problems.
- 119. Staff and student group efforts in providing educational, athletic and social programs are adequate and worthwhile.
- 120. Special options houses, such as "quiet houses," and "limited-visitation" houses should be maintained to accomodate student needs and interests.
- 121. I'd like to have more contact outside the classroom with my faculty members.
- 122. The environment in this Hall allows me to conduct my daily schedule (sleeping, studying,etc.) as I would choose.
- 123. The use of the hallway and the study lounge should be restricted to weekends.
- 124. The floor lounge and the hallway should not be used for parties and social activities.
- 125. The hallway and the floor lounge should be available at any time for floor parties and social activities.
- 126. For the purpose of assuring fire safety, the University should exercise its right to inspect residence hall rooms.
- 127. Students are generally considerate of others.
- 128. Students are willing to take initiative and assume personal responsibility for confrontation when others are too noisy or cause damage in the living unit.
- 129. I feel that adequate avenues are available to me if I believe my personal rights are being violated.
- 130. In general, I believe that other people in my house are concerned about me and my welfare.
 - -- Thank you for your time and thoughts...

Please return this questionnaire and your answer sheet to your R.A.

APPENDIX B

WHITE MALE RESPONSES TO EACH ITEM
IN THE INSTRUMENT

APPENDIX B WHITE-MALE

07-11-74							
COLUMNS OF CONTROL GRO	DISTRIBUTION-TOP LINE						
002-002 00	4-CC4 COL	1	2	3	4	5	UMIT
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N	. 4 · 11	116	134	185	235	330	5
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DISTRIBUTION-TOP LINE									
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6.9% 20.1% 22.7% 44.7% 5.2% 0.5% 60-67 129 408 188 204 73 3 12.8% 40.6% 18.7% 20.3% 7.3% 0.3% 6/-68 419 367 97 83 36 3 41.7% 36.5% 9.7% 8.3% 3.6% 0.3% 62-69 84 444 275 164 35 3 8.4% 44.2% 27.4% 16.3% 3.5% 0.3% 63-70 25 87 272 488 131 2 2.5% 8.7% 27.1% 48.6% 13.0% 0.2% 64-71 205 278 181 295 43 3 20.4% 27.7% 18.0% 29.4% 4.3% 0.3% 66-72 17 94 217 560 113 4 1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 68-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 0.1% 71-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%	* ***** ************	58- 65								
12.8		59-66	69 6•9%	202 20.1%	228 22.7%	449 44•7%	52 5.28			
62-69 84 444 275 164 35 3 8.4% 44.2% 27.4% 16.3% 3.5% 0.3% 63-70 25 87 272 488 131 2 2.5% 8.7% 27.1% 48.6% 13.0% 0.2% 64-71 205 278 181 295 43 3 20.4% 27.7% 18.0% 29.4% 4.3% 0.3% 65-72 17 94 217 560 113 4 1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 71-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		60-67								
8.4% 44.2% 27.4% 16.3% 3.5% 0.3% 63-70 25 87 272 488 131 2 2.5% 8.7% 27.1% 48.6% 13.0% 0.2% 64-71 205 278 181 295 43 3 20.4% 27.7% 18.0% 29.4% 4.3% 0.3% 65-72 17 94 217 560 113 4 1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 71-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		6/-68	419	367 36.5%	97	83 8.3%	36 3.6%	3 0.3%		
2.5% 8.7% 27.1% 48.6% 13.0% 0.2% 64-71 205 278 181 295 43 3 20.4% 27.7% 18.0% 29.4% 4.3% 0.3% 65-72 17 94 217 560 113 4 1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		62- 69	84 8•4%	444 44.2%	275 27.4%	164 16.3%	35 3.5%	3		
65-72 17 94 217 560 113 4 1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%				87 8.7%	272 27.1%	488 48.6%				
1.7% 9.4% 21.6% 55.7% 11.2% 0.4% 66-73 22 55 112 657 157 2 2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		64-71					43 4.38			
2.2% 5.5% 11.1% 65.4% 15.6% 0.2% 67-74 155 510 206 102 28 4 15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0% 72:79 178 541 184 73 24 5		65- 72								
15.4% 50.7% 20.5% 10.1% 2.8% 0.4% 68-75 93 324 245 257 82 4 9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		66- 73	22 2•2%	55 5.5%	112	657 65.4%	157 15.6%	2 0.2%		
9.3% 32.2% 24.4% 25.6% 8.2% 0.4% 69-76 233 400 191 126 53 2 23.2% 39.8% 19.0% 12.5% 5.3% 0.2% 70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0% 72.79 178 541 184 73 24 5		67- 74	155 15•4%	510 50.7%	206 20.5%	102 10.1%	28 2.8%	0.48		
70-77 127 507 212 134 24 1 12.6% 50.4% 21.1% 13.3% 2.4% 0.1% 7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		68-75						4 0.4%		
7/-78 180 388 292 117 18 10 17.9% 38.6% 29.1% 11.6% 1.8% 1.0%		69-76	233 23.2%	400 39.8%	191 19.02	126 12.5%	53 5.3%	2 0.2%		
72: 79 178 541 184 73 24 5		70-17	127 12.6%	507 50.4%	212 21.1%	134 13.3%	24 2.4%	0.1%		
72: 79 178 541 184 73 24 5		7/-78	180 17.9%	388 38.6%	292 29•1%	117	18 1.82	10 1.0%		
たませいの かかせいの もいきかり にきぶむ 仁意でむ いきかむ		72: 79	178 17.7%	541 53.8%	184 18.3%	73 7.3%	24 2.4%	5 0.5%		

			DISTRIBUTION-TOP LINE						
FORM O	2 004-CC4 CO SEX 0	L 1	_	3	·	5	TIMO		
TOTAL RECORDS	1,005* 73-8	0 44 4.49	148 14.7%	390	376	41 4.1%	6. 0 . 6%		
A STATE OF THE STA		747%	LTOIM	30 • 0 A	21.470	A. T.	0.06		
WHITE- MAIL	74-8	1 73 7.3%	547 54.4%	232 23.1%	114 11.3%	33 3.3%	6 0.6%		
	75- 87	2 36 3.6%	69 6•9%	125 12.4%	400 39.8%	370 36.8%	5 0.5%		
		3 34 3.4%	151 15.0%	280 27.9%	460 45.8%	70 7.0%	10 1.0%		
A COMPANY OF THE PROPERTY AND A COMPANY OF THE PROPERTY OF T	77 - 84	68 6.8%	241 24.0%	385 38.3%	261 26.0%	42 4.2%	8		
3		95 9•5%	202 20.1%	167 16.6%	309 30.7%	231 23.0%	0.1%		
	74-86	545 54.2%				39 3.9%			
		7 46 4.6%	117	100 \$6.01	558 55•53	178 17•7%	6		
TOTAL RECORDS	1,005* 80,400*	8557 10•63				7987 9•9%			

COLJANS OF CONTROL 002-002	004-C04 COL	ļ	2	3	4	5	OMIT
FORM O	SEX O				•		
TOTAL RECORDS	1.005# 81.88		301				5 .
The state of the s	was and the same of the same o	24.6%	30.0%	22.9%	19.2%	2.9%	0.5%
The state of the s	82- 89		177		317	41	6
white mee		1.9%	17.6%	44.3%	31.5%	4.18	0.6%
a. and one or present the state of the state of	83 90	396		130	53	31	7
and the second state of the second se		39.4%	38.6%	12.9%	5.3%	3.1%	0.7%
uni. 1. – Salas Albano III. – Albano III. – Nacional Albano III. – Albano III. – Albano III. – Albano III. – Albano	84 91	511	326	70	53	39	6
		50.8%	32.4%	7.0%	5.3%	3.9%	0.6%
The same common to the same same of the same common to the same of	85 92		340		95	25	
file of the second seco		17.7%	33.87	35.7%	9.5%	2.5⊀	0.8%
ing. Display and the second control of the second control of the second control of the second control of the second	86 93		232		246	44	9
		3.9%	23.1%	43.3%	24.5%	4.4%	
The second second residence is a second seco	8794	39				268	
and the second section of the section of the second section of the secti	Company the state of the state	3.9%	7.1%	18.1%	43.8%	26.7%	0.5%
Company of the second section of the section of the second section of the s	88 95		177			120	
	•	2.4%	17.6%	27.6%	39.5%	11.9%	1.0%
and the second s	89 96	42		306			
- consequences proved a second region on the distinguish of the second new se		4.2%	25.2%	30.4%	27.2%	12.0%	1.0%
A A M TO THE TO THE TO THE TO THE TOTAL TO T			189				8
		3.4%	18.8%	34.7%	35.0%	7.3%	0.8%
iligan i diga pamban di samban di pamban di pamban Pamban di pamban di	<i>91</i> 98	42			568	240	
	· · · · · · · · · · · · · · · · · · ·	4.2%	9.4%	5.5%	56.5%	23.9%	0.6%
	92 99		335				11
		22.4%	33.3%	29.48	11.9%	1.9%	1.13
and the standard standard of the standard of t	93 100	30	155	273	441	99	7
and the state of t	and designed the second se	3.0%	15.4%	21.2%	43.9%	9.98	0.78
a a managan da da ang kangangan kang kang ang 118 km 118 km ang kangangan ka	74 101	82	347	267	241	61	7
	•						0.78
	95 102						4
		10.4%	40.78	20.43	10.7%	3.4%	0.4%
mana arang manang arang manang ma	96 103	123		254	204	66	9
		12.2%	34.74	25.3%	20.54	0.04	0.98
Enterent would be a common to the second of the common to	97 104	37		479		33	11
The state of the s	······································	3.18	34.58	41.7%	3.8%	3.3%	1.18
	98 105	165			206		5
		10.4%	35.0%	10.4%	20.5%	11.1%	ひ・つる
compression and such construction of the const	yr mark	-	•				

FORM	GC4-CO4 Sex	REC	1	. 2	3	4	5	TIMO
TOTAL RECORDS	1.005# 99	106	124 12.3%	432 43.0%	251 25.0%	151 15.0%		8.0.8%
white male.	/00	107	64 6.4%			248 24.7%		
whose mee.	10/	108	327 32.5%	335 33.37	161 16.0%	119 11.8%	53 5•3%	10
	102	109	589 58.6%	194 19.3%	138 13.7%	54 5•4%	24 2•4%	6 0.6%
1	103	110	54 5.4%	282 28.1%	393 39.1%	202 20.1%	66 6.6%	
2 <u> </u>	104	111	111 11.0%	392 39.0%	354 35.2%	102 10.1%	39 3.9%	7 0.7%
1	105	112	16	58 5.8%	127 12.6%	473 47.1%	324 32•2%	7 0.7%
	106	113	- 310 30.8%	208 20.7%	188 18.7%	218 21.7%	74 7.4%	7
	107	114	24 2.4%	85 8•5%	144 14.3%	472 47.0%	272 27.1%	8 0.8%
		115	68	238	423	226 22.5%	39	11
	109	116	26 2.6%	49 4.98	122	510 50.7%	292 29.1%	6 0.6%
<u> </u>	110	117	24 2.4%	4.78	113	568 56•5%	247 24.6%	6
	[11]	118	70 7.0%	348 34.6%	265 26.4%	197 19.6%	115 11.4%	10 1.0%
		119	9.8%	21.6%	20.8%		15.1%	0.6%
	113	120	110 10.9%	269 26.8%	224 22.3%	354 35.2%	43 4.3%	5 0•5%
	114					604 60.1%		
		122				450 44•8%		0.9%
	116	123	19 1.9%		260 25.9%	520 51.7%	145 14.4%	
TOTAL RECORDS TOTAL ANSWERS	1.005* 36.180*		4487 12.4%					267 0.78

APPENDIX C

WHITE FEMALE RESPONSES TO EACH ITEM
IN THE INSTRUMENT

APPENDIX C

WHITE-FEMALE

07 11-76	MILLIP - L PRANTIP									
07-11-74			DISTR	RIBUTION	-TOP LE	NE				
FORM	004-CC4 CUL Sex	1	••				OMIT			
O TOTAL RECORDS	961* /. 8	95 9•9%	446 46.4%	152 15.8%	229 23.8%	38 4.0%	0.1%			
WHITE- FEMALE	2- 9	43 4.5%				191 19.98	0.13			
	3- 10	182 18.9%	480 49.9%	174 18.1%	93 9.7%	24 2.5%	8			
		:•				197 20.5%				
P	5- 12	248 25.8%	476 49.5%	144 15.0%	45 4.7%	39 4.1%	9 0.9%			
		129 13.4%	405 42.1%	267 27.8%	102 10.6%	57 5.9%	0.13			
	3 7-14	129 13.4%	410 42.72	303 31.5%	99 10.3%	20 2.1%	and the second s			
		22 2.3%	53 5•5%	. 74 7.7%	532 55.4%	280 29.1%	*			
	9- 16	169 17.6%	344 35.8%	219 22.8%	192 20.0%	34 3.5%	3 0.3%			
		11 1.1%	53 5•5%	220 22•9%	469 48•8%	207 21•5%	0.12			
	//- 18	30 3.1%	92 9•6%	367 38•2%	363 37.8%	107 11.13	2 0.2%			
	/2- 19	15	70 7.3%	276 28.7%	476 49.5%	123 12.8%	0.1%			
Marie de la cale de la La cale de la cale de	/3- 20	139 14.5%	360 37.5%	189 19.7%	166 17.3%	104 10.8%	3 0.3%			
	14- 21					68 7.1%				
and the second s	//: 22	214 22.3%	428 44.5%	165 17.2%	106 11.0%	47 4.98	1 0.1%			
	/6- 23	21	12		364	544 56.64	3			
e de la companya del companya de la companya del companya de la co	//- 24	19 2.0%	55 .5.7%	52 5.4%	513 53.4%	321 33.48	1 0.1%			
	16			_						

• •			DISTR	RIBUTION	-TOP LI	INE .	
FORM	CO4-CO4 COL	1	. 2	. 3	4	5	OM ET
TOTAL RECORDS	961* /4. 26	100 10.4%	298 31.0%	267 27.8%	260 27.1%	34 3.5%	2 0.2%
WHITE. Female	20:-27					357 37.1%	
	21- 28	50 5.2.%	266 27.7%	294 30.6%	298 31.0%	53 5.5%	Acceptance of the control of the con
	2 2 2 9		105 10.9%			170 17.7%	0.18
	23 - 30	106 11.0%	248 25.8%	227 23.6%	286 29.8%	91 9.5%	3 0.3%
	24-31	122 12.7%	474 49.3%	239 24•9%	95 9•98	27 2.8%	
	25. 32	197 20.5%	472 49.1%	199 20.7%	63 6.6%	30 3.1%	
The state of the s	26-33	19 2.0%	74 7.7%				
	27- 34	61 6.32	147 15.3%	114	439 45.7%	198 20.6%	0.2%
	28-35	68 7.1%	189 19.7%	359 37.4%	294 30.6%	49 5.1%	2 0.2%
	29 -36	90 9•4%	324 33.7%	277 28.8%	203 21.1%	65	2 0.2%
	36-37	137 14.32	333 34.7%	198 20.6%	251 26.1%	4.48	- Lagar - Las aus autoritantis de la constant de con-
	31-38	112	216 22.5%	195 20.3%	363 37.8%	73 7.6%	2 0.2%
	3V-39	3.9%	143 14.9%	365 38.0%	350 36.4%	6.88	0.12
	33 - 40	326 33.9%	458 47.7%	94 9.8%	56 5.8%	25 2.6%	2 0.2%
	34-41	69 7.2%	271 28.2%	161 16.8%	291 30.3%	168 17.5%	0.18
***************************************	35 - 42	425 44.2%	309 32.2%	199 20.7%	9 0.9%	18 1.9%	0.1%
to the control of the	36-43	170 17.7%	257 26.7%			68 7.1%	
The same of the sa	** *	•					

		DIST	RIBUTION	-TOP LI	NE	
COLUMNS OF CONTROL GROUPS 002-002 CC4-CC4 FORM SEX 0 1	REC COL 1	2	, 3	4	5	OMIT
TOTAL RECORDS 961* 37-	44 94 948%	194 20.2%				3 0.3%
WHITE Female 38.	· 45 30	67 7.0%	378	434 45•2%	51	0.12
34-	46 9		. 284	505	95	2
40-	47 52	6.9%	176	454	9•9% 149	0.2%
//4		13.4%			15.5%	0.1%
	3.7%	14.6%	_18.0%	46.7%	16.9%	0.1%
·	8.7%	519 54.0%	19.8%	13.78	3.68	
43.	50 83 8.6%	172 17.9%				
t	51 149 15•5%	353 36.7%	158 16-42			
4.	52 150 15.6 %	404 42.0%			40 4•2%	
в	5356 5.8%	244 25.4%	307 31.9%	272 28•3%	79 8.2%	
r	54 64	394 41.0%	128	282	91	2
48.		106	177	598	53	2
<i>v</i> 44.	56 122	558		77	14	0.28
<i>r</i>	12.7%	58.1.% 405	19.8%		1.5%	TO THE PARTY OF TH
\$/·	3.7%	42.1%	29.7%	22.1%	2.43	Printers & P. S. 11 House, 7 July 2012
The second secon		33.0%	30.8%	29.0%	3.9%	2 0.2%
The contract of the contract o	59 25 2.6%	98 10.2%	69 7.2%	575 59.8%	193 20.1%	0.1%
·····································	ሰ. ፋ ሃ	35 3.6%	295 30.7%	502 52.2%	122 12.7%	3 0.3%
54.	61 40	135 14.0%	138 14.4%	475 49.4%	170 17.7%	3 0.38

9			DISTRIBUTION-TOP LINE							
COLJMNS OF CONTROL 002-002 FORM 0	GROUPS R: 004-004 C: Sex 1		2	3	4	5	TIMO			
TOTAL RECORDS	961* 55.	62 19 2.0%		89 9.3%		320 33.3%	3 0.3%			
WHITE- FEMALE.	56.	63 106 11.0%	559 58•2%	215 22•4%	66 6.9%	14 1.5%	0.12			
	57-	64 92 9.6%		84 8.7%	480 49.9%		2			
1	58.	65 16 1.7%		287 29.92		84 8.7%	0.2%			
	54.	66 45 4.7%		224 23.3%						
<i>9</i>	60.			144 15.0%		50 5•2%	0.18			
	61.	68 449 46.7%		65 6.8%						
<u> </u>	62.	8.2%	51.7%	24.1%	123 12.8%	3.0%	0.13			
	63.	70 13	62 6.5%	152 15.8%	564 58.7%	170 17.7%	editer average of an exception gas a service.			
The war of the second s	64.	71 239 24.9%		139 14.5%			0.18			
·	65.			193 20.1%						
	66 · ·	73 4 0.4%	29 3.0%	57 5.9%			0.18			
H	67.	18.5%		137 14.3%		38 4.0%	TO THE STREET OF			
8	68.	75 79 8•2%		190 19.84		68 7.1%	0.1%			
	64.	76 140 14.6%		254 26.4%			0.1%			
	70.	77 203 21.1%	557 58.0%	127 13.2%	62 6•5%	12 1.2%				
· · · · · · · · · · · · · · · · · · ·	71.	78 184 19.1%	390 40.6%	280 29.1%	90 9•4%	12	5 0.5%			
	72.	79 206 21.4%		140 14.6%	59	17				
Zina ili kana kana kana kana kana kana kana kan										

		DISTRIBUTION-TOP LINE							
COLUMNS OF CONTROL GR 002-002 0 FORM S 0 1 TOTAL RECORDS	04-004 CDI	1					TIMO		
TOTAL RECORDS	961* B. 80	0 29 3.0%	109 11.3%	263 27.4%	496 51.6%	64 6.7%			
WHITE-FEMME.	74 . 81	1113	580 60.4%	169 17.6%	69 7.2%	30 3.1%	en alema anare de la calendaria.		
		2 24 2•5%							
		18	75 7.8%	177 18.4%	580 60•4%	109 11.3%	2 0.28		
	77. 84	53 5.5%	198 20.6%	363 37.8%	304 31.6%	42 4.4%	1 0.1%		
		5 56 5.8%	190 19-8%	132 13.7%	377 39.2%	206 21.4%	r en		
	M· 80	520 54.1%	295 30.7%	58 6.0%	58 6.0%	30 3.1%			
	80· 87	2. 2.9%	130 13.5%	85 8.8	549 57.1%	167 17.4%	0.2%		
TOTAL RECORDS TOTAL ANSWERS 76									

	,		DIST	101TUB19	-TOP LI	NE
COLUMNS OF CONTROL OO2-002 FORM O	GROUPS REC 004-C04 COL Sex 1		2	3	. 4	5 OMIT
TOTAL RECORDS	961* 8/ 88	200 20.8%		236 24.6%	199 20.7%	
White		23 2.43	161 16.8%	324 33.7%	389 40.5%	63 1 6.6% 0.1%
female	83 90	337 35.1%		121		13 1 1.4% 0.1%
	8 4 91	556 57•9%	307 31.9%	. 42 4.4%	34 3.5%	22 2•3%
	85 92			349 36.3%		11 2 1.1% 0.2%
<u> </u>	86 93	41 4.3%		389 40•5%	246 25.6%	27 1 2.8% 0.1%
	87 94			119		337 35.1%
·		32 3.3%	-	296 30.8%		65 1 6.8% 0.1%
	89 96	46 4•8%	283 29.4%	236 24.6%	289 30.1%	104 3 10.8% 0.3%
·	· 90 97	24 2.5%	201 20.9%	361 37.6%		48 1 5.0% 0.1%
	91 98			34 3.5%		266 5 27.7% 0.5%
Name of the contract of the	92 99	250 26.0%		178 18.5%		17 5 1.8% 0.5%
·	13 100			242 25.2%		96 6 10.0% 0.6%
·	94 101	97 10.1%	410 42.7%	218 22.7%	194 20-28	40 28 0.28
	95 102	137 14.3%	505 52.5%	216 22.5%	73 7.6%	26 4 2.7% 0.4%
	96 103			154 16.0%		14 5 1.5% 0.5%
	47 104	52 5•4%	397 41.3%	419 43.6%		11 9 1.18 0.98
	98 105	123 12.8%	345 35.9%	131 13.6%		108 7 11.2% 0.7%

				DIST	RIBUTION	N-TOP L	NE	
COLUMNS OF CONTROL 002-002 FORM 0		REC	1	. 2	3	4	. 5	OMET
TOTAL RECORDS	961#49	1 06	125 13.0%	507 52.8%	177 18.4%	117 12.23	28 2.9%	7 0.7%
white -		107	55 5.7%		164 17.13		76 7.9%	6 0.6%
fenale	101	108	215 22.4%		124 12.9%		103 10.7%	6 0.6%
F	102	109	586 61.0%	199 20.7%	112	39 4.1%	21 2.2%	0.48
F	103	110	31 3.2%	215 22.4%	388 40.4%	264 27.5%	59 6.1%	4 0.4%
Fanan	104	111	112 11.7%		299 31.1%		33 3.48	0.3%
P	105	112	10				318 33.1%	
k	106	113	396 41.2%		133 13.8%			7 0.7%
P	107	114	25 2.6%	83 8.6%	87 9.1%	441 45.9%	319 33.2%	6 0.6%
r	108	115	78 8.1%		376 39.1%			5 0•5%
P	109	116	8 0.8%	22 2.3%	51 5.3%	480 49.9%	393 40.9%	7 0.7%
·		117	1.2%		78 8.1%		273 28.4%	
3	"//	118	107 11.1%	377 39.2%	220 22.9%	173 18.0%	75 7.8%	9 0.9%
S	1/12	119	127	219 22.8%	215 22.4%	271 28.2%	121 12.6%	 8.0
2	113	120	102 10.6%	253 26.3%	209 21.7%	353 36.7%	35 3.6%	9 0.9%
,			0.8%	4.5%	9.1%	62.7%	213 22.2%	0.78
	115	122	19 2.0%	167 17.4%	260 27.1%	413	93 9.72	9 0.9%
Anno similari manan i m	116	123	8	27 2.8%	139 14.5%	568 59.1%	211 22.0%	8.0.8%
TOTAL RECORDS TOTAL ANSWERS 3	961* 4,596*		4386 12.7%	9199 26.6%	7283 21.1%	9817 28.4%	3742 10.8%	169 0.5%

APPENDIX D

WHITE RESPONSES TO EACH ITEM IN THE INSTRUMENT

APPENDIX D

WHITE RESPONSES

07-11-74	•				DIST	RIBUTION	-TOP LI	NE	
COLUMNS D	F CONTROL 002-002 FORM	GROUPS 004-C04 SEX		. 1	2		4	5	TIMO
TOTAL REC	0	1,974**	' 8				435 22.0%		3 0.2%
- All. W	HITE -	2	- 9	91	400	307	754	421	1
on the second							38.2%		
and the same of the same of the		3-	. 10	369 18.7%	945 47.9%	19.4%	10.5%	2.7%	17 0.9%
Annual Community of the		4	- 11_	248 12.6%	306 15.5%	432 21.9%	451 22.8%	529 26.8%	0.4%
		5.	- 12	449 22.7%	932 47.2%	364 18.4%	143 7.2%	69 3.5%	17 0.9%
7		6	- 13	213	728	644	267 13.5%	119	3
<u> </u>		7	_ 14	257	768	688	210		2
Type grade subsequent region to the desirable security	nggan ti diteriah ada ap malaja ngjungan ad	8		82	169	199	1037	484	3
·				4.2% 314	8.6%	10.13	52.5%	24.5%	0.2%
	ny - Agyr Glasgae - Grafillinady e (gyrand) and			15.9%	32.7%	25.5%_	20.8%	4.9%	0.3%
	ar ar air f i amh am del am seo bhlianna an a' rao .	/6	- 17	27 1.4%	150 7.6%	528 26.7%	924 46•8%	339 17.2%	0.3%
		//	- 18	71 3.6%	226 11.4%	805 40.8%	669 33.9%	194 9.8%	9 0.5%
			- 19	42 2.1%	201 10.2%	575 29.1%	917 46.5%	236 12.0%	3 0.2%
)		/3	20	315			341 17.3%	204 10.3%	
			· 21	354	450	392		127	4
		/5	- 22	374	847	425		95	1
ernande ernand tillstad anner der seggigge gestere ernande ernande som ernand		/6	- 23	54	54 2.7%	77	806	977	6
··· ··· · · · · · · · · · · · · · · ·		17	- 24	70		154	1026		2 ·
en la companya no companya na mana na m	n pang titik in ser u intenggangan anak un u ang titik in ser u ang an	/8	' 25	53	131	164	1125	497	4
	*****		,				J. 4040		

			DIST	RIBUTION	-TOP LI	NE	
COLUMNS OF CONTROL 002-002 FORM	GROUPS REC 004-C04 COL SEX	1	2	3	4	5	TIMO
TOTAL RECORDS	1,974**/4- 26	190 9.6%	597 30.2%	528 26.7%	556 28.2%		9 0.5%
- WHITE -	20- 27	57 2•9%	96 4.9%	220 11.1%	921 46.7%	678 34.3%	0.1%
	21 - 28	154 7.8%	561 28.4%	602 30.5%	567 28.7%	90 4•6%	
r	•	78 4.0%	242 12.3%	245 12.4%	1105 56.0%	302 15•3%	0.13
В <u>пример и почет почет почет почет по</u> чет почет по	23-30	279 14-1%					
E	24-31		948 48.0%	499 25.3%	216 10.9%	56 2•8%	7 0 • 4%
V	25-32	342 17.3%	925 46.9%	459 23.3%	168 8.5%	80 4.1%	
F.,	24-33	35 1.8%	137 6.9%	247 12.5%	883 44.7%	670 33.9%	0.1%
	27- 34	157 8.0%	318 16.1%	284 14.4%	848 43.0%	355 18.0%	12 0.6%
*	28- 35	155 7.9%	383 19.4%	774 39•2%	562 28.5%	96 4•9%	4 0.2%
The second section of the second section	24-36	178 9.0%	584 29.6%	605 30.6%	438 22•2%	165 8.4%	4 0.2%
	<i>30-</i> 37	222 11.2%	564 28.6%	480 24.3%	561 28.4%	145 7.3%	2 0.18
	3/- 38	305 15.5%	479 24.3%	399 20.2%	659 33.4%	126 6.4%	6 0.3%
·			18.0*	39.28	32.5%	2.12	0.3%
	33 - 40	640 32.4%	930 47.1%	229 11.6%	111 5.6%	60 3.0%	0.2%
Contrade to the second		155 7.9%	555 28.1%	390 19.8%	561 28.4%		3 0.2%
		831 42.1%	659 33.4%	398 20.2%	34 1.7%	44 2•2%	8 0.4%
		335 17.0%	560 28.4%	295 14.9%	659 33.48	123	0.1
A THE STATE OF THE					• • •		

					DIST	AGI TUBIS	-TOP LI	NE	
COLUMNS O	F CONTROL 002-002 FORM 0	GROUPS 004-C04 SEX		1	. 2	3	. <u></u> 4	5	OMIT
TOTAL REC	ORDS	1,974**	37-44	188 9.5%		868 44.0%		80 4.1%	0.62
- WHITE			8-45	67 3.4%		827 41.9%		85 4.3%	5 0•3%
		3	9- 46			619 31.4%			0.28
	eren (franskrivere en franskrivere en franskrivere en franskrivere en franskrivere en franskrivere en franskri		10-47	133 6.7%	341 17.3%	363 18.4%	887 44.9%	245 12.4%	5 0.3%
The second secon	رود در	٠	f - 48	87 4.4%	287 14.5%	428 21.7%	905 45•8%	265 13.48	2 0.1%
		4	12-49			442 22.4%		84 4.3%	0.2%
	e major de la la la desarra de la composición del composición de la composición del composición de la	(/3-50	179 9.1%	372 18.8%	608 30.8%	637 32.3%	170 8.6%	8 0.4%
			/ ψ-51	328 16.6%		346 17.5%		200 10.1%	4 0-2%
1		4	15-52	338 17.1%	745 37.7%	525 26.6%	249 12.6%	106 5.4%	11 0.6%
tana tanan manana atau atau atau atau atau atau atau			46-53		472 23.9%	585 29•6%		185 9.4%	8 0.4%
Annual Company	· warner - company - comme		<i>t</i> 7-54			314 15.9%		186 9.4%	0.28
			48.55			423 21.4%		95 4•8%	7
2			4 - 56	207 10.5%	1057 53.5%	460 23•3%	205 10.4%	41 2•1%	4 0.2%
11 TEM SECULOR OF THE 18 FE TO SECULOR OF THE	कुल नेपोर्ड कर पांच पोर्ड प्राप्त प्रक्र प्रक्र प्रक्र प्रक्र प्रक्र प्रक्र प्रक्र प्रक्र प्रक्र प्र	den er makanan aranyi isami s	58- 57		776 39.3%	620 31.4%	448 22.7%	52 2.6%	0.38
	- senior who was property to a com-		\$1- 58		627 31.8%	635 32 -2 %	533 27.0%	92 4•7%	8
		A THE RESERVE TO SERVE THE	52-59	66 3.3%		196 9.9%	1120 56.7%	356 18.0%	0.2%
		5	3-60		94 4.8%	648 32.8%		235 11.9%	0.6%
ranaana ee aan		5	4-61	79 4.0%	301 15.2%		933 47.3%		5 0.3%
						•			

COLJMNS OF CONTROL GROUPS 002-002 0C4-C04 FORM SEX 0 TOTAL RECORDS . 1,974**	COL	1	2	3	4	5	OMIT
TOTAL RECORDS . 1,974**	~~						J., 1
1141	53.02		124 6.3%	240 12.2%		564 28.6%	
- WHITE - 5	6 - 63	174 8.8%	960 48.6%	590 29•9%	183 9.3%	61 3.1%	6 0.3%
5	7- 64	208 10.5%	366 18.5%	235 11.9%		258 13.1%	5 0.3%
<u></u>	8- 65	47 2.4%		593 30.0%		193	0.3%
The second s The second secon	57- 66			455 23.0%			7
·	00- 67	277 14.0%	868 44.0%	334 16.9%	367 18.6%	124	4 0.2%
	68	871 44.1%	711 36.0%	163 8.3%	163 8.3%	61 3.1%	5 0.3%
•	69	163 8.3%	946 47.9%	509 25•8≭	288 14.6%	64 3.2%	4 0.2%
	73 - 70	39 2.0%	149 7.5%	427 21.6%	1055 53.4%	302 15.3%	2 0.1%
6	4- 71	444 22•5%	576 29.2%	321 16.3%	543 27.5%	86	4 0 • 2%
6	5- 72	39 2.0%	201 10.2%	411 20.8%	1111 56.3%	208 10.5%	4 0.2%
6	6: 73	26 1.3%	84 4.3%	170 8.6%	1323 67.0%	368 18.6%	
6	7- 74	335 17.0%		344 17.48			
6		8.8₹	33.7%	22.1%	27.6%	7.68	5 0.3%
6	4- 76	373 18.9%	732 37.1%	447 22.6%	310 15.7%	109 5.5%	3 0.2%
	70-77	331 16.8%	1068 54.1%	341 17.3%		36 1•8%	0.12
7	V~ 78	365 18.5%	782 39.63	574 29.1%	208 10.5%		15 0.8%
	77-79	385 19.5%	1085 55.0%		132 6.7%	41 2.1%	5.0.3%

COLUMNS OF CONTR 002-00 FORM 0	ROL GROUPS REC 02 CO4-CC4 COL SEX	1	2	3	4	5	TIMO
	1,974** 73 - 80	73 3.7%				105 5.3%	
- WHITE -	74- 81	9.5%	57.4%	20.48	9.3%	63 3.2%	0.3%
programming our register value requires the second of the second	75-82	60 3.0%	128	204 10.3%	800 40.5%	775 39.3%	7
	76-83	52 2.6%	228 11.6%	459 23.3%	1043 52.8%	179 9.1%	13 0.7%
	77-84	122	440 22.3%	751 38.0%	568 28.8%	84 4.3%	9 0•5%
	78 - 85	151 7.6%	397 20.1%	299 15•1%	688 34.9%	438 22•2%	0.12
	79-86	1070 54.2%	567 28.7%	132	133	70 3.5%	2 0.1%
	80-87	77 3.9%	251 12.7%	186 9.4%	1107 56.1%	345 17.56	8 0.4%
	1,974**					16638	429

		DISTRIBUTION-TOP LINE						
COLUMNS OF CONTROL GROUP OU2-002 004- FORM SEX	S REC CC4 COL	1	2	3.	4.	5		
O TOTAL RECORDS 1,97	4**\$/ 88		608 30.8%	469 23.8%	393 19.9%		5 0.3%	
white	8289			770 39.0%				
	8390	737 37.3%	837 42.4%	252 12.8%	96 4•9%	44 2 • 2%	8 0.4%	
to a superior and the second of the second o	8491		633 32.1%	112 5.7%	90 4.6%	61 3.1%	0.4%	
	85 92	331 16.8%	720 36.5%	709 35.9%	168 8.5%	36 1.8%	10 0.5%	
<u> </u>	86 . 93	80 4.1%	492 24.9%	828 41.9%	493 25.0%	71 3.6%	0.5%	
M.,	87 ⁹⁴	78 4.0%	139 7.0%	302 15.3%	842 42.7%	607 30.78	6 0.3%	
·	88 95	57 2.9%	422 21.4%	575 29.1%	722 36.6%	187 9.5%		
	89 96			546 27.7%			13 0.7%	
·	90 97	59 3.0%		714 36.2%		121_6.1%	0.5%	
	<i>41</i> 98			90 4.6%				
*	9L 99	477 24•2%	771 39.1%	475 24.18	198 10.0%			
	93 100			518 26•2%			13 0.7%	
¢	44 101	181 9.2%	761 38.6%	485 24.6%	437 22.1%	101	9 0.5%	
	95 102	305 15.5%	916 46.4%	503 25.5%	181	60 3.0%	9 0.5%	
MARKET CONTRACTOR CONT	96 103	343 17.4%	822 41.6%	408 20.7%	307 15.6%	80 4.1%	0.78	
	47 104	89 4•5%		901 45.6%			20 1.0%	
	98 105	289 14•6%	699 35.4%	296 15.0%	456 23.1%	221 11.2%	0.78	
the contraction of the contract of the contrac	-			a				

6 250 12.7% 7 119 6.0% 8 544 27.6%	943 47.8% 749 37.9%	21.8%	268 13.6% 500	68 3.4%	OMIT 15 0.8%
7 119 6.0% 8 544 27.6%	47.8% 749 37.9% 640	21.8%	13.6%	3.4%	15 0.8%
6.0% 8 544 27.6%	37.9% 640	393 19.9%	500	222	**
27.6%	640		とつ・3る	200 10.1%	13 0.7%
	32.4%	287 14.5%	331 16.8%	156 7.9%	
9 1178	394	253	94	45	10
59.7%	20.0%	12.8%	4.8%	2.3%	
0 86	500	783	468	125	12
	25.3%	39.7%	23.7%	6.3%	0.6%
1 224	797	655	216	72	10
2 26	101	228	962	645	12
1.3%	5.1%	11.6%	48.7%	32.7%	0.6%
3 707	455	323	350	125	14
35.8%	23.0%	16.4%	17.7%	6.3%	0.78
4 49	170	232	918	591	14
2•5%	8.6%	11.8%	46.5%	29.9%	0.7%
5 147	480	801	460	70	
7•42	24.3%	40.6%	23.3%	3.5%	
5 34	71	174	994	688	13
1.7%	3.6%	8.8%	50•4%	34.9%	0.7%
7	. 91 4.6%	192 9.7%	1122 56.8%	521 26.4%	12
3 178	731	485	371	190	19
9.0%	37.0%	24.6%	18.8%	9.6%	1.0%
227	439 22.2%	425 21.5%	595 30.1%	274 13.9%	0.78
212	525	434	711	78	14
	26.6%	22.0%	36.0%	4.0%	0.7%
2.3%	118 6.0%	229 11.6%	1213 61.4%	354 17.9%	0.7%
37	301	536	865	217	18
	15.2%	27.2%	43.8%	11.0%	0.9%
27	83	400	1095	356	13
8916	17878	16213	20088	7527	442
12.5%	25.2%	22.8%	28.3%	10.6%	0.68
	1 224 11.3% 2 26 1.3% 3 707 35.8% 4 49 2.5% 5 147 7.4% 6 34 1.7% 7 36 1.8% 8 178 9.0% 9 227 11.5% 0 212 10.7% 1 46 2.3% 2 37 1.9% 3 27 1.4%	1 224 797 11.3% 40.4% 2 26 101 1.3% 5.1% 3 707 455 35.8% 23.0% 4 49 170 2.5% 8.6% 5 147 480 7.4% 24.3% 6 34 71 1.7% 3.6% 7 36 91 1.8% 4.6% 8 178 731 9.0% 37.0% 9 227 439 11.5% 22.2% 0 212 525 10.7% 26.6% 1 46 118 2.3% 6.0% 2 37 301 1.9% 15.2% 8 178 8 31 1.4% 4.2%	1 224 797 655 11.3% 40.4% 33.2% 2 26 101 228 1.3% 5.1% 11.6% 3 707 455 323 35.8% 23.0% 16.4% 4 49 170 232 2.5% 8.6% 11.8% 5 147 480 801 7.4% 24.3% 40.6% 6 34 71 174 1.7% 3.6% 8.8% 7 36 91 192 1.8% 4.6% 9.7% 8 178 731 485 9.0% 37.0% 24.6% 9 227 439 425 11.5% 22.2% 21.5% 0 212 525 434 10.7% 26.6% 22.0% 1 46 118 229 2.3% 6.0% 11.6% 2 37 301 536 1.9% 15.2% 27.2% 3 27 83 400 1.4% 4.2% 20.3% 8916 17878 16213	1	1 224 797 655 216 72 11.3% 40.4% 33.2% 10.9% 3.6% 2 26 101 228 962 645 1.3% 5.1% 11.6% 48.7% 32.7% 3 707 455 323 350 125 35.8% 23.0% 16.4% 17.7% 6.3% 4 49 170 232 918 591 2.5% 8.6% 11.8% 46.5% 29.9% 5 147 480 801 460 70 7.4% 24.3% 40.6% 23.3% 3.5% 6 34 71 174 994 688 1.7% 3.6% 8.8% 50.4% 34.9% 7 36 91 192 1122 521 1.8% 4.6% 9.7% 56.8% 26.4% 8 178 731 485 371 190 9.0% 37.0% 24.6% 18.8% 9.6% 9 227 439 425 595 274 11.5% 22.2% 21.5% 30.1% 13.9% 0 212 525 434 711 78 10.7% 26.6% 22.0% 36.0% 4.0% 1 46 118 229 1213 354 2.3% 6.0% 11.6% 61.4% 17.9% 2 37 301 536 865 217 1.9% 15.2% 27.2% 43.8% 11.0% 3 27 83 400 1095 356

APPENDIX E

BLACK MALE RESPONSES TO EACH ITEM

IN THE INSTRUMENT

APPENDIX E

BLACK-MALE

_]	BLACK-M	ALE				
07-11-74	•		DISTR	I BUT I ON	-TOP LI	NE	
COLUMNS OF CONTROL GRO 002-002 OC FORM SE	14-C04 COL	1	2	. 3	. 4.	5	OMIT
TOTAL RECORDS	49* /- 8	5 10.2%	18 36.7%	11 22.4%	9 18.4%	6 12.2%	* *
Black-MALE	2- 9	. 3	. 13	12	15	6	
(44)	3 - 10	12.2%	23 46.9%	22.4%	7 14.3%	2 4.1%	
The second members of the second of the seco	4- .,11 ,	6.1%	18.4%	14 28.6%	20.4%	26.5%	
P _{eric} anda de la companya del la companya de la co		2011	2007.		14.5	17.30	
R			15 30.6%	12 24.5%	7 14.3%	10 20.4%	
<u> </u>	/- 14	16.3%	28.6%	34.7%	14.3%	6.1%	The state of the s
P. 22. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 20.2. 2							
	9- 16	7 14.3%	15 30.62	15 30.6%	11 22.4%	2.0%	nager, and the same special and an agent same
	<i>(</i> 0− ₁₇	6.1%	7 14.3%	16 32.7%	16 32.7%	7 14.3%	
	and the same of	4.1%	14.3%	36.78	38.8%	6.18	
3		12.23	36.7%	30.6%	8.2%	12.28	
3	/4- 21	14 28.6%	12 24.5%	5 10.2%	12 24.5%	5 10.2%	2.0%
	/5- 22	15 30.6%	14 28.6%	7 14.3%	9 18.4%	3 6.1%	1 2.0%
		4 8•2%	4 8.2%	8.2%	19 38.8%	18 36.7%	e game e e su same asqu
	17- 24	8.2%	7 14.3%	4 8.2%	26 53.1%	8 16.3%	
	/8.25	2 4.1%	6 12.2%	10.2%	27 55.1%	9 18.47	
		•.					· · · · ·

COLUMNS DE CONTROL	CBOHO C DEC		DIST	RIBUTION	1-TOP LI	NE	10 W11071 MALA
COLUMNS OF CONTROL OO 2-002 FORM	SEX		, 2	3	4	5	TIMO
TOTAL RECORDS	49* 14- 26	4 8.2%	16 32.7%	12 24.5%	10 20.4%	6 12.2%	2.0%
Black-Male	20- 27	6.1%	4 8.2%	7 14.3%	20 40.8%	15 30.6%	
	21- 28	5 10•2%	18 36.7%	16 32.7%	7 14.3%	3 6.1%	A CONTRACTOR OF THE STATE
*	22- 29	3 6•1%	11 22.4%	9 18.4%	21 42.9%	5 10.2%	·• · · · · · · · · · · · · · · · · · ·
	23-30	12 24.5%	7 14.3%	13 26.5%	15° 30.6%	2 4.12	
4		10 20.4%	17 34.7%	18 36.7%	4.1% ⁻	4.1%	
4	25- 32	11 22.4%	17 34.7%	14 28•6%	6 12.2%	2.0%	
·		6.1%	6.13	8.2%	23 46.9%	16 32.7%	
	27-34	20.4%	6 12.2%	10 20•4%	17 34.7%	6 12.2%	
	28 · 35	12.2%	7 14.3%	23 46.9%	20.4%	3 6.1%	
	24-36	7 14.3%	14 28.6%	17 34.7%	8 16.3%	3 6.1%	
<u> </u>	3 0- 37	8 16.3%	8 16.3%	16 32.7%	13 26.5%	8.2%	******
	<i>31-</i> 38	5 10.2%	10 20.4%	11 22.4%	15 30.6%	8 16.3%	The specific period of the specific perio
<u> </u>							
	33- 40	23 46.9%	14 28.6%	7 14.3%	8.2%	2.0%	
Company of the second of the s		8 16.3%	10 20.4%	18 36.7%	8 16.3%	10.2%	
	<i>3</i> 5- 42	18 36.7%	16 32.7%	8 16.3%	5 10.2%	2 4.1%	
·····		11 22.4%	9 18.4%	8 16.3%	20 40.8%	1 2.0%	
The second section of the second section of the second section of the second section of the second section sec			•			-	The second secon

			DISTRIBUTION-TOP LINE					
COLUMNS OF CONTROL GROU 002-002 CO4 FORM SEX	CO4 CC	OL 1	2	3	4	5	OMIT	
1 O TOTAL RECORDS	49* 37- 4	8.2%	6 12.2%	25 51.0%	11 22.4%	3 6.17		
Black-Male	38- 4	5 4 8.2%	4 8.2%	22 44.9%	13 26.5%	5 10.2%	2.0%	
1	39- 4	6 1 2.0%	6.1%	15 30.6%	26 53.1%	3 6.1%	2.0%	
7	40- 4							
	41-4	8 3 6.1%	11 22.4%	12 24.5%	21 42.9%	2 4.1%		
1	42- 4							
	43- 5	0 7 14.3%	11 22.4%	13 26.5%	13 26.5%	5 10.2%		
*	44-5	18.4%		8 16.3%	7 14.3%	6 12.2%	2.0%	
en and a superior and	45- 5	2 9 18.4%	12 24.5%	17 34.7%	5 10.2%	6 12.2%	. Pr Pr Branderda e população p	
*		3 . 8 16.3%	14 28•6 ኛ	22.4%	13 26.5%	6.1%	The first transfer of the specific party.	
	47- 5	4 8 16.3%	15 30.6%	11 22.4%	13 26.5%	2 4.1%	The state of the s	
	48- 5	5 6 12.2%	22.4%	13 26.5%	18 36.7%	2.0%	· · · · · · · · · · · · · · · · · · ·	
A commence of the commence of	49- 5	6 6 12.2%					1 2.0%	
				14 28.6%	13 26.5%	2 4.1%	2.0%	
	<i>5/-</i> ₅	8 5 10.2%	20 40.8%			2 4.1%	1 2.0%	
·	52- 5	6.1%	9 18.4%	2 4.1%	25 51.0%	9 18.4%	2.0%	
	<i>53-</i> 6	0	3 6.1%	18 36.7%	18 36.7%	9 18.4%	1 2.0%	
	54-6		8.2%	16 32.7%	18 36.7%	4 8 • 2%	2.03	

			DISTR	RIBUTION	-TOP LI	NE	
COLUMNS OF CONTROL GROU 002-002 CO4 FORM SEX	-CC4 COL		2	3	4	5	OMIT
TOTAL RECORDS		2.0%	4 8.2%	7 14.3%	23 46.9%	13 26.5%	1 2.0%
Black MALE SUS	56-63	3 6.1%	18 36.7%	12 24.5%	10 20.4%	5 10.2%	2.0%
	57- 64	5 10.2%	9 18.4%	10 20.4%	20 40.8%	5 10•2%	
	58 - 65	4.1%	10 20.4%				
	54-66	6.1%	12 24.5%	14 28.6%	16 32.7%	4 8 • 2%	
<u> </u>	60-67						
· · · · · · · · · · · · · · · · · · ·	61- 68	21 42.9%	11 22.4%	6 12.2%	6 12.2%	5 10.2%	
	62- 69	6.1%					
	63- 70	2 4.1%	3 6.1%	9 18.4%	25 51.0%	10 20.4%	
Parameter (1997)	65- 72	4 8 • 2 %	6 12.2%	22.4%	23 46.9%	5 10.2%	The second section is a second section of the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a section in the second section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section in the section is a section in the
		4.1%					
7	67- 74	11 22.4%	23 46.9%	7 14.32	12.2%	2 4.1%	
·		10.2%	15 30.6%	13 26.5%	10 20.4%	12.2%	
	69 - 76	9 18.4%	17 34.7%	16 32.7%	8.2%	6.1%	
	7/- 18	9 18.4%	12 24.5%	18 36.7%	9 18.4%	2.08	
	72-79	7 14.3%	22 44.9%	12 24.5%	6 12.2%	4.18	

		-	DIST	NO 1 TUB 1 S	-TOP LI	NE	
CODM	2 004-C04 COL		2				OMIT
TOTAL RECORDS	49* 73- 80	5	6	17	18	3	
and the second of the second o	grant dates to the	10.2%	12.2%	34.78	36.7%	6.13	2
BLACK-MAIC	74- 81-	5 10.2%	26 53.1%	12 24.5%	4 8•2%	2 4.1%	
Company of the property of the	75- 82	2 4.1%	7 14.3%	9 18.4%	17 34.7%	14 28.6%	and a second sec
	77 - 84	8 16.3%	6 12.2%	19 38.8%	15 30.6%	2.03	
· · · · · · · · · · · · · · · · · · ·	78- 85	3 6.1%	11 22.4%	9 18.4%	14 28.6%	12 24.5%	man grane de la constanta de la compansión de la constanta de
	79- 86		15	4			
·							
TOTAL RECORDS TOTAL ANSWERS	49*	517	928	963	1073	423	16

			DIST	RIBUTION	-TOP L	INE	
FORM	CO4-CC4 COL SEX	i.	2	3	4	5	TIMO
TOTAL RECORDS	0 49* 4 1 88	17 34.7%	14 28.6%	8 16.3%	9 18.4%	1 2.0%	
Black	<u> </u>	2 4.1%	12 24.5%	16 32.7%	13 26.5%	6 12.2%	<u>.</u> .
male	83 90		18 36.7%				· · · · · ·
	84 91	22 44.9%	20 40.8%	- 8.2%	•	6.1%	
4	8592	10 20.4%	17 34.7%	15 30.6%	5 10-2%	4.1%	
Augustinian and Augustinian an	86 .93	2 4.1%	11 22.4%	17 34.7%	13 26.5%	6 12.2%	
1	87 94	2 4.1%	7 14.3%	12 24.5%_	14 28.6%	14 28.6%	
·	₹ 95	2 4.1%	13 26.5%	14 28.6%	16 32.7%	8.2%	W
	89 96	6 12.2%	10 20.4%	14 28.6%	12 24.5%	7 14.3%	
	90 97		8 16.3%				
	9/ 98	2 4.1%	12.2%	8 16.3 t	21 42.9%	11 22.4%	2.0%
	92 99	16.3%	17 34.7%	30.6%		6.18	2.08
	43 100	4 8.2%	8 16.3%	14 28.6%	16 32.7%	12.2%	2.0%
	14 101	2 4.1%	16 32.7%		10 20.4%	8.2%	2.02
	95 102	7 14.3%	14 28.6%	18 36.7%	5 10.2%	5 10.2%	
****** ##**##** ** ** **** ****	•	6 12.2%	14 28.6%	17 34.7%	10 20.4%	2.0%	2.0%
· · · · · · · · · · · · · · · · · · ·	9/104	5 10.2%	28.6%	20 40.8%	5 10.2%	8.2%	2.0%
(7.1	7 14.3%	16 32.7%	9 18.4%	7 14.32	9 18.4%	2.0%
	• • • • · · · · · · · · · · · · · · · ·	4	**	-	••		

		01211	KIROLIO	N-TOP LI	INE	
COLUMNS OF CONTROL GROUPS REC 002-002 004-004 COL FORM SEX 1 0	1	2	3	4	5.	OMET
TOTAL RECORDS 49*49 106	4 8.2%	14 28.6%	12 24.5%	9 18•4%	8 16.3%	2 4.1%
Black mule	8 16.3%	18 36.7%	8 16.3%	10 20.4%	6.1%	4.1%
/0/ 108						
/02 109	25 51.0%	9 18.4%	5 10.2%	5 10.2%	3 6•1%	2 4.18
103 110	3	13	16		Ś	2.0%
104 111	12 24.5%	18 36.7%	9 18.4%	5 10.2%	4 8•2%	2.0%
105 112	1 2.0%	4 8•2%	9 18.4%	20 40.8%	13 26.5%	2 4.1%
	13 26.5%	14 28.6%	9 18.4%	9 18.4%	4.1%	2 4.1%
/07 114	2 4.1%	4 8.2%	6 12.2%	21 42.9%	14 28.6%	4.17
108 115	3 6.1%	12 24.5%	19 38.8%	12 24.5%	1 2.0%	4.17
/09 116	1 2.0%	3 6.1%	7 14.3%	22 44.9%	14 28.6%	2 4.1%
//0 117	8.2%	4.1%	12.2%	21 42.9%	15 30.6%	2.08
/// 118					6 12.2%	4.13
/I~ 119	``````````````````	16.3%	34.7%	12 24.5%	4 8 • 2%	4.18
/B 120	22.4%	11 22.4%	8 16.3%		5 10.2%	2 4.1%
/IY 121		2 4.1%			14 28.6%	
115 122		10 20.4%	8 16.3%	19 38.82	10 20.4%	2 4.1%
//b123	2.0%	2 4.1%	13 26.5%	19 38.8%	12 24.5%	4.18
TOTAL RECORDS 49* TOTAL ANSWERS 1,764*	236 13.4%	411 23.3%	422 23.9%	427 24•28	228 12.9%	40 2.3%

APPENDIX F

BLACK FEMALE RESPONSES TO EACH ITEM
IN THE INSTRUMENT

APPENDIX F

BLACK-FEMALE

07-11-74

COLUMNS OF CONTROL GROUPS 002-002 004-C04 COL 1 2 3 4 5 0M FORM SEX 1 TOTAL RECORDS 75* /- 8 4 27 19 19 6 5.3% 36.0% 25.3% 25.3% 8.0% Black-Female 2-9 7 15 16 24 13 9.3% 20.0% 21.3% 32.0% 17.3% 3-10 5 32 17 16 4 6.7% 42.7% 22.7% 21.3% 5.3% 1. 4-11 10 18 19 18 10 13.3% 24.0% 25.3% 24.0% 13.3% 5-12 12 35 12 14 2 16.0% 46.7% 16.0% 18.7% 2.7% 6-13 9 29 24 7 6 12.0% 38.7% 32.0% 9.3% 8.0% 7-14 11 22 20 15 6 12.0% 38.7% 32.0% 9.3% 8.0% 7-14 11 22 20 15 6 14.7% 29.3% 26.7% 20.0% 8.0% 1. 8-15 6 5 11 31 22 8-0% 6.7% 14.7% 41.3% 29.3% 4-16 12 26 25 7 5 16.0% 34.7% 33.3% 9.3% 6.7% 10-17 4 6 22 36 7 5.3% 8.0% 29.3% 48.0% 9.3%	
Black-remare 2-9 7 15 16 24 13 9.3% 20.0% 21.3% 32.0% 17.3% 3-10 5 32 17 16 4 6.7% 42.7% 22.7% 21.3% 5.3% 1. #- 11 10 18 19 18 10 13.3% 24.0% 25.3% 24.0% 13.3% 5-12 12 14 2.7% 16.0% 46.7% 16.0% 18.7% 2.7% 6-13 9 29 24 7 6 12.0% 38.7% 32.0% 9.3% 8.0% 7- 14 11 22 20 15 6 14.7% 29.3% 26.7% 20.0% 8.0% 1. #- 15 6 5 11 31 22 8.0% 6.7% 14.7% 41.3% 29.3% 6.7% 16.0% 34.7% 33.3% 9.3% 6.7% 16.0% 17 4 6 22 36 7 5.3% 8.0% 29.3% 48.0% 9.3% $\frac{1}{2}$	1 3%
Black-remare 2-9 7 15 16 24 13 9.3% 20.0% 21.3% 32.0% 17.3% 3-10 5 32 17 16 4 6.7% 42.7% 22.7% 21.3% 5.3% 1. #- 11 10 18 19 18 10 13.3% 24.0% 25.3% 24.0% 13.3% 5-12 12 14 2.7% 16.0% 46.7% 16.0% 18.7% 2.7% 6-13 9 29 24 7 6 12.0% 38.7% 32.0% 9.3% 8.0% 7- 14 11 22 20 15 6 14.7% 29.3% 26.7% 20.0% 8.0% 1. #- 15 6 5 11 31 22 8.0% 6.7% 14.7% 41.3% 29.3% 6.7% 16.0% 34.7% 33.3% 9.3% 6.7% 16.0% 17 4 6 22 36 7 5.3% 8.0% 29.3% 48.0% 9.3% $\frac{1}{2}$	1 38
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8- 15 6 5 11 31 22 8.0% 6.7% 14.7% 41.3% 29.3% 9- 16 12 26 25 7 5 16.0% 34.7% 33.3% 9.3% 6.7% 10- 17 4 6 22 36 7 5.3% 8.0% 29.3% 48.0% 9.3%	,
9- 16 12 26 25 7 5 16.0% 34.7% 33.3% 9.3% 6.7% 10- 17 4 6 22 36 7 5.3% 8.0% 29.3% 48.0% 9.3%	1 3%
/0- 17	
/0- 17	
//- 18 7 7 30 27 4 9.3% 9.3% 40.0% 36.0% 5.3%	
/2-19 5 14 20 31 5 6.7% 18.7% 26.7% 41.3% 6.7%	
/3-20 19 18 15 12 9 25.3% 24.0% 20.0% 16.0% 12.0% 2.	2 7%
/4- 21 29 15 10 16 5 38.7% 20.0% 13.3% 21.3% 6.7%	
/5- 22 23 33 10 6 3 30.7% 44.0% 13.3% 8.0% 4.0%	
/6-23 4 3 1 31 36 5.3% 4.0% 1.3% 41.3% 48.0%	
/7- 24	
/8- 25 3 4 7 34 25 4.0x 5.3x 9.3x 45.3x 33.3x 2.	2

The financial control control		DISTR	1 TUB I F	I-TOP LI	NE	
COLUMNS OF CONTROL GROUPS REC 002-002 CC4-C04 COL FORM SEX	1	2	3	4	5	OM LT
1 1 TOTAL RECORDS 75* /4- 26	5 6.7%	25 33.3%	22 29.3%	16 21.3%	6 8.08	1 1.3%
Black-Female. 20-27	.3 4.0%	7 9.3%	7 9.3%	42 56.0%	16 21.3%	·- ·- ·
21- 28	9.3%	21 28.0%	18 24.0%	26 34.7%	3 4.0%	
22- 29	2.7%	7 9.3%	13 17.3%	40 53.3%	13 17.3%	
23-30	21.3%	27 36.0%	14 18.7%	17.3%	4 5.33	1.38
24- 31	14.7%	36.0%	25.3%	14 18.7%	5.3%	
25- 32	6.7%					a second
	2.1%			29 38.7%		***********
Committee and an experimental control of the following the control of the control	11 14.7%	16 21.3%	13 17.3%	25 33.3%	10 13.3%	************************
28- 35	13438	20.0%	28.0%	26 34.7%	4.08	wi en (en comun
	14.7%	24.0%	24.08	30.7%	6.7%	The state of the s
<i>36 - 37</i>	12.0%	33.3%	32.0%	18.7%	4.0%	·
	10.7%	20.0%	33.38	29.38	6.73	
32 - 39						
33-40	38.7%	34.1%	20.0%	5.3%	1.3%	
34·41 35·42	9.3%	36.0%	17.3%		12.04	1.32
The blanks are an experience of the company of the	25.3%					
%- 43		16 21.3%	16 21.3%	30 40.0%	5.3%	

					DIST	RIBUTIO	N-TOP L	I NE	
•	FORM	8		1	2	3	4	5	TIMC
TOTAL REC	CORDS	75* 37	7 - 44	5 6.7%	20 26.7%	39 52.0%	10 13.3%	1 1.3%	-
Black-1	Female	35	- 45	2 2.7%	11 14.7%	33 44.0%	28 37.3%	1 1.3%	
and the second of the second o		34	_ 46		6 8.0%	21 28.0%	43 57.3*	5 6.7%	
	· •••• •	40	- 47	7 9.3%	15 20.0%	19 25.3%	25 33.3%	9 12.0%	
4		4	_ 48	8.0%	12 16.0%	16 21.3%	32 42.7%	9 12.0%	
1	and the second s	42	- 49	9.3%	23 30.7%	25 33.3%	11 14.7%	9 12.0%	
**************************************		43	- 50	12.0%	25 33.3%	21 28.0%	19 25.3%	1.3%	er en
/	der eine von der der Lande – der und mag und der L	44	- 51	9 12.0%	18 24.0%	13 17.3%	16 21.3%	19 25.3%	THE CONTRACT CONTRACT
		45	5 2`	5 6.7%	25 33.3%	24 32.0%	13 17.3%	8 10.7%	
<u> </u>			- 53_	9 12.0%	28.0%	24 32.0%	17 22.7%	4 5•3∦	
		47	- 54	4 5.3%	23 30.7%	9 12.0%	26 34.7%	12 16.0%	1 1.3%
	OF THE STEEL COST COST COST COST COST COST COST COST	48	- 55	5 6.7%	13 17.3%	16 21.3%	40 53.3%	1.3%	Tritime and and and and
		44	56	7 9.3%	35 46.7%	28 37.3%	2.7%	3 4.0%	en en di ti i i de rui i de
James mercenin igini, migajiri singer -	n ndjego og se klenned gro ogserge gda den om ord		- 57					4 5•3%	
		5/-	58	6 8.0%	29 38.7%	26 34.7%	12 16.0%	2 2.7%	nt a san ar
		52-	- 59	2.7%	10	6 8-0%	43 57.3%	14 18-72	
		53	~ 60		4 5.3%	21 28.0%	39 52.0%	11	
			61	6	13	15	31	9	1 1.3%
								_	

				DIST	RIBUTION	N-TOP LI	INE	
	004-004 C	OL	1,	2	3	. 4	5	OMIT
TOTAL RECORDS	75* <i>55</i> _	62	5 6.7%	5 6.7%	11 14.7%	41 54.7%	13 17.3%	
Bluck-Female	56-	63	4 5•3%	35 46.7%	23 30.7%	10 13.3%	3 4.0%	
The second of th	57-	64	9.3%	10 13.3%	12 16.0%	39 52.0%	7 9.3%	
	59-	65	1.3%	15 20.0%	20 26.7ሂ	28 37.3%	11 14.7%	
	54-	66	6 8.0%	15 20.0%	16 21.3%	36 48.0%	2 2.7%	المستحديد المراجع
			14.7%					~~·~:«««»»
	61-	68	39 52.0%	20 26.7%	9.3%	6 8.0%	3 4.0%	ه اما اما در
, Lange Committee of the Committee of th	62-	69	13.3%	31 41.3%	16 21.3%	17 22.7%	1.3%	o de la compansión de la c
	63-	70	1.3%	5.3%	5 6.7%	42 56.0%	23 30.7%	
	64	71	20 26.7%	17 22.7%	15 20.0%	18 24•0%	5.3%	1.3%
	65-	72	5	· ´5	27	33	5	
The state of the s	66-	73		9.3%	13.3%	48 64.0%	10 13.3%	· · · · · · · · · · · · · · · · · · ·
	67-	74	19 25.3%	34	13	´ 8	1	
	68-		0.05		14 18.7%			
	69-	76 	18.7%	19 25.3%	24 32.0%	14 18.7%	4" 5.3%	
			9 12.0%					r demokratika i kilongerski k
	7/-	78 -	12.0%	27 36.0%	30	6 8.0%_	3 4.0%	na agairm ann an
	72-	79	7 9.3₹	40 53.3%	16 21.3%	8 10.7%	4 5.3%	

		DISTRIBUTION-TOP LINE							
FORM	004-C04 COL Sex			3			OMIT		
TOTAL RECORDS		3 4.0%	15 20.0%	19 25.3%	37 49.3%	1.3%			
Black-Female	74- 81	4 5.3%	51 68.0%	13 17.3%	4 5•38	3 4.0%			
Comparation in Manne 275 C A C C	75- 82	3 4.0%	2.7%	5 6.7%	23 30.7%	41 54.7%	1.3%		
	76- 83	3 4.0%	8 10.7%	18 24.0%	40 53.3%	5 6.7%	1.3%		
	77- 84	5 6.7%	14 18.7%	24 32.0%	28 37.3%	3 4•0%	1.3%		
<u> </u>	78- 85	7 9.3%	17 22.7%	11 14.7%	19 25.3%	21 28.0%	. Operation of the comment		
	74- 86	42 56.0%	22 29.3%	5•3ቼ	3 4.0%	4 5.3%	and the second of the second o		
······································	80 - 87	2.7%	16.0%	9 12.0%	40 53.3%	12 16.0%			
TOTAL RECORDS TOTAL ANSWERS	75 * 6,000*	678	1532 25.5%	1382 23.0%	1765 29.4%	628 10.5%	15		

· · · · · · · · · · · · · · · · · · ·			DIST	RIBUTION	N-TOP LI	INE	
FORM	004-CC4 COL Sex	. 1	. 2	. 3	4	5 .	OMIT
TOTAL RECORDS	75* 8/ 88	18 24.0%	25 33.3%	16 21.3%	14 18.7%	2 2.7%	
Black	82 89	1.3%	16 21.3%	25 33.3%	24 32.0%	9 12.0%	
Lemale	83 90	20 26.7%	37 49.3%	13 17.3%	4 5.3%	1.3%	
·	84 91	51 68.0%	18 24.0%	4 5.3%		2 2.7%	
М	85 92	22 29.3%	23 30.7%	22 29.3%	8.0%	2 2.7%	
T		2.7%	10 13.3%	23 30.7%	30 40.0%	10 13.3%	
and the second s	87 94	9 12.0%	9.32	11 14.7%	34 45•3%	14 18.7%	The common of the second contract of
· · · · · · · · · · · · · · · · · · ·	&V 95	· www.men.u.u.		24 32.0%	34 45.3%	9 12.0%	
F	89 96	7 9.3%	9 12.0%	18 24.0%	29 38.7%	12 16.0%	The state of the s
De la companya della companya della companya de la companya della	90 97	6.0%	24 32.0%	24 32.0%	18 24.0%	3 4.0%	
	<i>4</i> / 98	6 8.0%	11 14.7%	2 2.7%	51 68.0%	5 6.7%	
·	92. 99	18 24.0%	23 30.7%	24 32.0%	9.3%	2.7%	1.3%
	43 100	2 2.7%	11 14.7%	28 37.3%	32 42•7%	2 2.7%	
·	94 101	8 10.7%	18 24.0%	21 28.0%	26 34.7%	2.78	·· ·
	95 102	4 5.3%	41 54.7%	22 29.3%	5 6.7%	3 4.0%	
	96 103	11	32	13	14	2	
	47 104	4 5.3%	20 26.7%	38 50.7%	10 13.3%	2.7%	1 1.3%
	48 105	10	26	14	19	5	
THE PROPERTY OF THE PROPERTY O	25 188 8 8 8			•		•	

on which are controlled		0.56		DĮSTR	18UT10N	I-TOP LI	NE	
COLUMNS OF CONTROL G 002-002 FORM	0C4-C04 SEX		1	2	3	4	5	OMIT
TOTAL RECORDS	75*99	1 06	10 13.3%	27 35.0%	15 20.0%	16 21.3%	6 8.0%	1 - 3%
Black	100	107	4 5.3%	26 34•7%	12 16.0%	17 22.7%	15 20.0%	1.38
Femele	101	108	14 18.72	20 26.7%	17 22.7%	9 12.0%	15 20.0%	
	-201	. 109	46 61.3%	10 13.3%	10 13.3%	4 5.3%	4 5.3%	1.38
	/03	110	2 2.7%	12 16.0%	32 42.7%	24 32.0%	4 5.3%	1 1.3%
3 <u></u>	104	111		30 40.0%		10 13.3%	5 6.7%	**********
	105	112	3 4.0%	2.7%	9.3%	37 49.3%	26 34.7%	
·	106	1,13	43 57.3%	13 17.3%	13.3%	5 6.7%	2 2.7%	2 . 7%
	107	114	1.3%	3 4.0%	9.3%	31 41.3%	33 44.0%	
	108	115	7 9.3%	17 22.7%	25 33.3%	21 28.03	3 4.0%	2.78
	109	116	2.7%	1.3%			28 37.3%	
		117.	1.3%	2.7%	6 8.0%	41 54.7%	24 32.0%	1.3%
		118	4 5.3%	28 37.3%	18 24.0%	12	11 14.7%	2.7%
	112	119	12.0%	14 18.7%	20 26.7%	21 28.0%	10 13.3%	1.3%
a the control of the	113		16 21.3%	27 36.0%	19 25.3%	11 14.7%	2 2.7%	
	114	121	4 5.3%	6 8.0%	9 12.0%	42 50.0%	13 17.3%	1.32
	115	122	2 2.7%	8 10.7%	16 21.3%	36 48.0%	12.	1.3%
	111	123	2	6 8.0%	16.07	39 52.0%	14 18.7%	2.7%
TOTAL RECORDS			381 14.1%			772 28.6%	314 11.6%	23 0-9%

APPENDIX G

BLACK RESPONSES TO EACH ITEM
IN THE INSTRUMENT

APPENDIX G

BLACK RESPONSES

07 11-76	BL	ACK RES	PONSES	}			
07-11-74		•	DISTR	RIBUTIUN	N-TOP LI	INE	
COLUMNS OF CONTROL GROU 002-002 CC4 FORM SEX 1	-CO4 COL	1.	2	. 3	4	5	TIMO
TOTAL RECORDS 1	24** /- 8	9 7.3%	45 36•3%	30 24.2%	28 22.6%	12 9.7%	The second section of the section of
- Black -	2- 9	10 8.1%	28 22.6%	28 22.6%	39 31.5%	19 15.3%	· · · · · · · · · · · · · · · · · · ·
ALL.	3- 10	11 8.9%	55 44.4%	28 22.6%	23 18.5%	6 4.8%	0.8%
The second secon	4- 11	13	27 21.8%	33	28	23	
**************************************	5- 12	22 17.7%	48 38.7%	25 20.2%	20 16.1%	9 7.3%	Transfer of the Control of the Contr
У применения применения применения применения по применения применения применения применения применения примене	6- 13	11.3%	44 35.5%	36 29.0%	14 11.3%	16 12.9%	er minor a cita quar <u>a</u> ur e
<u> </u>	/ 14	19 15.3%	36 29.0%	37 29.8%	22 17.7%	7.3%	0.8%
Y		10 8.1%	8.9%	14 11.3%	50 40.32	39 31.5%	the state of their date plant give plant plant gifts (gift
	7- 16	19 15.3%	41 33.1%	40 32.3%	18 14.5%	6 4.8%	an e sa an an agus ga agus ga agus ga ang an agus ga ang an agus ga ang an agus ga ang ang ang ang ang ang ang
F		7 5.6%	13 10.5%	38 30.6%	52 41.9%	14 11.3%	
	//- 18	9 7.3%	14 11.3%	48 38.7%	46 37.1%	7 5.6%	ه مدم پور هوه هوه مده دد و د مدر هوه هوه هوه هوه هوه هوه هوه هوه هوه هو
	/2-19						
	/3-120	25 20•2%	36 29.0%	30 24.2%	16 12.9%	15 12.1%	2 1.6%
)	14- 21	43 34.7%	27 21.8%	15 12.1%	28 22.6%	10 8.1%	0.8%
	15- 22	38 30.6%	47 37.9%	17	15 12.1%	6 4.8%	0.82
	16-23	8 6.5%	7 5.6%	5 4.0%	50 40.3%	54 43.5%	The Company of the Co
	- 17- 24	6 4.8%	18 14.5%	11 8.9%	65 52.4%	24 19.4%	
	18- 25						2
Property make an apply of the property of the complete specific and the contract of the contra	•						

COLUMNS OF CONTROL GROUPS REC		DISTR	RIBUTION	-TOP LI	INE	
002-002 0C4-CG4 COL FORM SEX	1					
TOTAL RECORDS 124** /4- 26	9 7.3%	41 33.1%	34 27.4%	26 21.0%	12 9.7%	2
-Black - 20-27	4.8%	11 8.9%	14 11.3%	62 50.0%	31 25.0%	
21- 28	12 9.7%	39 31.5%	34 27.4%	33 26.6%	6 4.8%	The same for the same same same same same same same sam
22-29	5 4.0%	18 14.5%	22 17.7%	61 49.2%	18 14.5%	
						0.82
24-31	21 16.9%	44 35.5%	37 29•8%	16 12.9%	4.8%	
25- 32	16 12.93	49 39.5%	40 32.3%	10 8.1%	9 7.3%	
26 · 33	4.0%	. 7.3%	13 10.5%	52 41.9%	45 36.3%	
27-34	21 16.9%	22	23	42	16	
28-35	16 12.9%	22 17.7%	44 35.5%	36 29.0%	6 4.8%	
29-36	18 14.5%	32 25.8%	35 28.2%	31 25.0%	8 6.5%	
<i>3</i> 0 - 37	17 13.7%	33 26.6%	40 32.3%	27 21.8%	7 5.6%	
3/- 38	13 10.5%	25 20.2%	36 29.0%	37 29.8%	13 10.5%	
	12 9.7%	21 16.9%	50 40.3%	33. 26.6%	8 6.5%	
33- 40	52 41.9%	40 32.3%	22 17.7%	8 6.5%	2 1.6%	
		29.8%	25.0%	21.0%	11.3%	0.8%
35- 42	37 29.8%	40 32.3%	33 26.6%	7.3%	5 4.0%	
36 - 43	20 16.1%	25 20.2%	24 19.44	50 40.3%	5 4.0%	

COLUMNS OF CONTROL GRO	ibc Bec		DIST	RIBUTION	I-TOP LI	NE	
002-002 00 FORM SE	4-CC4 COL	1	2	3	4	. 5	OMIT
TOTAL RECORDS	124** 37-44	9 7.3%	26 21.0%	64 51.6%	21 16.9%	4 3 • 2%	
- Black-	38- 45	6 4.8%	15 12.1%	55 44•4%	41 33.1%	6 4•8%	1 0.8%
	39_ 46	0.8%	7 <u>.</u> 3%	36 29.0%	69 55.6%	8 6.5%	1 0.8%
	40-47			32 25.8%			
	44- 48	7.3%	23 18.5%	28 22.6%	53 42.7%	11 8.9%	and the second of the second o
	42- 49	13	39 31.5%	42 33.9%	18 14.5%	12 9.7%	
	₩. 50	16	36	34 27.4%	32	6	
	44.51	18 14.5%	36 29.0%	21 16.9%	23 18.5%	25 20.2%	0.8%
	45. 52	14	37 29.8%	41 33.1%	18 14.5%	14 11.38	
	46- 53	17.	35 28.2%	35 28.2%	30 24.2%	7 5.6%	and was the same and the same part of the same and the same
	47- 54	12 9.7%	38 30.6%	20 16.1%	39 31.5%	14 11.3%	1 0.8%
	48- 55	. 11	24		58	2	
	44- 56	13 10.5%				4 3.2%	
		7 5.6%	49 39.5%	36 29.0%	25 20•2%	6 4.8%	0.82
	<i>5</i> 7- ₅₈	8.92	49 39.5%	40 32.3%	19 15.3%	4 3.2%	0.8%
	52- 59	5 4.0%	19 15.3%	8 6.5%	68 54.8%	23 18.5%	1.0.8%
	53-60			39 31.5%	57 46.0%	20 16.1%	10.8%
	54- 61	12	17 13.7%	31 25.0%	49 39.5%	13 10.5%	2

					DIST	RIBUTION	N-TOP LI	NE	
COLUMNS O		GROUPS 004-C04 SEX		1	2	3	4	5	OMIT
TOTAL REC	ORDS	124**	<i>55-</i> 62	6 4•8%	7.3%	18 14.5%	64 51.6%	26 21.0%	1 0-8%
- Blac	R –	. <u>.</u>	56- 63,					8 6.5%	
Target was a section of the section				12 9.7%	15.3%	17.78	47.6%	9.7%	
1		<u></u> 5	58. 65	3 2.4%	25 20.2%	36 29.0%	45 36.3%	15 12-1%	
1		• · · · · · · · · · · · · · · · · · · ·	54.66	9	27	30	52	6 4.8%	
}			60 · 67	23 18.5%	46 37.1%	22 17.7%	25 20•2%	8 6•5%	
Tangga agai aran magantar magantar		······································	6/ 68	60 48.4%	31 25.0%	13 10.5%	12 9.7%	8 6.5%	
·			62 · 69 .	13 10.5%	54 43.5%	26 21.0%	27 21.8%	3.2%	TO TO THE POST OF SECURITION AND AND AND AND AND AND AND AND AND AN
	. Some consideration and consideration of		63.70	3 2.4%	7 5.6%	14 11.3%	67 54.0%	33 26.6%	The second secon
			64.71	30 24.23	31 25.0%	25 20.23	30 24•2%	5.6%	1 0.8%
		an Zin e	65.72			38 30.6%			n ig i de se i se se se ge ige de se se geg
	and the second of the second o	Professional Section 1	66:73	2 1.6%	10 8.12	14	77 62.1%	21 16.9%	**********
	i til med som er stil til til til som er stil sykning som er s Frikanske med styrkholikeriger skriverigen som er er e	#	67.74	30 24.2%	57 46.0%	20 16.1%	14 11.3%	3 2.4%	ne në me 45 më 24 me. Galë ale dhe 24 me 25
	24 m. 6 - proces 100 mb da 100 gap gar and 100 s		68.75	8.9%	36.3%	27 21.8%	25.0%	10 8.12	, ক্ৰেছত উপজ্ঞান ত ব সভ
And the second s	and a gard and gard and and an age of one of	deleter i de l'escret pe de l'apiè e l'escret l'apiè e l'escret l'apiè e l'escret l'apiè e l'escret l'apiè e l	69.76	23 18.5%	36 29.0%	40 32.3%	18 14.5%_	7 5.6%	
			70.11	15 12.1%	67 54.0%	25 20.2%	15 12.1%	2 1.6%	
The state of the s			7/- 78	18 14.5%	39 31.5%	48 38.7%	15	3.2%	
There is a second of the		·-····································	72 . 79	14 11.3%	62 50.0%	28 22.6%	14 11.32	6 4.8%	

			DIST	RIBUTION	I-TOP LI	NE	
COLUMNS OF CONTROL GROUPS O02-002 OC4-CO FORM SEX	04 COL		2	3	. 4	5	TIMO
TOTAL RECORDS 124*	* 73.80	8 6•5%	21 16.9%	36 29.0%	55 44.4%	4 3.2%	••
-Black-	74. 81,			25 20.2%			.
Annual contract of the second	75 · 82	5 4•0ቼ	7.3%	14	40 32.3%	55 44.4%	0.8%
<u> </u>							2
C	77. 84	13 10.5%	20 16.1%	43 34.78	43 34.7%	4 3.2%	1 0.8%
<u> </u>							
	74. 86	66 53.2%	37 29.8%	8 6.5%	6 4.8%	7 5.6%	4 - 14 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
3							1 0.8%
TOTAL RECORDS 124* TOTAL ANSWERS 9,920*	* *	1195	2460 24.8%	2345 23.6%	2838 28•6%	1051 10.6%	31 0.3%

COLJANS OF CONTROL GROUPS REC		
002-002 004-004 COL 1 2 3 4 FORM SEX	5	OMIT
TOTAL RECORDS 124** \$\infty\$ 88 35 39 24 23 28.2% 31.5% 19.4% 18.5%	3 2.48	
&Z 89, 3 28 41 37 2.4% 22.6% 33.1% 29.8%	15 12.1%	
Black. 83 90 41 55 16 11 33.1% 44.4% 12.9% 8.9%	0.8%	e i mariente
84 91 73 38 8 58.9% 30.6% 6.5%	5 4.0%	r
% 92 32 40 37 11 25.8% 32.3% 29.8% 8.9%	4 3.2%	er de le le le le de de de gerde le
86 93 4 21 40 43 3.2% 16.9% 32.3% 34.7%	16 12.9%	
8794 11 14 23 48 8.98 11.38 18.58 38.78	28 22.6%	e er me
\$\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	13 10.5%	
89 96 13 19 32 41 10.5% 15.3% 25.8% 33.1%	19 15.3%	n - y are re en rei digenia ant de rej pa
96 97 9 32 45 31 7.38 25.88 36.38 25.08	7 5.6%	·
9/ 98 8 17 10 72 6.5% 13.7% 8.1% 58.1%	16 12.9%	0.8%
92 99 26 40 39 12 21.0% 32.3% 31.5% 9.7%	5 4.0%	1.6%
43 100 6 19 42 48 4.8% 15.3% 33.9% 38.7%	8 6.5%	0.8%
7\frac{4}{101} 10 34 37 36 8.1\frac{8.1\frac{27.4\frac{29.8\frac{29.0\frac{8}{37}}{27.4\frac{29.8\frac{8}{37}}{29.0\frac{8}{37}}}}		0.82
95 102 11 55 40 10 8.9% 44.4% 32.3% 8.1%	8 6.5%	
96 103 17 46 30 24 13.7% 37.1% 24.2% 19.4%		
47 104 9 34 58 15 7.3% 27.4% 46.8% 12.1%	6 4.8%	2 1.6%
98 105 17 42 23 26 13.7% 33.9% 18.5% 21.0%	14 11.3%	1.6%

				DIST	RIBUTIO	V-TOP L	INE	
COLUMNS OF CONTROL 002-002 FURM 1	GROUPS 004-004 SEX	COL	1	. 2	3	4	5	TIMO
TOTAL RECORDS	124** 49	106	14 11.3%	41 33.1%	27 21.8%	25 20.2%	14 11.3%	2.4%
all	/00	107.	12 9.7%	44 35.5%	20 16.1%	27 21.8%	18 14.5%	3 2.4%
Black	/0/	108	26 21.0%	37 29.8%	24 19.4%	15 12.1%	20 16.17	2 1.6%
	102	109	71 57.3%	19 15.3%	15 12.1%	9 7.3%	7 5•6%	2.4%
The same of the Arrangement of the same of	103	110	5 4.0%	25 20.2%	48 38.7%	35 28.2%	9 7.3%	2 1.6%
		111	24 19.4%	48 38.7%	27 21.8%	15 12.1%	9 7.3%	0.8%
	105	112	4 3.2%	6 4•8%	16 12.9%	57 46.0%	39 31.5%	2 1.6%
	104	113	56 43.2%	27 21.8%	19 15.3%	14 11.3%	3.28	4 3.2%
	107	114	3 2.42	7 5.6%	13 10.5%	52 41.9%	47 37.9%	2 1.6%
							3.2%	
	109	116	3 2.48					
							39 31.5%	
		118	6 4.88	43 34.7%	33 26.6%	21 16.9%	17 13.7%	4 3.2%
***************************************	112	119	15 12.1%	22 17.7%	37 29.8%	33 26.6%	14.3%	2.48
The state of the s	113						7 5.6%	2
· · · · · · · · · · · · · · · · · · ·	114		4	8	16	66	27	
American managan ara a gara gara a	115	122					22 17.7%	3 2.4%
	116	123	3 2.4%	8 6.5%	25 20.2%	58 46.8 3	26 21.0%	3.28
TOTAL RECORDS TOTAL ANSWERS	124** 4,464**		617 13.8%	1022	1021 22.9%	1199 26.9%	542 12.1%	63

APPENDIX H

RESPONSES OF THE TOTAL SAMPLE TO EACH

ITEM IN THE INSTRUMENT

APPENDIX H

TOTAL

 .			TOTA	.L				
07-11-74				DISTR	IBUTION	-TOP LI	NE	
COLUMNS OF CONTROL G 002-002 FORM	ROUPS R CO4-CC4 C SEX		1	2		4	5	OMIT
TOTAL RECORDS	2.287*** /	8		1011 44.2%			93 4.1%	4 0.2%
TOTAL-		9	116 5.1%	463 20.2%		865 37.8%	473 20.7%	0.0%
SO. COMPLEY.		10	422	1086	447	248	66	18
<	4	11	280 12.2%	353 15.4%		530 23•2%	608 26.6%	10
4 <u> </u>	5	12		1042	427 18.7%	187 8.2%	94 4.1%	19 0.8%
		13.	252 11.0%	839 36.7%	733 32.1%	302 13.2%	158 6.9%	
Salahan and Andrews and Andrew	7	14	303 13.2%	863 37.7%	797 34.8%	256 11.2%	65 2•8%	0.1%
·	8	15	107 4.7%		237 10.4%			0.2%
	9	16		737 32.2%			114 5.0%	
(ve. 151 - 55 15 55 55 55 55 55 55 55 55 55 55 55	/o	17	1.8%	170 7.4%	618 27.0%	1073	378 16∙5≵	0.3%
***************************************	"	18		264 11.5%		768 33.6%		11 0.5%
	12.	19	. 53 2.3%	237 10.4%				0.28
	/3	20	375 16.4%	773 33.8%	508 22.24	381 16.7%	241 10.5%	9 0.4%
		21	450 19.7%	512 22.4%	440 19.27	727 31.8%	153 6.7%	5 0 • 2%
	15	22		966 42.2%			112 4.9%	2 0.1%
	. 16	23	74 3•2%	70 3.1%	102 4.5%		1111 48.6%	
	17	24					615 26.9%	0.1%
· • · · · · · · · · · · · · · · · · · ·	18	25	69 3.0%	154 6.7%	195 8.5%	1297 56.7%	566 24.7%	6 ·····
							_	

	_	DIST	RIBUTION	N-TOP LI	NE	
COLUMNS OF CONTROL GROUPS REC 002-002 004-C04 COI FORM SEX		2	3	4	5	OM IT
TOTAL RECORDS 2,287*** 19 26	3 220 9.6%		619 27.14		116 5.1%	
TOTAL - 20 27			267 11.7%		766 33.5%	0.1%
SOUTH COMPLEX.	3 185 8.1%		686 30.0%			
ひレ 29			298 13.0%			0.1%
23 30	346 15.1%				184 8.0%	7
24 31	297 13.0%	1074 47.0%	582 25•4%	255 11.1%	71 3.1%	8 0.3%
كلا 32	384 16.8%	1047 45.8%	561 24.5%	192 8.48	102 4.5%	0.08
24 33	49 2.1%		284 12.48			
ン) 34					e v 400 17.5%	
2 Ø 35	198	428 18.7%	890 38•9%	651 28.5%	116	4 0.2%
પ્યું 36	213 9.3%	664 29•0%	714 31.2%	502 22.0%	190 3.3%	4 0.2%
30 3 <u>7</u>	255 11.1%	641 28.0%	571 25.0%	657 28.7%		0.13
3/ 38	350 15.3%	550 24.0%	479 20.9%	751 32.8%	149 6.5%	8 0.3%
	129 5.6%	410 17.9%	882 38.6%	741 32.4%	120 5.2%	5 0.2%
33 40	750 32.8%	1050 45.9%	281 12.3%	127 5.6%	75 3.3%	0.2%
3441	188 8.2%		469 20•5%			5 0.2%
3542	942 41.2%	756 33.1%	471 20.6%	49 2.1%	61 2.7%	8 0.3%
36 43					145	

•			* •	DIST	REBUTION	N-TOP LI	INE	
COLUMNS OF CONT 002-0 FORM	ROL GROUPS 002 0C4-C04 SEX	REC		. 2	. 3	4	5 .	TIMO
TOTAL RECORDS	2,287***	*3744		469 20.5%			87 3.8%	16 0.7%
TOTAL -		38 45	89 3.9%	251 11.0%			100 4.4%	
SOUTH COMP	~LEX,	39 46					235 10.3%	5 0.2%
		40 47	164 7.2%	384 16.8%	448 19.6%	1008 44.1%	277 12.1%	6.3%
		4/ 48	113 4.9%	336 14.7%	496 21.7%	1039 45.4%	301 13.2%	2 0.1%
		41 49	181 7.9%	1092 47.7%	531 23.2%	372 16.3%	107 4.7%	4.0.2%
		43 50	215 9.4%	435 19.0%	696 30.4%	733 32.1%	199 8.7%	9 0 • 4%
,	•••••		382 16.7%	851	403	394		5
	en de company de la company de	4552	382 16.7%	840 36.7%	625 27.3%	292 12.8%	137 6.0%	11 0.5%
		46 53	201 8.8%	550 24.0%	674 29.5%	642 28.1%	212 9.35	8
		47 54	159 7.0%	884 38.7%	371 16.2%	647 28.3%	221 9.7%	5 0.2%
<u> </u>		48 55		368 16.1%	502 22.0%	1219 53.3%	107	7
		49 56		1210 52.9%				6 0.3%
	***************************************	50 57	88 3.8%	886 38.7%	728 31.8%		68 3.0%	7
The second of th		5/ 58		741 32.4%			107 4.7%	10 0.4%
		S 2 59	82 3.6%	268 11.7%	232 10.1%		422 18.5%	5
The second secon		\$3 60	32 1.48	111	751 32.8%	1097 48.0%	284 12.48	12 0.5%
	······································	6461		348	400	1071	360 15.7%	7

COLUMNS OF CONTROL GROUP	S REC		DISTR	REBUTEON	I-TOP LI	NE	· • • · · · · · • • • • · • · ·
002-002 004- FORM SEX		1	. , , 2	3	. 4.	<u></u> 5	OMIT
TOTAL RECORDS 2,28	7***5562		151				
TOTAL -	56 63.		1094 47.8%				8
SOUTH COMPLEX.	57 64	253 11.1%	423 18.5%	280 12.2%	1036 45.3%	290 12.7%	5 0.2%
·	S 65	57		683	745	•	6.3%
F	59 66	135 5.9%	429 18.8%	531 23.2%	1069 46.7%	115	8
D	6067	322 14.1%	980 42.9%	403 17•6%	427 18.7%	150 6.6%	
H	6/68	1014	804 35•2%	195 8.5%	188 8.2%	81 3.5%	5
P	6269	196	1072	594	346	75 3.3%	4
W	63 70	50 2.2%	168 7.3%			365 16.0%	3 0.1%
· · · · · · · · · · · · · · · · · · ·	64 71	516 22.6%	659 28•8%	376 16.48	620 27.1%	109	7
	6572		224 9.8%			243 10.6%	
×	66 73	35 1.5%	105 4.6%	209 9.1%	1521 66.5%	414 18.1%	3 0.1%
75.		400 17.5%				77 3.42	
8	68 75		772 33.8%		626 27.4%	• • •	5.0.2%
r	69 76	432 18.9%	826 36.1%	535 23.4%	360 15.7%	131 5.7%	
\dot{p}	70 77	376 16.4%	1231 53.8%	404 17.78	231 10.1%	44 1.98	0.0%
r	7/ 78	409 17.9%	894 39.1%	690 30.2%	237 10.4%	40 1.7%	17
29.	7279		1229	403	161 7.0%	56	5
And the second s							

	•			DISTR	RIBUTION	I-TOP LI	NE	
COLUMNS OF CONTR 002-00 FORM		REC	1	_. 2	3	4	5	TIMO
TOTAL RECORDS	2,287***73	80	94 4.1%	309 13.5%			120 5.2%	6. 0.3%
TOTAL-		81	214 9.4%				77 3.4%	•
SOUTH COMPLEY	75	82			249 10.9%		902 39.4%	9.48
	76	83_	73 3.2%	259 11.3%	541 23.7%	1191 52.1%	207 9.1%	16 0.7%
	77	84	154	502 22.0%	856 37.48	662 28.9%	103 4.5%	10 0.4%
	78	85	172 7.5%					
	79	86	1236 54.0%				84 3.7%	
and the second s	80	87.	92 4.0%	298 . 13.0%	225 9.8%	1273 55.7%	390 17.1%	9 0.4%
TOTAL RECORDS							19408 10.6%	

COLUMNS OF CONTRO	OL GROUPS REC		DIST	RIBUTION	-TOP LI	NE	
002-002 FORM	2 004-004 COL SEX	1	2	3	. 4	. 5	OMIT
TOTAL RECORDS	2.287*** 88			532 23.3%			6 0.3%
total	82 89		404 17.7%	889 38.9%			9 0.48
	83 90	849 37.1%	964 42.2%	294 12.9%	122 5.3%		8
(<u>,,</u>	84 91	1253 54.8%	722 31.6%	136 5.9%	98 4.3%	71 3.1%	7
P.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	85 92	406 17.8 የ	826 36.1%	805 35.2%	197 8.6%	43 1.9%	10 0.4%
P	86 93	103 4.5%		945 41.3%			10 0.4%
	87 94	99 4•3%	173 7.6%	355 15.5%	961 42.0%	693 30.3%	6 0.3%
		65 2.8%	479 20.9%	669 29.3%	837 36.6%	225 9•8%	12 0.5%
7 <u></u>	89 96	109		627 27.4%		272 11.9%	13 0.6%
		75 3.3%	463 20.2%	813 35.5%	782 34.2%	142 6.2%	0.5%
	9 1 98	85 3.7%	176 7.7%	112 4.9%	1346 58.9%		14 0.6%
•	9 2 99			565 24.7%		46 2.0%	
er in men men op met en en met en er en	93 100	58 2.5%	354 15.5%	612 26.8%			17 0.7%
		211 9.2%	858 37.5%	572 25.0%	510 22.3%	124 5.4%	0.5%
	95 102		1049 45.9%	599 26•2%	208 9.1%	75 3.3%	11 0.5%
	96 103	393 17.2%	931 40.7%	489 21.4%	360 15.7%	95 4•2¥	19
	47 104		839 36.7%	1047	207 9.1%	54 2.4%	25 1-1%
	98 105	339 14.8%		346 15.1%	522 22.8%	259 11.3%	18

			DISTRIBUTION-TOP LINE											
COLUMNS OF CONTROL 002-002 FORM	L GROUPS R 0C4-C04 C SEX		. 2	3	4	5	OMIT							
TOTAL RECORDS	2,287*** 1	06 286 12.5%	1068 46.7%	504 22.0%	316 13.8%	92 4.0%	21. 0.9%							
TOTAL	(00 1	07 142 6.2%		449 19.6%		253 11.1%	18							
SOUTH.	/0/ ¹	08 632 27.6%	744 32.5%			187 8•2%	20 0.9%							
	/02 1	09 1353 59.2%			127 5.6%	63 2.8%	15 0.7%							
	103 1	10 101 4.4%	571 25.0%		554 24•2%	145 6.3%	16 0.7%							
The second secon	104 1.	11 276 12.1%	911 39.8%	747 32.7%	253 11.1%		13							
	105	12 37 1.6%	113 4.9%	275 12.0%	1102 48.2%	743 32.5%	17 0.78							
	106 1	13 819 35.8%	519 22.7%		396 17.3%	145 6.3%	21							
	107 1	14 59 2.6%	189 8.3%	268 11.7%	1056 46•2%	695 30•4%	20 0.9%							
·	108 11	15 174 7.6%	543 23.7%	915 40.0%	544 23.8%		22							
	109 11	16 44	88 3.8%			798 34•9%								
				223	1274	619 27.1%	17							
	/// 11	18 200 8.7%		565 24.7%		235 10.3%	26 1.1%							
	11211	19 261 11.4%	506 22.1%	495 21.6%	685 30•0%	320 14.0%	20							
	//3 12	272 11.9%	621 27•2%				19							
to the second of	11412	21 57 2.5%		269 11.8%		417 18.2%	20							
	11512	22 45 2.0%	345 15.1%	618		267	25							
	Nb 12	23 39	· •	468	1246	413 18.1%	20							
	2,28 7*** 82,332***		20452 24.8%				582. 0.78							

APPENDIX I

ANALYSIS OF VARIANCE TESTS, BY RACE

APPENDIX I

ANALYSIS OF VARIANCE TESTS, BY RACE

MSU STAT SY	STEM VERSION 3.1	QB 7-19-74			Ţ	IME LAPSED 27.	.20 PA	GE /07/74
CASE 2000		*** - **	-					
RACE	QUIET	LIMV	SEX	SU81	SUB2 51.000000	SUB3	SUB4	SUB5
0.000000		0.00000	1.000000	40.000000	51.000000	31.000000	35.000000	63.0000n
SUB6 18	SUB7 11 22.009000	SUB8 12 77.00000	SU89 13					
46.003330	22.000000	77.000000	365.000000			•		
CASE 2200	_				•			
RACE	QUIET	LŢĦV	ŞEX	SU91	SU 82	รที่83	SU84	Supe
ก.อากภ้ออ	. 0.000500	0.00000	1.000000	38.000000	49.000000	32.000000	37.000000	SU85 9 9 9
SU 96 10	SU 87 11	SU88 12	SU99 13					23.068088
42.000000		69.១១០៎ក្ខែ០	351.000000					
* * * DATA INP	UT TERMINATED BY	END-OF-DATA C	ARD					
NUMBER OF CASE	S READ 2262 DROP	PED 0 AND	RETAINED 2262					
SINGLE PRECISE	ON FILE OF 2262 3	ASES AND 13	VARS. CREATED O	N D07/M09/74	•			

	VAR	MINIMUM		MEAN	SUM OF SQUARES	MISSING ELEMENTS
RITEVX11234556759 RITEVX11234556759 RULL SUURI GEBERTS SUURI GE	12345678901123	00000000000000000000000000000000000000	10.00000000000000000000000000000000000	95653163914 934848593689 793486593664 793486664	631.000 271.000 311.000 111	22222222222222222222222222222222222222

N
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MSU STAT SYSTEM	VERSION 3.1	7-19-74	=======================================	# = = = :	=======================================		TIME 12,39,49	
,	STAT	ristics	S FOR	E	CH CA	TEGORE	ELAPSED 47.811	L 08/07/74 3
:		DEPENDENT VA	ARIABLE IS	X(9	5) S L) R	T E C ORTO		
(OVERALL) HINI	HUM VALUE-	25.000000	MAXIMUM	VALUE-	58.0	303	\	
o black	• SUH	FREQ	MEAN	MEAN	INCREMENT	SUM OF SQUARES	STANDARD DEVIATION	SUM OF SQUARED DEVIATIONS FROM THE MEAN
3 - other	85719.000000	2262 37	7.89522546			3303109.0000100	4.92163515	54763.168435
CATEGORY	78689.903033 4570.909033 539.900003 1921.000003	121 37 15 39	7.93414258 7.76459504 5.93333333 3.4200330		• 008917 • 125630 • 1.961892 • 524775	3032581.0003200 175504.0030300 19637.000003	5.00125736 4.39285738	49941.924374 3001.520661 269.933333 1482.180000
ANALY	SIS OF	VARIA	NCE T	ABL	E (ALLOHS	A SEPARATE MEA	N FOR EACH CATEGO	ORY)
٠.		DEPENDENT V	VARIABLE IS	X (5)	SUB1 RACE		
SOURCE OF VARIANCE	St	JM OF SQUARES	DEGS. FREEDO		MEAN SQUA	RE F STATIS	TIC PROBABILITY	IGNIFICANCE OF F STAT.
PETHEEN CATEGORIES		73.61006673	3 3		24.536688	91 1.01	297 •386	•
HITHIN CATEGORIES	· 5	694.55 836831	L 2258		24.222567	92		
TOTAL	54	.768.16843504	2251			MULTIPLE • 0 366	CORRELATION COEF	R2) E ETA

MOII STAT SYSTEM VERSTON 3.1AR 7-10-74						
	MCII	CTAT	CVCTCM	VESCTON	7 4 00	7-40-7/

STATISTICS FOR EACH DEPENDENT VARIABLE IS X (CATEGORY VARIABLE IS X (SUB2 RACE (OVERALL) MINIMUM VALUE-27.000000 MAXIMUM VALUE-65.0000 SUM OF SQUARED DEVIATIONS FROM THE MEAN STANDARD DEVIATION SUM OF SQUARES SUM FREQ MEAN MEAN INCREMENT 111789.000000 "2262 49.42042440 5554007.3030300 4.17163694 39347.176393 CATEGORY 0.303222 2076 121 15 50 49.47667861 48.74380165 48.53333333 48.98000000 35393.890173 2775.057851 117.733333 976.980000 5117362.0030300 290266.0000030 35450.0000000 120929.0000000 728.000055 2449.300033

ANALYSIS OF VARIANCE TABLE (ALLOWS A SEPARATE MEAN FOR EACH CATEGORY)

DEPENDENT VAPIABLE IS X (CATEGORY VARIABLE IS X (

SURZ

SOURCE OF Variance	SUM OF SQUARES	DEGS. OF FREEDOM	MEAN SQUARE	F STATISTIC	APPROX. SIGNIFICANCE PROBABILITY OF F STAT.
RETWEEN CATEGORIES	83.51593459	3	27.83934486	1.60095	.187 ≺
WITHIN CATEGORIES	39253.66135800	2258	17.38868971		
TOTAL	39,347.17639259	2261		MULTIPLE CORI	RELATION COEFFICIENT SQUARED (R2) = ETA .002123

MSU STAT SYSTEM	4 VERS	ION 3.	109 7-19-7	4				Ţ	IME 12.39.50 LAPSED 48.114	PAGE 8 08/07/74	
		STA	TISTI	OS FOR	R EA	C H C	ATEG	ORY	ERF320 401114	40747774	
			DEPENDENT CATEGORY	VARIABLE IS	S X (7)	}	SUB3 #	o R Y	4 .		
(OVERALL) MIN	V MUMIN	ALUE-	21.0000	IUMIXAM DO	M VALUE-	51.	0000			SUM OF SQUARED	
		SUM	FREO	HEAN	MEAN :	INCREMENT	SUM 0	F SQUARES	STANDARD DEVIATION	DEVIATIONS FROM THE MEAN	
-	76503	. 90003	0 2262	33.8209549	1		261959	9.000000	3.77932214	32294.486737	
CATEGORY 9-200000 1-207070 2-207000 3-207000	4107 482	. 90300 . 90300 . 90000	0 121 0 15	33.9135838; 33.9421487; 32.133333; 34.3400000	5	007371 .121194 -1.687622 .519045	14219 1579	7.0010101 9.0010100 2.0000001 1.0000000	3.69205314 4.82924687 4.65781473 4.16305422	28284.856936 2798.595041 303.733333 849.220000	24
ANAL	YSI	s 0	FVARI	ANCE	TABLI	E (ALLO	IS A SEP	ARATE MEAN F	OR EACH CATEGOR	PY)	G
•			DEPENDEN CATEGORY	T VARIABLE	IS X(? }	SU93 RACE				
SOURCE OF VARIANCE			SUM OF SOUR	RES FREE	OF DOM	MEAN SQL	JARE	F STATISTIC	APPROX. SIG	NIFICANCE OF F STAT.	
RETHEEN CATEGORIES	S		58.08142	2633	3	19.36047	7544	1.35611	. 254		
WITHIN CATEGORIES	S		32236.43531	119 225	8	14.2765	3025				
TOTAL			32294.48673	3742 226:	1			MULTIPLE CO .042439	RRELATION COEFF SQUARED (R2 •001798	ICIENT ETA	

MSU STAT SYSTEM VERSION 3.10B 7-19-74	TIME 12.39.50 PAGE 9 ELAPSED 48.259 08/07/74
STATISTICS FOR EACH CATEGORY DEPENDENT VARIABLE IS X(8) SUB4 ACALES CATEGORY VARIABLE IS X(1) RACE	•
CATEGORY VARIABLE IS X(1) RĂCE (OVERALL) MINIMUM VALUE- 19.000000 MAXIMUM VALUE- 50.0000	
SUM FREQ MEAN MEAN INCREMENT SUM OF SQUARE	SUM OF SQUARED STANDARD DEVIATIONS S DEVIATION FROM THE MEAN
78256.000000 2262 34.59593280 2744058.000000	4.02989067 36718.682582
CATEGORY	ñ 4.19999344 2116.793368 0 4.34576970 264.40000 №
ANALYSIS OF VARIANCE TABLE (ALLOHS A SEPARATE ME	AN FOR EACH CATEGORY)
DEPENDENT VARIABLE IS X(8) SUB4 CATEGORY VARIABLE IS X(1) RACE	•
SOURCE OF DEGS. OF VARIANCE SUM OF SQUARES FREEDOM MEAN SQUARE F STATI	APPROX. SIGNIFICANCE STIC PROBABILITY OF F STAT.
RETHEEN CATEGORIES 59.00069625 3 19.66689875 1.2	1135 •304
WITHIN CATEGORIES 36,559.68188555 2258 16.23546585	
TOTAL 36718.68258183 2261 MULTIPL .040	E CORRELATION COEFFICIENT R SQUARED (R2) = ETA 085 .001607

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MSU STAT SYSTEM	VE		N 3.1		-19-74		_				.					TIME	12.39.50 SED 48.408	PAGE 10 08/07/74	
		3		DEPE	T I C NOENT SORY	VAR:	F IARLE IABLE	OR IS IS	χ(E A 9) 1)	υн		N T E SUB5 RACE		متنكنت	من			
(OVEPALL) MIN	HUMI	VAL	.UE-	36	.0000	10	MAXI	MUH	VAL	UE-		78.0	000					SUM OF SQUARED)
		SU	M	FPE	J.	Mi	EAN		ME	AN I	NCR	EMENT	SUM	0F	SQUARES		STANDARD DEVIATION	DEVIATIONS FROM THE MEAN	4
	1264	92.0	0200	225	2	55.	92042	2440					7120	434.	0010100		4.55676645	46947.676393	3
CATEGORY 1.000000 1.000000 2.000000	66	65. ¶ 32. ¶	00000	12	1	55.0	95616 98256 46566	4453 6657			8	35741 37780 53758 79576	3699	987. 336.	0000000 0000000 00000000		4.53813194 4.88294101 3.35658557 4.69476478	42735.011079 2861.173554 157.733333 1080.00000	
ANAL	YS	IS	0 1		A R I		C E RIABI		A B S X(S X(: !}	(ALLOWS	S A SE	EPAR	ATE MEA	N FOR	EACH CATEGOR	RY)	4/
SOUPCE OF VARIANCE			!	SU4 0F	SQUAR	RES	O F	EGS. REED	OF OM		ME	AN SQUA	ARE	F	STATIS	TIC	APPROX. SIC PROPABILITY	GNIFICANCE OF F STAT.	
PETHEEN CATEGORIES	;			113.	758426	552		3			37	.919479	551		1.82	821	.140		
WITHIN CATEGORIES				,	91796		;	2258			2Ն	.741327	771						
TOTAL			(•69 47 .	676392	259	•	2261						М	ULTIPLE R 0492	CORRE	ELATION COEFF Squared (R2 .032.423	FICIENT E ETA	

HSU STAT SYSTEM VERSION 3		(TIME 12.39.51 ELAPSED 48.554	PAGE 11 08/07/74
	A T I S T I C S F O R DEPENDENT VARIABLE IS CATEGORY VARIABLE IS	X(10) SUBS Parco	<i>I</i> /	•
(OVEPALL) HINIHUM VALUE-	HUHIXAH OCOOON.85	VALUE- 68.0000		SUN OF SQUARED
SUM	FREQ MEAN	MEAN INCREMENT SUM OF SQU	JARES STANDARD DEVIATION	DEVIATIONS FROM THE MEAN
104118.0000	33 2262 46.02917772	4847786.000	00000 4.94642121	55320.074271
CATEGORY 0.303000 95371.0030 1.303300 5700.03000 2.000000 690.00000 3.3000000 2357.0030	00 121 47.13743802 00 15 46.0000000	089390 4431401.000 1.078250 272275.000 029178 31932.000 1.110822 112177.000	00360 5.60030017 00000 3.70328040	50077.473507 3763.603306 192.000000 2
ANALYSIS O	F VARIANCE T	A B L E (ALLOWS A SEPARATE	E MEAN FOR EACH CATEGOR	ω (Υ)
-	DEPENDENT VARIABLE IS CATEGORY VARIABLE IS	X(10) SUB6 X(1) RACE		
SOURCE OF VAFIANCE	SUM OF SQUARES FREEDO	OF .	TATISTIC APPROX SIG	
PETHEEN CATEGORIES	218.97745803 3	72.99248601	2.99118 (.030	
WITHIN CATEGORIES)	55111.09681258 2258	24.46261152	*******	
TOTAL	55320.07427061 2261		TIPLE CORRELATION COEFF SQUARED (R2 062916 .003958	P) E ETA

MSU STAT SYSTEM VE	RSTON 3.	138 7-19-74 TISTICS	500 51		TIME 12.39.51 ELAPSED 48.702	PAGE 12 08/07/74
	3 1 4	DEPENDENT VARI	FOR EA ARLE IS X(11) ABLE IS X(1)	SH CATEGORY SUBT ANTERPE	romal.	
(OVEPALL) MINIMUM	1 VALUE-	15.309000	MAXIMUM VALUE-	39.0000		SUM OF SQUARED
	SUH	FREQ ME	AN " MEAN I	NCREMENT SUM OF SQUARE	STANDARD S DEVIATION	DEVIATIONS FROM THE MEAN
603	353.00000	0 72262 26.5	8125553	1634523.000000	0 3.28029953	24329.185234
1.J00000 32 2.J0J300 3	+18.00003 253.00000 384.00000	0 121 26.8 0 15 25.6		.013349 1501368.000000 .203342 88925.000030 1.081256 10015.000000 -721256 34314.003000	0 3.50045255 0 3.64103596	22006.379576 1470.380165 185.600000 2 617.920000 49
ANALYS	IS O	FVARIAN	CE TABLE	(ALLOWS A SEPARATE ME	AN FOR EACH CATEGOR	
		DEPENDENT VAR	IABLE IS X(11 IABLE IS X(1	SUB7 RACE		
SOURCE OF VAPIANCE		SUM OF SGUARES	DEGS. OF FREEDOM	MEAN SQUARE F STATE	STIC PROPABILITY	NIFICANCE OF F STAT.
BFTWEEN CATEGORIES		48.90549291	3	16.30183097 1.5	1603 .208	
WITHIN CATEGORIES		24280.27974140	2258	10.75300254		
TOTAL	;	24329.18523431	2261	MÜLTIPL • 044	R SQUARED (R2	2) = ETA

MSU STAT SYSTEM VERSION 3.10B 7-19-74 STATISTICS FOR EACH CATEGORY	TIME 12.39.51 ELAPSED 48.845	PAGE 13 08/07/74
DEPENDENT VARIABLE IS X(12) CATEGORY VARIABLE IS X(1) RACE RACE	nal	
(OVERALL) MINIMUM VALUE- 51.000000 MAXIMUM VALUE- 100.0000		Ally AF ABULARA
SUM FRED MEAN HEAN INCREMENT SUM OF SQUARES	STANDARD Deviation	SUM OF SQUARED DEVIATIONS FROM THE MEAN
167601.000000 74.09416446 12499119.0000000	5.98032093	80862.942971
CATEGORY	5.90645347 6.98668616 5.28970249 6.92139540	72368.849711 5691.173554 N 391.733333 U 2347.380060 O
ANALYSIS OF VARIANCE TABLE (ALLOHS A SEPARATE MEAN	N FOR EACH CATEGO	RY)
DEPENDENT VARIABLE IS X(12) SUBB CATEGORY VARIABLE IS X(1) RACE		
SOURCE OF THE SUM OF SQUARES FREEDOM MEAN SQUARE F STATIST	IC PROPABILITY	GNIFICANCE OF F STAT.
RETHEEN CATEGORIES +3.80637279 3 14.60212426 .407	797 .747	
WITHIN CATEGORIES 80319.13659814 2258 35.79235456		
TOTAL \$0862.94297093 2261 HULTIPLE R 0 2327	CORRELATION COEF SQUARED (R	2) = ETA

MSU STAT SYSTEM VERSION S T	ATISTICS FOR DEPENDENT VARIABLE IS	EACH CATEGORY ((13) SUB9 COTAL ((1) RACE	TIME 12.39.52 ELAPSED 48.981	PAGE 14 08/07/74
(OVEPALL) MINIMUM VALUE SUM	- 279.000000 MAXIMUM V FPEQ MEAN	MEAN INCREMENT SUM OF SQUARES	STANDARD Deviation	SUM OF SQUARED DEVIATIONS FROM THE MEAN
810831.000	1011 2262 358.45755968	. 291453595.0000000	18.93205134	810393.425730
CATEGORY	0010 121 358.65289256 1900 15 350.73333333	.034251267524965.0030000 .195333 15616405.0030000 -7.724226 1848365.0030000 .422440 6469160.0000300	13.69171115 23.80573258 15.01649886 24.50209487	724962.860791 51945.421488 3156.933333 N 29417.280000 U
ANALYSIS	OF VARIANCE T	A B L E (ALLOHS A SEPARATE MEAN	FOR EACH CATEGOR	L (188
	DEPENDENT VARIABLE IS CATEGORY VARIABLE IS	X(13) SUB9 X(1) RACE		
SOURCE OF VAPIANCE BETHEEN CATEGORIES	SUM OF SQUARES FREEDO			NIFICANCE OF F STAT.
WITHIN CATEGORIES	839482.49561122 2258	358.49534792		
TOTAL	810393.42572975 2261	MULTIPLE (R • 0 3352	CORRELATION COEFF SQUARED (R2 7 .301124	E) E ETA

APPENDIX J

ANALYSIS OF VARIANCE TESTS, BY SEX

APPENDIX J

ANALYSIS OF VARAINCE TESTS, BY SEX

MSU STAT SYSTEM		-					_											TIM	SED 4	42.19	PAGE 6 08/07/74
		STA	TI	STI	C	S	FO	R	£	A	СН	C	A	TE	G	0 R	Y	•			• • • • • • • • • • • • • • • • • • • •
			DEP CAT	ENDEN EGORY		ARIAS ARIAS			K (5) 4)			SU S	81 EX					•		
(OVERALL) MINI	AV HUM	LUE-	2	5.000	600	MA	XIM	UM 1	/ALU	E-		58	00	63							
	S	W M	FQ	: 0		MEAN	l		MEAI	N I	INCRE	MENT		รบฯ	OF	SQ	UARES		STANDA DEVIAT	30	JH OF SOUARE DEVIATIONS FROM THE MEAN
	85719.	00000	0 22	62	3	7.895	225	46					3	303	169	. 0 G	0000		4.9216	8515	54768.16843
CATEGORY																					
male 7.303000	44984. 41635.	00100	0 11 P 11			7.938 7.850			•		- 04	2812 5225	1	697 605	322 787	.00	33000		4.6275 5.2161	1561	24861.53872 29902.25030
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			CÃ	1500 55405	NT Y	VARIA Varia	BLE	IS IS	X (5	5)		S	U31 SEX							
SOURCE OF VAPIANCE			0 PU2	F SOU	ARE:	S	Dig Fre	S. (GF .		MEA	N SQ	JAR	E		FS	TATIST	TIC	APPROPAB	X. SIGNI	FICANCE F STAT.
STWEEN CATEGORIES	-	•••	. 4	. 3797	286	B		1			4.	3797	86	8			. 193	374	.671		
ITHIN CATEGORIES			54763	7887	263	6	22	60			24.	2317	549	2							
OTAL		•	54768	1684	350	4	22	61								HUL'	TIPLE	CORR	ELATION	COEFFIC	IENT

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B5	TWEEN	CATE	GOR	IES						1	119	31.	47	808	98	8			1	L			11	91.	47	808	8 9	8			7	70.57	243	•	<0.0	005	;						
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						CAT	EVD EGO	ENT RY		RIA	BLE	IS IS	X (7	?) ;}				JB3 SEX				-		· ·
(OVERALL)	MINI	HUH	VAL	UE-		S	1.0	000	00	M	AXII	NUI	VAL	.UE-	•		51	.00	00						SUM OF SQUARED
			SU	M		FR	ΕQ			HEAI	4		Mé	AN	IN	CREI	ENT		301	ı OF	S (QUARES	5	STANDARD DEVIATION	DEVIATIONS FROM THE MEAN
		7650	3.0	03 0	0 3	22	62		33	.829	954	91						2	2619	9699	.00	00000	ì	3.77932214	32294.486737
CATEGORY 0.101000 1.00000		3900 3750	3.0	0000	00	11 11	62 13				5404 0969				-	• 25 • 26	550 1954	1				000300		3.70342531 3.84112476	15923.529260 16214.919091
: ANA	LY	S	S	- 0	F	V	4	R I	A	N C	E	T	4 6	L	Ε	C	LLO	HS	A S	SEPA	RAT	TE MEA	N FO	R EACH CATEGO	RY)
						ne CA	PEN TEG	05V	T V	ARI	ABLE	Ī	S X		7 }			S	SEVS SEX	3					
SOURCE OF VARTANCE					SU	н о	F S	AUD:	RES		DEC FR.					MEAN	s s q	UAR	ŘΕ		F S	STATIS	TIC	APPROX. SI PROBABILITY	
BETHEEN CATEGOR	IES					156	. 94	838	659			1			1	56.0	483	865	59			10.97	7344	.001	
WITHIN CATEGOR	IES				32	1 38	. 43	835	J82		22	26G				14.2	205	479	34						
TOTAL					32	294	.48	673	742	•	. 22	261									HUL	.J695	?	RELATION COEF SQUARED (R .00483	2) E ETA

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PSU STAT SYSTEM VERSION 3.109 7-19-74	TIME 18.42.19 ELAPSED 47.398	PAGE9
STATISTICS FOR EACH CATEGORY	ECAPSED 41.340	08/07/74
DEPENDENT VARIABLE IS X(8) SUB4 CATEGORY VARIABLE IS X(4) SEX		
(OVEPALL) MINIMUM VALUE- 19.000000 MAXIMUM VALUE- 50.0000		SUN OF SQUARED
SUM FREQ MEAN MEAN INCREMENT SUM OF SQUARES	STANDARD Deviation	DEVIATIONS FROM THE MEAN
78256.00000 2262 34.59593280 2744.58.0000000	4.02989067	36718.682582
CATEGORY 6.907000 40084.007037 1162 34.49559707100236 1491940.00700000 1.000000 38172.000000 1170 34.73181818 .105885 1342118.0000000	4.96815155 3.98417592	19214.478485 17480.196364
ANALYSIS OF VARIANCE TABLE (ALLOHS A SEPARATE MEAN	FOR EACH CATEGOR	ហ
DEPENDENT VARIABLE IS X(8) SUB4 CATEGORY VARIABLE IS X(4) SEX		
SOUPCE OF DEGS. OF VAPIANCE SUM OF SQUARES FREEDOM MEAN SQUARE F STATIST	IC PROBABILITY	NIFICANCE OF F STAT.
RETHEEN CATEGORIES 24.00773278 1 24.00773278 1.478	62 .224	
WITHIN CATEGORIES 36694.67484902 2260 16.23658179		•
TOTAL 36718.5825818C 2261 HULTIPLE 02557	CORRELATION COEFF SQUARED (R2 0 .000654	?}

MSU STAT SYST	TEM	VE	RS]																									TI	ME APSET	18.42.20 47.527		PAGE 10 08/07/74
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							CĀ	PEN TEC	DE OR	Y Y		RIA				X (9) 4)					UB5 SEX								,	
(OVEPALL) N	INI	MUM	V	LU	E-			36.	80	000	3	*	1A X	IM	UM	VA	LUE	-			78	.0	000									
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	1	2649	٥2.	. 0 0	300	13	2	262	·		55	. 98	204	24	40								712	14.	34.	.00	30300		4.5	55675645		46947.67639
CATEGOPY					•										•																	,
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							Ü	E PE	e 0	ENT RY	V	AR!	[AB	LE	IS	§ . X	(9)				SU ⁿ SE	, X								
SOUPLE OF VARIANCE						SU	M	0F	sq	UAF	RES) F	E G	S. EDO	OF OM			M	EAN	ı sı	AU A	RE		F	FS	TATIS	TIC	PRO	PROX. SI	GNI OF	FICANCE F STAT.
WEEN CATEGOR	ES						11	9.	0.0	RRS	39				1				11	9.2	608	886	39				5.75	278	• (17		
HIN CATEGOR	IES					46	82	8.4	75	506	19			22	60				2	C.7	209	564	38									
AL	-					46	94	7. (76	392	59			22	61										•	1UL	TIPLE	COR	RELAI	TION COEF	ĘĮC	<u>IENT</u>

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		1	34	11	8.	0	63	333)	22	62	•		4	6.0	29	17	77	2								4	347	778	36.	. 8 0	00	200		4.9	464	2121	L	5!	5320	.0742	271	
CATEGOPY 0.701100 1.000100		;	5 3 5 0	31 8ú	3. 5.	0	00		}		. 62 . ü 0			4	5 • 8 6 • 1	3 û 8 F	37 36	8 o 3 6	6 4	,			-:	14 15	879 71 8	99 86	5	47 37	194 584	43.	00	3 0 3 0	200 000		4.7 5.1	252 6 7 3	1164 3594)	2	5922 3344	3726 7954	33	
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)FN)PY	T	VAF VAF	AIS	BL	E	IS IS	X	(10		•				UB(SE)															7
SOURCE OF VARIANCE						•		9	SU1	1 (F	sc	NU A	۹E:	s		DE FR	GS EE	óo	OF M			М	EAN	1 5	เดา	AR	ε		,	s	TA:	TIST	IC	PRO	PRO Bab	X. Ş İLI	IGN Y 0	IFIC F F	CANCI	i.		
STWEEN CATEGOR	IE:	\$				•••				52	. 9	86	18	26	2				1				5	2.9	906	18	26	2				2	. 163	45	.1	41							
HTTHIN CATEGOR	IE:	S			•	•		5	552	: 57	' • 1	56	198	79	9		2	26	0				2	4.4	454	49	91	5															
TOTAL						-			553	3 ?0	. 0	74	27	06	1		2	26	1														PL <u>=</u> 3092		ELAT So	UAR	COE ED ((R2)	CĪE	NT ETA			

MSU STAT SYSTEM		TISTICS	FOR E	ACH CATEG	EL	ME 18.42.43 APSED 47.809	PAGE 12 08/07/74	
		DEPENDENT VA		11) SUB7		•		
(OVEPALL) MIN	NIMUM VALUE-	15.000000	MAXIMUM VALU					
	SUM	FREQ '	MEAN MEA	N INCREMENT SUM OF	SQUARES	STANDARD DEVIATION	SUM OF SQUARED DEVIATIONS FROM THE MEAN	
	60353.00000	3 2262 26	.69125553	1634623	.0000000	3.28029953	24329.185234	
CATEGOPY G.101110 1.10000	30526.00000 2982 7.0 000	0 1162 26 0 1100 27	.27u22375 .11545455		.0000300	3.35742582 3.14038234	13097.149742 10838.3372 73	
ANAL	YSIS O	FVARIA	NCE TA'B	L E (ALLONS A SEPA	RATE MEAN FOI	R EACH CATEGOR	Y)	2
		DEPENDENT V CATEGORY V	ARIABLE IS X (11) SUB7 5EX				258
SOURCE OF Variance		SUM OF SQUARES	DEGS. OF FREEDOM	MEAN SQUARE	F STATISTIC	APPROX. SIG		
THEEN CATEGORIES	_	403.69821975	1	403.69821975	38.13331	<0.0005		
THIN CATEGORIES		23925.49701455		10.58649868				
TAL .		24329.19523431	2261	• .	HULTIPLE COR	RELATION COEFF SQUARED (R2 •J16593	ICIENT) = ETA	

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MSU STAT SYSTEM VERSION 3.109 7-19-74	TIME 18.42.43 PAGE 13 ELAPSED 47.952 08/07/74
STATISTICS FOR EACH	CATEGORY ELAPSED 47.952 Q8/Q7/74
DEPENDENT VARIABLE IS X(12) CATEGORY VARIABLE IS X(4)	SU38 SEX
(OVEPALL) MINIMUM VALUE- 51.000030 M4XIMUM VALUE-	100.6000
SUM FREQ MEAN MEAN INCREM	SUM OF SQUARED STANDARD DEVIATIONS LENT SUM OF SQUARES DEVIATION FROM THE MEAN
167661.003033 2262 74.09416446	12499119.0000000 5.98032093 80862.942971
CATEGORY C.3COROC 86481.000000 1162 74.42426850 .33C 1.3CO000 81120.009000 1160 73.74545455348)710 6J23Z36.0000300
	N Ui
	ILLOWS A SEPARATE HEAN FOR EACH CATEGORY)
DEPENDENT VARIABLE IS X(12) CATEGORY VARIABLE IS X(4)	SU99 SEX
SOURCE OF SUM OF SOURCES FREEDOM MEAN	APPROX. SIGNIFICANCE PROBABILITY OF F STAT.
RETWEEN CATEGORIES 260.38006987 1 260.3	8006987 7.30075 .007
WITHIN CATEGORIES 80602.56290106 2260 35.6	6495084
TOTAL 80852.94297093 2261	MULTIPLE CORRELATION COEFFICIENT R SQUARED (R2) = ETA .056745 .503220

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MSU STAT SYS	STEM VE	RSION 3.	108 7-19-7		=======		: # # # # # # # # # # # # # # # # # # #	TIME 18.42.43 ELAPSED 48.380	PAGE 14 08/07/74
		S T 4	TISTI	CS FOR	EAC	H CATEG	0 R Y	66H 254 43666	00701714
			DEPENDENT CATEGORY	VARIABLE IS		SUB3 SEX			
(OVEPALL)	MINIMUM	VALUE-	279.3000	MUMIXAM 68	VALUE-	500.0000			
		SUM	FREQ	MEAN	MEAN INC	CREMENT SUM O	F SQUARES	STANDARD DEVIATION	SUM OF SQUARED DEVIATIONS FROM THE MEAN
	8108	31.000001	22 62	358.45755968		29145839	5.0000000	18.93205134	810393.425736
CATEGORY									
1.00000		17.999900 14.00009	1162	356.98537005 360.61272727		.47219014846540 .55516314299348		18.13453443 19.62823531	381806.751291 423407.821819
ANA	LYS	IS O	. VARI	ANCE T	ABLE	(ALLOWS A SEP	ARATE MEAN	FOR EACH CATEGOR	(Y)
			DEPENDEN CATEGORY		S X(13)	SUR9 SEX			
SOURCE OF VAPIANCE		:	SUM OF SQUA	RES FREED		MEAN SQUARE	F STATISTI	APPROX. SIG	NIFICANCE OF F STAT.
BETWEEN CATEGOR	RIES		5178.85262	038 1	517	78.85262038	14.5359	1 <0.0005	
WITHIN CATEGOR	RIES	8:	5214.57310	937 2260	39	56.28963412			
TOTAL			L0393.42572		-		MULTIPLE 0	CORRELATION COEFF SOUARED (RZ 	?) E ETA

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SELECTED BIBLIOGRAPHY

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