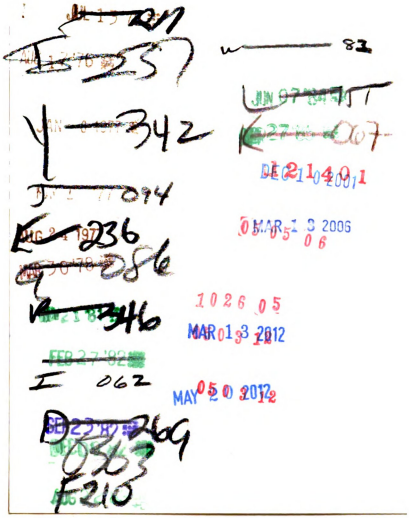
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ABSTRACT

COEDUCATIONAL AND SINGLE SEX RESIDENCE HALLS: AN EXPERIMENTAL COMPARISON

By

Lee Edward Jacokes

In this study an investigation of two variations of coeducational housing compared to traditional segregated or single sex facilities was made to experimentally evaluate the effects of single sex and coeducational housing on various behaviors, perceptions and personality characteristics of freshman men and women during their first year in college. Men and women were housed in each of three housing variations: 1) single sex, 2) wing by wing, 3) levels. A randomly ordered list of residence halls was compiled from which random distribution of freshman men and women to these residence halls was made.

Six living units were selected on the basis of similarity of physical facilities, common visitation hours, lack of special groups or programming within the living unit and no distinguishing campus or institutional characteristics from the other units in the study. Two hundred sixteen students out of three hundred ninety-seven volunteered for the study by completing a required participation agreement.

Three questionnaires were administered over the one year period of the study. The first questionnaire was administered during the summer of 1973 prior to the students' arrival on campus, the second was administered in November, 1973 and the third was administered in May, 1974.

The questionnaires contained information about the students' background and families, their experience with the university, their residence halls, their social and extracurricular activities, and measures of personality characteristics. Additional information was obtained from student files about academic performance and aptitude.

The experimental design consisted of the two independent variables; type of residence hall and sex. A total of seventy single dependent measures or repeated dependent measures were compared among the six experimental groups. Statistical analysis involved chi-square, analyses of variance, and cluster analysis.

Analysis indicated that there was little support for hypotheses suggesting that coeducational or single sex residence halls differentially affect students in any of the following areas: 1) academic perception and performance, 2) personality characteristics, 3) perception of institutional warmth and friendliness, 4) perception of residence hall warmth and friendliness, 5) religious perception and practices and 6) extracurricular activities. Evidence was found that dating behavior and satisfaction was differentially affected by coeducational and single sex residence halls.

Several specific variables which were used to test the above general areas did produce significant differences. There was evidence that coed environments may help improve grade point averages over time for men, that the more closely integrated coeducational residence halls may have influenced men and women to increasingly view their own sex as more superior over time, that coed environments significantly decreased their residents' ratings of student friendliness over time while single sex residents significantly increased their ratings and, that men in coeducational environments were involved in significantly less informal conversations with both sexes.

Students were equally satisfied with their dating opportunities on the campus regardless of residence hall environment. Coed residents dated more non-residents more frequently than they did fellow residents. Evidence suggested that the more closely integrated levels residence hall condition resulted in lower scores on the social dating scale than did the less integrated wings and single sex environments. Coeducational residence hall students were not involved in any greater degree of intimate dating behavior than single sex students; however, they were more intimately involved with fellow residents than with non-residents. Further, evidence suggests that coeducational residence halls influenced women to become significantly less involved in intimate dating behavior than women in single sex residence hall environments.

A number of sex differences were found. Women significantly increased their non-conformity ratings within the first two months at the university. Women dated significantly more people more often and they dated non-residents more often than did men. Both men and women in coed residence halls dated fellow residents at about the same rate but dated more non-residents more often than fellow residents.

Women had a higher social dating behavior rating with non-residents. Women experienced a significant increase in degree of intimate dating behavior with non-residents over time. Coed residence hall students, regardless of sex, experienced significant increases in degree of intimate dating behavior over time.

Both men and women experienced a significant decline in strength of belief in church doctrines and monthly church attendance within the first two months of attendance at the university. Women were significantly more involved in informal conversations with both other women and

men throughout the year while men were found to be significantly more involved in college organizations. A cluster analysis of the seventy variables in the study produced twelve clusters made up of forty-eight of the variables suggesting possible new scales to be used in future studies of this nature.

COEDUCATIONAL AND SINGLE SEX RESIDENCE HALLS: AN EXPERIMENTAL COMPARISON

By

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CHAPTER I

INTRODUCTION

THE PROBLEM

> During their four years of college life, our students would live together, not only under the same roof, but (preselected on the basis of careful psychological tests) heterosexual couples would share the same quarters: a study room, a bathroom, and a bedroom with twin beds. This unconventional living arrangement was the keystone of our proposal . . . this study would provide the blueprint for a new sexually oriented aristocracy of individual men and women who were free of sexual inhibitions, repressions, and hate, and were thoroughly educated into the meaning and the art of love as distinguished from the purely sexual relationship. The Harrad Experiment.

Thus began Robert H. Rimmer's novel The Harrad Experiment (1966). In the novel, Harrad College was a four-year liberal arts college with one unique additional component: men and women were expected to sleep together in the residence halls of Harrad College as part of their four-year collegiate experience. Through this "coed" sleeping arrangement and an intensive curriculum component aimed at the psycho-social-sexual development of the student, each Harrad graduate was to become a fully sexually, as well as intellectually, educated individual. Although no present-day educator is openly recommending that the Harrad Experiment be made a reality, those who oppose the presence of coed housing on American campuses might point to the Harrad Experiment as the logical and ultimate consequence of liberal housing policies. It has been said that the "coed" rooming patterns suggested in the Harrad Experiment are

in fact a reality in many present-day off campus settings and, although not institutionally approved, undoubtedly occur informally within present residence halls.

There are various arrangements which coeducational facilities can take (Crane, 1962, p. 48; 1963, p. 79; Riker & Lopez, 1961, p. 56).

Traditional Single-Sex Residence Hall Arrangement. This type of arrangement consists of male and female living units which are physically separated from one another on the campus. The coeducational element would be commonly shared eating facilities used by both sexes. If common eating facilities were not available, this would be a truly "single-sex" residence hall.

Adjacent Residence Hall Arrangements. In this arrangement separated male and female residence halls are located next to one another, but some types of common service facilities are used by both sexes, e.g., dining hall, laundromat, recreational facilities, etc.

Residence Halls Arranged by Wings. In this arrangement, one or more wings of a residence hall would house men and another wing(s) would house women. Commonly shared facilities such as dining halls, recreation facilities, laundromats, study facilities, etc. would be found centralized in the area connecting the wings.

Alternating Floors or Levels Residence Hall Arrangements. Residence facilities of this type involve the same physical structure shared by both men and women. One floor is occupied by men, the next floor by women, etc. In arrangements by levels, a floor may be broken up by corridors connected by either common entrance facilities or only a fire door. Common facilities as described above are available; however, other facilities such as floor lounges, study areas, etc. are also used by both sexes. Open access

to either the floor or corridor of the opposite sex may be allowed depending on visitation policies.

Alternating Rooms or Suites Residence Hall Arrangements. In this arrangement, men and women occupy the same floor and are housed by either alternating rooms or suites of women in between rooms or suites of men. In addition to the commonly shared house facilities mentioned above, this arrangement virtually allows a 24 hours per day, seven days per week open visitation policy.

Factors Influencing The Adoption of Coeducational Residence Halls

Colleges and universities have been under rather intense pressure in the last few years to provide some form of coeducational housing. The traditional residence hall has lost its attractiveness and students have been moving off campus to find more intimate and private living arrangements. This movement has resulted in loss of revenue to colleges, leaving them with partially empty residence halls and large loans which still must be paid. The attractiveness of "apartment" living to the student is undeniable; the student has a greater freedom of personal behavior and the opportunity to be more responsible for his own actions.

Moreover, in the last few years there has been a rather rapid change in the in loco parentis concept in colleges and universities. Faced with a general social attitude which allows the teenager more individual freedom and the recently enacted 18-year-old age-of-majority legislation, colleges and universities find it difficult to continue to demand that students remain in residence halls. And finally, during the last few years, students, as a group, have demanded and have obtained more say in the governance of colleges and universities. The result is that students now play an important role in the setting of rules and regulations in many colleges and universities.

Pressures such as those listed here, have led many colleges and universities to attempt to make the residence hall more attractive to students. This move has resulted in extensive revision of visitation policies, ranging from allowing the opposite sex visitation privileges a few hours a day to 24 hours a day; has set the stage for experimentation with various forms of coeducational living; has given individual residents of a residence hall extensive say in the running and the management of the facility; and has caused officials to remodel the residence halls into environments which more closely resemble the type of living accommodations students can obtain off campus.

There are additional pragmatic and theoretical reasons for colleges and universities to provide coed housing on campus. Pragmatically, providing such facilities attracts some students back to the campus and may keep others from leaving campus housing. Thus, residence halls are filled and debt payments can be made. It has also been reported that mixing men and women in the same residence facility results in less destructive male behavior and reduces repair bills. Many educators also believe that coed residence halls contribute to healthier adolescent growth and development, better academic climate and performance and, it is hoped, more mature individuals later in life.

However, many individuals object to coeducational residence halls on campuses. They argue that the basic purpose of the college or university is to foster academic growth. They believe coed facilities interfere with that growth because of a greater freedom to socialize with and be distracted by the opposite sex. They suggest that such living facilities abnormally force social relationships on late adolescents who may not be ready for such relationships because of their particular emotional and social adjustment. And finally, the largest single objection to coed

housing is that it promotes a greater opportunity for promiscuous sexual behavior on the part of the residents.

PREVIOUS RESEARCH

Educators, especially student personnel workers, have for many years been concerned with the effect of residence halls on the academic and social development of the student. Feldman and Newcomb (1969, p. 196) stated:

> Since the student hardly spends all of his time either in the classroom or engaged in classroom-associated activities, there are other loci of potential college influences. One of these is the student's living group. If the major field, as one kind of "home" for the college student, has distinctive impacts on the student, it seems hard to imagine that the student's actual residence during college would not.

Concern with the effects of the residence hall on the growth of the student has been reflected, over the years, in numerous studies which have dealt with various aspects of residence halls. Only a few studies have been experimental or quasi-experimental in approach. Studies into the physical and social environments of residence halls and their effect upon such diverse processes as social integration, personality formation, academic performance etc., have been conducted. Many institutions have focused on the residence hall as a learning environment and have grouped students by major area of interest, by similar personality and interest patterns and have designed entire curricula to form small collegiate environments within residence halls. Emphasis in these studies has been placed on the developmental stages of the student and the relationship of the student's choice of housing and personality factors to his academic achievement and personal adjustment in college.

Most studies about the effects of the living unit on the student and the factors influencing students to select certain types of living

units have involved single sex residence halls. Reviews of the literature over the last 40 years can be found in several sources (Alfert, 1968; Biggs & Cowan, 1969; Brown, 1968; Duvall, 1969; Feldman & Newcomb, 1969; Ferguson, 1967; Hatch, 1968; Marquardt, 1968; Mene & Sinnett, 1971; and Sanford, 1962).

The History and Rationale for Establishing Coeducational Residence Halls.

The issue of coeducational residence halls in colleges and universities is an extremely emotional one, to say the very least. Placing students, most of whom are between the ages of eighteen and twenty-two, in close living proximity to the opposite sex goes contrary to many of the prevailing religious and ethical mores of American society. Although coeducational residence halls have only recently been publicized in a number of popular magazines (Lear, 1969; Rollins, 1969; Shearer, 1960; Thorsen, 1970), some form of coeducational housing has been present in the United States since the mid-fifties. The Office of Institutional Studies at the University of Southern California (1972) conducted a survey of 33 private and public colleges and universities and found that coeducational residence halls had been introduced as early as 1956 by the University of Minnesota and Purdue University. Greenleaf (1962, p. 108) indicated that Indiana University introduced its first coeducational residence hall in 1957. All of these initial coeducational residence hall facilities were of the coed-by-wing variety.

From 1957 to 1965 approximately one-third of the colleges and universities in the country adopted coeducational residence facilities. Riker and DeCoster (1967, p. 2) and Riker (1970, p. 8:360) reported a survey sent to members of the Association of Colleges and University Housing Officers (ACUHO) regarding coeducational housing. Three hundred

ninety-two institutions reported; analysis indicated that 51% of ACUHO membership had instituted some form of coeducational residence halls by 1967. These residence halls generally involved separate living quarters for men and women with common areas of joint activities. By 1971, Sievert (1971) indicated that 70% of residential colleges in the United States offered some form of coeducational residence halls and had diversified the physical arrangement of coeducational residence halls.

In 1967, three percent of the colleges permitted coeducational housing which placed students on the same floor in separate apartments or suites. By 1971, twenty-two percent of the colleges permitted this arrangement. In 1967, less than 1% permitted coed arrangements with students living in separate rooms on the same floor but by 1971, fifteen percent were allowing this living arrangement. Table 1 indicates the percentages of campuses housing students in various types of coeducational units in 1967 and 1971.

TABLE 1

PERCENT OF CAMPUSES HOUSING STUDENTS IN VARIOUS TYPES OF COEDUCATIONAL UNITS

Type of Coed Housing	1967	1971
Separated Buildings	55%	62%
Separated Wings	28%	53%
Separate Floors	19%	52%
Same Floor, in Separate Apartments or Suites	3%	22%
Same Floor in Separate Rooms	1%	15%

Source: University of Southern California. Coeducational Housing at Colleges and Universities. Office of Institutional Studies, 1972.

Reaction to coeducational residence halls varied, depending on the particular group questioned. Campus administrators and students were by far the most favorable toward coeducational housing with 48% of campus administrators and 88% of students reporting favorable reactions. The University of Southern California Study (1972, p. 12) further found that 3% of parents and 18% of the state legislators had unfavorable reactions to coeducational residence halls. A number of individuals ranging from 12% of students to 61% of parents had mixed reactions to coeducational housing because they were aware of both the favorable and unfavorable publicity about coeducational residence halls. Parental opinion of coeducational residence halls, solicited in a 1971 Gallup Poll (Student Housing, 1972, pp. 11-15), found that 46% of parents interviewed were not opposed to having their daughters live in a coeducational residence hall.

As mentioned previously, the move toward establishing coeducational housing occurred because of a number of pragmatic and theoretical reasons. Although it is undeniable that student pressure and the need to fill residence halls were factors in the trend toward coeducational housing, there were also sound theoretical and educational arguments in its favor. Experimentally unsubstantiated reasons ordinarily given for establishing coeducational residence halls were:

1. Attracting students from off campus housing and retaining students already living in residence halls in order to bring in needed revenues.

2. Bringing students into the residence halls in order to provide a more intense academic environment through residence hall programming.

3. Changes in visitation policies over the last few years have become more liberal and have, by and large, been successful. Success with visitation policies has indicated that coeducational housing could be of great benefit to the student.

4. Colleges and universities have moved away from parietal rules, changing the in loco parentis concept as previously implemented through university rules and regulations.

5. The emergence of greater autonomy for women and the protest against double sex standards.

6. The belief that intellectual development cannot occur unless psycho-social needs are also developed. Establishing coeducational residence halls is seen as providing more opportunities for the development of the individual during his late adolescent years.

7. Providing additional classroom space and making the integration of educational programming within the residence halls possible, thereby improving both social interaction and the intellectual atmosphere within residence halls.

(University of Southern California, 1972, p. 1; Blackman, 1966, p. 250; Duncan, 1970, pp. 3-5; Leland & Burk-Dietrich, 1970, p. 8).

Coeducational Housing: Effects on the Behavior and Personality of Students.

Very few studies have focused specifically on the individual behavior of students and the effects of coeducational housing on personality structure. Schroder and LeMay (1974) examined the differences between students who had selected coeducational residence halls and those students who had selected non coeducational residence halls in order to determine whether there were any initial differences on select scales of the Personality Orientation Inventory (POI) between these two groups of students. They were also interested in determining whether coeducational living units had any effect on the development of self-actualization as measured by the six POI scales selected for their study. From a sample of 590 students who were selected by a stratified sampling method to insure representative proportions of students from each of the eleven residence halls, they concluded that freshmen who selected coeducational residence halls were more psychologically mature, were more flexible in the application of their values, and were better able to develop meaningful interpersonal relationships. They also found that these students had a higher

degree of self-actualization which, the authors conclude, helped them to cope with the variety of new opportunities, pressures, and tasks presented by coeducational living. In analyzing group differences between the fall pretest and the spring post-test of the personality inventory, an analysis of co-variance revealed that coed residence halls appeared to facilitate further interpersonal growth and development on the part of the students. Coed residence halls appeared to influence, particularly, the personal development of men who were classified as medium self-actualizing individuals more than for the other sub groups. These men became more mature, independent, flexible and self supportive during the course of their freshman year.

The effect of coeducational residence hall living on men has been noted by a number of authors. Stanford Psychologist Joseph Katz hypothesized that men are particularly helped by coeducational residence halls because "they learn that masculinity is more than a superficial toughness" and that "females are more than submissive sex objects." (Rollins, 1969, p. 28). Further, in the coeducational living situation, males have an opportunity to "dispel fears of the women's dominance; a fear that they have acquired because of the dominance of their mothers during their growing up years."

Observation of both male and female behavior has suggested that both tend to exhibit more mature behavior when living in coeducational residences. Men tend to exhibit less destructive and boisterous behavior and tend to be less involved in activities which can damage the living unit (University of Southern California, 1972, p. 5). Rollins (1969, p. 27) notes that both males and females improve their ordinary speaking patterns. Men reduced their "pseudo tough talk" and use of obscene language and

women spent much less time indulging in "diet and date" talk as compared to those living in a single sex facility. In the student survey conducted at the University of Michigan (1970), men and women residing in coed residence halls believed that they had been affected positively by the experience. Men reported attitude changes, noting that they had become more tolerant and more mature in their behavior and attitudes toward others. Women reported they had developed more liberal opinions and, in general, that they were more tolerant of differing opinions. As a result of her three-year observation of men and women in coeducational residence halls Greenleaf (1962, p. 108) indicated that their general social behavior patterns appeared to be better than that of those students residing in the typical single sex residence hall.

Involvement of students in academic and extracurricular activities has been investigated by a number of authors. In general, they found that men and women in coeducational residence halls tended to participate more in campus activities, that the residence halls and campus atmosphere became more intellectually oriented, and that students engaged in more informal intellectual conversations than those in single sex residence halls. It was noted that there tended to be fewer alienated and lonely students in coed residence halls than in single sex residence halls (Thorsen, 1970, p. 36; University of Southern California, 1972, p. 4).

The subject of academic performance of students residing in coeducational housing has been studied by a number of researchers. All investigators concluded that academic performance as measured by grade point average did not significantly differ when comparing students who lived in coed units to those living in traditional single sex facilities (Blackman, 1966, p. 251; Greenleaf, 1962, p. 108; Imes, 1966; Riker, 1970, p. 8:361;

Thorsen, 1970, p. 36; University of Southern California, 1972, p. 5). Similar results have been found in single-sex facilities (Elton & Bate, 1966). Thorsen (1970, p. 36) indicated that a tendency toward group study developed within coeducational residence halls.

Coeducational Housing: Effects on the Interaction of Students With the Opposite Sex.

One of the areas of greatest concern about coeducational housing is the impact which such living arrangements have on students and their interactions with the opposite sex. Proponents and critics alike express great concern about the effects of such living arrangements on the quality of residence hall life, on dating and social behavior between men and women, and on the sexual behavior of the student. This section will report the effects of coed residence halls on the interaction of students with the opposite sex under two main categories: 1) Group living interaction, 2) Dating and sexual behavior.

Group Living Interaction. Most institutions with coeducational residence halls report the living environment has markedly improved. Coed residence halls are characterized as environments with a high sense of community and a high level of morale, (University of Southern California, p. 12). One investigator found students had a greater sense of pride in their living unit, exhibited greater respect for their fellow students, and were more involved in student government and extra curricular activities than students residing in single sex residence halls (Lynch, 1971, p. 37). Lynch further indicated that in addition to a better spirit within the coeducational residence halls, 74% of the students were pleased with their living arrangements as compared to 52% of students living in single sex residence halls. Other indicators of a healthier living

environment were given by Jackson (1971) who noted that the frequency of drug usage in coed dorms was lower than in single sex dorms and LeMay (1973) who found by placing sound level meters in both coeducational residence halls and single sex residence halls that coed residence halls were much quieter during the usual 7:00 p.m. to 10:30 p.m. study time than single sex residences. Two investigators found coed residents went home less on weekends in order to "stay home" with friends in their residence halls than did students in single sex residence halls (Greenleaf, 1962, p. 111; Lynch, 1971, p. 37).

Students in coeducational residence halls developed "family type" relationships with one another. Students on coeducational floors functioned more as one large friendly community with less small group formation and more interaction as a whole than was found in separate sex residence halls (Corbett & Summer, 1972, p. 216; University of Southern California, 1972, p. 4). One important point often made by supporters of coeducational residence halls is that coed residence halls allowed both dating and non dating relationships to develop between men and women. It was hypothesized that since all contacts with the opposite sex were not dating relationships a more relaxed interpersonal relationship develop between the sexes and a healthier environment resulted (Thorsen, 1970, p. 32).

In the University of Michigan's survey (1970) of its residence halls, 87% of the students in coed facilities found their living experience to be valuable because they were able to make more friends with the opposite sex and they were free of competitive tensions often found in single sex halls. Students attributed the change in friendship patterns with the opposite sex to their living in coeducational facilities. Women were particularly affected in establishing more non dating friendships with the opposite sex. The absence of a "need to date in order to meet the

opposite sex mentality" resulted in a naturalness of behavior by students in the residence facilities (Currie, 1963, p. 250; Thorsen, 1970, p. 32) and allowed them to relate to one another as friends rather than as sex objects. Greenleaf (1962, p. 107) found these informal relationships resulted in students participating in both cultural, intellectual and social activities which allowed them to get to know the opposite sex in a natural and informal way. Lynch (1971, p. 38) agreed with this assessment and further indicated that students were more involved with faculty, ate together, and enjoyed social events and programs to a greater extent than did those students in single sex residence halls. He found that 83% of students living in coeducational residence halls dined together whereas only 37% of students in non coeducational residence halls ate with the opposite sex on a regular basis.

This daily, close contact with the opposite sex helped students to gain a better knowledge of their opposite sex friends and to develop an awareness of what behavior the opposite sex expected. Frequent and regular contact helped both sexes to become acquainted with the attitudes and interest of the other (Greenleaf, 1962, p. 109; Riker, 1970, p. 8:344). In the University of Michigan study (1970), 79% of the students in coeducational residence halls believed that this experience helped them to learn more about the opposite sex. It provided students with an environment in which they could 1) talk with the opposite sex, 2) observe the opposite sex and become friends with them over a period of time, and 3) grow to understand the opposite sex and thus to relate to others in an open and intensive relationship. Schroder and LeMay (1974) provided some statistical evidence to support the above claims. They found that freshmen in coeducational residence halls significantly increased their ability to develop meaningful and close associations with others. Scores on the

various sub-scales on the Personal Orientation Inventory supported the contention that students in coeducational residence halls develop more interpersonal competencies. They concluded that coeducational living exerted a facilitative effect upon the development of a healthier and a more mature relationship by providing opportunities for diverse associations with the opposite sex. They found that coeducational residence halls seemed to stimulate students toward a greater interpersonal sensitivity while sexually segregated residence halls do not facilitate the development of sensitive personal relationships.

Dating and Sexual Behavior. Certainly, one of the biggest concerns on the part of all those who are interested in the impact of coeducational housing on the student is the effect which these living units have on the student's dating and sexual behavior. The largest single objection to a coeducational living unit is the possibility of promiscuous sexual behavior on the part of the residents. This concern led a number of investigators to focus on observable changes in sexual and dating behavior and to compare the behavior of students in coeducational and single sex residence halls.

Initial observations indicate that some differences in dating behavior between students in coed residence halls and those in single sex residence halls do exist. Rollins (1969, p. 27) hypothesized that a type of "brother-sister" relationship arises between residents living in the same coed unit. Katz (Rollins, 1969, p. 22) suggested that a type of "incest taboo" exists in a coeducational unit resulting from the close living together with the opposite sex. Jackson (1971) suggested that women in coed residence halls perceive the men in their living units as surrogate big brothers. This close contact of men and women living in the same unit tended to encourage group dating patterns among the residents. It was theorized that dating within a living unit was replaced

by a platonic relationship (Corbett & Summer, 1972, p. 217; Leland & Burk-Dietrich, 1970, p. 6; University of Michigan, 1970, p. 10). In general, it was suggested that students in coed residence halls relate to one another on a more meaningful and close emotional level rather than a sexual one. Other factors seen as influencing the formation of this type of non sexual relationship are the social pressures within the residence hall and the lack of privacy.

Students in coeducational residence halls did, of course, date one another; however, the frequency of dating individuals within their own residence facility was lower than dating persons outside of the residence hall. Brown, Winkworth & Braskamp (1973), Jackson (1971) and Lynch (1971, p. 38) found that students did not date those living in their own hall as often as those living outside of their hall. Jackson found only 17% of students living in coed residence halls dated others from their own residence hall; 82% never or rarely dated students in their residence hall. Lynch indicated that men tended to date women living in other residence halls on campus more than women in their own units and that women dated more off campus men than their own residence hall men. The same trend was noted by Rollins (1969, p. 27). He found that individuals typically dated "non-house" individuals rather than people from within their own living unit. Corbett & Summer (1972, p. 217) indicated that few floor romances were found in coed residence halls.

Attempts to estimate the degree of sexual activity among males and females in coed residence halls were made by a number of investigators. This was a most difficult factor to assess and, in the end, the findings of these investigators were part observation, part reports from students in residence halls, and part expert opinion. Every attempt made

to estimate sexual behavior suggested one of two conclusions: 1) that sexual intercourse showed no significant increase for men or women in coeducational residence halls or, 2) that there was an actual decrease in the amount of sexual intercourse taking place in coed residence halls as compared to single sex residence halls. In the University of Southern California's questionnaire (1972, p. 10), eleven institutions indicated the amount of promiscuity in coed residence halls and single sex residence halls was not significantly different. Two institutions indicated that coed halls produced less promiscuity than single sex halls. Katz (Rollins, 1969, p. 22) suggested that the presence of the "incest taboo" resulted in far less sex in coed residence halls and that coed residence living, in effect, de-emphasized sex. Thorsen (1970, p. 36) indicated that sexual activity actually decreased in comparison to that in traditional housing. He went on to say that normal dating was more likely to lead to sexual intercourse than residing within coeducational housing, because both sexes tended to anticipate the sexual aspect of a traditional date and thus, a sexual relationship became a goal for the date. Jackson (1971) also found in his survey that men and women in coed halls engaged in less sexual intercourse in coeducational residence halls than in single sex facilities.

General Considerations and Problems of Coeducational Residence Halls.

A number of problems have arisen with coeducational residence halls. The major problems which have occurred are: 1) a reduction of privacy, 2) pressure to make alliances within the group in the residence hall, 3) reduction in the freedom of dress, particularly in the case of women, 4) frequent disruptions by roommates, 5) in some cases, too much socializing (Thorsen, 1970, p. 36; University of Southern California,

1972, p. 14). Leland and Burk-Dietrich (1970, pp. 5-6) indicated that men and women are likely to have different priorities in judging what constitutes an acceptable residence environment. The more intermixed the coed unit becomes the more these differences can be a source of frustration. Men tend to place a higher priority on the coeducational living unit than do women. This is reflected in the percentage of men and women requesting coeducational living. For example, at Stanford University, 58% of the women volunteered for coeducational residence hall as compared to 85% for men (Leland and Burk-Dietrich, 1970, p. 7). In the University of Southern California study, (1972, p. 10) researchers asked the 33 institutions in their sample about such problems as noise, theft, damage to property, lack of privacy, unclean rooms, foul language, poor manners, untidy personal appearance, unwanted attempted seduction, increased promiscuity, poor grades, and attrition from dorms. Most of these problems were judged as not significantly different when comparing coeducational residence halls to single sex residence halls. Most of the institutions in this study found privacy improved and foul language decreased in coeducational residence halls.

From the research mentioned, it is clear that many believe coeducational residence halls are a major innovation on college campuses. Most investigators suggested the most beneficial impact of coeducational residence halls is upon the day to day psycho-social behavior of students. Although individual academic performance does not appear to be affected significantly, it has been found that the academic climate within the residence hall is significantly improved, resulting in more informal intellectual discussions and a general improvement in the intellectual environment. Effects on individual student behavior are seen as positive with both men and women showing increased maturity, improvement in language,

and a general openness toward others. Some evidence suggests that the personality of students may be affected, especially for men, by helping them to become more self-actualizing. Men are further singled out as being helped with their sexual identification by coming to a better understanding of the meaning of their masculinity in relationship to women. Men and women are seen as developing better competencies at close and meaningful interpersonal relationships with the opposite sex.

The quality of life in coed residence halls is believed improved with most students feeling very satisfied with the coed style of life. Perhaps the most significant finding about coeducational residence halls is the impact which these units have in providing a natural and stress-free environment for young men and women to come to know and understand one another's attitudes and behavior. A number of investigators suggest that dating among men and women living in the same residence hall is actually less than dating outside of the residence hall and that fears of increased sexual promiscuity of men and women living in the same residence facility are not supported. In fact, the exact opposite may be true.

It is clear that most institutions with coeducational residence hall facilities on their campuses are reasonably pleased with the outcomes. Students, faculty, and administration groups appear well satisfied with the impact which coeducational units have on students. Whether the success of coeducational residence halls is caused by their being coeducational or by other important factors is problematic. Leland and Burk-Dietrich (1970, p. 809) suggest that there may be a number of other important factors other than the "coeducationalness" of the living unit. Factors such as the ratio of males to females in the coeducational unit, the type of architecture which encourages interaction, house programs,

attractive facilities to encourage leisure dining, individuals within the unit who are committed to the residential unit and give it a kind of esprit de corps, the individual's desire to interact and to communicate with one another may all be factors which make the coeducational residence hall a success. They point out, however, that none of these hypotheses has been evaluated because of lack of control groups.

The cited research about coeducational residence halls and their advantages and disadvantages over single sex residence halls has been largely descriptive in nature. The studies represent the conclusions of experienced student personnel workers, the reports of students who have lived in these environments and the results of surveys administered to both residents and administrative personnel at numerous colleges and universities. Though these results are valuable and informative they were not obtained through careful experimentally controlled procedures and thus, make it difficult to validly infer any causal relationships amongst the numerous variables discussed. That such experimental studies should be made is self-evident.

PURPOSE OF THE STUDY

The purpose of this study is to experimentally evaluate the effects of single sex and coeducational housing on various behaviors, perceptions, attitudes and personality characteristics of freshman men and women students during their first year in college. These factors were compared for both men and women and differing residence hall living conditions. A unique contribution of this study was the elimination of "self-preference" as a variable effecting the behavior and adjustment of the students in the various housing arrangements.

Previous research cited above suggested seven areas of characteristics which should be included in the study. These seven areas were:

1. Academic Perception and Performance
2. Perception of Personality Characteristics
3. Institutional Warmth and Friendliness
4. Residence Hall Warmth and Friendliness
5. Dating Behavior and Satisfaction
6. Religious Practices and Perceptions
7. Extracurricular Activities

From these seven selected areas the major hypotheses of the study were generated:

Hypothesis One. There is no significant difference in academic perception or performance between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Two. There is no significant difference in perception of personality characteristics between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Three. Students living in coeducational residence halls perceive the general university environment as significantly more warm and friendly than do students living in single sex residence halls.

Hypothesis Four. Students living in coeducational residence halls perceive their own residence hall environment as significantly more warm and friendly than do students living in single sex residence halls.

Hypothesis Five. There is no significant difference in dating behavior and satisfaction between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Six. There is no significant difference in religious perception and practice between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Seven. Students living in coeducational residence halls are significantly more involved in extracurricular activities than are students living in single sex residence halls.

Table 2 lists the variables used to evaluate each of the hypotheses of the study.

TABLE 2

VARIABLES USED TO EVALUATE THE SEVEN HYPOTHESES OF THE STUDY

HYPOTHESES	VARIABLES
Hypothesis One. There is no significant difference in academic perception or performance between residents in single sex residence halls and residents in coeducational residence halls.	1. Summer orientation program attended. 2. Number of term hours carried. 3. Number of hours spent studying each week. 4. Residence Hall scholarship. 5. Student scholarship. 6. University academic standards. 7. Institutional scholarship. 8. Student perception of social, political and intellectual activities on campus. 9. Student grade point average.
Hypothesis Two. There is no significant difference in perception of personality characteristics between residents in single sex residence halls and residents in coeducational residence halls.	10. Social adaptability. 11. Emotional control. 12. Conformity. 13. Masculinity-Femininity. 14. Attitude toward the opposite sex.
Hypothesis Three. Students living in coeducational residence halls perceive the general university environment as significantly more warm and friendly than do students living in single sex residence halls.	15. Faculty friendliness. 16. Student friendliness. 17. University friendliness. 18. Student considered transferring to another college.
Hypothesis Four. Students living in coeducational residence halls perceive their own residence hall environment as significantly more warm and friendly than do students living in single sex residence halls.	19. Residence hall friendliness. 20. Student satisfaction with residence hall living conditions. 21. Number of roommate changes. 22. Residence hall transfer rate. 23. Number of weekends spent off campus.
Hypothesis Five. There is no significant difference in dating behavior and satisfaction between residents in single sex residence halls and residents in coeducational residence halls.	24. Dating opportunity satisfaction. 25. Number of formal dates. 26. Number of informal dates. 27. Total number of separate dates (formal and informal). 28. Total number of persons dated.

Table 2 (cont'd.)

HYPOTHESES	VARIABLES
	29. Total number of persons dated who were residents of the student's residence hall (coed residence hall students only).
	30. Total number of non-residence hall students dated (all residence hall students included).
	31. Total number of separate dates with residents of the student's residence hall (coed residence hall only).
	32. Total number of separate dates with non-residence hall student (all residence hall students included).
	33. Social dating behavior (with non-residence hall students).
	34. Social dating behavior with students who were residents of the student's residence hall (coed residence hall students only).
	35. Social dating behavior of respondents who lived in coed residence halls compared to social dating behavior of single sex residence hall respondents with students who were not residents of the respondent's residence hall.
	36. Intimate dating behavior (with non-residence hall students).
	37. Intimate dating behavior with students who were residents of the student's residence hall (coed residence hall students only).
	38. Intimate dating behavior of respondents who lived in coed residence halls compared to intimate dating behavior of single sex residence hall respondents with students who were not residents of the respondent's residence hall.

Table 2 (cont'd.)

HYPOTHESES	VARIABLES
Hypothesis Six. There is no significant difference in religious perception and practice between residents in single sex residence halls and residents in coeducational residence halls.	39. Strength of belief in church doctrine. 40. Monthly church attendance. 41. Consistency of religious service attendance. 42. Self-religious perception.
Hypothesis Seven. Students living in co-ducational residence halls are significantly more involved in extracurricular activities than are students living in single sex residence halls.	43. Employment hours per week. 44. Informal conversation with the same sex. 45. Informal conversation with the opposite sex. 46. Participation in college organizations.

CHAPTER II

METHOD

DESIGN OF THE STUDY

This study followed the experimental method outlined in Fairweather's book, Method for Experimental Social Innovation (1967). Fairweather suggested the construction of two or more social subsystems in which one or more variables were manipulated and tested for desired outcomes between the several subsystems. According to Fairweather (1966, p. 77) the unit of research in experimental social innovation is a social subsystem which can only be understood in terms of its functional properties. The establishment of these social subsystems as an alternate solution to a given social problem is done primarily to view the outcome of that subsystem. The outcome of a subsystem "is the functional relationship between outcome, participants, and social situation that the social innovative experimentalist uses to operationally define a social subsystem." In this study the innovative social subsystems were defined as the two types of coeducational residence hall settings. These residence hall settings were compared against a traditional residence hall setting, a single sex arrangement.

The models or residence hall conditions examined in this study were:

1. A "traditional" segregated or single sex residence hall condition. In this condition all males were housed in one residence hall

(MSSEX) and all females were in another residence hall (FSSEX). No common recreation or dining facilities providing contact with the opposite sex were available in either residence hall facility.

2. A wing-by-wing residence hall condition. In this type of facility, men were housed in one wing (MWINGS) and women in another (FWINGS). This residence facility provided common dining and recreation facilities along with mutually shared lounges, study rooms, laundry facilities and residence hall programs.

3. A residence hall condition housing men and women on the same floor or level within the residence facility. This involved a corridor of men (MLEVELS) and a corridor of women (FLEVELS) connected by a common entrance way and allowing twenty-four-hour access of either men or women to the other's corridor. In addition, the levels residence hall condition made the same facilities available as in the wings residence hall condition.

The experimental design of the study was a three by two repeated measurements design similar to that discussed by Edwards (1972, pp. 330-368). The first independent variable was type of residence hall condition with three levels; single sex residence halls (SSEX), wing-by-wing residence halls (WINGS), and residence halls where students were arranged by levels (LEVELS). The second independent variable was sex with two levels; 1) male and 2) female. Thus from this design six residence hall groups were formed; MSSEX, FSSEX; MWINGS, FWINGS; and MLEVELS, FLEVELS. Table 3 illustrates the arrangements of these conditions and groups.

TABLE 3

ARRANGEMENT OF RESIDENCE HALL CONDITIONS, SEX AND RESIDENCE HALL GROUPS

	Residence Hall Conditions		
Sex	Single Sex Residence Hall Condition (SSEX)	Wings Residence Hall Condition (WINGS)	Levels Residence Hall Conditions (LEVELS)
Male	MSSEX residence hall group	MWINGS residence hall group	MLEVELS residence hall group
Female	FSSEX residence hall group	FWINGS residence hall group	FLEVELS residence hall group

The dependent variables were either 1) single dependent measures which were used to establish equality of samples (see Table 4 and Table 5, pp. 32, 40), 2) twice repeated dependent measures which were variables presented in the questionnaires two and three or 3) three repeated dependent measures which were variables presented in questionnaires one, two and three. Refer to Table 2 and Appendix F for a detailed listing of each of these variables.

Statistical analysis techniques included the following. For comparative analysis, chi-square was used for nominal variables and analysis of variance for either single or repeated measurements designs was used for the remaining variables. The computer program Multivariance (Finn, 1972) was used for all analysis of variance problems. In addition an associative analysis was performed using Tryon and Bailey's (1970) cluster analysis technique and their BC TRY computer program.

ADMINISTRATIVE PROCEDURES AND AGREEMENTS

Because the nature of the study involved the interaction and the cooperation among a number of various offices and committees of the

university, an administrative agreement and several separate approvals were needed to authorize the study. Following Fairweather's suggestion (1967, p. 51) an administrative agreement (Appendix A) was drawn up and approved by the Coordinator of Residence Hall Programs and the Manager of Residence Halls. This administrative agreement outlined the responsibilities of the researcher and the two offices and indicated the time period of the study, the assistance which each office agreed to give the researcher, the approval to the researcher for access to student housing files. It also outlined the method of random assignment of subjects to residence halls and promised the institution that the researcher would follow university procedure for assuring confidentiality of information.

After receiving approval from the researcher's doctoral committee for the design of the study, two additional university committees needed to review various parts of the study. Approval was received from the University Committee on Research Involving Human Subjects and the Committee on Release of Information and Approval of Questionnaires (Appendix B). Before receiving approval from these two committees, several suggestions for improving the study were incorporated into the design, procedures, and questionnaires.

SELECTION AND ASSIGNMENT PROCEDURES OF STUDENTS TO RESIDENCE HALL CONDITIONS

In preparation for the assignment of students to the various residence halls a list of residence halls which were to house incoming freshmen was compiled with the residence halls listed in random order. This list was provided to the Manager of Residence Halls whose office was responsible for room assignments. Assignment of qualified freshmen students to the residence halls was carried out by the manager's staff by starting from the top of the random ordered residence hall list and

assigning each student to a residence hall in the order indicated by the list. In this way, all qualified freshmen were randomly distributed to a randomly ordered list of available residence halls.

Selection of the residence halls to be used in the study from the randomly ordered list of residence halls was made in consultation with the Coordinator of Residence Halls Programs. The final six living units selected were chosen because:

1. Physical facilities were as similar as possible.
2. Visitation hours were the same for each living unit (24-hour visitation).
3. The living units did not include any special programming or other characteristics which would distinguish the type of student in that residence hall from students in other residence halls. For example, some residence facilities on the university campus tended to house athletes, or included special honors college programming. The residence halls selected did not include any such special groups or programs.
4. On the basis of the judgment of the Coordinator of Residence Hall Programs and his staff none of the residence halls selected for the study had any particular campus or institutional characteristics and/or reputation which would tend to set it apart from other residence hall facilities.

The students selected for this study met three criteria. First, they were students who had made housing requests through May, 1973. The housing office staff made the first room assignments of freshman students on the basis of those freshmen who applied for housing through May, 1973. Additional rooming assignments were made later in the summer but these students were not included in the study. Second, only students who had given no indication of preference for type of residence hall assignment were included in the study. This made it possible to place a student in a randomly selected residence hall and eliminated "self-preference" as a variable in the study. Third, only those freshman students who were not involved with any special program or needed to be assigned to any special

residence hall because of a particular need, e.g., athlete, honors college student, etc. were used.

University housing assignments placed two additional restrictions on the random assignment of students. First, those students who applied earliest were assigned their rooms first. However, since all students who had applied for rooming assignments through May were assigned at the same time for all practical purposes each student had an equal opportunity for selection. Secondly, if a student had specifically requested a particular roommate this request was honored. Thus, a student and any specific roommate he requested were randomly assigned to a residence hall. If later, the roommate's name came up as a randomly selected student to be included in the study, he also became part of the sample. Since all eligible freshman students were randomly distributed to a randomly ordered list of residence halls and thus, to the empirically selected living units included in the study, the students within each of these living units were randomly assigned.

After the random assignment of freshman students was completed, the Manager of Residence Halls provided a list of assigned freshman students to the selected residence halls. In the end, 397 students were eligible for inclusion in the study (see Table 4).

The final determination of the students who were included in the study proceeded as follows. The university's policy for the inclusion of students in university approved research required prior consent of each subject before the study began. Thus, a procedure for obtaining each student's prior agreement was designed. During the summer of 1973, each of the eligible 397 students were mailed a letter (Appendix C) which briefly explained the nature of the study and informed the prospective partiçipant of the type of information which would be requested. A

self-addressed postage-paid participant agreement card was included which the student was asked to sign indicating his willingness or unwillingness to participate in the study and permitting the investigator to have access to his academic and housing files (Appendix C). A follow-up mailing to those students who had not responded to the first letter was made about two weeks later (Appendix C). The two mailings resulted in 216 (54.4%) of the original 397 students agreeing to participate in the study.

Table 4 indicates the number of students within each residence hall group and the response to the questionnaires of these students over the 1973-1974 academic year. The table indicates the number of students who completed or did not complete each questionnaire and the number of students who withdrew from college or transferred to another type of residence hall other than the type to which they had been originally assigned prior to the administration of Questionnaires Two and Three. Table 4 also indicates the number of students included in the final analysis. A student was included in the final analysis if he had completed at least one of the three questionnaires and had attended the university during the first term of the academic year. Thus, all 216 students were included in the final analysis with appropriate values substituted for missing data for each student who missed either a specific question or failed to complete an entire questionnaire at a specific administration. The values substituted for missing data were the means of the specific subgroup to which the student belonged, e.g., MSSEX, FWINGS, MLEVELS, etc.

ASSESSMENT DEVICES

Data collection for the study was accomplished through the administration of three questionnaires and additional information obtained from

TABLE 4

THE NUMBER OF STUDENTS IN THE ORIGINAL POPULATION WITHIN EACH RESIDENCE HALL GROUP AND THEIR FREQUENCY OF RESPONSE TO EACH QUESTIONNAIRE

Type of Residence Hall Group	Eligible Students in Original Population	Students volunteering for study	Number of Student Responses to Questionnaires: Questionnaire 1 Summer 1973 Completed	Not Completed	Questionnaire 2 November 1973 Completed	Not Completed	Questionnaire 3 May 1974 Completed	Not Completed	Students withdrawing from the university prior to administration of: Questionnaire 2	3	Students who transferred to another type of residence hall prior to Questionnaire 2	3	Students included in the final analysis with missing data included
Male Single Sex (MSSEX)	55	26	26	0	23	3	22	4	0	0	0	0	26
Female Single Sex (FSSEX)	96	60	57	3	56	3	46	8	0	1	1	5	60
Male Wings (MWINGS)	49	25	24	1	20	3	15	3	0	5	2	2	25
Female Wings (FWINGS)	54	37	36	1	34	2	33	3	1	0	0	0	37
Male Levels (MLEVELS)	60	22	22	0	19	3	17	5	0	0	0	0	22
Female Levels (FLEVELS)	83	46	46	0	44	1	41	3	0	0	1	2	46
TOTAL	397	216	211	5	196	15	174	26	1	6	4	9	216

the student's academic file. Information taken from the student's academic file included: 1) the student's grade point average for the first term, 2) the cumulative grade point average for the 1973-1974 academic year, 3) the SAT verbal aptitude test score, 4) the SAT mathematical aptitude test score, and 5) the student's high school grade point average. The remainder of the information was obtained from the student's responses to the above three questionnaires.

The questionnaire administration took place at three times beginning in the summer of 1973 and ending in May, 1974. Questionnaire one (Appendix D) was sent to each student who had agreed to take part in the study during July and August of 1973. This questionnaire, as mentioned earlier, constituted a pretest and gathered demographic and personal information. Two hundred and sixteen questionnaires were mailed with 211 returns (97.7%). A detailed listing of each item in the questionnaire is contained in Appendix D and Tables 3 and 4. Questionnaire two (given in November) and questionnaire three (given in May) (Appendix E) were nearly identical questionnaires which asked for repeated responses from each student. In addition to the religious perception questions, the five perceptual personality scales included in questionnaire one, questionnaires two and three asked for the following information:

1) The orientation program in which the student participated during the summer preceding registration, 2) the number of credit hours for which the student was registered, 3) the student's estimate of the number of hours he actually spent in study during a typical seven-day week, 4) the average number of hours worked per week, 5) the number of college organizations to which he belonged, 6) the student's perception of how hard he studied compared to others in his residence hall, 7) the

number of hours spent in conversation with students of the same sex, 8) the number of hours spent in conversation with students of the opposite sex, 9) the student's estimate of the studiousness of the students at the university, 10) the student's estimate of the academic standards at the university, 11) a rating of the degree of openness and friendliness of the faculty, 12) a rating of the friendliness of the students at the university toward one another, 13) a rating of the scholarship of students in the respondent's residence hall, 14) a rating of the friendliness of the students in the respondent's residence hall, 15) the number of roommate changes, 16) the number of weekends spent off campus, 17) an indication of whether the student transferred to another residence hall, 18) the student's satisfaction with dating opportunities at the university, 19) an indication of whether the student has considered transferring to another college or dropping out of college, 20) the number of formal dates which the student had, 21) the number of informal dates which the student had, 22) the type of residence facility in which the respondent's dates lived, 23) for coed residence hall students, the approximate number of individuals the student had dated from his own residence hall, 24) the number of dates the student had had with residents of his own residence hall, 25) for both coed and single sex residence hall students, the number of individuals and the number of dates the student had had with students who were not residents of his own residence hall.

In addition to the above questions, questionnaire two and three contained: 1) an institutional scholarship scale which indicated the student's general rating of scholarship at the university, 2) an institutional friendliness scale which indicated the student's general rating

of the openness and friendliness of both faculty and students at the university, 3) an awareness scale developed from several items of the Awareness Scale found in Pace's (1969) College and Universities Environment Scales, 4) residence social dating and residence intimate dating scales which indicated the degree of involvement of students in coeducational residence halls in social and intimate dating behavior and, 5) social and intimate dating scales which indicated the social and intimate dating behavior with students who did not live within the residence hall.

Five perceptual personality and attitude scales were included in all three questionnaires. These five scales were:

1. Attitude toward the opposite sex. This scale asked the respondent to rate men or women as either superior or equal to one another on a series of personality traits, e.g., intelligence, creativity, morality, etc. Devised for the Mundelein College Self Study (Hruby, 1963), it has been repeated in a number of other studies and differentiates those respondents who tend to view either men or women as superior from those who tend to view men and women as equal on these traits. Its inclusion in this study was an attempt to measure any changes over time in either men's or women's attitudes toward the opposite sex which might be a function of the effects of the residence hall environment on the student.

2. Social adaptability. This scale was constructed from the Q-sort items developed by Fairweather, et al (1960). This scale differentiated individuals who were shy and withdrawn from those who are comfortable in various social situations.

3. Emotional control. This scale was constructed from Fairweather's et al (1960) Q-sort items which differentiated individuals who had little control over the expression of their feelings from those who controlled their feelings very rigidly.

4. Conformity. This scale was constructed from Fairweather's et al (1960) Q-sort items which differentiated those individuals who were very rule bound and controlled by outside influences from those who were more independent and relied on their own views and standards.

5. Masculinity-femininity. This scale was constructed with 20 items similar to those in the Gilford Zimmerman Temperament Survey (Gilford & Zimmerman, 1955) which most clearly differentiated between male and female interest patterns.

Questionnaire two was administered to the students in November, 1973 after they had been students at the university for nearly two months. Two hundred sixteen students received the questionnaire through the campus mail service with an accompanying letter (see Appendix E) and 196 students returned the questionnaire (after one followup letter) representing a 90.7% return. An identical procedure was followed for the administration of questionnaire three in mid May, 1974 when 216 questionnaires with an attached letter were sent (see Appendix E) and 174 were returned (80.6% returned). By this time, seven students had withdrawn from the university and 13 additional students had transferred from their original residence hall to another type of residence hall different from the one to which they were originally assigned. These students' responses made after moving into a different style of residence hall were not included in the study. Rather, the means for the student's original residence hall group were entered for each of these students (see Table 4 for further breakdown of questionnaire returns).

CHAPTER III

RESULTS

The results of this study are presented in three parts: 1) comparability of samples 2) analysis of hypotheses and 3) analysis of the associative results.

COMPARABILITY OF SAMPLES

Evidence of the success of the random distribution of students to the various subgroups is found in Table 5 and Table 6. A pretest questionnaire was sent to each student who had previously agreed to take part in the study in order to gather some demographic information about each student and his family and information about the high school from which he graduated, his home community, and his religious preference and belief. Five personality adjustment scales were also included in the questionnaire. The verbal and mathematical aptitude and high school grade point average were obtained from the student's file.

Analyses of variance and chi-square analyses are summarized for each variable in Tables 5 and 6. Of the 29 variables compared between each subgroup and the 69 tests of significance performed in analyzing these variables, 12 significant differences were discovered. Six of these significant differences were not surprising as they related to expected sex differences:

1. Employment hours per week. A significant difference ($p < .004$) indicated that men worked more hours during the summer months than did women.

2. Belief in doctrines of student's church. A significant difference ($p < .022$) indicated that women believed in more of the doctrines of their church than did men.

3. Attitude toward the opposite sex. A significant difference ($p < .0001$) indicated that both men and women tended to rate their own sex as somewhat superior on various personality traits than did the opposite sex.

4. The social adjustment scale. A significant difference ($p < .0007$) indicated that women were more socially adjusted than were men.

5. The emotion control scale. A significant difference ($p < .0001$) indicated that men were less emotional in their outward behavior than were women.

6. The masculinity-femininity scale. A significant difference ($p < .0001$) indicated that men and women had different interest patterns in typical "feminine" or "masculine" activities.

Significant differences were found for the number of brothers and sisters in the student's family. The LEVELS condition was significantly higher ($p < .035$) than the SSEX or WINGS condition. In addition, the students in MWINGS, MLEVELS, and FLEVELS residence hall groups had significantly more ($p < .024$) brothers and sisters than did MSSEX, FSSEX or FWINGS. Significant residence hall condition differences ($p < .049$) were found on the masculinity-femininity scale. The WINGS students were significantly higher on this scale than were SSEX or LEVELS students. A significant difference on both verbal ($p < .0001$) and mathematical aptitude ($p < .0001$) between men and women was found indicating that the men had significantly higher mathematical and verbal aptitude than the women in the study. Further, a residence hall group difference on the mathematical aptitude test indicated that the MSSEX residence hall group had a significantly higher mathematical aptitude than the men in the other residence hall groups.

When computing a series of significance tests, the probability that some significant differences could occur by chance must be considered. Sakoda, Cohen and Beall (1954, p. 173) presented a method of determining the number of significant differences expected when a series of N significance tests were computed. Their table indicated that 6 significant differences in a series of 63 significance tests would be expected to occur with a probability of less than 0.10 at .05 level of significance. Thus, it is probable that all 6 of these significant differences were chance differences. Of the significant differences discussed above, the most plausible non-chance differences would appear to be the two significant differences differentiating the verbal and mathematical aptitude scores between men and women. The possibility that some uncontrolled factors may have been operating to produce these rather large discrepancies should be considered.

It should be noted that only three variables produced significant residence hall differences, i.e., the number of brothers and sisters in the family, the masculinity-femininity rating, and the mathematical aptitude. The remaining differences were associated with sex differences, not residence hall condition differences. This would seem to indicate that the random distribution process was reasonably successful in distributing students equally across the residence hall conditions. It indicates that the students in the three residence hall conditions were equal on the various measures presented and therefore, the significant differences between residence halls which might be found later could be given reasonable credibility. Interpretation of differences between the sexes within residence halls would have to be made more cautiously.

TABLE 5

ANALYSIS OF VARIANCE FOR QUESTIONNAIRE 1 (PRETEST-SUMMER, 1973)
VARIABLES, VERBAL AND MATHEMATICAL
APTITUDE AND HIGH SCHOOL GPA

VARIABLE DESCRIPTION	Residence Hall Conditions Effect[1]		Sex Effect[2]		Residence Hall Groups Effect[3] (Interaction of Residence Hall Conditions by Sex)		Error Term[4]
	F	P	F	P	F	P	
Age of Student	0.511	.601	0.598	0.440	0.389	0.678	1.664
Father's highest educational attainment	1.797	.168	1.299	0.256	0.166	0.847	2.242
Mother's highest educational attainment	0.111	.896	0.262	0.609	2.395	0.094	1.199
Number of brothers and sisters in family	3.421	.035*	1.741	0.189	3.796	0.024*	1.920
Number of brothers in family	1.239	.292	0.616	0.433	1.098	0.335	1.461
Number of sisters in family	2.644	.074	1.603	0.207	2.794	0.064	1.479
Socio-economic status	2.234	.110	0.626	0.430	0.686	0.505	473.730
Size of high school	0.454	.636	0.018	0.893	0.851	0.429	2.188
Home town population	1.074	.344	1.152	0.284	0.142	0.868	0.526
Employment hours per week	1.980	.141	8.313	0.004*	0.217	0.806	1.425
Belief in Doctrines of student's Church	0.289	0.749	5.308	0.022*	1.412	0.246	0.216

Table 5 (cont'd.)

VARIABLE DESCRIPTION	Residence Hall Conditions Effect[1]		Sex Effect[2]		Residence Hall Groups Effect[3] (Interaction of Residence Hall Conditions by Sex)		Error Term[4]
	F	P	F	P	F	P	
Church attendance each month	2.779	0.064	0.695	0.406	0.823	0.441	0.287
Attitude toward the opposite sex	1.399	0.249	61.290	0.0001*	1.456	0.236	1.743
Social Adjustment Scale	0.251	0.778	12.115	0.0007*	0.534	0.587	3.506
Emotional Control Scale	0.457	0.634	22.208	0.0001*	0.798	0.452	2.702
Conformity Scale	1.012	0.365	1.433	0.233	0.505	0.604	1.901
Masculinity-Femininity Scale	3.061	0.049*	286.69	0.0001*	0.330	0.719	2.443
Verbal Aptitude (SAT Verbal Aptitude Test)	1.207	0.301	16.979	0.0001*	0.911	0.404	6624.380
Mathematical Aptitude (SAT Mathematics Aptitude Test)	0.100	0.905	51.418	0.0001*	4.446	0.013*	5101.840
High School Grade Point Average	1.142	0.321	2.866	0.092	0.294	0.746	0.213

[1]Residence Hall Conditions Effects, degrees of freedom = 2

[2]Sex Effects, degrees of freedom = 1

[3]Residence Hall Groups Effects, degrees of freedom = 2

[4]Error term, degrees of freedom = 210

*Significantly different at less than the 0.05 level.

TABLE 6

CHI-SQUARE ANALYSIS FOR QUESTIONNAIRE 1
(PRETEST-SUMMER, 1973) VARIABLES

VARIABLE DESCRIPTION	df	Chi-Square	p
Ethnic background of student	2	1.065	0.50
Present religious affiliation	15	20.560	0.20
Parents' marital status	2	2.769	0.30
Parents presently living	2	0.960	0.70
Student's position in family	10	14.956	0.20
Type of high school last attended	2	2.556	0.30
Attended coed or non-coed high school	2	2.692	0.30
Living arrangements with parents when not attending college	5	2.262	0.90
Consistency of attending religious services	5	3.797	0.70

ANALYSIS OF HYPOTHESES

Comparative analysis was made for the dependent variables for each of the seven major hypotheses in the study. These seven hypotheses were:

Hypothesis One. There is no significant difference in academic perception or performance between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Two. There is no significant difference in perception of personality characteristics between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Three. Students living in coeducational residence halls perceive the general university environment as significantly more warm and friendly than do students living in single sex residence halls.

Hypothesis Four. Students living in coeducational residence halls perceive their own residence hall environment as significantly more warm and friendly than do students living in single sex residence halls.

Hypothesis Five. There is no significant difference in dating behavior and satisfaction between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Six. There is no significant difference in religious perception and practice between residents in single sex residence halls and residents in coeducational residence halls.

Hypothesis Seven. Students living in coeducational residence halls are significantly more involved in extracurricular activities than are students living in single sex residence halls.

The several variables used in testing each hypothesis were analyzed by either analysis of variance or chi-square depending on the nature of the variable. The exact probability values for each test of significance can be found in Appendix F and the means for the variables can be found on each figure illustrating the significant differences.

Analysis of Hypothesis One

Hypothesis One states that there is no significant difference in academic perception or performance between residents in single sex residence halls and residents in coeducational residence halls. Nine variables were used to test this hypothesis (see Table 2 for detailed listing). Reference to Table 7 shows that for residence hall conditions only one of the nine variables was found to be significantly different. Figure 2.1 illustrates that the students in the WINGS condition rated residence hall scholarship significantly higher ($p < .001$) than did the students in the SSEX or LEVELS conditions in both November and May. Sakoda's et al (1954) charts suggests that one significant difference in a series of nine significance tests could be expected to occur with a probability of approximately 0.35 at the .05 level. Thus, it is likely this could be a chance difference.

TABLE 7

RESULTS OF SIGNIFICANCE TESTS FOR VARIABLES USED TO TEST HYPOTHESIS ONE[1], [2]

Type of Effect	Variable Number								
	1	2	3	4	5	6	7	8	9
Main Effects:									
Residence Hall Conditions	NS	NS	NS	S	NS	NS	NS	NS	NS
Sex	NS	NS	NS	S	S	S	S	S	NS
Time		NS	S	NS	NS	S	NS	NS	NS
Interaction Effects:									
Sex by Time		NS	NS	NS	NS	NS	NS	NS	NS
Residence Hall Conditions by Time		NS	S	NS	NS	NS	NS	NS	NS
Residence Hall Groups (Residence Hall Conditions by Sex)	NS	NS	S	NS	NS	S	NS	NS	NS
Residence Hall Groups by Time		NS	NS	NS	NS	NS	NS	S	S

[1]Exact probabilities of all significance tests can be found in Appendix F.

[2]S, significant at $p < .05$; NS, not significantly different at $p < .05$.

With only one significant difference in nine variables, strong support is given to the hypothesis that the type of residence hall environment does not effect the academic perception or performance of the residents.

However, there were significant differences between the sexes on five of the nine variables. Women rated the following scales significantly higher than did men: residence hall scholarship (Figure 2.2) was significantly higher ($p < .002$) in November but nearly equal by May; student scholarship was rated significantly higher ($p < .003$) in both November

and May; university academic standards (Figure 3.1) were rated significantly higher ($p < .0001$) in November but showed a significant decrease by May though the ratings were still higher than the men's ratings; institutional scholarship was rated significantly higher ($p < .0001$) in both November and May; and finally, women perceived the university as significantly ($p < .038$) more intellectually stimulating (Figure 4.1) than did men. Analysis by time revealed two variables changing significantly over the period of the study. All students reported significant increases ($p < .0001$) in the number of hours spent studying each week (Figure 1.1) in both November and May compared to their high school study hours as reported in the summer questionnaire. A significant decrease ($p < .003$) by all students in rating the university academic standards occurred between November and May but was especially influenced by decreases in the ratings of women (Figure 3.2).

An interaction effect was not found for sex by time on any of the nine variables; however, the residence hall conditions by time interaction revealed one significant difference: all residence halls conditions showed significant increases ($p < .005$) in the number of hours spent studying between summer and November; however, the WINGS residence hall condition had significantly decreased study hours from its November rating while SSEX and LEVELS conditions were nearly equal by May (Figure 1.1). Residence hall groups (residence hall conditions by sex interaction) were significantly different on only one of the nine variables. Figure 1.2 shows the MWINGS condition to be significantly different ($p < .029$) in study hours in May than the other five residence hall groups. Residence hall groups by time interaction revealed significant differences on two variables. MLEVELS students significantly decreased ($p < .018$) their ratings of the

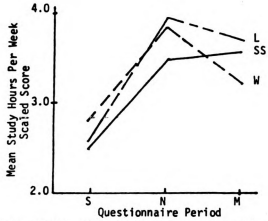


Figure 1.1. Average study hours per week during each questionnaire period for residence hall conditions.

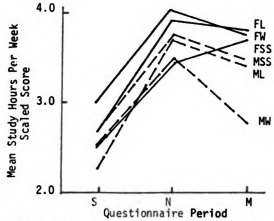


Figure 1.2. Average study hours per week during each questionnaire period for residence hall groups.

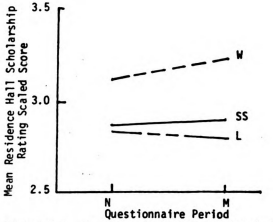


Figure 2.1. Residence hall scholarship during each questionnaire period for residence hall conditions.

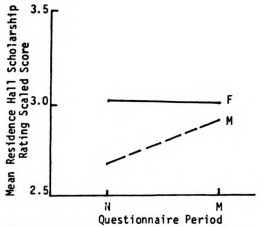


Figure 2.2. Residence Hall scholarship during each questionnaire period for men and women.

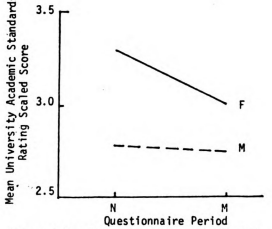


Figure 3.1. University academic standards during each questionnaire period for men and women.

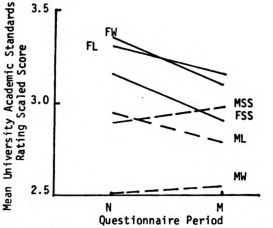


Figure 3.2. University academic standards during each questionnaire period for residence hall groups.

Residence Hall Conditions:
SS - SSEX
W - WINGS
L - LEVELS

Residence Hall Groups:
MSS - MSSEX
FSS - FSSEX
MW - MWINGS
FW - FWINGS
ML - MLEVELS
FL - FLEVELS

Sex:
M - Men
F - Women

Questionnaire Periods:
S - Summer
N - November
M - May

intellectual stimulation of the university between November and May while the other five residence hall groups rated intellectual stimulation by May as nearly equal and significantly higher than MLEVELS (Figure 4.2). Analysis of grade point average revealed that MLEVELS and MWINGS students significantly increased ($p < .014$) their G.P.A.'s between November and May (Figure 5).

In summary, there was little evidence to support the hypothesis that residence hall conditions influenced academic perception or performance. Significant sex differences were found; however, the remaining main and interaction effects produced few significant differences over the variables measuring academic perception or performance.

Analysis of Hypothesis Two

Hypothesis Two stated there is no significant difference in perception of personality characteristics between residents in single sex residence halls and residents in coeducational residence halls. Five variables were used to test this hypothesis (see Table 2 for detailed listing). Reference to Table 8 shows that for residence hall conditions only one of the five variables was significantly different. The WINGS condition was significantly higher ($p < .049$) on the masculinity-femininity perceptual personality rating than were the SSEX or LEVELS conditions throughout the duration of the study (Figure 7.2). Sakoda et al (1954) indicates that one significant difference in a series of five significance tests could be expected to occur with a probability of approximately 0.20 at the .05 level, thus it is likely that this difference could be a chance difference. With only one significant difference in five variables, Hypothesis Two appears adequately supported suggesting no significant difference in perception of personality characteristics exist between residents in single sex or coeducational residence halls.

Analysis for differences between the sexes revealed that women were significantly different than men on four of the five perceptual personality scales. Men scored significantly higher ($p < .0001$) on emotional control while women were significantly higher ($p < .0007$) on social adaptability. Men and women were significantly different ($p < .0001$) in masculinity-femininity ratings (Figure 7.1). There were also significant differences ($p < .0001$) between the sexes in attitude toward the opposite sex; each sex consistently rated its own superior to the opposite sex (Figure 8.1). There were no significant differences over time on any of the five variables.

Interaction effects were not found for either residence hall conditions by time or residence hall groups (residence hall conditions by sex). One sex by time interaction effect was present. Figure 6 shows that in the summer preceding arrival on campus, women tended to score lower (more conforming) on the conformity scale than did men though not significantly lower. However, by November, women had increased their ratings on the conformity scale (more non-conforming) significantly ($p < .05$) at which time their ratings were nearly identical to those of men. By May, both men and women rated almost identically on conformity, both sexes showing a slight increase over their November ratings. Residence hall groups by time interaction effects were found for one variable; attitude toward the opposite sex. The most significant differences ($p < .025$) were found for FLEVELS and MLEVELS where the students in each of these groups rated themselves as superior to the opposite sex in November and even "more superior" by May (see Figure 8.2). MSSEX and FSSEX moved closer toward equality over the time period while FWINGS remained relatively unchanged and MWINGS shifted toward equality in November only to return to its summer 1973 rating by May.

Overall, little evidence was found to suggest that personality characteristics were influenced by residence hall conditions. Several expected sex differences in personality characteristics were found; however, the remaining main and interaction effects produced only a few significant differences on the personality variables.

Analysis of Hypothesis Three

Hypothesis Three stated that students living in coeducational residence halls perceive the general university environment as significantly more warm and friendly than do students living in single sex residence halls. To test the hypothesis four variables were selected (see Table 2 for detailed listing) none of which produced significant differences among the three residence hall conditions (see Table 8). Thus, the hypothesis is rejected. Analysis by sex and by time also failed to produce any significant differences among the four variables.

Interaction effects were not found for sex by time or for residence hall groups by time; however, both residence hall conditions by time and residence hall groups (residence hall conditions by sex) did produce significant differences. For residence hall conditions by time, both WINGS and LEVELS students significantly decreased ($p < .029$) their ratings of student friendliness between November and May, while SSEX significantly increased, rating student friendliness higher in May than the two coeducational residences, thus reversing the November situations (Figure 9.2). Differences were present among the six residence hall groups in both November and May ($p < .043$). MSSEX and FWINGS both remained the highest in rating student friendliness; however, FLEVELS, MLEVELS and MWINGS reversed positions with FSSEX between November and

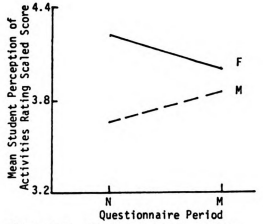


Figure 4.1. Student perception of social, political, intellectual activities during questionnaire periods for men and women.

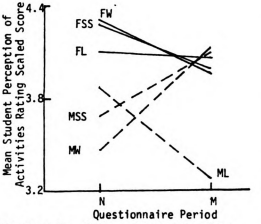


Figure 4.2. Student perception of social, political, intellectual activities during questionnaire periods for residence hall groups.

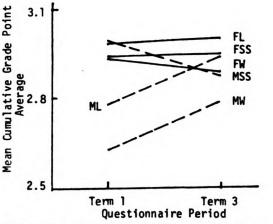


Figure 5. Student Cumulative grade point average for Term 1 and Term 3 for residence hall groups.

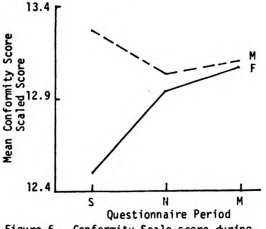


Figure 6. Conformity Scale score during questionnaire periods for men and women.

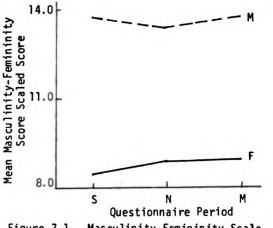


Figure 7.1. Masculinity-Femininity Scale score during questionnaire periods for men and women.

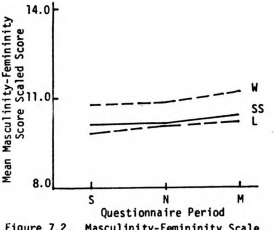


Figure 7.2. Masculinity-Femininity Scale score during questionnaire periods for residence hall conditions.

Residence Hall Conditions:
SS - SSEX
W - WINGS
L - LEVELS

Residence Hall Groups:
MSS - MSSEX
FSS - FSSEX
MW - MWINGS
FW - FWINGS
ML - MLEVELS
FL - FLEVELS

Sex:
M - Men
F - Women

Questionnaire Periods:
S - Summer
N - November
M - May

May and became nearly equal in their low rating of student friendliness (Figure 9.1).

In conclusion, residence hall conditions apparently did not differentially effect their residents' perception of the warmth and friendliness of the general university environment. Additionally, few differences in perception were found between men and women, over time or for interaction effects among these main effects.

Analysis of Hypothesis Four

Hypothesis Four stated that students living in coeducational residence halls perceive their own residence hall environment as significantly more warm and friendly than do students living in single sex residence halls. Five variables were selected to test this hypothesis (see Table 2 for detailed listing). For residence hall conditions, none of the five variables were found to be significantly different (see Table 8). Hypothesis Four is therefore rejected. Analysis by sex also failed to produce any significant differences; however, time analysis did indicate two variables to be significantly different. All students significantly increased ($p < .0001$) the number of roommate changes made between November and May while they significantly decreased ($p < .0001$) the number of weekends spent off-campus in the same time period.

There were no significant interaction effects for residence hall conditions by time, residence hall groups or residence hall groups by time. However, one significant difference for sex by time was found. Men became significantly ($p < .032$) more satisfied with their residence hall living conditions between November and May while women showed no significant change in satisfaction.

TABLE 8

RESULTS OF SIGNIFICANCE TESTS FOR VARIABLES USED TO TEST HYPOTHESES TWO, THREE AND FOUR[1, 2]

Type of Effect	Hypothesis Two Variable Number					Hypothesis Three Variable Number				Hypothesis Four Variable Number				
	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Main Effects:														
Residence Hall Conditions	NS	NS	NS	S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sex	S	S	NS	S	S	NS	NS	NS	NS	NS	NS	NS	NS	NS
Time	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	S	NS	S
Interaction Effects:														
Sex by Time	NS	NS	S	NS	NS	NS	NS	NS		NS	S	NS		NS
Residence Hall Conditions by Time	NS	NS	NS	NS	NS	NS	S	NS		NS	NS	NS		NS
Residence Hall Groups (Residence Hall Conditions by Sex)	NS	NS	NS	NS	NS	NS	S	NS	NS	NS	NS	NS	NS	NS
Residence Hall Groups by Time	NS	NS	NS	NS	S	NS	NS	NS		NS	NS	NS		NS

[1]Exact probabilities of all significance tests can be found in Appendix F.

[2]S, significant at $p < .05$; NS, not significantly different at $p < .05$.

Analysis of Hypothesis Five

Hypothesis Five concerned dating behavior and satisfaction and stated there is no significant difference in dating behavior and satisfaction between residents in single sex residence halls and residents in coeducational residence halls. Fifteen variables were used in testing this hypothesis (see Table 2 for detailed listing). For residence hall conditions, seven significant differences were found (see Table 9).

1. The students of the SSEX residence hall conditions dated significantly more ($p < .0003$) non-residence hall students than did WINGS and LEVELS students (Figure 12.2).

2. Students in SSEX residence halls had significantly more ($p < .0002$) dates with non-residence hall students than did WINGS and LEVELS students in both November and May (Figure 14.2).

3. Students in the SSEX residence hall conditions were significantly higher ($p < .0001$) on the social dating behavior scale with non-residence hall students than were WINGS and LEVELS students (Figure 15.2).

4. Students in the WINGS conditions were significantly higher ($p < .039$) on the social dating behavior scale with residents in their own halls than were LEVELS students (Figure 16.1).

5. Students in the LEVELS condition were significantly lower ($p < .0001$) on the social dating behavior scale with fellow residents than were students in the WINGS condition with fellow residents or students in the SSEX condition with non-residents (Figure 16.1).

6. Significant differences ($p < .021$) in degree of intimate dating behavior with non-residence hall students were present. Figure 17.2 shows WINGS students were significantly lower than SSEX students in both November and May while LEVELS students remained between the other two residence hall conditions.

7. When comparing the degree of intimate dating behavior of SSEX students with non-residents to the degree of intimate dating behavior of coed residence hall students to fellow-residents, SSEX students were significantly lower ($p < .022$) in November. However, as Figure 18.1 illustrates, by May the intimate dating behavior of all three residence hall conditions were nearly equal.

Sakoda et al (1954) indicates that seven significance differences in a series of 15 tests of significance could be expected to occur by chance with a probability of 0.001 at a significance level of .05. Thus, it is unlikely that all seven significant differences are due to chance. Two of the significant differences are easily explainable and were not unexpected. Since students in the SSEX residence hall condition had only non-residents to date, it is expected that they would date more individuals and have more separate dates with non-residents than would coed residence hall students who could divide their dating experiences between both resident and non-resident students. Nonetheless, there is strong evidence for the rejection of Hypothesis Five.

Evidence is strong that there were significant differences in dating patterns between men and women in the study. Seven variables out of 15 produced significant differences between the sexes. Women were significantly different from men on the following variables: 1) women had both more formal ($p < .035$) and informal ($p < .016$) dates each term, 2) women had a greater number ($p < .0004$) of separate dates each term (Figure 10.1), 3) women dated significantly more ($p < .016$) individuals in both terms, 4) women dated significantly more ($p < .039$) individuals who were not residents of their residence hall and had a greater number ($p < .0002$) of dates with non-residents in both terms (see Figures 12.1 and 14.1), 5) women rated significantly higher ($p < .007$) on the social dating behavior scale with non-residents in both terms (Figure 15.1).

Analysis over time revealed three significant differences. Students in coed residence halls showed a significant change ($p < .031$) in the number of fellow residents dated depending on the residence hall group (Figure 11). They also showed a significant increase ($p < .003$) over

time in the degree of intimate dating behavior with fellow residents (Figure 18.1). The same figure shows a significant increase ($p < .022$) in degree of intimate dating behavior over time when comparing coed residence hall intimate dating with fellow residents to the degree of intimate dating behavior of SSEX students with non-residents.

Analysis of interaction effects revealed a number of significant differences. Four sex by time significant differences were found. Men reported a significant increase ($p < .022$) in the number of formal dates between November and May. Women significantly increased ($p < .022$) the number of persons dated between November and May. Although men and women had nearly the same degree of intimate behavior with non-residents in November, by May women had significantly increased ($p < .026$) their degree of intimate behavior with non-residents and were higher (but not significantly higher) than men on this scale (Figure 17.1). Though both men and women in coed residence halls had nearly equal ratings on the intimate dating behavior scale with fellow residents in November, Figure 18.2 shows men significantly increasing (p .025) their degree of intimate dating behavior with fellow residents by May. There were no residence hall conditions by time interactions.

Residence hall groups (residence hall conditions by sex) interaction effects revealed two significant differences. Men showed very significant differences ($p < .005$) in the total number of separate dates depending on the residence hall in which they resided. Figure 10.2 shows MSSEX students had a significantly higher dating rate in both November and May than did MWINGS or MLEVELS students and while MSSEX students increased their dating activity by May, MWINGS and MLEVELS students decreased theirs. For women, no significant differences in

dating activity among residence hall groups are apparent; however, FLEVELS students increased dating activity slightly while FWINGS and FSSEX students show parallel (though not significant) decreases. MLEVELS and MWINGS had significantly fewer ($p < .036$) dates with non-residence hall students in both November and May. Figure 14.3 illustrates the above differences and further shows the remaining four groups as dating non-residents at about the same frequency in both November and May.

Residence hall groups by time interaction analysis produces seven significant differences out of 15 variables. The students of the four coed residence hall groups were dating about the same number of fellow residents in November; but by May all four groups had undergone significant changes ($p < .031$). As illustrated in Figure 11, by May FLEVELS, FWINGS and MLEVELS all showed decreases in the number of residents dated with MLEVELS dating the least number of residents, FWINGS next lowest and FLEVELS next. MWINGS increased in number of residents dated between November and May. Students in both FSSEX and MWINGS residence hall groups experienced a significant decrease ($p < .014$) in the number of non-residence hall students dated (Figure 12.3) between November and May. When considering the total number of separate dates by coed residence hall students with fellow residents significant changes ($p < .002$) over time are found. As Figure 13 shows, all four groups showed clear differences between November and May measures with MWINGS and FLEVELS showing increases and FWINGS and MLEVELS showing sharp decreases in total number of dates with fellow residents. For social dating behavior with fellow residents, one of the coed residence hall groups experienced a significant increase ($p < .018$) over time. Figure 16.2 shows the students of FLEVELS sharply increasing their rating between November and May. When comparing coed

students' social dating behavior with fellow residents to single sex residence hall students' social dating behavior with non-residents, FLEVELS was the only significant change ($p < .034$) over time once again (Figure 16.2). For students in coed residence hall groups, significant differences ($p < .026$) over time in degree of intimate dating behavior with fellow residents were found. Figure 18.3 shows all four coed residence hall groups with marked increases in degree of intimate dating behavior between November and May, especially MWINGS and MLEVELS which by May were substantially higher than FWINGS and FLEVELS. When comparing coed residence hall students' intimate dating behavior with fellow residents to single sex residence hall students' intimate dating behavior with non-residents, Figure 18.3 reveals even more significant increases ($p < .0001$) over time.

In summary, it is clear that dating patterns were significantly influenced by the type of residence hall condition and that men and women differed significantly in their dating behavior. Additionally, the residence hall groups by time interaction effect produced several significant differences suggesting that not only are sex differences important but also the type of residence hall group differentially effects the dating behavior of men and women.

Analysis of Hypothesis Six

Hypothesis Six said there is no significant difference in religious perception and practice between residents in single sex residence halls and residents in coeducational residence halls. Four variables were used to test this hypothesis (see Table 2 for detailed listings). For residence hall conditions, one significant difference was found among

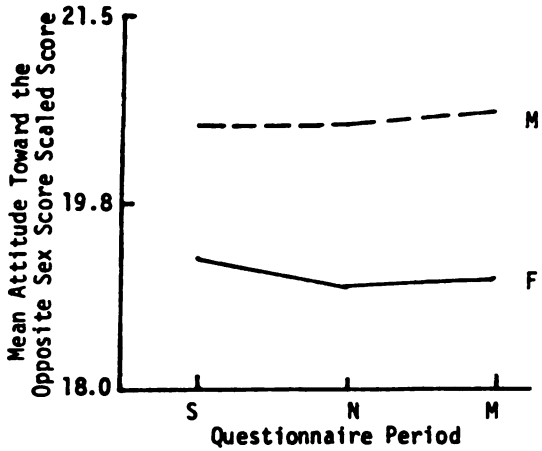


Figure 8.1. Attitude toward the opposite sex during questionnaire periods for men and women.

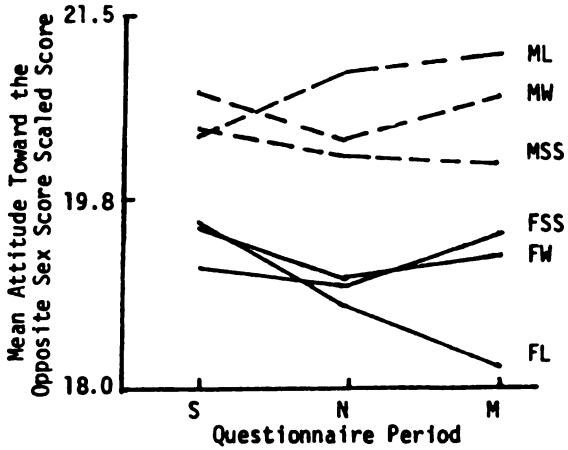


Figure 8.2. Attitude toward the opposite sex during questionnaire periods for residence hall groups.

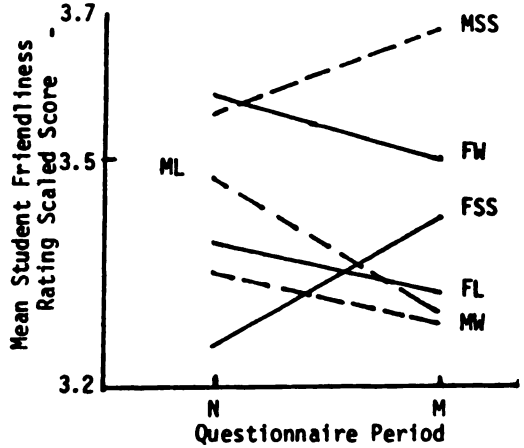


Figure 9.1. Student friendliness rating during questionnaire periods for residence hall groups.

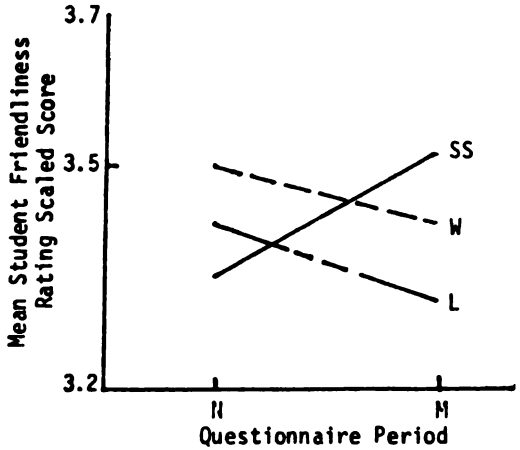


Figure 9.2. Student friendliness rating during questionnaire periods for residence hall conditions.

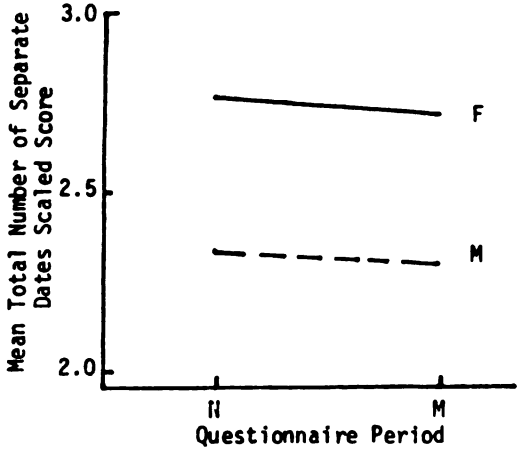


Figure 10.1. Total number of separate dates during questionnaire periods for men and women.

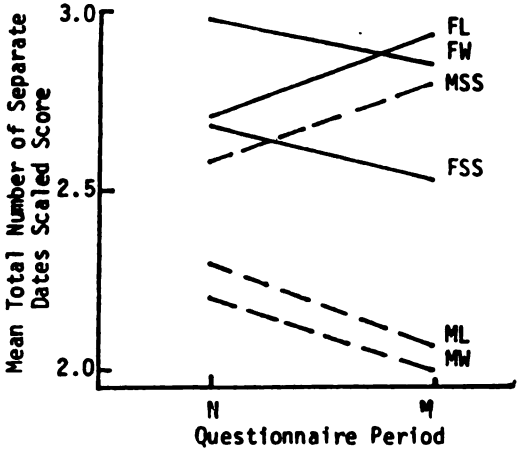


Figure 10.2. Total number of separate dates during questionnaire periods for residence hall groups.

Residence Hall Conditions:
- SS - SSEX
- W - WINGS
- L - LEVELS

Residence Hall Groups:
- MSS - MSSEX
- FSS - FSSEX
- MW - MWINGS
- FW - FWINGS
- ML - MLEVELS
- FL - FLEVELS

Sex:
- M - Men
- F - Women

Questionnaire Periods:
- S - Summer
- N - November
- M - May

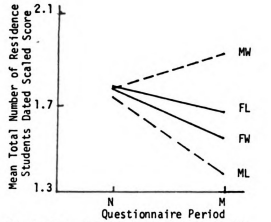


Figure 11. Total number of individuals dated who were residents of the student's residence hall (coed residence halls only) during questionnaire periods for residence hall groups.

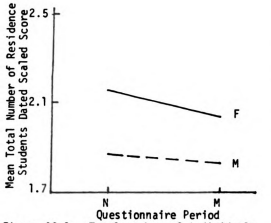


Figure 12.1. Total number of individuals dated who lived outside of the student's residence hall during questionnaire periods for men and women.

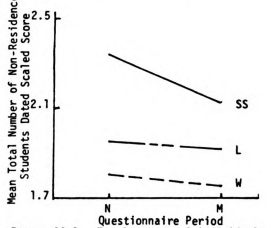


Figure 12.2. Total number of individuals dated who lived outside of the student's residence hall during questionnaire periods for residence hall conditions.

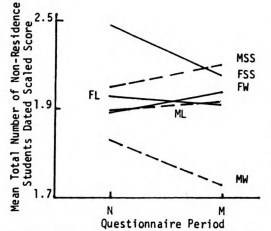


Figure 12.3. Total number of individuals dated who lived outside of the student's residence hall during questionnaire periods for residence hall groups.

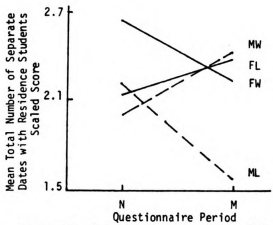


Figure 13. Total number of separate dates with residents of the student's residence hall (coed residence halls only) during questionnaire periods for residence hall groups.

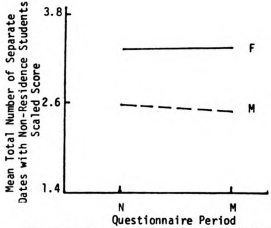


Figure 14.1. Total number of separate dates with students who lived outside of the student's residence hall during questionnaire periods for men and women.

Residence Hall Conditions:
SS - SSEX
W - WINGS
L - LEVELS

Residence Hall Groups:
MSS - MSSEX
FSS - FSSEX
MW - MWINGS
FW - FWINGS
ML - MLEVELS
FL - FLEVELS

Sex:
M - Men
F - Women

Questionnaire Periods:
S - Summer
N - November
M - May

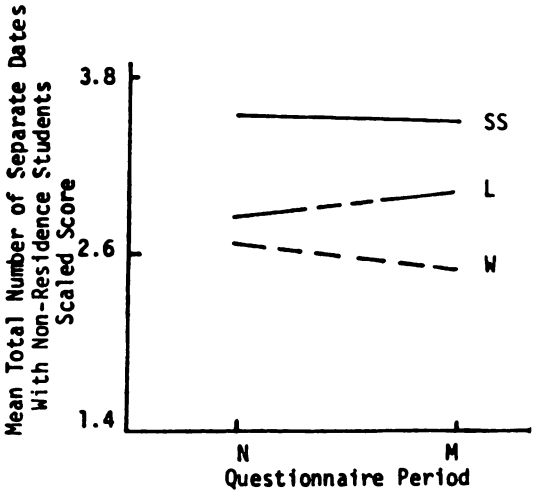


Figure 14.2. Total number of separate dates with students who lived outside of the student's residence hall during questionnaire periods for residence hall conditions.

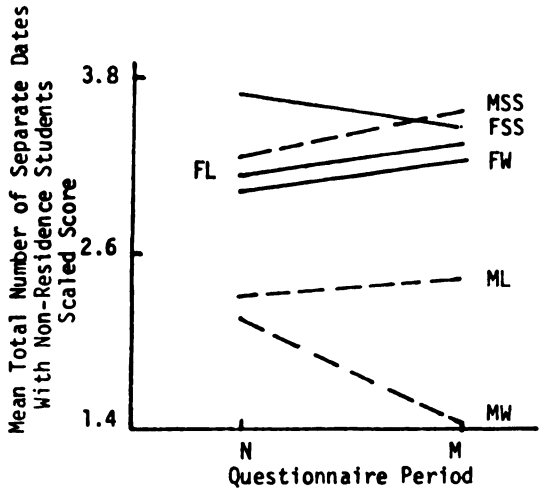


Figure 14.3. Total number of separate dates with students who lived outside of the student's residence hall during questionnaire periods for residence hall groups.

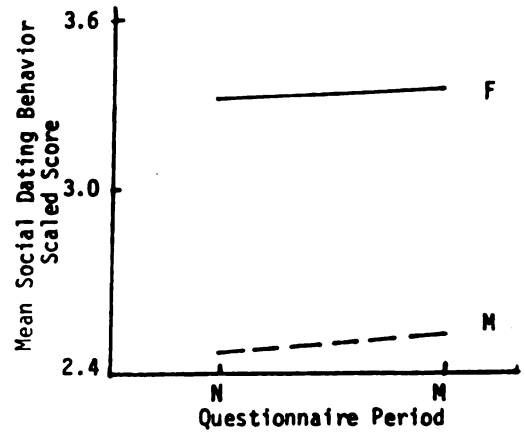


Figure 15.1. Social dating behavior with non-residence students during questionnaire periods for men and women.

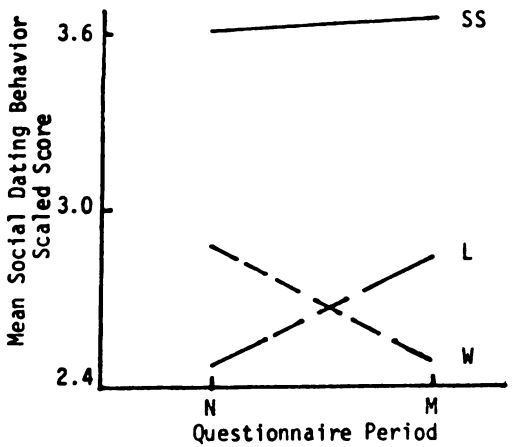


Figure 15.2. Social dating behavior with non-residence students during questionnaire periods for residence hall conditions.

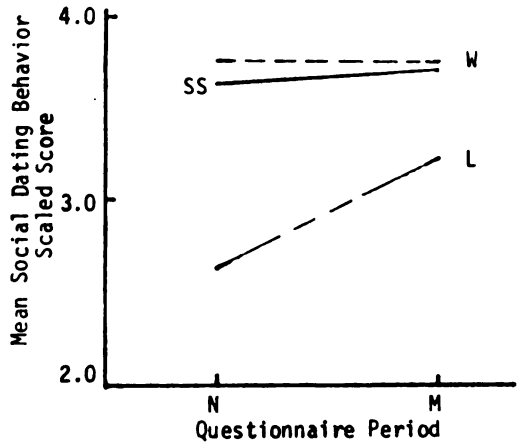


Figure 16.1. Social dating behavior with residents who lived in the student's residence hall (coed residence halls only) compared to single sex residents' social dating behavior during questionnaire periods for residence hall conditions.

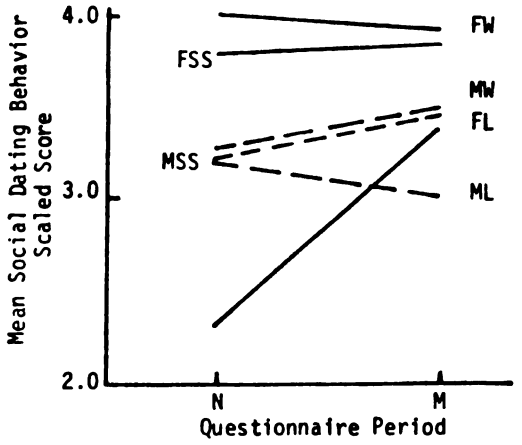


Figure 16.2. Social dating behavior with residents who lived in the student's residence hall (coed residence halls only) compared to single sex residents' social dating behavior during questionnaire periods for residence hall groups.

Residence Hall Conditions:
- SS - SSEX
- W - WINGS
- L - LEVELS

Residence Hall Groups:
- MSS - MSSEX
- FSS - FSSEX
- MW - MWINGS
- FW - FWINGS
- ML - MLEVELS
- FL - FLEVELS

Sex:
- M - Men
- F - Women

Questionnaire Periods:
- S - Summer
- N - November
- M - May

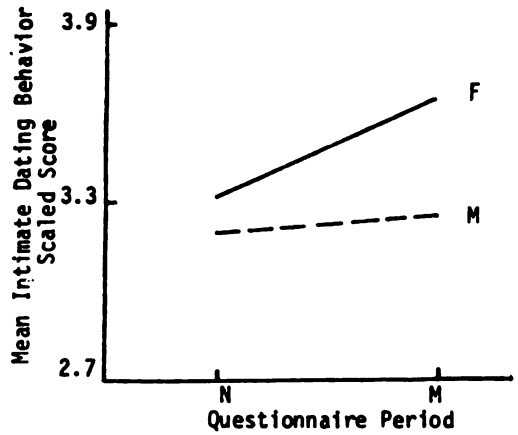


Figure 17.1. Intimate dating behavior with non-residence hall students during questionnaire periods for men and women.

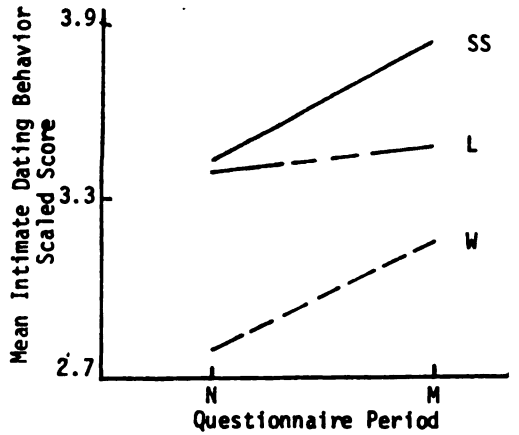


Figure 17.2. Intimate dating behavior with non-residence hall students during questionnaire periods for residence hall conditions.

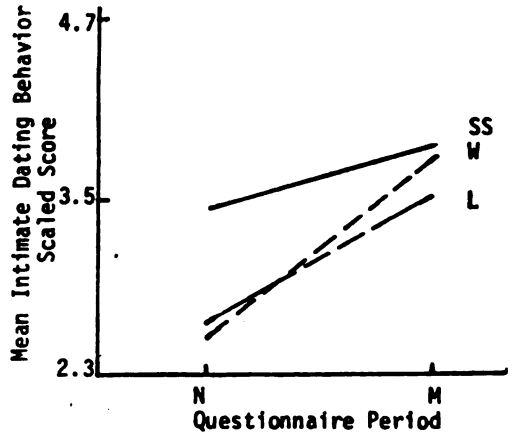


Figure 18.1. Intimate dating behavior with residents of the student's residence hall (coed residence hall students only) compared to single sex intimate dating during questionnaire periods for residence hall conditions.

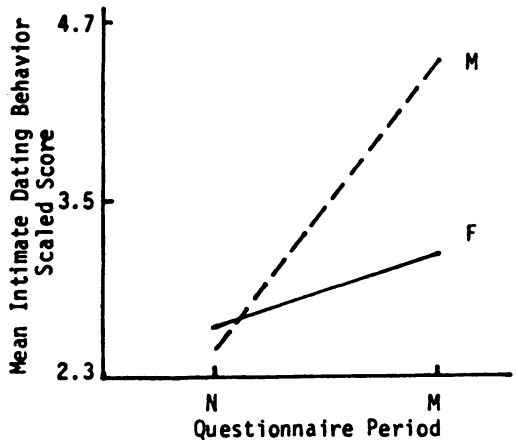


Figure 18.2. Intimate dating behavior with residents of the student's residence hall (coed residence hall students only) during questionnaire periods for men and women.

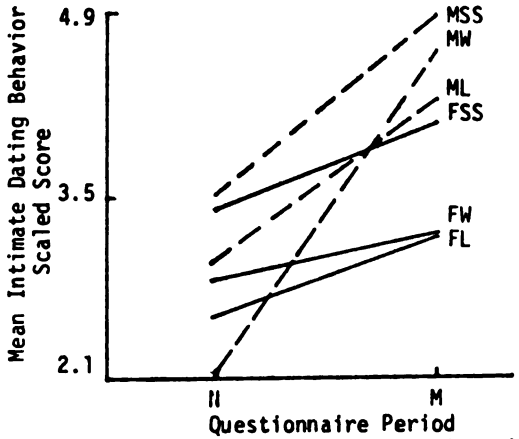


Figure 18.3. Intimate dating behavior with residents of the student's residence hall (coed residence hall students only) compared to single sex residents' intimate dating during questionnaire periods for residence hall groups.

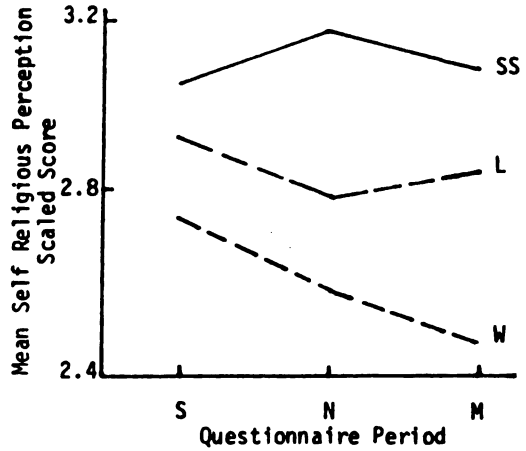


Figure 19. Self religious perception during questionnaire periods for residence hall conditions.

Residence Hall Conditions:
- SS - SSEX
- W - WINGS
- L - LEVELS

Residence Hall Groups:
- MSS - MSSEX
- FSS - FSSEX
- MW - MWINGS
- FW - FWINGS
- ML - MLEVELS
- FL - FLEVELS

Sex:
- M - Men
- F - Women

Questionnaire Periods:
- S - Summer
- N - November
- M - May

TABLE 9

RESULTS OF SIGNIFICANCE TESTS
FOR VARIABLES USED TO TEST HYPOTHESIS FIVE[1,2]

Type of Effect	Variable Number														
	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Main Effects:															
Residence Hall Conditions	NS	NS	NS	NS	NS	NS	S	NS	S	S	S	S	S	NS	S
Sex	NS	S	S	S	S	NS	S	S	NS	S	NS	NS	NS	NS	NS
Time	NS	NS	NS	NS	NS	S	NS	NS	NS	NS	NS	NS	NS	S	S
Interaction Effects:															
Sex by Time	NS	NS	S	NS	S	NS	NS	NS	NS	NS	NS	NS	S	S	NS
Residence Hall Conditions by Time	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Residence Hall Groups (Residence Hall Conditions by Sex)	NS	NS	NS	S	NS	NS	NS	NS	S	NS	NS	NS	NS	NS	NS
Residence Hall Groups by Time	NS	NS	NS	NS	NS	S	S	S	NS	NS	S	S	NS	S	S

[1]Exact probabilities of all significance tests can be found in Appendix F.

[2]S, significant at $p < .05$; NS, not significantly different at $p < .05$.

the four variables (see Table 10). Residence hall living conditions were found to be significantly different ($p < .013$) with students in the SSEX condition perceiving themselves as significantly more religious in November and May even though the three living conditions were nearly equal at the summer testing (Figure 19). Sakoda et al (1954) shows that one significant difference in a series of four tests of significance could be expected to occur with a probability of approximately .20 at the .05 level. Thus, it is probable that the one significant difference could be a chance difference. This result supports Hypothesis Six. Only one significant difference was found between the sexes: women were found to be significantly ($p < .022$) higher in their strength of belief in Church doctrine than were men. Two significant differences over time were revealed for all students between summer and May: 1) they experienced a significant decline ($p < .025$) in strength of doctrinal belief 2) they reported a significant decline ($p < .049$) in monthly church attendance. There were no significant interaction effects for any of the variables used to test religious perception and practice.

Analysis of Hypothesis Seven

Hypothesis Seven stated students living in coeducational residence halls are significantly more involved in extracurricular activities than are students living in single sex residence halls. Four variables were used to test the hypothesis (see Table 2 for detailed listing). For residence hall conditions, one variable produced a significant difference (see Table 10): the students in the WINGS residence hall condition were found to spend significantly less time ($p < .030$) in conversation with the same sex than did the SSEX and LEVELS students (Figure 20.2). One significant difference in four tests of significance would be expected

to occur with an approximate probability of 0.20 at .05 level (Sakoda et al, 1954). Thus, it is probable that this one significant difference is a chance difference. This would support the rejection of Hypothesis Seven.

All four variables were significantly different between the sexes suggesting that extracurricular activities are strongly influenced by sex differences. The four variables considered under the extracurricular area revealed that men had worked significantly ($p < .004$) more hours per week, especially during the summer (Figure 22). Men also participated in more extracurricular organizations in both November and May. Figure 20.1 and Figure 21.1 illustrate that women rated significantly higher in the number of non class hours spent in conversation with other women ($p < .026$) and with the opposite sex ($p < .001$). Time was also a significant factor with two variables found significantly different. A significant decrease ($p < .0001$) in number of hours worked per week was experienced by all students between summer and November followed by a slight increase by May and all students experienced a significant increase ($p < .034$) in the number of organizations in which they participated (Figure 22).

Analysis of interaction effects found no significant differences for residence hall conditions by time and residence hall groups by time. Sex by time was significantly different on the number of organizations in which the student participated. Men showed significant increases ($p < .021$) in organizational participation from November to May (Figure 22). Finally, residence hall groups (residence hall conditions by sex) were significantly different on two variables. For the MLEVELS and MWINGS students' conversation with the same sex was significantly lower ($p < .003$)

in both November and May (Figure 20.3). MWINGS and MLEVELS students also spent significantly less ($p < .032$) time in conversation with the opposite sex than did the other four groups; this difference was true in both November and May (Figure 21.2).

In conclusion, little evidence was found to support the hypothesis that residence hall conditions differentially influence the extracurricular activities of residents. Significant differences were found between men and women for extracurricular events with men more involved in outside employment and number of extracurricular organizations while women were significantly more involved in informal conversations with both sexes during the week. Men in the coed residence halls were also less involved in informal conversations with both sexes than were their counterparts in single sex residence halls.

ASSOCIATIVE ANALYSIS

An associative analysis was performed using Tryon and Bailey's (1970) cluster analysis approach. Seventy variables were selected for the analysis from the three questionnaires which included all demographic information in questionnaire one, aptitude test scores, high school and college grade point averages obtained from the student's academic file. For repeated measures, only the final measure taken in May was used.

The cluster analysis revealed twelve clusters:

Cluster One.	Family Sibling Structure
Cluster Two.	Environmental Friendliness
Cluster Three.	External Residence Hall Dating and Behavior
Cluster Four.	Environmental Scholarship
Cluster Five.	Academic Performance
Cluster Six.	Internal Residence Hall Dating and Behavior

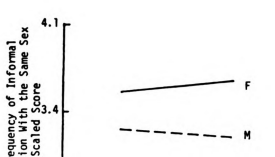


Figure 20.1. Frequency of informal conversation with the same sex during questionnaire periods for men and women.

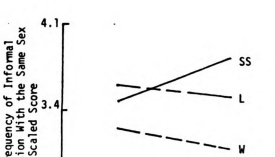


Figure 20.2. Frequency of informal conversation with the same sex during questionnaire periods for residence hall conditions.

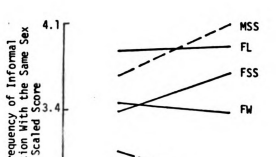


Figure 20.3. Frequency of informal conversation with the same sex during questionnaire periods for residence hall groups.

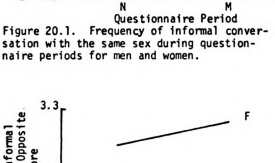


Figure 21.1. Frequency of informal conversation with the opposite sex during questionnaire periods for men and women.

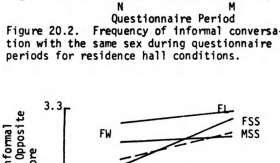


Figure 21.2. Frequency of informal conversation with the opposite sex during questionnaire periods for residence hall groups.

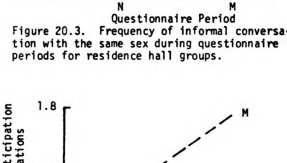


Figure 22. Frequency of participation in college organizations during questionnaire periods for men and women.

Residence Hall Conditions:
SS - SSEX
W - WINGS
L - LEVELS

Residence Hall Groups:
MSS - MSSEX
FSS - FSSEX
MW - MWINGS
FW - FWINGS
ML - MLEVELS
FL - FLEVELS

Sex:
M - Men
F - Women

Questionnaire Periods:
S - Summer
N - November
M - May

TABLE 10

RESULTS OF SIGNIFICANCE TESTS FOR VARIABLES USED TO TEST HYPOTHESES SIX AND SEVEN[1, 2]

Type of Effect	Hypothesis Six Variable Number				Hypothesis Seven Variable Number			
	39	40	41	42	43	44	45	46
Main Effects:								
Residence Hall Conditions	NS	NS	NS	S	NS	S	NS	NS
Sex	S	NS	NS	NS	S	S	S	S
Time	S	S	NS	NS	S	NS	NS	S
Interaction Effects:								
Sex by Time	NS	NS		NS	NS	NS	NS	S
Residence Hall Conditions by Time	NS	NS		NS	NS	NS	NS	NS
Residence Hall Groups (Residence Hall Conditions by Sex)	NS	NS	NS	NS	NS	S	S	NS
Residence Hall Groups by Time	NS	NS		NS	NS	NS	NS	NS

[1]Exact probabilities of all significance tests can be found in Appendix F.

[2]S, significant at $p < .05$; NS, not significantly different at $p < .05$.

Cluster Seven. Parental Education and Socio-economic Status

Cluster Eight. Male/Female Differences

Cluster Nine. Parental Marital Stability

Cluster Ten. High School Characteristics

Cluster Eleven. Religious Perception and Practice

Cluster Twelve. Study Habits and Perception

Table 11 shows the internal variable make-up of each cluster and the factor coefficient of each variable with its cluster.

Table 12 gives the correlations between the clusters given above and illustrates the degree of relationship between each of the oblique cluster domains.

Table 11 indicates that twelve factors appear to underly the seventy variables used in the associative analysis. Many of the demographic variables of questionnaire one are found in Cluster One - Family Sibling Structure, Cluster Seven - Parental Education and Socio-economic Status, Cluter Nine - Parental Marital Stability, and Cluster Ten - High School Characteristics. Cluster One, as illustrated in Table 12 is virtually uncorrelated with any other cluster. Clusters Seven and Nine have their highest intercorrelations with each other ($r = .24$) while Cluster Ten correlates highest with Cluster Three - External Residence Hall Dating and Behavior ($r = -.24$). This correlation suggests a slight interrelationship with students who came from smaller non-public high schools tending to score lower on the external residence hall dating and behavior dimensions.

Cluster Two - Environmental Friendliness is most correlated with Cluster Four - Environmental Scholarship ($r = .20$) and Cluster Six - Internal Residence Hall Dating and Behavior ($r = .24$). Cluster Four -

TABLE 11

THE TWELVE CLUSTERS, THEIR VARIABLE CONSTRUCTION AND VARIABLE FACTOR COEFFICIENTS

CLUSTER VARIABLE DESCRIPTION	VARIABLE'S FACTOR COEFFICIENT WITH CLUSTER
Cluster One - Family Sibling Structure	
1. Tends to be an older or middle child in the family	.64
2. Has a larger number of sisters in the family	.55
3. Has a larger number of brothers in the family	.47
Cluster Two - Environmental Friendliness	
1. Rates students as more friendly	.96
2. Rates both students and faculty as more friendly	.81
3. Rates students in own residence hall as more friendly	.72
4. Rates faculty of university as more friendly	.34
Cluster Three - External Residence Hall Dating and Behavior	
1. Has a larger number of separate dates with students who are not residents of his residence hall	.95
2. Dates a larger number of individuals who are not residents of his residence hall	.62
3. Tends to have a larger number of formal dates	.50
4. Tends to have a larger number of informal dates	.49
5. Tends to rate dating opportunities at the University as satisfactory	.48
6. Tends to spend more hours in conversation with the opposite sex	.39
7. Tends to be more open in expression of emotions and exerts less rigid controls on feelings	.33
8. Tends to be more socially adaptive in behavior	.32
9. Tends to be involved in higher degree of social dating behavior	.29
Cluster Four - Environmental Scholarship	
1. Rates academic standards of the university higher	.57
2. Rates students of the university as more highly devoted to scholarship	.57
3. Rates students in his own residence hall as more highly devoted to scholarship	.53
Cluster Five - Academic Performance	
1. Has a higher First Term grade point average	.93
2. Has a higher cumulative first year grade point average	.87
3. Had a higher cumulative high school grade point average	.51

"Table 11 (cont'd.)"

CLUSTER VARIABLE DESCRIPTION	VARIABLE'S FACTOR COEFFICIENT WITH CLUSTER
Cluster Six - Internal Residence Hall Dating and Behavior	
1. Tends to have more separate dates with residents in his own residence hall	1.00
2. Tends to date more individuals who are residents of his own residence hall	.75
3. Tends to have dated a larger number of individuals	.57
4. Tends to have had a larger number of separate dates	.39
5. Tends to have dated individuals who were on-campus students and/or lived in his own residence hall	.33
6. Tends to have transferred into a coed residence hall	.30
Cluster Seven - Parental Education and Socio-Economic Status	
1. Father has higher educational attainment	.91
2. Father has higher socio-economic status rating	.74
3. Mother has higher educational attainment	.59
Cluster Eight - Male/Female Differentiation	
1. Respondents tend to be men	.76
2. Has higher mathematical aptitude	.72
3. Tend toward masculine interest patterns	.70
4. Has higher verbal aptitude	.60
5. Has higher degree of intimate dating behavior with residents of own residence hall	.34
6. Tends to view men as more superior to women	.32
Cluster Nine - Parental Marital Stability	
1. Lives with one or more parents	.81
2. Parents are married	.77
3. Parents are living together	.39
Cluster Ten - High School Characteristics	
1. Attended a non coed high school	.82
2. Attended a private or parochial high school	.74
3. Attended a high school with a smaller size student body	.30
Cluster Eleven - Religious Perception and Practice	
1. Tended to perceive self as a religious person	.76
2. Tended to attend more church services per month	.69
3. Tended to believe more strongly the religious doctrines of his church	.67

"Table 11 (cont'd.)"

CLUSTER VARIABLE DESCRIPTION	VARIABLE'S FACTOR COEFFICIENT WITH CLUSTER
Cluster Twelve - Study Habits and Perception	
1. Tended to study more hours each week	.84
2. Rated self as working harder at studying than others	.81

Environmental Scholarship shows notable correlation with Cluster Eight - Male/Female Differentiation (r = -.30), Cluster Eleven - Religious Perception and Practice (r = .22) and Cluster Twelve - Study Habits and Perception (r = .36). Cluster Five - Academic Performance correlates strongest (r = .36) with Cluster Twelve - Study Habits and Perception. There is a negative correlation (r = -.20) between Cluster Six - Internal Residence Hall Dating and Behavior and Cluster Eleven - Religious Perception and Practice. Cluster Eleven also correlates higher with Cluster Four - Environmental Scholarship (r = .22), Cluster Eight - Male/Female Differentiation (r = -.24) and highest with Cluster Twelve - Study Habits and Perception (r = .34).

In the comparative analysis, seven areas were investigated: 1) academic performance and perception, 2) personality characteristics, 3) institutional warmth and friendliness 4) residence hall warmth and friendliness, 5) dating behavior and satisfaction, 6) religious practices and perception and 7) extracurricular activities. Comparison of these seven intuitively defined areas with the twelve clusters found in the associative analysis shows some degree of correspondence.

1. Academic Perception and Performance is made up of variables found in

a) Cluster Four - Environmental Scholarship

TABLE 12

CORRELATIONS BETWEEN EACH OF THE TWELVE CLUSTERS

Clusters		Clusters 1	2	3	4	5	6	7	8	9	10	11	12
1.	Family Sibling Structure		-.10	-.10	-.02	-.07	.03	.02	.07	.13	.09	.04	-.05
2.	Environmental Friendliness	-.10		.18	.20	-.11	.24	-.06	-.06	-.15	.08	.13	.04
3.	External Residence Hall Dating and Behavior	-.10	.18		.08	-.02	.16	.15	-.17	.14	-.24	.03	.05
4.	Environmental Scholarship	-.02	.20	.08		-.16	.01	-.15	-.30	-.04	-.07	.22	.36
5.	Academic Performance	-.07	-.11	-.02	-.16		-.11	.03	.16	.01	.09	.09	.29
6.	Internal Residence Hall Dating and Behavior	.03	.24	.16	.01	-.11		.07	-.10	.06	.09	-.20	-.08
7.	Parental Education and Socio-Economic Status	.02	-.06	.15	-.15	.03	.07		.13	.24	-.07	-.06	.03
8.	Male/Female Differentiation	.07	-.06	-.17	-.30	.16	-.10	.13		-.07	.14	-.24	-.16
9.	Parental Marital Stability	.13	-.15	.14	-.04	.01	.06	.24	-.07		.10	-.01	.13
10.	High School Characteristics	.09	.08	-.24	-.07	.09	.09	-.07	.14	.10		-.02	-.05
11.	Religious Perception and Practice	.04	.13	.03	.22	.09	-.20	-.06	-.24	-.01	-.02		.34
12.	Study Habits and Perception	-.05	.04	.05	.36	.29	-.08	.03	-.16	.13	-.05	.34	

b) Cluster Five - Academic Performance

c) Cluster Twelve - Study Habits and Perception

2. Cluster Two - Environmental Friendliness appears to include many of the variables found in

a) Residence Hall Warmth and Friendliness

b) Institutional Warmth and Friendliness

3. Dating Behavior and Satisfaction incorporates most of the variables in

a) Cluster Three - External Residence Hall Dating and Behavior

b) Cluster Six - Internal Residence Hall Dating and Behavior

4. Religious Practices and Perception variables are nearly identical to the variables which make up Cluster Eleven - Religious Perception and Practice.

Thus seven of the twelve clusters correspond closely to five of the original seven areas of the comparative analysis. Little similarity exists between the remaining areas and clusters. A total of seventy variables were used in the analysis. Of these seventy variables, forty-eight variables appeared in the clusters. The remaining twenty-two variables were dropped from the analysis because of low communalities.

CHAPTER IV

DISCUSSION

The purpose of this study was to experimentally evaluate the effects of single sex and coeducational housing on various behaviors, perceptions, attitudes and personality characteristics of freshman men and women students during their first year in college. These factors were compared for both men and women and differing residence hall living conditions and groups.

RESIDENCE HALL CONDITION DIFFERENCES

There was little evidence that residence hall conditions influenced the academic perception and performance of students in this study. Previous investigators had studied a number of variables related to academic performance and perception and had found varying results depending on the variable under question. The lack of significant differences in grade point average among the residence hall conditions supports the conclusions of a number of investigators (Blackman, 1966, p. 251; Greenleaf, 1962, p. 108; Imes, 1966; Riker, 1970, p. 8:361; Thorsen, 1970, p. 36; University of Southern California, 1972, p. 5). Further, the lack of differences in average number of hours devoted to study each week among the residence hall conditions suggests that the residence hall condition does not differentially influence the study behavior of the residents. Thus, no support is provided by this study to the notion that either a single sex or coed residence hall environment is more beneficial to academic performance.

Neither does the study support the conclusion of Thorsen (1970, p. 36) and the University of Southern California Study (1972, p. 12) suggesting the campus becomes more intellectually oriented when there are coeducational residence halls. To the extent that the scales used in this study were able to reflect student perception of increased intellectual orientation of the university's academic climate no significant difference in perception between single sex or coed residence hall conditions was found. Apparently, neither single sex nor coed environments differentially influence such a difference in perception. Of course, this scale did not measure the "academic climate" of the campus directly. It does suggest that if such an increased intellectual orientation was present and was caused by coeducational residence hall environments that such a condition was not differentially perceived by students in either coeducational or single sex environments.

The two studies cited above further suggest that coed residence hall environments become more intellectually oriented. This study supports that conclusion only partially. The students in the WINGS condition did differentially perceive their fellow residents as significantly more devoted to the scholastic enterprise than did residents in the SSEX or LEVELS conditions. This finding suggests that the coeducational WINGS environment influenced the residents of that environment to perceive fellow residents as more devoted to scholarship and study. To the extent that such a difference in perception is caused by a "more intellectually oriented" residence hall, then the hypothesis of the previously cited studies is supported for the WINGS coed environment.

Several important interaction effects were found, especially for residence hall groups (residence hall conditions by sex) and residence

hall groups by time. Although there were no significant differences in grade point average among the six residence hall groups, there were other differences, especially for MWINGS students. MWINGS students studied significantly less and perceived the academic standards of the university lower than the other groups. To further confuse the issue, they significantly increased their rating of the intellectual stimulation on the campus over the one year period. This all suggests that the WINGS environment may have had a differential effect on the male residents not present for the other five groups.

There were also no significant differences in perception of personality characteristics between residents in single sex residence halls and residents in coeducational residence halls. This suggests that residence hall conditions have no differential effect on the students' perception of their personality characteristics. Of the five variables used to measure personality characteristics only one produces a significant difference, masculinity-femininity. This difference was present at the initial summer questionnaire and, as discussed on page 39, could be explained as a chance difference.

An intriguing interaction effect was found for residence hall groups by time. The FLEVELS and MLEVELS residence hall groups became increasingly more significantly different from each other on the attitude toward the opposite sex scale over the one year period.

This finding suggests that both men and women in the LEVELS living condition which constituted the highest coeducational mix of the three residence hall conditions, came to view the opposite sex as more inferior to themselves as a result of their experience in this living condition. This finding is contrary to several investigators' reports

which suggest that coeducational residence halls tend to help men and women become more aware of and more accepting of the opposite sex's attitudes and behavior and to be more understanding and more relaxed in interpersonal relationships (Greenleaf, 1962, pp. 107, 109; Lynch, 1971, p. 37; Riker, 1970, p. 8:30; Schroder and LeMay, 1974; Thorsen, 1970, pp. 32, 38; University of Michigan, 1970). Further support for this study's finding is evident in the changes which the other four residence hall groups experienced on this scale. MSSEX and FSSEX students were the most similar in rating the equality of the opposite sex by May. Thus, it would seem that the single sex residence hall groups came to view the opposite sex more favorably than did the students in either of the coeducational residence hall conditions. Although the difference in rating equality of sexes was not significant between FSSEX and FWINGS, the two male coeducational residence hall conditions ratings were substantially different from the MSSEX group implying that men in coeducational residence hall conditions come to view women as more inferior than men over time. This study seems to indicate that both men and women came to view themselves as more superior to the opposite sex in direct relationship to the degree of coeducational mix of the residence hall condition.

This result is also at variance with the predictions of intragroup change which Newcomb et al (1961, p. 355; 1965, p. 458; 1966, p. 9) suggest occurs when two groups which have prejudicial attitudes toward one another are brought in contact. If an attitude of one sex judging themselves as "superior" to the other sex can be interpreted as a prejudicial attitude, than the closer proximity of the two sexes to one another in the LEVELS living condition should result in a lessening of this

superior judgement because of the presumed improved communications, more frequent close personal and informal contact and the opportunity to become more aware of and more accepting of the opposite sex's attitudes and behavior.

Newcomb et al (1965) indicate that prejudicial groups which have the combination of the removal of barriers to communication, the motivation to associate and to communicate with individuals against whom there is existing prejudice and the opportunity for joint participation in activities will lessen their prejudicial attitudes and behavior toward one another. These conditions supposedly were approximated in coed living conditions; however, the hypothesized lessening of prejudicial attitudes did not occur, in fact, the opposite occurred, especially for MLEVELS and FLEVELS students. This result suggests that the presumed emotional "closeness" to the opposite sex in coed residence halls may have been over emphasized by previous investigators. It is possible that the proximity of the sexes in coed residence halls reinforces previously held male-female prejudices and that presumed openness in communications and/or involvement in more personal and intimate male-female interactions is not present in coed environments at near the level suggested by previous investigators.

Since freshmen were used in this study which was only one academic year in duration, it is not possible to know if these attitudinal differences are permanent. Certainly, this contrary finding indicates additional research is needed.

Evidence supporting the contention that students living in coeducational residence halls perceive the general university environment as significantly more warm and friendly than do students living in single

sex residence halls was minimal. Of the four variables used to test this hypothesis, none of the variables produced a significant difference. Interaction effects were present for residence hall conditions by time and for residence hall groups (residence hall conditions by sex) on rating the friendliness of students at the university. The evidence suggests that the coed conditions caused a decreased rating of friendliness of those university students who lived outside of the resident's residence halls. SSEX students significantly increased their perception of student friendliness at the same time coed residents were signifying a significant decline. This suggests that SSEX students may have been more motivated to seek friendships with other students living outside of their residence hall than coed residence hall students, thus resulting in SSEX students gradually coming to view the friendliness of non-residence hall students as greater than did coed residence hall students. Although the mean ratings of the three conditions were not significantly different in either November or May, the trends do run counter to the findings of other investigators who have suggested that coeducational residence hall facilities result in a more relaxed and friendly campus environment (Thorsen, 1970, p. 36; University of Southern California, 1972, p. 4).

The hypothesis that students living in coeducational residence halls perceive their own residence hall environment as significantly more warm and friendly than do students living in single sex residence halls received no support. None of the five variables used to test this hypothesis produced any significant differences.

Some investigators have suggested that coed residence halls facilitate a friendly, warm and cohesive residence hall environment (Corbett & Summer, 1972, p. 216; Lynch, 1971, p. 37; University of Southern

California, pp. 4, 12). The measures used in this study failed to support their conclusions. Both coeducational and single sex residence hall students rated residence hall friendliness and satisfaction with their residence hall living conditions at the same levels. Lynch (1971, p. 37) and Greenleaf (1962, p. 111) suggested that coed residence hall students tended to go home less on weekends. Although this study indicates that all students significantly decreased the number of weekends spent off campus between November and May, it does not support Lynch and Greenleaf's conclusions since there was no significant difference in frequency of weekends off campus reported by students among the residence hall conditions or groups. This suggests that neither coed nor single sex residence hall facilities differentially affect the frequency of off campus weekends. The two additional factors, number of roommate changes and residence hall transfer rates, which might reflect satisfaction or dissatisfaction with the residence hall environment, failed to significantly differentiate among residence hall conditions or groups.

Analysis suggested a number of significant differences in dating behavior and satisfaction between residents in single sex residence halls and residents in coeducational residence halls existed. For the students in the various residence hall conditions, apparently the lack of close living proximity to the opposite sex for SSEX residence hall students or the closer living proximity of the opposite sex for WINGS or LEVELS students had little affect on the students' rating of satisfaction with the opportunity to date.

Some interesting differences in dating patterns did emerge among residence hall living conditions. Although there were no significant differences among residence hall conditions in either the total number

of individuals dated or in the total number of separate dating experiences, the students of the three residence hall conditions did distribute their dating activity differently. SSEX students dated significantly more non-resident students and had significantly more individual dating experiences with non-residents. Since SSEX students only had the choice of non-resident individuals to date, this is not an unexpected finding. When comparing coed residence hall conditions only, neither WINGS nor LEVELS students dated significantly more fellow residents. There was evidence that coed residence hall students tended to date more individuals who lived outside their residence hall than fellow residents and that they also tended to have more separate dating experience with non-residents than with fellow residents. These findings support the conclusions of several authors (Corbett & Summer, 1972, p. 217; Jackson, 1971; Lynch, p. 38; Rollins, 1969, p. 27).

Supporters of coed residence halls have generally suggested that coed environments tend to increase group interaction between the sexes, to stimulate more involvement in social events (Lynch, 1971, p. 38) and to create a tendency toward group dating on the part of coed residence hall students. The following results did not support those conclusions and, in fact, were contrary to them. SSEX students were significantly higher on the social dating behavior scale with non-resident students than were coed residence hall students, suggesting that SSEX students were involved in a higher degree of social dating than were coed residence hall students with non-residents. Why WINGS and LEVELS students should be significantly less involved in social dating with their non-resident dates than were SSEX students is unclear. When comparing the degree of social dating behavior of SSEX students (with non-resident students) to

the degree of social dating behavior of students in coed residence halls with fellow residents, SSEX and WINGS were very nearly equal in rating while both conditions were significantly higher than LEVELS students in November, though this difference diminished somewhat by May. This suggests that the more closely integrated LEVELS coed living environment resulted in less social dating than did the less coed integrated environments of WINGS and SSEX.

The intimate dating behavior of the three residence hall conditions varied somewhat depending upon the type of residence of the person dated. When comparing the degree of intimate dating behavior with non-residence hall students, SSEX students were intimately involved to a significantly higher degree than were WINGS or LEVELS students throughout the entire year. Neither WINGS nor LEVELS students differed significantly from one another in degree of intimate dating with fellow residents. When comparing the degree of intimate dating behavior of SSEX students (with non-residence students) to the intimate dating behavior of students in coed residence hall conditions with fellow residents, SSEX students were significantly more intimately involved in November; however, by the end of the year, there were no significant differences among the three residence hall conditions in degree of intimate dating behavior. Thus, coed residence hall students were not as intimately involved as SSEX students with non-residents; however, coed students appeared to have a higher degree of intimate dating behavior with fellow residents though this degree of intimacy was about equal to the involvement of SSEX students with non-residents. In short, coed students' degree of intimacy was significantly lower with non-residents than it was with residents but was equal to SSEX non-residence dating by the end of the year.

These findings are at variance with other authors, depending on the comparison being made. In the University of Southern California's study, eleven institutions reported the level of promiscuity was not significantly different between coed residence halls and single sex residence halls (University of Southern California, 1972, p. 10). This study supports that conclusion when comparing coed residence hall students' intimate dating behavior with fellow residents to single sex students' intimate dating behavior. However, it does not support their findings when comparing coed residence hall students' degree of intimate dating behavior with non-residence hall students. The results of this study definitely contradict those authors who suggest that coed residence hall students are less intimately involved with fellow residents than are single sex students with their dating partners. (Jackson, 1971; Rollins, 1969, p. 22; Thorsen, 1970, p. 36).

Some differences in dating patterns for specific residence hall groups did emerge from these results. Men in the single sex residence hall group (MSSEX) had a significantly greater number of separate dating experiences than did men in the WINGS and LEVELS condition. MSSEX students also experienced a significant increase in number of total separate dates between November and May while both MWINGS and MLEVELS had a sharp decline in total dates during this period. While MSSEX students dated at about the same rate as the women in the three women's residence hall groups, MWINGS and MLEVELS dated at a considerably lesser rate. Of particular interest is the significantly lower number of non-resident students dated and the significantly lower number of separate dates by MWINGS students when compared to the remaining residence hall groups. Although they had less dating involvement with non-residents, MWINGS students made up for

this lower non-resident dating pattern by dating both more individuals and having more individual dating experiences with their fellow residents. Meanwhile, MLEVELS students had significantly less separate dating experiences with non-resident students but also had significantly less separate dating experiences with residence hall students. In fact, MLEVELS students had the least amount of dating activity of all six residence hall groups by May.

Thus, it appears that dating patterns were particularly different for the two male coed residence hall groups. MWINGS had significantly more involvement with residence hall students and MLEVELS had the least amount of dating activity of all six residence hall groups.

Although there were no significant differences between the four coed groups in degree of social dating behavior with residence students, there were substantial differences among coed groups on residence hall intimate dating behavior. These differences were substantially sex differences. Although all four coed groups experienced significant increases in degree of intimate dating behavior between November and May, this increase was especially sharp for MWINGS and MLEVELS which were substantially higher in intimate dating behavior than FWINGS and FLEVELS by May. Comparing the four coed groups on residence hall intimate dating to SSEX non-residence hall intimate dating again shows this sex difference with all three male groups significantly higher than the female groups except FSSEX. FSSEX ended the year nearly equal in level of intimate dating behavior to the male groups while FWINGS and FLEVELS are significantly lower in resident hall intimate dating than FSSEX and the three male residence hall groups.

This data suggests that the residence hall environment has no differential effect on degree of intimate dating for men. All men,

regardless of residence hall environment, engage in about the same degree of intimate dating behavior. On the other hand, the evidence suggests that coed residence hall environments may result in women being significantly less involved in intimate dating behavior than women in single sex residence hall environments. At least with regard to women, this finding would support, partially, the conclusions of Jackson (1971), Katz (Rollins, 1969, p. 22) and Thorsen (1970, p. 36).

Evidence suggested that there was no significant difference in religious perception and practice between residents in single sex residence halls and residents in coeducational residence halls because only one of the four variables used to test the hypothesis was significantly different. The one significant difference for residence hall conditions suggested that both men and women students in the SSEX condition perceived themselves as significantly more religious than did WINGS and LEVELS students throughout the academic year despite the fact they had had the same religious perceptions of themselves in the summer preceding their arrival on campus. This difference in self-religious perception may reflect some generally shared biases or campus mores that suggest that living in a single sex residence hall environment makes one "more" religious and coed residents "less" religious.

The hypothesis that students living in coeducational residence halls were significantly more involved in extracurricular activities than were students living in single sex residence halls was rejected when only one of the four variables used to test the hypothesis was found significantly different.

Students in residence hall conditions did become differentially involved in informal conversations depending on the specific conditions.

WINGS students engaged in significantly less informal conversation with the same sex than students in either SSEX or LEVELS conditions. By May, SSEX students significantly increased their degree of informal conversation with the same sex while LEVELS students were next highest followed by WINGS students who were still lowest.

There were no differences among residence hall conditions in conversation with the opposite sex; however, residence hall groups did show some differences in informal conversations. MWINGS and MLEVELS were significantly less involved in informal conversations with both sexes in November and May. The two women's coed groups and both SSEX groups were involved in about the same levels of informal conversations with both sexes. Apparently, men in the coed living conditions were involved in less informal conversations than men or women in the remaining four residence hall groups. Previous investigators have suggested that both men and women in coeducational residence halls are involved in more informal conversations than students in single sex residence halls (Thorsen, 1970, p. 36; University of Southern California, 1972, p. 4). This study is unable to support that conclusion; in fact, for men, the opposite may be true. These authors also suggested that coed residence hall students were more involved in campus activities than single sex residence hall students. Again, the results of this study do not support that conclusion since no significant differences were found in student participation in college organizations among either residence hall conditions or residence hall groups.

SEX DIFFERENCES

Differences between the sexes on five of the nine variables used to measure academic performance and perception suggest important differences

exist between men and women especially in perception of the academic climate of the environment. It appears that freshman women perceived the academic climate as significantly more challenging and stimulating than did freshman men, especially upon entrance into the university. Whether this difference was due to the significantly lower verbal and mathematical aptitude of the women in this study or to their significantly higher expectation of the university's academic climate is in question. Pace (1969, p. 10) has found in studies using the College and University Environment Scales that freshman students tend to have unrealistically high expectations about the college environment which result in inflated socres on several dimensions of the CUES including the scholarship scale. The fact that the cumulative grade point average was not significantly different between the sexes in either the first term or at the end of the year and that both men and women became more similar in rating residence hall scholarship, university academic standards, and student perception of activities by the end of the year suggests that higher expectations on the part of women may be the more plausible explanation.

Though there were no apparent differential effects among the three female groups, the two male coed residence hall groups experienced significant increases in grade point average between the first and third terms while the male single sex students experienced a significant decrease over the same time period. This suggests that coed environments may have a beneficial effect by providing environmental conditions which lead to improved grade production over time for men, while single sex residence hall environments may contribute to a deterioration in grade production for men. This suggests that men in coeducational residence halls because of reduced distractions and concerns about relating to the

opposite sex with whom they have daily involvement increased their grade production over time while men in single sex environments experienced greater distractions and concerns for relationships with women which resulted in deteriorating academic performance over the same time period. While this hypothesis is not directly mentioned by previous authors, it is reminiscent of the inferences made by a number of researchers who suggested differential effects on the maturing process and academic behavior of men due to the coeducational environment.

Not unexpectedly, men and women were found to perceive themselves significantly different on the various personality characteristic scales used in the study. The lack of change over time for men on all four perceptual personality scales and for women on all scales except conformity is perhaps somewhat unexpected. It has been generally thought that entrance into college has its greatest impact on the personality adjustment of freshmen in the earlier months of the school year (Baker & Nidorf, 1964). The lack of significant change over the one year period on these personality scales could mean that no changes actually occurred or it could indicate a lack of sensitivity of these scales to such change.

Significant changes did occur in women on the conformity scale over time. The increase reflects a sudden growth in non-conforming behavior commensurate with their leaving home and their first two months on the university campus. This implies that the home influence tends to promote more conforming behavior in women living at home. However, once women are in college where the environment presumably promotes more non-conforming behavior, they respond and quickly catch-up with the more non-conforming behavior of their male counterparts. This change which is specifically found in freshman women further suggests that the

norms of the university in regard to conformity are male norms and it is toward this male-dominated environment that the freshman women are changing.

Women dated significantly more often and with more people than did men throughout the entire year. In addition, dating pattern differences existed between men and women with women dating significantly more individuals who lived outside of their residence hall. When viewing coed residence hall students only, men and women dated fellow residents throughout the year at the same rate and number regardless of type of coed residence hall condition or groups. This data suggests that women tended to seek dating experiences with non-residents more often than did men while coed students regardless of sex sought dates with fellow residents at about the same rate. The data additionally shows that both men and women in coed residence halls dated more non-residents than residents and had more separate dating experiences with non-residents than residents. This result agrees with several authors who have hypothesized that coed students do not date those living in their own residence halls as frequently as they date people living outside the residence halls (Corbett & Summer, 1972, p. 217; Jackson, 1971; Lynch, 1971, p. 38; Rollins, 1969, p. 27). Whether this trend toward external dating as opposed to internal dating can be interpreted to support the existence of an "incest taboo" in coed dorms as suggested by Katz (Rollins, 1969, p. 22), a "brother-sister" relationship as posed by Rollins (1969, p. 27), a "surrogate big brother" as hypothesized by Jackson (1971) or a "platonic relationship" with the opposite sex as proposed by others (Corbett & Summer, 1972, p. 217; Leland and Burk-Dietrich, 1970, p. 6; University of Michigan, 1970, p. 10) is only theorizing at its best.

Social dating behavior was higher for women dating non-residence students than for men; however, when comparing coed residence hall students, social dating behavior did not differ between the sexes when dating fellow residence hall students.

Intimate dating behavior did not differ between the sexes, with non-residence hall students nor, when considering coed residence hall students only, did intimate dating differ between the sexes with fellow residents. Women had a significant increase in degree of intimate dating between November and May with non-residents while men did not; however, when considering coed residence hall students only, all students regardless of sex experienced a significant increase in degree of intimate dating between November and May with residents in their own residence hall.

Significant differences were found between the sexes and over time for some variables measuring changes in religious perception and practice. Women maintained a stronger belief in their Church's doctrines; however, both men and women experienced significant declines in both strength of belief in doctrine and monthly church attendance during the first few months at the university. These changes are undoubtedly caused more by general academic and social factors in the overall university environment which may challenge the beliefs and practices of the student during his first year at the university resulting in a movement toward the more secular norms of the university environment. This shift toward the larger group's norms is entirely consistent with studies of attitude change carried out by previous investigators (Festinger, Schachter & Back, 1959; Festinger, 1957; Newcomb, Turner & Converse, 1965).

There were some significant differences between men and women in involvement in extracurricular activities. Men worked significantly more hours than women during the summer preceding their entrance into the university. Once attending the university, both sexes dropped significantly the total hours worked per week during this time.

Women engaged in significantly more informal conversations with both other women and with men throughout the year. Men were found to be significantly more involved in college organizations than were women. Men also became significantly more involved in such activities between November and May.

ADDITIONAL FINDINGS

Cluster analysis of seventy variables used in the study resulted in the definition of twelve clusters of variables rather than the seven intuitively defined areas, 1) academic performance and perception, 2) personality characteristics, 3) institutional warmth and friendliness, 4) residence hall warmth and friendliness, 5) dating behavior and satisfaction, 6) religious practice and perception and 7) extracurricular activities. The twelve clusters resulting from this analyses were:

Cluster One.	Family Sibling Structure
Cluster Two.	Environmental Friendliness
Cluster Three.	External Residence Hall Dating and Behavior
Cluster Four.	Environmental Scholarship
Cluster Five.	Academic Performance
Cluster Six.	Internal Residence Hall Dating and Behavior
Cluster Seven.	Parental Education and Socio-economic Status
Cluster Eight.	Male/Female Differentiation
Cluster Nine.	Parental Marital Stability
Cluster Ten.	High School Characteristics
Cluster Eleven.	Religious Perception and Practice
Cluster Twelve.	Study Habits and Perception

The analysis suggests that the originally defined areas were in some cases too broadly defined and, as a matter of fact, consisted of more

than one relatively independent factor. This was particularly true of two areas: Academic Perception and Performance and Dating Behavior and Satisfaction. The Academic Perception and Performance area was further broken by the analysis into three relatively independent clusters, 1) Cluster Four - Environmental Scholarship, 2) Cluster Five - Academic Performance and, 3) Cluster Twelve - Study Habits and Perception. The Dating Behavior and Satisfaction area divided into the two relatively independent clusters, 1) Cluster Three - External Residence Hall Dating and Behavior and 2) Cluster Six - Internal Residence Hall Dating and Behavior. In one instance, two of the intuitively defined areas, 1) Residence Hall Warmth and Friendliness and, 2) Institutional Warmth and Friendliness constituted one integrated cluster, Environmental Friendliness.

The twelve clusters were made up of forty-eight of the seventy variables used in the analyses. This result suggests that in future studies the twelve clusters made up of these forty-eight variables would be sufficient to describe the important variance related to this type of a study. The twenty-two variables not included in the clusters should be either dropped from future studies or carefully reviewed individually before being included.

In the case of clusters composed of two or three variables, creating additional variables which could improve the reliabilities of these clusters would be recommended.

An interesting side issue was raised because of the lack of correlation ($r = -.07$) between Cluster One - Family Sibling Structure and Cluster Five - Academic Performance suggesting that no relationship exists between academic performance and position in and size of family. Other

investigators (Altus, 1965; Lunneborg, 1968, 1971; Oberlander & Jenkins, 1967; Oberlander, Jenkins & Houlihan, 1970) have discovered that the oldest siblings in families were higher in both ability and performance measures. Though these investigators did not always find significant differences between the oldest sibling and younger children in the family, the older siblings were consistently higher and often significantly higher on measures of ability and performance. Following the suggestions of Oberlander et al, (1970) all students who were only children were eliminated and an analysis of the oldest child versus other children in two children families or larger was made. Two performance measures were used, 1) high school grade point average and 2) college grade point average and two ability measures were used, 1) verbal scholastic aptitude and 2) mathematical scholastic aptitude. Table 13 shows that no significant differences between the oldest sibling and younger siblings on performance or ability measures were found. However, similar to the above authors, the oldest siblings produced larger means on all four measures indicating that although older siblings are not significantly higher on performance and ability measures, they tend to score consistently higher on such measures. The lack of significant differences between the ability and performance measures and the low correlation between the two clusters do not support an interpretation that older siblings have significantly higher abilities or perform significantly better than younger siblings.

SUMMARY

Are coeducational residence halls more beneficial to students than single sex residence halls? That is the basic question to which the main thrust of the study has been aimed. Unfortunately, the results

TABLE 13

ANALYSIS OF OLDEST VS YOUNGER SIBLINGS ON HIGH SCHOOL AND COLLEGE GRADE POINT AVERAGES AND VERBAL AND MATHEMATICAL SCHOLASTIC APTITUDE SCORES

VARIABLE	Mean	Standard Deviation	Number	t ratio	df	Significance Level[1]
High School Grade Point Average						
Oldest Siblings	3.269	0.356	51			
Younger Siblings	3.252	0.406	153	0.640	202	NS
College Grade Point Average						
Oldest Siblings	3.000	0.525	56			
Younger Siblings	2.940	0.575	151	0.682	205	NS
Verbal Scholastic Aptitude Score						
Oldest Siblings	510.0	128.0	50			
Younger Siblings	489.4	105.6	155	1.130	203	NS
Mathematical Scholastic Aptitude Score						
Oldest Siblings	560.2	72.1	49			
Younger Siblings	544.3	83.9	159	1.184	206	NS

[1]NS, not significant at the .05 level.

of this study suggest that a simple answer is not possible; perhaps previous investigators have not recognized the complexity of the answers. Many individuals have hypothesized various benefits of coeducational environments; a number of these supposed benefits were not supported by this study. On the other hand, neither does this study give detractors of coeducational residence halls much evidence to support their positions.

There was little evidence to support the contention that either single sex or coed residence halls differentially influenced the academic perception and performance of students. There was some evidence that for grade point average, men in single sex environments tended to decrease their academic average over time while men in coed environments tended to improve their grade point averages over the same period.

Personality changes did not appear to be related significantly to the type of residence hall environment. There was some evidence that the more closely integrated coeducational residence halls may have influenced men and women to view themselves as more superior to the opposite sex as the year proceeded. This "familiarity breeds contempt" reaction is contrary to the hypotheses of several supporters of coeducational residence halls.

There was no evidence to suggest that the type of residence hall environment differentailly affected a student's perception of faculty friendliness or the general friendliness of the university environment. However, evidence was found suggesting that single sex and coed environments may have differential effects on residents' perception of the friendliness of students at the university. Over the one year study, students in coed environments significantly decreased their ratings of student friendliness while students in single sex environments significantly increased these ratings.

The perception of residence hall warmth and friendliness was not significantly influenced by the type of residence hall. Both coed and single sex residents perceived their residence hall environments as nearly equal in friendliness, warmth, and cohesiveness.

Dating behavior measures did produce some interesting results. Students seemed to be equally satisfied with the dating opportunities on the campus regardless of residence hall environment. Coed residence hall students dated more non-residents more frequently than they did fellow residents; however, there were no differences in number of fellow residents dated or frequency of dates with fellow residents when comparing WINGS and LEVELS conditions.

Single sex residents were involved in a significantly greater degree of social dating behavior with non-residents than were coed resident hall students. When comparing the degree of social dating behavior of single sex students with non-residents to the degree of social dating behavior of students in coed residence halls with fellow residents, evidence suggests that the more closely integrated LEVELS coed living environment resulted in a lesser degree of social dating than did the less coed integrated WINGS and single sex environments.

For coed residence hall students, intimate dating activity did differ depending on whether they were dating non-residents or fellow residents. Coed residents were involved in a significantly lesser degree of intimate dating behavior with non-residents than were single sex students; however, when dating fellow residents the degree of intimate dating behavior increased but was not significantly different in degree from the level of intimacy of single sex residence hall students with their dating partners. Thus, coeducational residence hall students are

not involved in any greater degree of intimate dating behavior than single sex residence students. They are, however, more intimately involved with fellow residents than with non-residents.

Although the type of residence hall environment did not differentially affect men in the degree of intimate dating behavior in which they were involved, it did appear to affect women. The evidence suggested that coeducational residence hall conditions influenced women to become significantly less involved in intimate dating behavior than women living in single sex residence hall environments.

The religious perception and practice of students appeared not to be significantly influenced by the type of residence hall in which the student lived. There was also little evidence suggesting that residence hall environments differentially influenced students' extracurricular activities. There was some evidence suggesting that men in the coed living conditions were involved in significantly less informal conversations with both sexes than were men and women in the remaining residence hall groups.

A number of differences between the sexes were found. Women perceived the academic climate of the institution as significantly more challenging and stimulating than did men, a result probably due to higher expectations about the university on the part of women. Women had a significant increase in non-conformity ratings approaching the ratings of men within the first two months of arriving on the university campus. Women were found to date significantly more often and with more people than did men throughout the entire year. Women tended to seek dating experiences with non-residents more often than did men while coed residence hall students, regardless of sex, sought dates

with fellow residents at about the same rate. Additionally, both men and women in coed residence halls dated more non-residents more often than fellow residents.

Women had a higher social dating behavior rating with non-residents than did men; however, social dating behavior did not differ between the sexes when dating fellow residence hall students. There was no significant difference in degree of intimate dating behavior between sexes when dating non-residence hall students. Neither was any difference in degree of intimate dating behavior between the sexes found for coed residence hall students when dating fellow residents. Women experienced a significant increase in degree of intimate dating behavior over the one year period when dating non-residents. For coed residence hall students, all students regardless of sex experienced a significant increase in degree of intimate dating behavior with fellow residents over the one year period.

Other differences suggested that although women maintained a stronger belief in their church's doctrines, both men and women experienced a significant decline in both strength of belief in doctrines and monthly church attendance during the first few months of attendance. Women were found significantly more involved in informal conversations with both other women and men throughout the year. Finally, men were found to be significantly more involved in college organizations than were women.

Cluster analysis revealed twelve clusters of variables among the seventy variables used in the study. Forty-eight variables constituted these clusters and accounted for most of the variance within the study. Analysis of the relationship between the oldest sibling and

younger siblings on measures of academic performance and scholastic aptitude failed to discover any significant differences.

IMPLICATIONS FOR FUTURE RESEARCH

From an overview perspective this study represents a beginning attempt to apply experimental methodology to the study of coeducational residence hall environments and their impact on students. The study is by no means definitive; replication by studies similar to this investigation are necessary. It is only through such replications that the conclusions of this study can be checked to see if they can be generalized or are only specific to this experimental sample or university. With this in mind, a number of possible directions for further research are given below.

The effect of various visitation hour policies should be investigated. It is possible that coeducational or single sex environments may be rather inconsequential if the residence halls have open visitation which might, in effect, create unofficial coed environments of various types. Also, the addition of more variations of coeducational environments is strongly suggested, e.g., coeducational units which have an intermix of rooms or suites of men and women. Such arrangements were not available to the investigator in this study but would be especially valuable in adding a closer mix of the sexes in a coed environment.

In selecting the six residence halls to be included in the study, specific facilities were selected on the basis of staff opinion that these residence halls did not include any special programming or other characteristics which would tend to set them apart from other facilities. In future studies, student samples might be selected from all residence

halls of a specific arrangement in order to more effectively reduce any residence hall specific characteristics which might affect student behavior or perception.

Since the study was concerned only with freshman students, future studies might include upperclassmen in order to observe changes in students in older age groups. Replication of similar studies on different university campuses is also suggested. Each college or university environment differs from others. It would be important to discover whether these different campus environmental characteristics would change the results of this study. The design of this study did not lend itself to the study of small group processes among the participants. Future studies might focus on small group interaction among participants, making it possible to better judge residence hall group cohesiveness and functioning.

Future studies should develop variable scales which take into account the cluster structure found in the study. Further, since this study relied heavily on questionnaire responses, the development of more unobtrusive measures of student and residence hall functioning might be beneficial. More behaviorial indices which could be developed and applied unobtrusively would be beneficial.

There are other student housing conditions not directly controlled by the college or university which might show different effects on students. Off campus housing is increasingly popular. Apartments, co-op houses, fraternities, sororities and cohabitation arrangements are only a few. Future investigators might apply similar measures to these conditions for comparison to the residence hall environments on campus.

APPENDIX A

Administrative Agreement

ADMINISTRATIVE AGREEMENT

The following agreement is a statement of cooperatiom between Lee E. Jacokes, graduate student in Ecological Psychology, Gary North, Coordinator of Residence Hall Programs, and Robert Underwood, Manager of Residence Halls at Michigan State University. The research is being carried out to investigate coeducational residence halls and their effect on the students at Michigan State University.

In order that the responsibilities of the individuals and officers involved in the research project are understood, the following responsibilities of each party are hereby agreed to:

ON THE PART OF THE COORDINATOR OF RESIDENCE HALL PROGRAMS AT MICHIGAN STATE UNIVERSITY

1. Allow Mr. Lee E. Jacokes, graduate student in Ecological Psychology, to conduct a study of Residence Hall Environments as outlined in the attached document entitled "A Study of Coeducational Residence Hall Environments" from January 1973 through June 1974.

2. Allow Mr. Jacokes the use of postage and secretarial assistance as approved in each instance by the Coordinator of Residence Halls Programs.

3. Agree to assist Mr. Jacokes in the implementation of the study through the use of Residence Hall staff when appropriate and with specific approval in each instance from the Coordinator of Residence Hall Programs.

4. Allow Mr. Jacokes accessibility of student housing files as appropriate to the information needed for the study.

ON THE PART OF THE MANAGER OF RESIDENCE HALLS AT MICHIGAN STATE UNIVERISTY

1. Allow Mr. Lee E. Jacokes, graduate student in Ecological Psychology, to conduct a study of Residence Hall Environments as outlined in the attached document entitled, "A Study of Residence Hall Environments" from January 1973 through June 1974.

2. Agree to follow the method of randomly assigning entering first-time freshmen of September 1973 as outlined in the attached document.

3. Agree to provide a list of 1973 freshmen students assigned to each of these Residence Halls by May 1973.

4. Allow Mr. Jacokes accessibility to student housing files as appropriate to the information needed for the study.

ON THE PART OF LEE E. JACOKES, GRADUATE STUDENT IN ECOLOGICAL PSYCHOLOGY

1. Agree to assume full responsibility for the design, implementation, analysis, and publication of the study as outlined in the attached document.

2. Agree to follow Michigan State University procedures for insuring the confidentiality of information from participants in the study.

3. Agree to make available all reports on research as they become available.

4. Agree to use of the information collected from this research to meet doctoral dissertation requirements at Michigan State University.

Lee E. Jacokes, Graduate Student in Ecological Psychology — Date 4/[illegible]/73

Gary B. North, Coordinator of Residence Hall Programs — Date 5/5/73

Robert Underwood, Manager of Residence Halls — Date 5/5/73

APPENDIX B

Formal Approval of the University Committee on Research Involving Human Subjects

Formal Approval of the Committee on Release of Information and Approval of Questionnaires

MICHIGAN STATE UNIVERSITY -- East Lansing, Michigan, 48823

To Lee E. Jacokes

The project entitled A study of coeducational residence hall environments

whose principal investigator will be Lee Jacokes

has been reviewed by our institutional committee for the use of human subjects.

____ This application does not include activities involving human subjects.

_x_ This application includes activities involving human subjects. Our committee has reviewed and approved it on 6/19/73.

Robert D. Schuetz

Asst. Coordinator for Health Programs

Title

6/19/73

Date

MICHIGAN STATE UNIVERSITY EAST LANSING • MICHIGAN 48823

OFFICE OF INSTITUTIONAL RESEARCH • 331 JOHN A. HANNAH ADMINISTRATION BUILDING

May 11, 1973

Mr. Lee E. Jacobs
Aquinas College
Grand Rapids, Michigan 49506

Dear Mr. Jacobs:

RE: Your request for approval on an Administration Agreement and dissertation proposal.

Your Administrative Agreement and dissertation proposal has been reviewed by the Committee on Release of Information and Approval of Questionnaires. The dissertation proposal was approved as written, but there were several questions raised on the Administrative Proposal.

The members of the Committee point out that you cannot represent yourself as a member of the staff or use the official letterhead, (re: items 2 & 3, paragraph 1, Administrative Agreement.) I am sure if you refer to yourself as a graduate student in Ecological Psychology, conducting research in residence halls with the approval of the Coordinator of Residence Halls Programs, there will be no problem.

If you have further questions, please advise.

Sincerely,

William S. Gunn
Administrative Assistant

APPENDIX C

Letter of Invitation to Participate in the Michigan State University Housing Study

Michigan State University Housing Study Participation Agreement

Follow-up Letter to the Letter of Invitation

July 1973

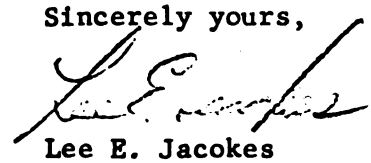
Dear Student:

Over the years, Michigan State University has continually reviewed and studied its housing conditions in an attempt to provide better housing environments for its students. During the 1973-74 academic year an in-depth study of housing environments at Michigan State University will be made with the permission of Dr. Gary North, Coordinator of Residence Hall Programs. I would like to ask for your assistance with this study.

The study will involve approximately 400 students and will attempt to determine their satisfaction with residence hall living and how these living environments effect their college experience during the first year. Information obtained from each participant will include: personality characteristics, study habits, dating behavior, educational background, academic performance, religious preference, ethnic background, perception of residence hall environments, etc. This data will be analyzed to see how these factors relate to the student's adjustment to residence hall living. Each participant will agree to complete three questionnaires which would involve about three hours of time distributed over the academic year.

At Michigan State University, agreement must be obtained from each participant prior to the beginning of such a study. Enclosed is a self-addressed postage-paid card on which you can indicate your willingness/unwillingness to participate. Please read it carefully, indicate your preference, sign the card and return it immediately. I encourage you to take part in the study. The results will be helpful in continually improving housing at Michigan State University. Thank you.

Sincerely yours,



Lee E. Jacokes
Graduate Student in
Ecological Psychology

Enclosures

MICHIGAN STATE UNIVERSITY HOUSING STUDY
PARTICIPATION AGREEMENT

I agree to participate in the MSU Housing Study for the 1973-74 academic year. I understand the study involves the determination of the effects of housing environments on the student and his satisfaction with housing at MSU. I further understand that:

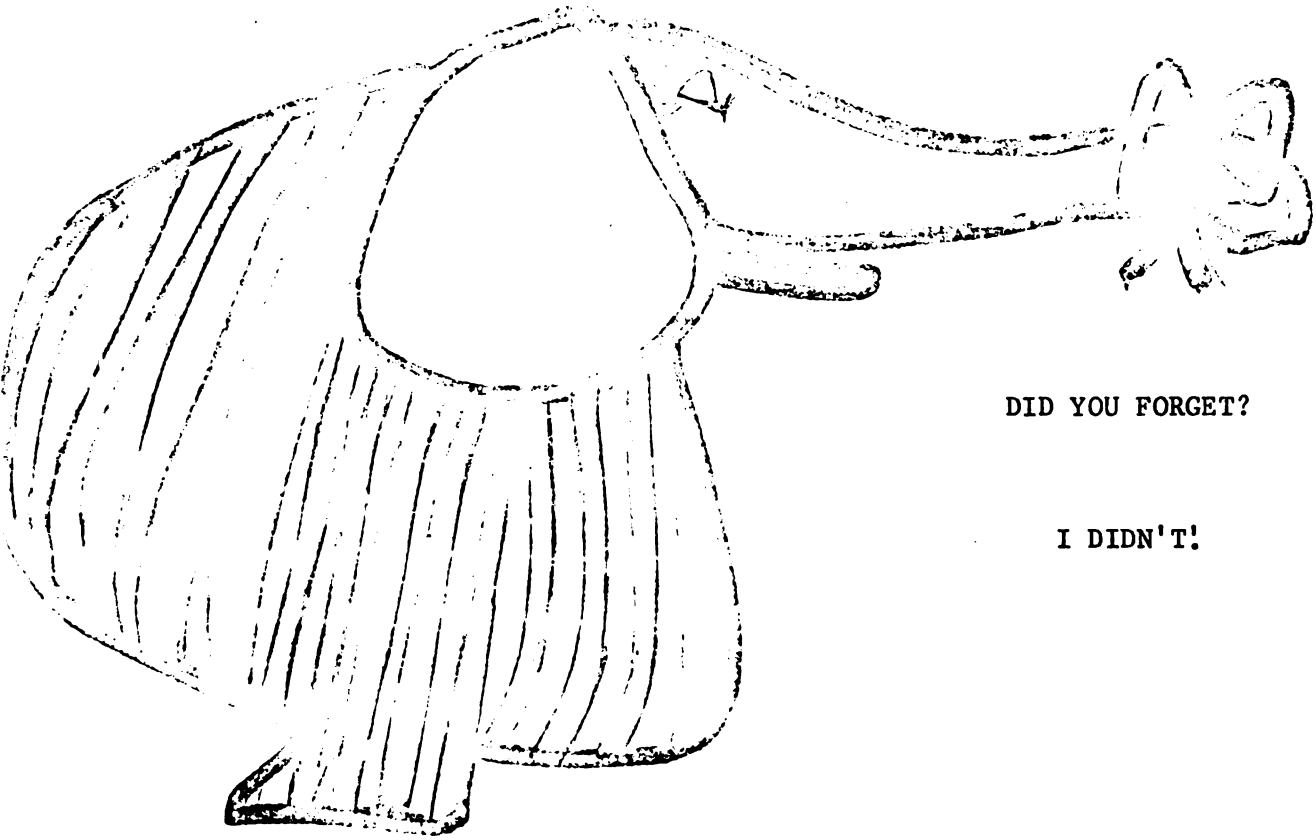
1. The names of participants in the study will be held confidential.
2. Only group results will be reported; no identification of individuals will be made.
3. I agree to allow the principle investigator, Mr. Lee E. Jacokes, access to information pertinent to the study from my academic and housing files.
4. Information obtained from any participant by means of questionnaire results, academic files, housing files, etc. will be held confidential and will be known only by the principle investigator, Mr. Lee E. Jacokes.
5. I am free to discontinue participation in the study at any time.

I agree to participate in the Michigan State University Housing Study (1) ☐ Yes (2) ☐ No

Student Signature	Student Number	Name of Resident Hall

STAMP
HERE

Mr. Lee E. Jacokes
Office of Residence Hall Programs
338 Student Services Building
Michigan State University
Lansing, Michigan 48823



DID YOU FORGET?

I DIDN'T!

Several weeks ago, you received the enclosed letter and card explaining the Michigan State University Housing Study to be conducted during the 1973-74 academic year. We invited you to participate but, alas, we have not yet heard of your decision. Would you please look over the enclosed material and return the card TODAY. We need to know your decision immediately in order to plan for those students who will be participating. Besides, I am getting tired of the string on my trunk - I think I am going to SNEE. . . . . .

Thank you.

APPENDIX D

Questionnaire One

Follow-up Letter to Questionnaire One

August 1973

Dear Student:

Thank you for agreeing to participate in the Michigan State University Housing Study. Enclosed is the first of three questionnaires you will be asked to complete between now and May 1974. We are asking that you complete the questionnaire and return it in the enclosed envelope now, so that with your arrival on the MSU Campus this fall, you may give full attention to your initial adjustment to college life. You will be contacted in mid-November and again in May 1974 and asked to give your opinion on a variety of subjects related to your experience in MSU Residence Halls. The information which you and the 400 other participants provide will be invaluable in helping to improve housing at MSU.

Instructions for Completing Questionnaire:

The attached questionnaire is simple and quick to complete. Read each question carefully and write in the information requested or check the one option which best fits your situation. The enclosed questions ask for background information about you and your family, your high school, home community, work hours, religious preference and attitude and on the last few pages, a short personal preference scale is presented.

Before you begin the questionnaire, I would like to point out that any information which you provide is confidential and will be known only by the principle investigator, Mr. Lee E. Jacokes. If you do not wish to answer a specific question, just skip over it and continue on to the remaining questions. Thank you for your cooperation.

Sincerely yours,

Lee E. Jacokes
Graduate Student in Ecological
Psychology

MICHIGAN STATE UNIVERSITY - HOUSING QUESTIONNAIRE 1

Please indicate your

Name: _____
Last First Middle Initial

What is your Michigan State University Student Number? _ _ _ _ _ _ _

Please indicate your sex: ☐☐

(1) ☐ Female
(2) ☐ Male

Please indicate your age: _____

Which of the following best describes your ethnic background or nationality (not citizenship).

(1) ☐ Caucasion
(2) ☐ Black American
(3) ☐ Oriental American
(4) ☐ American Indian
(5) ☐ Spanish American
(6) ☐ Other _____

Indicate your present religious affiliation:

(1) ☐ Agnostic
(2) ☐ Atheist
(3) ☐ Catholic
(4) ☐ Eastern Orthodox
(5) ☐ Jewish
(6) ☐ Protestant
(7) ☐ Non-denominational Christian
(8) ☐ Other (Specify) _____

Please indicate the marital status of your parents:

(3) ☐ Married
(2) ☐ Separated
(1) ☐ Divorced

Indicate which of the following is true of your parents:

(3) ☐ Both of my parents are living
(2) ☐ One of my parents is deceased, the other is living
(1) ☐ Both of my parents are deceased

Which of the following best describes your father's highest educational attainment:

(1) ☐ Eighth grade or less
(2) ☐ Part high school
(3) ☐ High school graduate
(4) ☐ Attended college but did not graduate
(5) ☐ College graduate
(6) ☐ M.A., M.S., or equivalent
(7) ☐ M.D., LL.B., J.D., D.D.S., Ph.D., or equivalent

Which of the following best describes your mother's highest educational attainment:

(1) ☐ Eighth grade or less
(2) ☐ Part high school
(3) ☐ High school graduate
(4) ☐ Attended college but did not graduate
(5) ☐ College graduate
(6) ☐ M.A., M.S., or equivalent
(7) ☐ M.D., LL.B., J.D., D.D.S., Ph.D., or equivalent

Please indicate the number of brothers and sisters which you have in your family:

(1) ☐ 0
(2) ☐ 1
(3) ☐ 2
(4) ☐ 3
(5) ☐ 4
(6) ☐ 5 or more

Indicate the number of brothers you have in your family:

(1) ☐ 0
(2) ☐ 1
(3) ☐ 2
(4) ☐ 3
(5) ☐ 4
(6) ☐ 5 or more

Indicate the number of sisters you have in your family:

(1) ☐ 0
(2) ☐ 1
(3) ☐ 2
(4) ☐ 3
(5) ☐ 4
(6) ☐ 5 or more

Indicate your position in the family in regard to your brothers and sisters:

(4) ☐ I am a middle child
(3) ☐ I am the oldest child
(2) ☐ I am the youngest child
(1) ☐ I am an only child

In what occupation has your father spent the most time in the past 5 years? Please give a short description of his typical duties in this job (e.g. he assembles motors on an auto assembly line; he is president of his own manufacturing firm which makes conveyor systems; he is an office manager for X company and is responsible for supervising secretaries, sales personnel, etc.)

_____

Job Title and description

Indicate the type of high school you last attended:

(1) ☐ Public High School
(2) ☐ Private - Non Parochial High School
(3) ☐ Parochial High School

Indicate whether the High School you last attended was coeducational or not:

(1) ☐ The high school I last attended was not coeducational
(2) ☐ The high school I last attended was coeducational

What was the size of the student body at the last high school you attended?

(1) ☐ Under 500 students
(2) ☐ 500 - 999
(3) ☐ 1000 - 1499
(4) ☐ 1500 - 1999
(5) ☐ 2000 - 2499
(6) ☐ 2500 or more

When college is not in session indicate which of the living arrangements applies to you:

(3) ☐ I live at home with both my parents
(2) ☐ I live at home with only one of my parents
(1) ☐ I do not live with either of my parents

Indicate the approximate size of the population of the city or community in which your home is located:

(1) ☐ We live on a farm
(2) ☐ We live in a community of less than 2,500 population
(3) ☐ We live in a community or city with a population between 2,500 and 500,000 people
(4) ☐ We live in a large metropolitan area with a population exceeding 500,000 people

Not counting the time in class, about how many hours do you spend in actual study during a typical seven-day week?

(1) ☐ Under 5 hours
(2) ☐ 5 - 10 hours
(3) ☐ 10 - 15 hours
(4) ☐ 15 - 20 hours
(5) ☐ 20 - 30 hours
(6) ☐ More than 30 hours

Indicate the approximate average amount of hours per week you have been employed during the last 2 months:

(1) ☐ I have not been employed
(2) ☐ 1 - 10 hours per week
(3) ☐ 11 - 20 hours per week
(4) ☐ 21 - 29 hours per week
(5) ☐ 30 hours or more per week

How firmly do you believe in the major doctrines of the church in which you were reared?

(1) ☐ I disbelieve most of the doctrines of my church
(2) ☐ I question many of the doctrines of my church and tend to disbelieve some of them
(3) ☐ I question some of the doctrines of my church but believe in most of them
(4) ☐ I strongly believe in most or all of the doctrines of my church

How many times have you attended a church service in the last 4 weeks?

(1) ☐ None
(2) ☐ One or two services
(3) ☐ Three to five services
(4) ☐ More than five services

Is the answer which you gave to the question above reasonably representative of the number of times you attend church services during an average month?

(1) ☐ Yes
(2) ☐ No

How religious a person do you consider yourself?

(5) ☐ Considerably more religious than average
(4) ☐ Slightly more religious than average
(3) ☐ About average
(2) ☐ Slightly less religious than average
(1) ☐ Considerably less than average

Of the men and women of your age and education, how would you rate them in comparison to one another on the following traits? Circle the number in the appropriate column.

	Women superior to men	Women equal to men	Men superior to women
Intelligence	1	2	3
Creativity	1	2	3
Morality	1	2	3
Courage	1	2	3
Dependability	1	2	3
Flexibility	1	2	3
Humanitarianism	1	2	3
Internal Strength	1	2	3
Sense of Humor	1	2	3
Industriousness	1	2	3

☐☐

The following statements are to be answered by circling either T (True) or F (False). Read each statement and indicate whether it is true or false for you. It is probably best to give your first reaction to each statement, so do not spend a great amount of time on any one statement.

T F I make friends rather quickly and feel at ease in a few minutes.

T F It is necessary to obey most rules in order to live together.

T F I can express my anger without losing friends or making enemies.

T F I pay little attention to styles in clothing.

T F I am too easily influenced.

T F I am shy.

T F When a parent, teacher, or boss scolds me, I feel like weeping.

T F I don't show my real feelings.

T F I am an aloof, reserved person.

T F When I become emotional I come to the point of tears.

T F I often have uncontrollable rages.

T F I listen to others but try to make up my own mind.

T F Odors of perspiration disgust me.

T F I have extreme loves and hates.

T F There are certain standards one must live by.

T F I always have perfect control over my emotions.

T F I get mad whenever anyone disagrees with me.

T F Usually in a mob of people I feel a little bit alone.

T F I would rather be a building contractor than a nurse.

T F I am really self-centered.

T F I don't let anybody tell me what to do.

T F I can get mad without "losing my head."

T F I like the love scenes in a movie or play.

T F I am tolerant.

T F I can take orders from the boss without feeling small.

T F I think before I act.

T F I do not follow rules and regulations which limit my freedom.

T F I accept social invitations rather than stay home alone.

T F I have feelings but don't lose control over them.

T F The sight of blood frightens me.

T F I am different from others.

T F I don't care about the opinions of others.

T F I can show emotion.

T F I feel badly if someone does not approve of what I am wearing.

T F I can put my affairs aside to aid others.

T F I cannot accept people with bad manners.

T F Nothing ever bothers me.

T F I especially dislike to get my hands dirty or greasy.

T F I obey rules which are meaningful.

T F I can live comfortably with the people around me.

T F The sound of foul language disgusts me.

T F I have my likes and dislikes.

T F I am self-reliant.

T F I would like to go hunting with a rifle for wild game.

T F I have a warm emotional relationship with others.

T F All you have to do with me is to insist and I give in.

T F I tend to be on my guard with people who are more friendly than I expect.

T F I do as I please.

T F I am very excitable.

T F I would rather be an interior decorator than an architectural engineer.

T F I am liked by most people who know me.

T F I can tolerate disagreement.

T F I am a responsible person.

T F I feel sorry for a fish that is caught on a hook.

T F Sometimes people do things which bother me.

T F I cry rather easily.

T F I am impulsive.

T F I usually like people.

T F I obey all rules.

T F I am spontaneous.

T F I would rather be a forest ranger than a dress designer.

T F I will do anything rather than suffer the company of tiresome and uninteresting people.

T F The sight of ragged or soiled fingernails is repulsive to me.

T F I can show my emotion when the occasion demands it.

T F I live by other peoples' standards.

T F I enjoy myself at parties or other social gatherings.

T F I feel uncomfortable while talking with someone.

T F I am inhibited.

T F I feel strongly against kissing a friend of my own age or sex.

T F I try to please others.

T F I am a good mixer.

T F If I think I am right I will stand up for my views.

T F I have some periods when I am very blue and some when I am very happy.

T F I would rather be a miner than a florist.

T F I never let people know when I am mad.

T F I would rather go to an athletic event than to a dance.

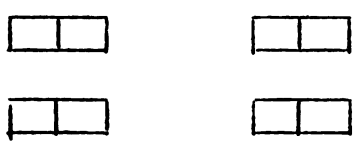
T F I am an independent person.

T F I am very choosy about whom I accept as a friend.

T F I have my emotional ups and downs but don't go to extremes.

T F I like to read stories about love and romance.

Please do not write in this space.



September 18, 1973

Dear Student:

Two or three weeks ago a copy of the enclosed questionnaire for the MSU housing study was sent to your home address. As of this date, we have not received your completed questionnaire. Perhaps in the rush of preparing to come to college it was overlooked. Please read the attached letter for further explanation of the questionnaire.

We ask that you complete the enclosed questionnaire immediately. We must receive this information by this Friday, September 21, 1973 in order to include it in the results of the initial questionnaire returns. Simply seal it in the return envelope and give it to your floor resident advisor and ask him/her to put it in the inter-college mail service (no postage necessary).

Thanks for your help.

Sincerely yours,

Lee E. Jacokes
Graduate Student in Ecological Psychology

APPENDIX E

Questionnaire Two and Questionnaire Three

Follow-up Letter to Questionnaire Two

Follow-up Letter to Questionnaire Three

November 1973

Dear Student:

Hello again. I hope your first two months at MSU have been enjoyable and productive. You probably remember the MSU Housing Study which you kindly agreed to take part in during your freshman year at MSU. Your response to the first questionnaire distributed just prior to your arrival on campus was overwhelming with nearly 100% of all students in the study completing the questionnaire. Enclosed you will find the second of the three questionnaires which are being administered for this study. (Remember, the third questionnaire will be distributed in May 1974.) Your continued participation in this study is essential and will provide invaluable help in our attempt to continually improve housing at MSU.

Instructions for Completing Questionnaire:

The attached questionnaire is simple and quick to complete. Read each question carefully and check the options which best fit your situation.

The questions ask you to note various experiences you have had at MSU, your impression of the university and residence hall environments, and the various types of extra-curricular activities in which you have become active. In addition, a few questions have been repeated from the previous questionnaire in order to see if you have changed your opinions on these issues and characteristics. I am sure you will find this questionnaire interesting, enjoyable and thought provoking.

Before you begin the questionnaire, I would like to point out that any information which you provide is confidential and will be known only to the principle investigator, Mr. Lee E. Jacokes. If you do not wish to answer a specific question, just skip over it and continue on to the remaining question.

When you have completed the questionnaire, seal it in the enclosed addressed envelope and place it in the Campus Mail Service at the main reception area in your residence hall, no postage necessary. Thank you for your continued assistance.

Sincerely yours,

Lee E. Jacokes

Lee E. Jacokes
Graduate Student in Ecological Psychology

MICHIGAN STATE UNIVERSITY - HOUSING QUESTIONNAIRE 2

Please indicate your

Name: _____
Last First Middle Initial

What is your MSU Student Number? ___ ___ ___ ___ ___ ___

In what Residence Hall do you live? _____
Name of Residence Hall

☐☐ (Please leave Blank)

Over the summer, Michigan State University had several orientation program options in which the incoming student could participate. In which of those programs did you participate?

(1) ☐ I participated in the "mail in" orientation in which I completed my class schedule at home and sent in my schedule to MSU
(2) ☐ I came to the MSU campus for the one day orientation
(3) ☐ I came to the MSU campus for the 1½ to 2 day orientation program staying overnight on campus
(4) ☐ I came for the one week long orientation program which preceded Welcome Week

Indicate the number of credit hours you are taking this term:

(1) ☐ 0 - 5 hours
(2) ☐ 6 - 11 hours
(3) ☐ 12 - 17 hours
(4) ☐ 18 or more hours

Not counting the time in class, about how many hours do you spend in actual study during a typical seven-day week?

(1) ☐ Under 5 hours
(2) ☐ 5 - 10 hours
(3) ☐ 10 - 15 hours
(4) ☐ 15 - 20 hours
(5) ☐ 20 - 30 hours
(6) ☐ More than 30 hours

Indicate the approximate average amount of hours per week you have been employed during the last two months:

(1) ☐ I have not been employed
(2) ☐ 1 - 10 hours per week
(3) ☐ 11 - 20 hours per week
(4) ☐ 21 - 29 hours per week
(5) ☐ 30 hours or more per week

In how many college organizations are you a participant? Include all academic clubs, societies, athletic teams, musical organizations, student government, etc.

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ___ 7 or more

May 1974

Dear Student:

We are back once again to ask for your help with the MSU Housing Study. It is hard to believe but the end of your first year at MSU is fast approaching and the end of this study is also near. All that is needed are your responses to the attached questionnaire. As you probably remember, two previous questionnaires were administered, the first prior to your arrival on campus in the fall and the second in November. As with the first questionnaire, responses to the November questionnaire were near 100%, a truly remarkable demonstration of your follow-through to your initial agreement to take part in the study.

I wish to thank you for the time and effort you have given to this study. I know that it must be an imposition on your busy schedule. Since you have spent time completing the questionnaires, a space is provided for you to indicate if you wish a summary of the results. Certainly, you deserve to know what conclusions are reached. Please return your completed questionnaire as soon as possible. Final exams are on the horizon and we would not want to interfere with your studying.

Instructions for Completing Questionnaire:

The attached questionnaire is simple and quick to complete. Read each question carefully and check the options which best fit your situation.

The questions ask you to note various experiences you have had at MSU, your impression of the university and residence hall environments, and the various types of extra-curricular activities in which you have become active. In addition, a number of questions have been repeated from the previous questionnaires in order to see if as a result of your year at MSU you have changed your opinions on these issues and characteristics. I am sure you will find this questionnaire interesting, enjoyable and thought provoking.

Before you begin the questionnaire, I would like to point out that any information which you provide is confidential and will be known only to the principle investigator, Mr. Lee E. Jacokes. If you do not wish to answer a specific question, just skip over it and continue on to the remaining questions.

When you have completed the questionnaire, seal it in the enclosed addressed envelope and place it in the Campus Mail Service at the main reception area in your residence hall, no postage necessary. Thanks again for your assistance.

Sincerely yours,

Lee E Jacokes

Lee E. Jacokes
Graduate Student in Ecological Psychology

MICHIGAN STATE UNIVERSITY - HOUSING QUESTIONNAIRES 2 AND 3

Please indicate your

Name: _____
Last First Middle Initial

What is your MSU Student Number? ___ ___ ___ ___ ___ ___

In what Residence Hall do you live? _____
Name of Residence Hall

☐☐ (Please leave Blank)

Please indicate if you would like a summary of the results of the MSU Housing Study sent to you. __ Yes __ No. If Yes, indicate your home address.

_____
Number Street

_____
City State Zip Code

Indicate the number of credit hours you are taking this term:

(1) ☐ 0 - 5 hours
(2) ☐ 6 - 11 hours
(3) ☐ 12 - 17 hours
(4) ☐ 18 or more hours

Not counting the time in class, about how many hours do you spend in actual study during a typical seven-day week?

(1) ☐ Under 5 hours
(2) ☐ 5 - 10 hours
(3) ☐ 10 - 15 hours
(4) ☐ 15 - 20 hours
(5) ☐ 20 - 30 hours
(6) ☐ More than 30 hours

Indicate the approximate average amount of hours per week you have been employed during the last two months:

(1) ☐ I have not been employed
(2) ☐ 1 - 10 hours per week
(3) ☐ 11 - 20 hours per week
(4) ☐ 21 - 29 hours per week
(5) ☐ 30 hours or more per week

In how many college organizations are you a participant? Include all academic clubs, societies, athletic teams, musical organizations, student government, etc.

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 or more

Compared to the students in your Residence Hall, how hard would you say that you work in your studies?

(5) ☐ Considerably harder than the average student
(4) ☐ Somewhat harder than the average student
(3) ☐ About average
(2) ☐ Somewhat less than the average student
(1) ☐ Considerably less than the average student

About how much of your non-class time per average school week would you say you have spent in informal but somewhat serious conversations with friends and acquaintances of the same sex?

(1) ☐ Under 2 hours
(2) ☐ 2 - 5 hours
(3) ☐ 5 - 10 hours
(4) ☐ 10 - 15 hours
(5) ☐ 15 - 20 hours
(6) ☐ 20 - 30 hours
(7) ☐ More than 30 hours

About how much of your non-class time per average school week would you say you have spent in informal but somewhat serious conversations with friends and acquaintances of the opposite sex?

(1) ☐ Under 2 hours
(2) ☐ 2 - 5 hours
(3) ☐ 5 - 10 hours
(4) ☐ 10 - 15 hours
(5) ☐ 15 - 20 hours
(6) ☐ 20 - 30 hours
(7) ☐ More than 30 hours

How would you rate the devotion to overall scholarship and study of the students at MSU? (Choose one only)

(1) ☐ Students have very little interest and involvement in their studies and spend a great amount of time in non-academic activities
(2) ☐ Students show some interest in their studies but spend more time in non-academic activities than in preparing for their courses
(3) ☐ Students are moderately interested in their studies and spend an equal amount of time in both preparing for their courses and non-academic activities
(4) ☐ Students show above average interest in their studies and spend more time preparing for their courses than in non-academic activities
(5) ☐ Students are very interested in their studies and spend a great amount of time preparing for their courses with very little time devoted to non-academic activities

How would you rate the academic standards for study and scholarship at MSU? (Choose one only)

(1) ☐ The academic standards are very low - it is very easy to pass a course with little effort
(2) ☐ The academic standards are somewhat low - it is not extremely difficult to pass a course but some effort is required
(3) ☐ The academic standards are moderately high - it is somewhat difficult to pass a course if only a moderate amount of effort is extended by the student
(4) ☐ The academic standards are high - it is difficult to pass a course if only a moderate amount of effort is extended by the student
(5) ☐ The academic standards are very high - it is very difficult to pass a course unless a great deal of effort is extended by the student

☐ ☐ (Please leave Blank)

How would you rate the degree of friendliness of the faculty toward the students at MSU? (Choose one only)

(1) ☐ Faculty members are very distant with students - they relate to students on strictly a teacher-student relationship and allow little contact with students on an informal basis
(2) ☐ Faculty members tend to be somewhat distant with students - they tend to over-emphasize the student-teacher relationship but do allow a few informal contacts with students
(3) ☐ Faculty members tend to be somewhat close with students - they tend to de-emphasize the student-teacher relationship and allow frequent informal contacts with students
(4) ☐ Faculty members are very close with students - they emphasize a co-equal relationship between students and teacher and have many informal contacts with students outside of the classroom

How would you rate the friendliness of the students toward one another at MSU? (Choose one only)

(1) ☐ The students are very unfriendly and cold toward other students - it is very difficult to make friends outside of your immediate group
(2) ☐ The students are somewhat unfriendly and cold toward other students - it takes persistent effort on your part to make friends outside of your immediate group
(3) ☐ The students are neither overly friendly or unfriendly - although it takes some effort on your part to make friends outside of your own group, it is not unusual to occasionally have students unknown to you try to make friends with you on their own initiative
(4) ☐ The students are friendly and warm toward one another - many students will attempt to make friends with you even if you are not an immediate member of their group. You do not have to exert much effort to make friends on this campus
(5) ☐ The students are exceptionally friendly and warm toward one another - most students make sincere efforts to make friends outside of their own immediate group. Very little effort is needed to make friends on this campus

☐☐ (Please leave Blank)

Please answer the following statements True or False (circle the appropriate answer)

T F Constructive criticism of rules, regulations and teacher effectiveness is encouraged by the college.
T F The college encourages involvement by students in social and political activities.
T F Controversial speakers are invited on campus frequently.
T F Students are actively concerned on this campus with national and international problems.
T F Diverse points of view are actively discussed among the students.
T F Many faculty members are known for their active involvement in national and local politics.
T F Concerts, art exhibits, and plays typically draw large crowds of students.

☐ (Please leave Blank)

How would you rate the devotion to overall scholarship and study of the students who live in your residence hall? (Choose one only)

(1) ☐ The students in my residence hall have very little interest and involvement in their studies and spend a great amount of time in non-academic activities.
(2) ☐ The students in my residence hall show some interest in their studies but spend more time in non-academic activities than in preparing for their courses.
(3) ☐ The students in my residence hall are moderately interested in their studies and spend an equal amount of time in both preparing for their courses and non-academic activities.
(4) ☐ The students in my residence hall show above average interest in their studies and spend more time preparing for their courses than in non-academic activities.
(5) ☐ Students in my residence hall are very interested in their studies and spend a great amount of time preparing for their courses with very little time devoted to non-academic activities.

How would you rate the friendliness of the students who live in your residence hall toward one another? (Choose one only)

(1) ☐ The students in my residence hall are very unfriendly and cold toward other students - it is very difficult to make friends outside of your immediate group.
(2) ☐ The students in my residence hall are somewhat unfriendly and cold toward other students - it takes persistent effort on your part to make friends outside of your immediate group.
(3) ☐ The students in my residence hall are neither friendly or unfriendly although it takes some effort on your part to make friends outside of your own group, it is not unusual to have students unknown to you try to make friends with you on their own initiative.
(4) ☐ The students in my residence hall are friendly and warm toward one another - most students will attempt to make friends with you even if you are not an immediate member of their group.
(5) ☐ The students in my residence hall are exceptionally friendly and warm toward one another - most students make sincere efforts to make friends outside of their own immediate group.

How many times have you changed roommates so far this year?

(1) ☐ I have not made any roommate changes.
(2) ☐ I made one roommate change.
(3) ☐ I made two roommate changes.
(4) ☐ I made three roommate changes.
(5) ☐ I made more than three changes.

How many weekends have you spent off campus so far this term, e.g., went home for the weekends, spent the weekend at a friend's home, etc.

(1) ☐ I have not spent any weekend off campus this term.
(2) ☐ I have spent one weekend off campus this term.
(3) ☐ I have spent two weekends off campus this term.
(4) ☐ I have spent three weekends off campus this term.
(5) ☐ I have spent four weekends off campus this term.
(6) ☐ I have spent more than four weekends off campus this term.

Have you transferred from one residence hall to another this year, thus far?

(1) ☐ No, I have not transferred to another residence hall.
(2) ☐ Yes, I have transferred into a single-sex residence hall.
(3) ☐ Yes, I have transferred into a coed residence hall with separate wings for men and separate wings for women.
(4) ☐ Yes, I transferred into a coed residence hall with alternating floors of men and women.
(5) ☐ Yes, I transferred into a coed residence hall arranged with men and women on the same level in separated wings/corridors of the residence hall.

Overall, how satisfied are you with living conditions in your residence hall so far?

(1) ☐ I am very unsatisfied.
(2) ☐ I am somewhat unsatisfied.
(3) ☐ I am neutral - I neither feel greatly satisfied or unsatisfied.
(4) ☐ I am reasonably satisfied.
(5) ☐ I am very satisfied.

How satisfied are you with the dating opportunities you have had so far at MSU?

(1) ☐ Very dissatisfied.
(2) ☐ Moderately dissatisfied.
(3) ☐ Moderately satisfied.
(4) ☐ Very satisfied.

Have you considered transferring to another college or university during the term?

(1) ☐ Yes.
(2) ☐ No.

Have you considered leaving college and discontinuing your collegiate studies during this term?

(1) ☐ Yes.
(2) ☐ No.

Approximately how many formal dates have you had this term? (A formal date would include any pre-planned date, e.g., going to a dance, movies, party, etc.)

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 - 8
(6) ☐ 9 or more

Approximately how many informal dates have you had this term? (An informal date would include any "spontaneous" get together, e.g., I meet a friend in the residence hall, lounge, or a class and we decide to have supper together, study together, talk together, go to a show, etc.)

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 6 - 7
(6) ☐ 7 - 8
(7) ☐ 9 or more

With whom do you have dates? (Choose the one option below which is closest to your situation.)

(1) ☐ So far, I have not dated anyone this school year.
(2) ☐ I have mainly dated individual(s) who do not attend MSU.
(3) ☐ I have mainly dated individual(s) who live in off campus residences but attend MSU.
(4) ☐ I have mainly dated individual(s) who live in some other residence hall at MSU other than my own.
(5) ☐ I have mainly dated individual(s) who live in my residence hall (Coed Residence halls only).

SECTION I

This section should be answered by STUDENTS WHO LIVE IN COED RESIDENCE HALLS ONLY. If you do not live in a Coed Residence Hall, skip this section and go to Section II, Page 7.

How many individual(s) have you dated this term who were residents in your residence hall?

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 - 8
(6) ☐ 9 or more

How many dates have you had this term with individual(s) who were residents in your residence hall?

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 - 8
(6) ☐ 9 or more

Indicate by checking the statements below what type of dating activities you engaged in with individual(s) who were residents of your residence hall. Indicate an activity even if it took place only once. (Choose all applicable.)

(1) ☐ My date(s) and I stayed in the residence hall by ourselves and studied together in my room or a common area.
(2) ☐ My date(s) and I stayed in the residence hall by ourselves and watched television.
(3) ☐ My date(s) and I stayed in the residence hall by ourselves and played cards, talked, etc.
(4) ☐ My date(s) and I went to a movie, drama production, sports event or other such activities by ourselves.
(5) ☐ My date(s) and I spend time with other people in common group activities such as a party, group rap session, card game, etc.
(6) ☐ My date(s) and I went with other people to a movie, drama production, sports activity, or other such activities.

(1) ☐ My date(s) and I held hands with one another.
(2) ☐ My date(s) and I kissed one another one or two times.
(3) ☐ My date(s) and I put our arms around one another for a brief period of time.
(4) ☐ My date(s) and I kissed one another many times over an extended time period.
(5) ☐ My date(s) and I made love to one another (e.g., petting, any other type of sexual activity except intercourse).
(6) ☐ My date(s) and I had sexual intercourse with one another.

☐ (Please leave Blank)

SECTION II

This section should be answered by BOTH STUDENTS WHO LIVE IN SINGLE SEX RESIDENCE HALLS and by STUDENTS WHO LIVE IN COED RESIDENCE HALLS.

How <u>many individual(s)</u> have you dated this term who were not residents in your residence hall?

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 - 8
(6) ☐ 9 or more

How <u>many dates</u> have you had this term with individual(s) who were not residents in your residence hall?

(1) ☐ None
(2) ☐ 1 - 2
(3) ☐ 3 - 4
(4) ☐ 5 - 6
(5) ☐ 7 - 8
(6) ☐ 9 or more

☐

Indicate by checking the statements below what type of dating activities you engaged in with individual(s) who were not residents of your residence hall. Indicate an activity even if it took place only once. (Choose all applicable.)

(1) ☐ My date(s) and I stayed in the residence hall by ourselves and studied together.
(2) ☐ My date(s) and I stayed in the residence hall by ourselves and watched television.
(3) ☐ My date(s) and I stayed in the residence hall by ourselves and played cards, talked, etc.
(4) ☐ My date(s) and I went to a movie, drama production, sports activity or other such activities by ourselves.
(5) ☐ My date(s) and I spent time with other people in common group activities such as a party, group rap session, card game, etc.
(6) ☐ My date(s) and I went with other people to a movie, drama production, sports activity, or other such activities.

(1) ☐ My date(s) and I held hands with one another.
(2) ☐ My date(s) and I kissed one another one or two times.
(3) ☐ My date(s) and I put our arms around one another for a brief period of time.
(4) ☐ My date(s) and I kissed one another many times over an extended time period.
(5) ☐ My date(s) and I made love to one another (e.g. petting, any other type of sexual activity except intercourse).
(6) ☐ My date(s) and I had sexual intercourse with one another.

☐☐ (Please leave Blank)

Of the men and women of your age and education, how would you rate them in comparison to one another on the following traits? Circle the number in the appropriate column.

	Women superior to men	Women equal to men	Men superior to women
Intelligence	1	2	3
Creativity	1	2	3
Morality	1	2	3
Courage	1	2	3
Dependability	1	2	3
Flexibility	1	2	3
Humanitarianism	1	2	3
Internal Strength	1	2	3
Sense of Humor	1	2	3
Industriousness	1	2	3

☐☐

How firmly do you believe in the major doctrines of the church in which you were reared?

(1) ☐ I disbelieve most of the doctrines of my church.
(2) ☐ I question many of the doctrines of my church and tend to disbelieve some of them.
(3) ☐ I question some of the doctrines of my church but believe in most of them.
(4) ☐ I strongly believe in most or all of the doctrines of my church.

How many times have you attended a church service in the last 4 weeks?

(1) ☐ None
(2) ☐ One or two services
(3) ☐ Three to five services
(4) ☐ More than five services

Is the answer which you gave to the question above reasonably representative of the number of times you attend church services during an average month?

(1) ☐ Yes.
(2) ☐ No.

How religious a person do you consider yourself?

(5) ☐ Considerably more religious than average.
(4) ☐ Slightly more religious than average.
(3) ☐ About average.
(2) ☐ Slightly less religious than average.
(1) ☐ Considerably less than average.

The following statements are to be answered by circling either T (True) or F (False). Read each statement and indicate whether it is true or false for you. It is probably best to give your first reaction to each statement, so do not spend a great amount of time on any one statement.

T F I make friends rather quickly and feel at ease in a few minutes.

T F It is necessary to obey most rules in order to live together.

T F I can express my anger without losing friends or making enemies.

T F I pay little attention to styles in clothing.

T F I am too easily influenced.

T F I am shy.

T F When a parent, teacher, or boss scolds me, I feel like weeping.

T F I don't show my real feelings.

T F I am an aloof, reserved person.

T F When I become emotional I come to the point of tears.

T F I often have uncontrollable rages.

T F I listen to others but try to make up my own mind.

T F Odors of perspiration disgust me.

T F I have extreme loves and hates.

T F There are certain standards one must live by.

T F I always have perfect control over my emotions.

T F I get mad whenever anyone disagrees with me.

T F Usually in a mob of people I feel a little bit alone.

T F I would rather be a building contractor than a nurse.

T F I am really self-centered.

T F I don't let anybody tell me what to do.

T F I can get mad without "losing my head."

T F I like the love scenes in a movie or play.

T F I am tolerant.

T F I can take orders from the boss without feeling small.

T F I think before I act.

T F I do not follow rules and regulations which limit my freedom.

T F I accept social invitations rather than stay home alone.

T F I have feelings but don't lose control over them.

T F The sight of blood frightens me.

T F I am different from others.

T F I don't care about the opinions of others.

T F I can show emotion.

T F I feel badly if someone does not approve of what I am wearing.

T F I can put my affairs aside to aid others.

T F I cannot accept people with bad manners.

T F Nothing ever bothers me.

T F I especially dislike to get my hands dirty or greasy.

T F I obey rules which are meaningful.

T F I can live comfortably with the people around me.

T F The sound of foul language disgusts me.

T F I have my likes and dislikes.

T F I am self-reliant.

T F I would like to go hunting with a rifle for wild game.

T F I have a warm emotional relationship with others.

T F All you have to do with me is to insist and I give in.

T F I tend to be on my guard with people who are more friendly than I expect.

T F I do as I please.

T F I am very excitable.

T F I would rather be an interior decorator than an architectural engineer.

T F I am liked by most people who know me.

T F I can tolerate disagreement.

T F I am a responsible person.

T F I feel sorry for a fish that is caught on a hook.

T F Sometimes people do things which bother me.

T F I cry rather easily.

T F I am impulsive.

T F I usually like people.

T F I obey all rules.

T F I am spontaneous.

T F I would rather be a forest ranger than a dress designer.

T F I will do anything rather than suffer the company of tiresome and uninteresting people.

T F The sight of ragged or soiled fingernails is repulsive to me.

T F I can show my emotion when the occasion demands it.

T F I live by other peoples' standards.

T F I enjoy myself at parties or other social gatherings.

T F I feel uncomfortable while talking with someone.

T F I am inhibited.

T F I feel strongly against kissing a friend of my own age or sex.

T F I try to please others.

T F I am a good mixer.

T F If I think I am right I will stand up for my views.

T F I have some periods when I am very blue and some when I am very happy.

T F I would rather be a miner than a florist.

T F I never let people know when I am mad.

T F I would rather go to an athletic event than to a dance.

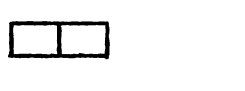
T F I am an independent person.

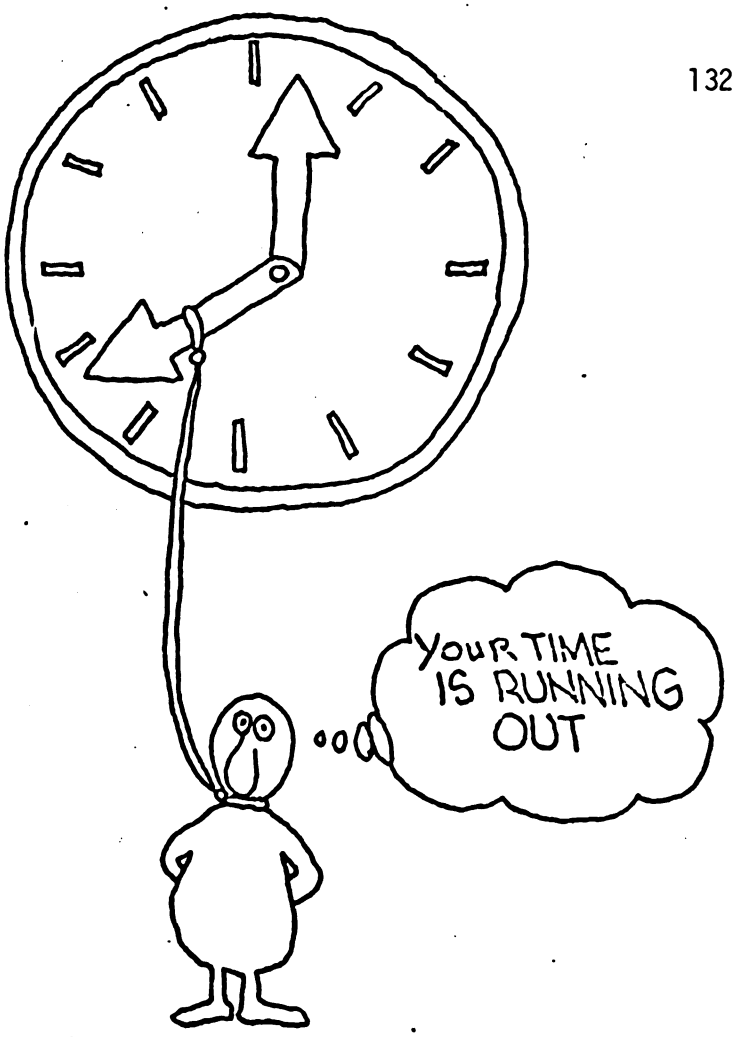
T F I am very choosy about whom I accept as a friend.

T F I have my emotional ups and downs but don't go to extremes.

T F I like to read stories about love and romance.

Please do not write in this space.



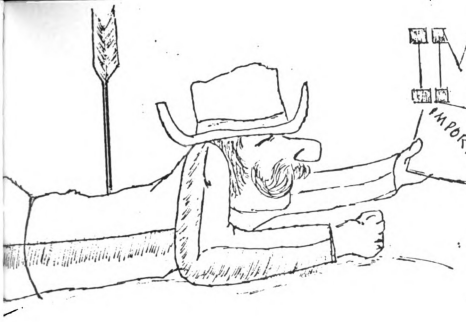


I T R E A L L Y

I S ! ! !

With final exams upon us and Christmas Vacation afterwards, your time is truly running out. And, if you don't sit down right now and complete the enclosed questionnaire for the MSU Housing Study, you probably won't have time to complete it before the end of the term. So, if you have not already sent in the questionnaire you received last week, please try to get it in immediately or at least before you leave for the term break. Thanks!

Lee E. Jacokes
Graduate Student in
Ecological Psychology



May 1974

After enduring the battles of this academic year, we are fast approaching the end. This IMPORTANT MESSAGE is to remind you that we still have need of your completing the enclosed MSU Housing Study Questionnaire in order to bring our study to a close. Please, won't you take the time to complete the questionnaire now? We don't want to interfere with your studying for exams which are coming ever closer. Be sure to read the cover letter for instructions. Thanks again!!

Lee E. Jacokes
Graduate Student in Ecological
Psychology

APPENDIX F

Chi-square Analysis of Residence Hall Groups on Questionnaire Two and Three Variables.

Analysis of Variance of Two and Three Repeated Measures for Forty-two variables Administered in Questionnaires One, Two, and Three.

APPENDIX F

CHI-SQUARE ANALYSIS OF RESIDENCE HALL GROUPS ON QUESTIONNAIRE TWO AND THREE VARIABLES

VARIABLE DESCRIPTION	df	Chi-Square	p
Academic Perception and Performance			
Summer orientation program attended by student	5	5.694	0.50
Residence Hall Warmth and Friendliness			
Student transferred from original residence hall to another during:			
a) the first term	2	1.024	0.95
b) the second term	2	0.137	0.99
Institutional Warmth and Friendliness			
Student considered transfering to another college during:			
a) the first term	5	2.010	0.90
b) the second term	5	3.579	0.70
Student considered discontinuing collegiate studies during:			
a) the first term	5	3.459	0.70
b) the second term	5	2.231	0.90
Religious Practices and Perceptions			
Consistency of Religious Service attendance			
1. the previous summer	5	3.797	0.70
2. the first term	5	4.963	0.50
3. the second term	5	6.801	0.30

APPENDIX F

ANALYSIS OF VARIANCE OF TWO AND THREE REPEATED MEASURES FOR FORTY TWO VARIABLES ADMINISTERED IN QUESTIONNAIRES ONE, TWO, AND THREE

VARIABLE DESCRIPTION	RESIDENCE HALL CONDITIONS EFFECT[1]		SEX EFFECT[2]		TIME EFFECT[3]		INTERACTION RESIDENCE HALL GROUPS EFFECT[4] (SEX BY RESIDENCE HALL CONDITIONS)		INTERACTION RESIDENCE HALL CONDITIONS BY TIME EFFECT[5]		INTERACTION SEX BY TIME EFFECT[6]		INTERACTION RESIDENCE HALL GROUPS BY TIME EFFECT[7]		ERROR TERM[8]
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
Academic Perception and Performance															
Number of term hrs carried	2.525	.0830	0.572	.4500	1.053	.3060	0.554	.575	1.495	.227	0.588	.444	0.018	.982	0.035
Number of hours per week student studied	0.630	.5340	3.838	.0520	976.720	.0001*	3.608	.029*	29.470	.005*	2.783	.100	0.282	.780	0.786
Residence Hall Scholarship	6.886	.0010*	9.769	.0020*	1.223	.2700	1.621	.200	0.007	.993	3.176	.076	1.383	.253	0.305
Student Scholarship	2.028	.1340	9.392	.0030*	0.082	.7750	0.846	.431	2.848	.060	0.315	.575	0.525	.592	0.347
University Academic standards	1.503	.2250	21.499	.0001*	9.336	.0030*	4.882	.009*	0.041	.959	3.308	.070	0.771	.464	0.277
Institutional Scholarship	0.551	.5770	30.719	.0001*	1.094	.2970	1.281	.280	1.381	.254	0.327	.568	1.298	.275	0.010
Student perception of social, political, intellectual activities on campus	0.213	.8080	4.350	.0380*	0.696	.4050	0.196	.822	0.572	.565	3.230	.074	4.109	.018*	1.225
Student grade point average	0.914	.4030	1.817	.1790	1.036	.3090	0.487	.615	1.351	.261	1.205	.274	4.379	.014*	0.064
Personality Characteristics															
Social Adaptability Scale	0.251	.7780	12.115	.0007*	1.381	NS[9]	0.534	.587	0.19	.700	0.279	NS	1.090	NS	3.506
Emotional Control Scale	0.457	.6340	22.208	.0001*	1.540	NS	0.798	.452	0.392	NS	1.44	NS	1.184	NS	2.702

Appendix F (cont'd)

VARIABLE DESCRIPTION	RESIDENCE HALL CONDITIONS EFFECT[1]		SEX EFFECT[2]		TIME EFFECT[3]		INTERACTION RESIDENCE HALL GROUPS EFFECT[4] (SEX BY RESIDENCE HALL CONDITIONS)		INTERACTION RESIDENCE HALL CONDITIONS BY TIME EFFECT[5]		INTERACTION SEX BY TIME EFFECT[6]		INTERACTION RESIDENCE HALL GROUPS BY TIME EFFECT[7]		ERROR TERM[8]
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
Conformity Scale	1.012	.3650	1.433	.2330	2.847	NS	0.505	.604	1.897	NS	4.293	.050*	2.129	NS	1.901
Masculinity-Femininity Scale	3.061	.0490*	286.692	.0001*	3.450	.0800	0.330	.719	0.239	NS	2.740	NS	2.1787	NS	2.443
Attitude Toward the Opposite Sex Scale	1.399	.2490	61.290	.0001*	2.050	NS	1.456	.236	1.580	NS	0.970	NS	4.480	.025*	1.743
Residence Hall Warmth and Friendliness															
Residence Hall Friendliness	1.153	.3180	2.199	.1390	2.979	.0860	3.029	.051	0.910	.404	1.264	.262	0.927	.397	0.353
Student Satisfaction with Residence Hall Living Conditions	0.144	.8660	0.457	.4990	1.139	.2870	0.488	.615	1.424	.243	4.673	.032*	0.104	.902	0.896
Number of Roommate Changes	0.962	.3840	0.283	.5960	36.635	.0001*	0.972	.380	1.286	.279	0.720	.397	0.792	.454	0.226
Number of Weekends Spent Off-Campus	0.532	.5880	0.146	.7030	39.244	.0001*	0.259	.771	0.753	.472	0.240	.625	1.343	.263	1.231
Institutional Warmth and Friendliness															
Faculty Friendliness	0.251	.7790	1.409	.2370	0.864	.3540	0.746	.476	0.013	.987	0.823	.366	1.648	.195	0.247
Student Friendliness	0.426	.6540	0.296	.5870	.008	.9290	3.196	.043*	3.575	.029*	0.309	.579	0.076	.927	0.233
University Friendliness	0.119	.8870	1.108	.2940	0.296	.5870	1.053	.351	1.506	.224	0.139	.906	1.159	.316	0.513
Dating Behavior and Satisfaction															
Dating Opportunity Satisfaction	0.697	.4990	0.002	.9640	1.306	.2550	0.010	.990	0.895	.410	0.543	.462	0.303	.739	0.426
Number of Formal Dates	0.005	.9950	4.496	.0350*	0.020	.8870	1.012	.365	0.346	.708	1.959	.163	1.099	.335	1.563
Number of Informal Dates	0.807	.4480	5.921	.0160*	0.312	.5770	1.008	.367	2.067	.129	9.564	.002*	2.333	.099	0.186

VARIABLE DESCRIPTION	RESIDENCE HALL CONDITIONS EFFECT[1]		SEX EFFECT[2]		TIME EFFECT[3]		INTERACTION RESIDENCE HALL GROUPS EFFECT[4] (SEX BY RESIDENCE HALL CONDITIONS)		INTERACTION RESIDENCE HALL CONDITIONS BY TIME EFFECT[5]		INTERACTION SEX BY TIME EFFECT[6]		INTERACTION RESIDENCE HALL GROUPS BY TIME EFFECT[7]		ERROR TERM[8]
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
Total Number of Separate Dates (Formal + Informal)	0.063	.9390	12.973	.0004*	0.188	.665	5.503	.005*	0.597	.552	0.0006	.980	1.674	.189	0.750
Total Number of Persons Dates	0.436	.6470	5.921	.0160*	0.312	.577	1.008	.367	2.067	.129	9.564	.002*	2.333	.099	0.186
Total Number of Persons Dated who were Residents of the Student's Residence Hall (Coed Resident Hall Students only)	0.328	.5680	0.015	.9030	4.791	.031*	2.242	.137	0.868	.354	0.303	.583	5.856	.017*	0.243
Total Number of Non-Residence Hall Students Dated (all Residence Halls included)	8.568	.0003*	4.296	.0390*	3.016	.084	1.085	.340	0.923	.399	0.493	.484	4.340	.014*	0.420
Total Number of Separate Dates with Residents of the Student's Residence Hall (Coed Resident Hall Students Only)	0.837	.3620	1.612	.2070	0.217	.642	0.092	.762	0.026	.872	0.005	.942	9.679	.002*	1.135
Total Number of Separate Dates with Non-Residence Hall Students (all Residence Halls included)	9.589	.0002*	15.138	.0002*	0.029	.865	3.383	.036*	0.551	.577	0.158	.692	2.383	.948	1.918
Social Dating Behavior with Students who were not Residents of the Respondent's Residence Hall	11.865	.0001*	7.985	.0070*	0.032	.859	0.967	.383	1.488	.229	0.127	.722	1.263	.286	1.729 (df = 140)

VARIABLE DESCRIPTION	RESIDENCE HALL CONDITIONS EFFECT[1]		SEX EFFECT[2]		TIME EFFECT[3]		INTERACTION RESIDENCE HALL GROUPS EFFECT[4] (SEX BY RESIDENCE HALL CONDITIONS)		INTERACTION RESIDENCE HALL CONDITIONS BY TIME EFFECT[5]		INTERACTION SEX BY TIME EFFECT[6]		INTERACTION RESIDENCE HALL GROUPS BY TIME EFFECT[7]		ERROR TERM[8]
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
Social Dating Behavior of Respondants who Lived in Coed Residence Halls with Students who were Residents of the Respondant's Residence Hall (Coed Residence Hall Students only)	4.489 (df = 1)	.0390*	0.003	.9550	1.441	.235	2.261 (df = 1)	.138	1.408 (df = 1)	.240	1.639	.206	5.979 (df = 1)	.018*	2.216 (df = 58)
Social Dating Behavior of Respondants who Lived in Coed Residence Halls compared to Social Dating Behavior of Single Sex Residence Hall Respondants with Students who were not Residents of the Respondants' Residence Hall	11.117	.0001*	3.366	.068	3.630	.058	2.713	.069	2.694	.070	0.839	.361	3.439	.034*	1.764
Intimate Dating Behavior with Students Who were not Residents of the Respondant's Residence Hall	3.988	.0210*	0.300	.585	1.750	.188	0.725	.486	0.009	.990	5.050	.026*	1.633	.199	1.856 (df = 140)
Intimate Dating Behavior of Respondants Who lived in Coed Residence Halls with Students who were Residents of the Respondant's Residence Hall (Coed Residence Hall Students Only)	0.043 (df = 1)	.8360	3.163	.081	10.067	.003*	1.678 (df = 1)	.200	3.879 (df = 1)	.054	5.339	.025*	5.245 (df = 1)	.026*	1.565 (df = 58)

VARIABLE DESCRIPTION	RESIDENCE HALL CONDITIONS EFFECT[1]		SEX EFFECT[2]		TIME EFFECT[3]		INTERACTION RESIDENCE HALL GROUPS EFFECT[4] (SEX BY RESIDENCE HALL CONDITIONS)		INTERACTION RESIDENCE HALL CONDITIONS BY TIME EFFECT[5]		INTERACTION SEX BY TIME EFFECT[6]		INTERACTION RESIDENCE HALL GROUPS BY TIME EFFECT[7]		ERROR TERM[8]
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	
Intimate Dating Behavior of Respondants Who lived in Coed Residence Halls Compared to Intimate Dating Behavior of Single Sex Residence Hall Respondants with Students Who were not residents of the Respondant's Residence Hall	3.880	.0222*	0.657	.419	41.203	.0001*	3.420	.035*	4.917	.008*	2.793	.096	13.398	.0001*	1.594
<u>Religious Practices and Perception</u>															
Belief in Church Doctrine	0.289	.7490	5.308	.0220*	6.943	.025*	1.412	.246	0.340	NS	0.928	NS	0.715	NS	0.216
Monthly Church Attendance	2.779	.0640	0.695	.4060	4.375	.049*	0.823	.441	1.468	NS	3.336	.100	1.158	NS	0.287
Self Religious Perception	4.412	.0130*	3.704	.0560	1.550	NS	0.443	.643	1.735	NS	0.088	NS	2.450	NS	0.408
<u>Extracurricular Activities</u>															
Employment Hours Per Week	1.980	.1410	8.313	.0040*	340.400	.0001*	0.217	.806	0.065	NS	1.870	NS	0.350	NS	1.425
Informal Conversation With the Same Sex	3.552	.0300*	5.063	.0260*	0.333	.5650	6.188	.003*	2.914	.057	0.351	.554	0.538	.584	1.000
Informal Conversation With the Opposite Sex	0.797	.4520	10.869	.0010*	2.623	.1070	3.514	.032*	1.457	.235	0.267	.606	0.977	.378	1.094
Participation in College Organizations	1.007	.3670	18.319	.0001*	4.583	.0340*	0.504	.605	1.931	.148	5.452	.021*	1.471	.232	0.165

[1]Residence Hall Conditions Effect, df = 2 unless otherwise indicated

[2]Sex Effect, df = 1

[3]Time Effect, df = 1 unless otherwise indicated

[4]Residence Hall Groups Effect (Sex By Residence Hall Conditions), df = 2 unless otherwise indicated

[5]Residence Hall Conditions by Time Effect, df = 2 unless otherwise indicated

[6]Sex by Time Effect, df = 1 unless otherwise indicated

[7]Residence Hall Groups by Time Effect, df = 2 unless otherwise indicated

[8]Error Term, df = 210 unless otherwise indicated

[9]NS, not significant at .05 level, exact p value not available

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