ROOMMATE COMPATIBILITY AND GROUP COHESIVENESS
AS INFLUENCED BY THE AMOUNT AND TYPES
OF AWARDED FINANCIAL AID

An abstract of a Field Report by
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Problem. In what way is the compatibility between
students assigned as roommates on the basis of the amount
and types of awarded financial aid packages similar and
dissimilar to the compatibility between students assigned
as roommates through the traditional freshmen procedure
utilized at Drake University?

What is the extent of the difference in group
cohesiveness among the members of the two groups of
students assigned as roommates in both the experimental
and control groups?

Procedure. In July of 1976, through the use of a
computer print-out, an experimental group of twenty-eight
pairs and a control group of twenty-seven pairs of male
and female freshmen students were matched as roommates
for the 1976-77 academic year on the basis of awarded
financial aid packages and through the roommate selection
procedure utilized at Drake University. The groups were
housed in a co-educational residence hall at Drake
University.

Through personal interviews, chi-square ($x^2$) tests,
and tabulations of roommate changes and numbers of students
returning as roommates to Drake University for the 1977-78
academic year, an attempt was made to determine whether
the amount and types of awarded financial aid packages
influenced roommate compatibility and group cohesiveness
in a Drake University residence hall.

Findings. Chi-square ($x^2$) test findings appeared
to be significant at the .05 level for a difference between
total experimental and control groups on compatibility and
at the .01 level for a difference between experimental
men and control men for compatibility and between experimental
men and control men for cohesiveness.

Conclusions. Within severe limitations, findings
appeared to show that roommate compatibility and roommate
cohesiveness were greater for those students assigned
together as roommates on the basis of awarded financial aid when combined with traditional roommate assignment procedures at Drake University.

Recommendations. It is recommended that, in future studies, a larger sample be studied; an "objective" opinionnaire be used instead of individual interviews; and that students in state institutions be utilized as the research population.
ROOMMATE COMPATIBILITY AND GROUP COHESIVENESS
AS INFLUENCED BY THE AMOUNT AND TYPES
OF AWARDED FINANCIAL AID

A Field Report
Presented to
The School of Graduate Studies
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In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Mary Louise Herschberger
May 1979
ROOMMATE COMPATIBILITY AND GROUP COHESIVENESS AS INFLUENCED BY THE AMOUNT AND TYPES OF AWARDED FINANCIAL AID

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Chapter 1

INTRODUCTION

Given the realities of declining student enrollments and a decrease in the overall pool of students available to be matriculated into the halls of higher education, few colleges can afford the luxury of being nonchalant about the way students come and go. For every three students who enter college each year, at least one of the three will drop out of college prior to completion of studies.\(^1\) This writer contends that both the academic and social systems of institutions of higher learning should be reviewed, studied, examined and critically analyzed in the search to understand the attrition figures compiled in today's universities.

The university is a large complex entity offering little solace to those students who come from relatively sheltered home and high school backgrounds. To add to the lack of homogeneity among today's college students, access to higher education is becoming financially available to a wider socio-economic range thrusting some individual

\(^1\)W. Sheffield and V.P. Meskill, "What Can Colleges Do About Student Attrition," *College Student Journal*, 8 (February-March, 1974), 37.
students into a peer culture with which they are unable to identify.

A residence hall can provide a laboratory in human relations where, through informal contacts, students can learn to know and understand fellow students and faculty members through a variety of experiences.\(^1\) According to Menne and Sinnett, in an article published in 1971, there has been a tendency to regard students' living situations and their academic life as being independent of each other rather than interdependent.\(^2\) In 1972, Paolone stated that student development has been found to be related to such "non-classroom" factors as place of residence, student culture, major field of study, student background and individual personality.\(^3\)

This investigator subscribes to the view that university residence halls exist to provide students with a safe, secure, clean and well-maintained environment in which to live plus maintain an environment which complements educational pursuits and provides for total interpersonal

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\(^3\) Francis J. Paolone, "Collegiate Residence and Student Background: An Exploratory Study into Their Relationship to Student Maturity" (Division of Education Policy Studies, Graduate School, The Pennsylvania State University, 1972), p. 129.
development. The strengths of residence hall systems need to be accentuated; each academic or living environment decision should be made with the realization of how student development and growth may be influenced. How one influences development and growth becomes particularly important when speaking of residence hall roommate assignments.

It has been stated many times, in various articles and research designs, that there is an acute lack of recent information and research concerning the subject of roommate compatibility in residence halls. This may be significant if one subscribes to the view that roommates are, whether chosen by the students themselves or assigned by student personnel housing staff, one of the most influential determiner's of happiness in residence hall living and the closely associated total college life experience.\(^1\) This should not be of surprise in view of the substantial amount of time normally spent in a residence hall room with, or under the influence of, one's roommate.

If living arrangements do have a substantial impact upon a student's total experience within a university, the university should consider new ways and take into account

new variables when structuring the total residential experience and the matching of roommates. An effective residence hall program, with all of its intricacies, relies on effective residence hall administrators who have the basic responsibility for integrating and applying knowledge gained through relevant educational research.

It is contended that roommate assignments may be particularly important in a university where freshmen are required to live on campus their first year. In addition, whether a student remains at a particular university, transfers to another institution, or discontinues the educational process may depend on the ability of two students, with perhaps different values and backgrounds, to coexist within a relatively small living space, develop close friendships and become identified with a recognizable cohesive reference group.

This ability to develop a close friendship and cohesive peer reference group may be influenced by a student’s socio-economic background. In fact, socio-economic factors are well-known indices and help explain fundamentally, in conjunction with other variables, individual and group behavior, subcultural entrance and dynamics.¹

a significant indicator of the amount and types of financial aid awarded to students. Therefore, the major contention of this study is that awarded financial aid packages cannot be ignored when matching freshmen residence hall roommates.

However, as is the case with research regarding roommate assignments, little is known about recipients and the influence or the effects of specific types of financial aid such as grants, loans, and work upon the recipient's total college career. No study has been found which compared, in any way, roommate compatibility and residence hall group cohesiveness on the basis of the amount and types of awarded financial aid packages. It is hoped that this study will contribute to and increase the relevant educational research now available to housing and financial aid professionals.

Statement of the Problem

In what way is the compatibility between students assigned as roommates on the basis of the amount and types of awarded financial aid packages similar and dissimilar to the compatibility between students assigned as roommates through the traditional freshmen procedure utilized at Drake University?

What is the extent of the difference in group cohesiveness among the members of the two groups of students assigned as roommates in both the experimental and control groups?
Chapter 2

REVIEW OF RESEARCH

Background Data

Financial aid packaging strategy is generally determined by financial aid offices located within each institution of higher education. A family which has a student who anticipates attending a university and desires financial assistance completes a Financial Aid Form (FAF) which is computer analyzed by one of the approved need analysis services located throughout the United States. Drake University uses the College Scholarship Service (CSS) which analyzes FAF's in either Princeton, New Jersey, or Berkeley, California. The computerized need analysis is prepared based upon socio-economic data made available by the family applying for financial assistance.

Individual institutional financial aid officers may regularly review the computer analysis. Following the review, a financial aid package for a student is determined within the guidelines developed by the university and the qualifications established and restrictions imposed by the various available loan, grant, scholarship and work programs. The packages are then offered to students, who, with their families, have the opportunity to accept or reject
all or parts of the total aid package.

As stated earlier, materials available on the
matching of residence hall roommates based on these awarded
financial aid packages are limited; therefore, information
will be presented on the possible effects socio-economic
data may have on the development of cohesive peer reference
groups and friendship formation and the data's possible
effect, if any, on roommate compatibility.

A good deal of research, carried out principally
by Astin and his associates at the American Council on
Education, has demonstrated that the outcome of a college
education depends heavily upon the characteristics students
bring with them at entrance.\(^1\) Hence, it is important that
universities learn more about the material, moral,
intellectual, emotional, and cultural resources with which
students come to college. These resources have been largely
determined by the life experiences students have had and
these, in turn, are shaped by the socio-economic status
they and their parents have held in the larger society.\(^2\)
Without this understanding, universities cannot possibly
know how to develop an adequate total educational program

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\(^1\) Arthur W. Chickering, Commuting Versus Resident
Students, ed. Alexander W. Astin (San Francisco: Jossey-
Bass, 1974), p. 56; see also American Council on Education

\(^2\) Theodore M. Newcomb and Everett K. Wilson, eds.,
College Peer Groups (Chicago: Aldine Publishing Company,
which would stimulate students representing a great diversity of socio-economic backgrounds.

Particularly in the past, higher education appears to have been oriented toward the strengths of the middle and upper middle class and has not had to worry about developmental opportunities for a student population comprised of unlike backgrounds. Students have been found to screen themselves out of the whole "apply-for-college" syndrome simply because of the feeling that money was neither available nor accessible to obtain the desired higher education. Social scientists have consistently found measures of class standing, occupation, and income to be effective predictors of belief and behavior.¹

Some researchers do not feel that incongruent socio-economic background data have any influence on such things as persistence, achievement, social development or roommate compatibility. In a recent study done at Kansas State University residents themselves felt that present behavioral factors were more important than background factors.² In an earlier study, it was suggested that college students are sufficiently homogeneous to permit roommate compatibility among many combinations of

¹Newcomb, p. 100.

students.¹

It was also felt that there may be some undefined quality within a college atmosphere which offsets the varied backgrounds of students. However, Holmstrom, in a 1973 ACE Research Report, stated that low-income undergraduates do not differ dramatically from more affluent classmates, even though the low-income student may temporarily drop out; all students generally share the same life goals, degree aspirations, activities and interests.² Also, a study by Jones at Arkansas A & M indicated that students from a low socio-economic background did not find their background to have a negative effect on academic success.³ One researcher emphasized that class background has far less effect on educational attainment than other factors.⁴

Other researchers, the writer included, feel that the socio-economic background and the comparative family


³John D. Jones, "A Study of the Relationship Between the Student's Socio-Economic Background and his Freshman Year in College," NASPA Journal, 8 (April, 1971), 234.

income levels do have an effect on an entering college student and, as a result, influence the student's interaction with not only the entire college environment, but play a significant part in the development of peer friendships and reference groups. It is maintained that the college atmosphere, in particular, a residence hall room, is a relatively new culture which provides many new experiences for most freshmen. There are many indications that people who are reared in one culture experience difficulties when they try to adjust to and compete within another culture.¹ Behind the patterns of life experience lie social class, racial and ethnic ties, and religious identifications; these subcultures and the values they impose and the socio-economic background the patterns may suggest shape the orientations most students initially assume toward college.²

It has also been found that those students who have been awarded financial aid packages and have received little support from home remain in school under greater financial pressures than students largely supported by their parents.³ A significant effect that is masked by


the failure to divide the data and control the influence of demographic factors is that a diametrically opposite relationship seems to exist between self-concept and academic achievement for lower versus higher income groups.¹ Statistical studies have pointed out the fact that quite often, incoming low-income students have made slightly better high school grades than middle and high income students but in general, low-income students made slightly lower grade point averages in college than those students who came from middle and high income backgrounds.²

What are the implications of the above facts for the housing administrator in charge of assigning roommates and how does the assignment affect a student's adjustment to a college residence hall room? The writer feels that because of the possible discontinuity between an entering college students' socio-economic background and the new environment, adjustment on the part of students to the new culture may be slow. This anxiety may directly influence a student's interpersonal relationships with peers, thus slowing the process of cohesive reference groups.

Various economic values influence the numerous

¹J. Wright, "The Impact of Perceived Stress on Academic Achievement when Family Income Level and Self-Concept are Taken into Account," _Journal of College Student Personnel_, 7 (1966), 117.

²Holmstrom, pp. 16-17.
ways students view themselves and their environment. Unsuccessful roommates do tend to have different economic values.\textsuperscript{1} An early study found that college women from a low income level, on the average, had a more difficult time making friends, showed more evidence of internal stress, and expressed more fears and feelings of inferiority than women from middle and high income levels.\textsuperscript{2} In 1971 it was suggested that students from lower socio-economic backgrounds did respond less well academically to an institution than students from middle and high socio-economic backgrounds.\textsuperscript{3}

Most of the conceptions of self and the world brought to college have been taken over rather uncritically from parents, community and schoolmates.\textsuperscript{4} Little change would occur if the environment of a college did not challenge the conceptions and values held by entering students. However, recognition must be given to the


\textsuperscript{3}R.G. Taylor, J.D. Roth, and G.R. Hanson, "Experimental Housing and Tutoring: Effects on Achievement and Attrition," Journal of College Student Personnel, 12 (July, 1971), 277.

potential influence these values do have in terms of one's total development in a new environment. Students tend to develop and co-exist within peer reference groups which reinforce each other's existing values.\(^1\) What is possible at a given educational level depends on the developmental stage that the students have reached; the understanding of individuals requires that they be viewed in the context of all that has gone before in their lives.\(^2\)

In his book, Chickering described the incoming freshmen.\(^3\)

Students bring to college, along with skis, sports equipment, and decks of cards, their mothers, fathers, mother's parents, preschool playmates, elementary school pals, high school girl friends and older friends of the family. All of this becomes a part of the student culture which responds as called upon under various circumstances. And there's lots more. Inside that little circle exists strengths and weaknesses, prides and prejudices, clarities and confusions, images of self and idea, and quite a bit of unfinished business for each individual student.

It is felt that these socio-economic factors do indeed have a significant influence on the development of cohesive peer reference groups, friendship formation and roommate compatibility.

\(^1\)Chickering, Education and Identity, p. 224; see also Newcomb, College Peer Groups, 1965.


\(^3\)Chickering, Education and Identity, p. 254.
Peer Groups

Research has shown that the nature of group living in a residence hall may have a major impact on the level of friendships developed among residence hall students and the total satisfaction felt on the part of the residents with residence hall life.¹ The friendships developed in a residence hall, and particularly among the members of a floor and between roommates, may influence a student's perception of the total college environment. The nucleus of the student's social world is often made up of other students living on the same residence hall floor.² Only after students become comfortable and begin to grasp who they are in relationship to the relatively new environment of their residence hall floor, do they begin to feel the need to branch out, cultivate new friends, and experience new challenges.

A student's association with other students plays a significant role in the development of attitudes, values, and patterns of behavior.³ Friendships and peer reference groups have the ability to filter messages to an individual, thereby exerting a powerful influence upon a student's


³Taylor, p. 272.
personal development. Since the traits expected of a good roommate have not appeared to differ from those which the literature indicates are expected of a good friend, matching roommates on the basis of awarded financial aid packages may have an impact on the overall strength of peer group influence.¹

If the socio-economic backgrounds of students do influence the composition of awarded financial aid packages, one might assume that messages within peer groups are filtered in a way peculiar to a student's particular socio-economic background. However, while it may seem logical to reason that students with certain values would be attracted to the type of subculture most likely to provide an outlet for those values, Apostal, in a study of student subcultures and personal values, found only a small number of significant relationships among students with similar values.²

Social comparison theory stresses that people utilize others as sources of information in order to stabilize the self-concept.³ Results of a 1974 study

¹Nudd, p. 78.
indicated that a friend is a complement of one's own self-estimate.\textsuperscript{1} In other words, friendships may form if the people involved project qualities and interact and generally hold the basic value beliefs common to all concerned. Students, following the social comparison theory thought, seem to search for friends and support groups whose attitudes and values are similar to their own. The support group provides some evidence for the validity of their personal views. The level of aspiration of students may be viewed in part as a function of the level of the expectations that they perceive significant other students hold for their behavior.\textsuperscript{2}

Provided that the social comparison theory is valid, a peer group could restrict the freedom and total obtained in a study by Menne and Sinnett indicated that students are most influenced by those in closest proximity to them.\textsuperscript{3} Individual group members find it difficult to break away from the influence of the total group; selected members of the peer group may react by clinging to and depending more upon the cohesive peer group. This dependence is easier in a residence hall living environment than breaking away from the select peer group.

\textsuperscript{1}Bailey, p. 65.


\textsuperscript{3}Menne, p. 30.
In his book, Chickering described the development of what he considers true individual autonomy.¹

1. Emotional Independence means to be free from continual and pressing needs for reassurance, affection, or approval. The first step is disengagement from the parents.

2. Instrumental Independence is characterized by the ability to carry on activities and to cope with problems without seeking help, and the ability to be mobile in relation to one's own needs and desires.


For many students, the most important subculture in college is that to which only students belong—the world of curricular activities, student government, and various informal friendships, living, or interest groups; it is a world in which the student can find support, friendship, and prestige.² Newcomb suggested that a condition of peer group influence involves relative homogeneity of group members. He stated that, "homogeneity of age, sex, religious affiliation and social class contributes to effective peer group influence primarily because of the homogeneity of attitudes that tend to go along with such similarities; therefore, the socio-economic status of the student's family might be seen as an antecedent condition of peer group affiliation."³

¹Chickering, p. 58.
²Sanford, Where Colleges Fail: A Study of the Student as a Person, p. 149.
³Chickering, p. 75.
If Chickering's definition of total autonomy is accepted as being a recognition of one's interdependencies, manipulation of the residence hall living environment through roommate assignment procedures may influence a student's recognition of interdependencies and create peer groups which could have the potential to thrust a student into a college subculture which may run counter to the total residence hall development program.

It will be assumed, for a moment, that cohesive peer groups do not have a negative influence on a student's total educational development. Therefore, perhaps residence hall administrators should be more concerned with how administrative actions, such as roommate assignment procedures, affect the development of peer group influences and possibly manipulate the formation of close friendships.

Chickering places great importance on the influence of friend upon friend.

A student's most important teacher is another student. Friends and reference groups filter and modulate the messages from the larger student culture. They amplify or attenuate the force of curriculum, faculty, parietal rules, and institutional regulations. They can trump the best teacher's ace and stalemate the most thoughtful or agile dean. Thus, relationships with close friends and peer groups, or subcultures, are primary forces influencing student development in college.¹

Recent studies have left no doubt that what students learn in college is determined, in a large measure,  

¹Chickering, p. 253.
by their fellow students. In a study at Harvard University, change was strongly associated with the amount of "peer involvement" and the degree to which an individual became part of the student social structure.\(^1\) Values, ideas, future plans or past beliefs may change from September through May. Any kind of simple association or administrative manipulation of a peer group may influence learning and bring about change during an academic year.

It has been shown that the high impact of residence hall living is probably due to a high correlation between place of residence and pattern of reference group identification.\(^2\) Cohesive residence hall peer groups oftentimes exert a powerful environmental influence through the establishment of particular norms of behavior, attitudes, and values which members of the peer group are expected to follow. However, these same strong interpersonal relationships may facilitate greater integration of the student into the social system of the college.\(^3\) Rap and bull sessions among peer group members can have the effect of sharpening intellectual skills, questioning traditional

\(^1\)Chickering, p. 261.


values, and destroying stereotypes.

The closeness and physical proximity of students in a residence hall should not be overlooked in terms of the formation of friendships and peer groups. At the University of Saskatchewan, results of a study indicated that freshmen do tend to select friends being in the nearest category.\(^1\) People who live close together have a good chance of interacting, thus making the formation of friendships and peer groups easier. In most cases, asking a roommate for a favor involves much less of a personal investment than going to another floor or residence hall to ask the same favor of a classmate. Close living proximity allows friendships and peer groups to develop slowly but securely without a lot of initial emotional commitment on the part of individual students. Students whose rooms are on the opposite sides of a residence hall are less frequently recognized even though they have lived on the same floor and used the same facilities for over a year and a half; in terms of liking, even when persons on the other side of the building come to be known, they are still less liked.\(^2\)

In a report prepared in 1968 by the Committee on

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\(^1\) Roger D. Martin, "Friendship Choices and Residence Hall Proximity Among Freshmen and Upper Year Students," *Psychological Reports*, 34 (February, 1974), 118.

the Student in Higher Education, it was stated:

The student friendship group helps determine what is learned in the college, how it is learned, and what effect both knowledge and the learning experience have on the student's total personality. The importance of peer group influence is so obvious that we must rapidly acquire more knowledge of how it works and integrate it into the educational experience, hopefully, without attempting to manipulate it.¹

The writer feels that any administrative peer group manipulation, such as roommate assignment procedures, should be critically evaluated in terms of either being a positive or negative contribution toward the student's total educational development.

Roommate Compatibility Philosophy

When freshmen arrive in the fall at the colleges of their choice, some of the first people they meet are their roommates. Sometimes the students know one another and have mutually selected each other as roommates. In most cases, freshmen roommates do not know each other. The individual student may have a set of expectations, assumptions and needs which may or may not be compatible with those of the assigned roommate. Therefore, the writer believes that at the very least, a roommate can unknowingly influence another student's perception and adjustment to the total collegiate environment especially if one considers the large amount of time freshmen roommates

initially tend to spend together.

The issue of roommate assignments and their influence upon life in the residence hall has again gained attention with the development of the living-learning concept, crowded and over-occupied conditions, and the increasing demand for professionalism on the part of the residence hall staff. Roommate assignment responsibilities have not always been looked upon as part of the learning process. Rather, the assignment of roommates is often thought of as being a purely administrative function done once a year with little thought given to the influence the assignments could potentially have upon the interworkings of a residence hall system. However, the writer views roommate assignment responsibilities as part of a student personnel function which can either foster or inhibit change and development.

The issue of roommate assignments can be dodged by random assignment unguided by systematic conceptions concerning relationships between likely outcomes and institutional objectives; however, this does not eliminate accountability on the part of residence hall administrators.\(^1\) Intelligent application of previous knowledge must be a reality if growth of any educational system, which in the opinion of the writer, definitely includes residence halls,

is to be realized.

The writer's study was approached on the basis of the influence of demographic variables which influenced the number of types of awarded financial aid packages. In 1970 Pierce suggested that compatibility between roommates may, hopefully, be achieved through either matching roommates on the basis of demographic, personality, or interest variables, or intervening in some way in the ongoing relationship to help roommates co-exist more successfully with each other.¹ But regardless of how compatibility between roommates is sought to be achieved, the writer feels that the issue must not be dodged or overlooked if for no other reason than the potential impact one person has on another's co-existence in a relatively small personal living space.

Roommate conflict has been described as the degree of controversy, disagreement, and argumentativeness among roommates.² Through the review of current research, the writer feels that the degree of conflict, difference of opinion, or similarity of socio-economic backgrounds have not been adequately assessed or thoroughly examined as


variables which may have an influence upon roommate relationships. It is known that too great a discontinuity can stress the organism beyond its capacity to reorganize adaptively; too small a discontinuity can leave that same organism unchallenged and unchanged.\(^1\) The components and rewards of challenge and discontinuity should not be so well planned that the outcome of the task or situation produces no new learning.

Challenge and discontinuity may be accompanied by stress and roommates may have different coping thresholds for stress. While dissatisfaction should not be allowed to become disruptive, if a report of satisfaction with one's roommate is simply a report of lack of conflict, perhaps optimum growth and health can be achieved by matching roommates to be compatible on the basis of needs but different as to values.\(^2\) The theory of balance suggests that whenever sentiments or relations are consistent, balance exists.\(^3\) Stress or conflict does not become an intervening factor within the relationship because the theory prescribes what sentiments and units should change.

Two other roommate compatibility theories were reviewed by Pierce in 1970.\(^4\) Newcomb's similarity theory

\(^{1}\text{Pierce, p. 358.}\)
\(^{2}\text{Pierce, p. 358.}\)
\(^{3}\text{Priest, p. 634.}\)
\(^{4}\text{Pierce, p. 355.}\)
stated that people who choose each other for friends are likely to share roughly similar levels of the same needs. Winch's theory of complementarity suggested that opposites attract; people choose friends whose needs complement their own, either because they have very different levels of the same need or similar levels of different needs.

Sanford described conformity as a disposition to believe and behave as prestigious others do, regardless of the real merit of those beliefs and patterns and regardless of the integrity of one's self.¹ In order to make decisions which are responsible, individuals must be aware of the sources of bias within themselves, have the ability to arrive at opinion through their own through processes, and to integrate their rational beliefs with their personalities so that their convictions can stand against a cohesive peer reference group.²

Relationships between residence hall roommates do not appear to be very well understood. Roommates may have powerful effects upon each other, but these outcomes are mediated by numerous sociological and psychological factors.³ It may be that the most a residence hall administrator can hope for is an increased tolerance for one

¹Sanford, Where Colleges Fail: A Study of the Student as a Person, p. 153.
³Williamson, p. 337.
other individual's habits and idiosyncrasies. Another goal may be to reinforce and strengthen attitudes developed through one's past experiences. Perhaps if a roommate helps one become more honest with oneself and with others, the roommate has made a substantial and lasting contribution.\(^1\)

Although the writer does not subscribe to the "trial and error" method, the method is an alternative in deciding how roommates are assigned. Perhaps "trial and error" does promote compatibility among residence hall students. Research has shown that a residence hall roommate does affect the total college environment; the important question then becomes what criteria should be employed for assigning roommates.\(^2\)

Previous Studies: Roommate Compatibility

It has been stated that roommates greatly influence each other's happiness, and in some cases, success in a college. The formation of peer groups and their vast effect upon an individual's life in an institution of higher education has also been discussed.

Although extensive research has been conducted in the area of relationships between roommates and among

\(^1\)Chickering, *Education and Identity*, p. 257.

groups of roommates, the writer was not able to locate a study which specifically dealt with the assignment of roommates either by awarded financial aid packages or through comparing the socio-economic backgrounds of students. Most of the research which the writer was able to locate was approximately five to ten years old. Finally, although what research there is leaves little doubt that roommates can be an important source of impact, little could be found in the way of systematically gathered evidence on roommates' effects upon one another in the many areas in which they presumably have impacts.\(^1\)

Results of those studies which were found are inconsistent and do not show a particular pattern.

This does not mean, however, that the studies which are available are not relevant to this particular study. In order to understand what happens in a roommate relationship, it is necessary to be aware of the influence of other variables which may be impossible to control in a single individual study.

To add to the confusion, writers cannot, or have chosen to avoid, coming to a consensus of what the word compatibility even means. Universities and colleges differ on what is viewed as a compatible roommate. Recently, kits and models have been developed at some institutions to help bridge the compatibility gap. Yet even the kits

\(^{1}\text{Feldman, p. 214.}\)
and models are often changed by a particular university's housing office to fit their own definition of roommate compatibility. Roommate compatibility, like similarity, can only be defined by specifying the dimensions a housing administrator or researcher wishes to consider at a particular time and place for a particular purpose.

An easy definition of compatibility is Webster's, "capable of existing together in harmony,"\(^1\) This is much too simple if one subscribes to the author's view that modern student development theory sees residence halls as an important contributing agent to the total interpersonal growth and education of the university student.

Zumwinkle defined a compatible roommate relationship as a relationship in which the attitudes and acts of each of the roommates produces an environment which is favorable to the functioning of the personality of each.\(^2\) In 1976, Muret defined compatibility as a condition where two roommates may live together for a semester without undue stress causing one or the other to request a new roommate.\(^3\) This is approaching the definition of compli-

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\(^3\)Muret, p. 2.
bility the writer has chosen to use for the purposes of this study.

In 1966 Brown, in an unpublished doctoral dissertation, defined roommate compatibility as mutually choosing each other as roommates for the following year. For the purpose of this study, roommate compatibility is defined as two people remaining together as roommates for one academic year in the same room and on the same floor.

What does the literature say on the subject of roommate compatibility and the influence of specific living arrangements and environments on a student's adjustment to the residence hall and total institution?

In 1971-72 Sauber tried to ascertain the influence of different places of residence on specific problem areas of college life for the female undergraduate student at the Florida State University. In general, the results indicated that the place of residence did not appear to have a significant effect upon academic test score data in terms of frequency and severity for the total number of problem areas.

Douglas, in 1972, designed a study to determine whether differentiated housing programs at the University


of Tennessee has an effect on the academic achievement of freshmen. Douglas found that there is a relationship between the type of housing selected and performance in high school coupled with the ACT program and selected by American College Testing Program's TH Index. In addition, Douglas' study tended to disprove the practice of relating housing regulations regarding curfew or open houses to enhanced achievement.¹

At Harcum Junior College a pilot study was conducted in 1972 in which an experimental situation was contrived to ascertain the effect upon academic performance, if any, of the assignment of roommates with varying high school academic records. Where "above average" students were assigned to "average" students as roommates, the total group's performance, in terms of academics, was much higher than an "all-average" grouping.² This finding may have some influence on the idea of assigning high-performing roommates with those students who have a more difficult time in achieving high academic grades during their collegiate years. However, what was not shown is the possible negative impact of the lower-performing students on the high-performing students' grade point


averages.

Much consideration has been given to the idea of purposefully creating an academically-oriented residence unit. In 1967-68 DeCoster hypothesized that students with academic potential would facilitate the development of a scholastically-oriented residential community while at the same time creating a living experience more satisfying and congenial. The academic performance of the members of the experimental group did increase to a higher degree than the randomly assigned control group. Most of the variance was with the homogeneously assigned women students who registered a higher withdrawal rate. An adequate explanation for this phenomenon is not available but it should be noted that one woman was in serious academic difficulty; four dropped out for medical reasons; and one left because of financial difficulties.

In 1964 Pace stated that residence hall administrators have not been able to discover a method of roommate selection that would pair students according to study habits as well as interests and backgrounds. Pace felt that if roommates were compatible, adjustment to the


2Decoster, p. 75.

3Pace, "Scholastic Achievement as Influenced by Roommate Compatibility in a College Residence Hall," p. 3.
total institution would not only be easier, but, with some positive motivation, greater educational progress would be achieved. Her master's thesis in 1964 explored the direction and amount of roommates' grade achievements upon each other and found a significant correlation between grade achievement and roommate compatibility. ¹

In 1967 Pace wrote her doctoral dissertation on the identification of relationships between three variables in a college residence hall roommate situation. The three relationship variables identified were: 1) roommate dissatisfaction and scholastic achievement, 2) roommate dissatisfaction and perception of the college campus environment, and 3) roommate dissatisfaction and measured personality variables as indicated by the Edwards Personal Preference Schedule. ² The three statistically different results which occurred indicated that one's roommate relationship might have possible effects on scholastic achievement and the psychological perception of the campus environment. ³ Although the results implied that roommates with high scholastic achievement tended to have lower roommate dissatisfaction scores than roommates with

¹Pace, p. 39.


³Pace, p. 74.
low scholastic achievement and that roommates with high
dissatisfaction scores tended to have lower scholastic
achievement than roommates with low dissatisfaction scores,
Pace implied that a simple and direct "high" association
between roommate dissatisfaction and roommate scholastic
achievement probably did not exist for residence hall
roommates.¹ Perhaps a compatible roommate atmosphere,
where dissatisfaction is at its very lowest, could increase
roommate's grade point averages; however, Pace herself
stated that other factors are important in determining
academic achievement and that additional research by
residence hall administrators is needed to refine the
results and implications.²

In an earlier study Murray sought to determine the
effect roommates have on the scholastic achievement of
college students. Her findings supported the hypothesis
that grades of college roommates are likely to deviate
from expectancy to a greater degree and in the same
direction than those students who live alone during their
years in college.³ The author feels that Murray's study
has implications for the small number of single living

¹Pace, p. 72-74.
²Pace, p. 119.
³Mary Pitts Brookes Murray, "The Effect of Roommates
on the Scholastic Achievement of College Students,"
Dissertation Abstracts International, 21 (1961), 2196,
(University of Southern California).
units which colleges generally provide for their students, particularly if the degree of differentiation from a student's expected high grades is considerable and is in the same direction as that of the lower-achieving roommate.

For an added dimension, in a study done at the University of Minnesota in 1962-63, it was found in the experimentally assigned roommate group that students with high-ability roommates obtained better grades than those with low-ability roommates only if the roommate was later-born; among males, first-borns profited more than later-borns from sharing courses with their roommate.\(^1\) The study did not indicate the difference of the roommate interaction between a first-born and later-born roommate so as to bring about a different type of influence, but the presence of a later-born roommate appeared to be a necessary condition for interpersonal influence on academic achievement.\(^2\)

Another study done over ten years later by Scheidt and Smith tested Toman's Theory of opposite-sex relationships exhibit interpersonal stability to the degree that dyad members are compatible for birth order. Scheidt and Smith's study sought to determine the applicability of Toman's Theory to roommate relationships with the same sex. The

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\(^2\)Hall, p. 318.
results of the study, which included 77 pairs of roommates (50 female sets; 27 male sets), showed that twelve pairs exhibited high interpersonal conflict and conflicting birth orders; 20 pairs, low interpersonal conflict, conflicting birth orders; 6 pairs, high interpersonal conflict, no birth order conflict; 39 pairs, low interpersonal conflict and no birth order conflict.¹ There appears to be some relevance in pairing roommates according to their birth order. To extrapolate, it would seem plausible that roommates who have the same birth order within a family may have undergone some of the same experiences, for instance, with sibling rivalry.

In the Minnesota study, students were also experimentally assigned to high academic ability roommates with matched students assigned to low academic ability roommates. Though roommates of different ability levels showed discernible difference as stimulated persons, there was no evidence that they had a differential overall effect on grades, when proper controls were introduced.² It was also discovered that roommates who share courses do better than those roommates who do not share courses. Some students directly helped and tutored their roommates by suggesting ways to approach a subject or through proofreading and discussing their roommate's work.

¹Scheidt, p. 1174.
²Hall, p. 317.
When a group of freshmen men, whose socio-economic background was fairly homogeneous, was assigned to a residence hall floor and rooms on the basis of their academic-vocational goals, there were effects upon the social inter-action of the students. It was found that propinquity and similarity played an important role in the establishment of friendship patterns; different majors formed best friend relationships with students because of the physical proximity of students while, at the same time, these same students tended to seek out students on other floors.\(^1\) While the manipulation of the roommate assignments did not influence the number of friends or acquaintances, it did appear to influence the type of friends and the room location of friends.\(^2\)

Freshmen manipulation of roommate assignments was also studied by Shapiro and Voog in 1969. They were concerned with the effect of a first semester freshman's grade point average upon the roommate's GPA. The study suggested that roommate behavior accounted for between 10% and 14% of the variability in a freshmen's grade point average and appeared to show that a roommate's behavior does have significant influence upon the academic standing.

\(^1\)Brown, p. 3.
\(^2\)Brown, p. 138.
Although research suggests that developing homogeneous residence units based on majors may have some positive outcomes, little research supports the development of homogeneous residence units based on year in school.\(^2\) Lozier felt that assigning roommates according to similar educational goals and extracurricular plans did not result in fewer roommate changes, but resulted in fewer incompatible roommate changes. He recommended that three factors, academic interests and habits, extra-curricular interests, and socio-economic background, be considered when pairing roommates.\(^3\)

In 1953 Zumwinkle sought to prove that the "birds of a feather get along well together" hypothesis could be effectively used when studying the compatibility of roommates. Zumwinkle's hypothesis stated that the compatibility of pairs of roommates is a function of the homogeneity of the characteristics of the roommates.\(^4\) Although his findings indicated a tendency for pairs who are similar in social introversion-extraversion to be more compatible than

\(^1\)J.G. Shapiro and T. Voog, "Effect of the Inherently Helpful Person on Student Academic Achievement," *Journal of Counseling Psychology*, 16 (November, 1969), 505.

\(^2\)Williamson, p. 336.

\(^3\)Williamson, p. 339.

\(^4\)Zumwinkle, p. 1.
roommates who are dissimilar in this characteristic, the weight of the evidence was clearly in opposition to the hypothesis.\(^1\)

It has been alleged that there are many similarities between roommate and marriage relationships; in both, contracts are present, domestic articles are shared and personal interests are frequently similar.\(^2\) In both relationships, expectations are developed between the two people involved which may or may not be realistic.

Nudd found in his study on roommate compatibility that when roommate relationships fail, it is not because they do not know each other's expectations, or because they don't have similar expectations, but because they do not behave as expected.\(^3\) People seemed to want to associate with people who display characteristics which reflect positively on themselves. Nudd found that students want their roommates to possess traits which are indicative of supportiveness, respect-worthiness and pleasantness of association.\(^4\)

Nudd's data also appeared to show that normally, especially in the case of dissatisfied roommates,

\(^1\)Zumwinkle, p. 106.


\(^3\)Nudd, p. 85.

\(^4\)Nudd, p. 77.
perception of how one roommate sees the other is less than accurate. Dissatisfied roommates may indeed think that they are fulfilling their roommates' expectations; however, if their perception of themselves is, from their roommates' point of view, distorted in a negative direction, the conflict between the two roommates may be far less than the one roommate imagined. ¹ Nudd went on to say:

It may follow that having learned through association, the behavioral expectations of the group, the members of the group will seek to reward themselves through finding someone who will fulfill these expectations for them. Therefore, if both the satisfied and the dissatisfied students have the same picture of the desired roommate and if the association with such a person would be rewarding, it can be expected that both satisfied and dissatisfied roommates would hold the same basic behavioral expectation for their roommate.²

According to Miller and Zoradi the goal of treatment in both marriage and roommate conflict is to alter or terminate the displeasing behavior that has caused the conflict.³ Using Nudd's study as a foundation, perhaps, if roommates became more sensitive and aware of the differing expectations of behavior for each other and were more perceptive of their own personal actions which pleased or displeased their roommate, a compatible relationship, beset

¹ Nudd, p. 70.
² Nudd, p. 83.
³ Miller, p. 228.
with minimal conflict, could exist.

With regard to the difference between female and male pairs of roommates, Nudd found that male pairs of roommates, more so than female pairs of roommates, were extremely anxious that their roommate not possess any characteristics of the opposite sex. Female pairs of roommates, however, showed more disdain for the student who is a "big operator", "glad hander", "apple polisher", or who avoids or is unfriendly toward those of another race or cultural background.\(^1\) While male pairs of roommates tended to place more importance on having a roommate who was practical and had good judgement and common sense and who was cheerful and optimistic, women pairs were more concerned with having a roommate who treated them "like a true friend" and who was understanding and a considerate listener.\(^2\)

In 1966, approximately four years after Nudd completed his study, Volkwein studied pairs of male freshmen admitted to Harper College of the State University of New York. This experiment found no significant difference in requested roommate changes between pairs matched randomly and pairs matched on age, size of high school

\(^1\)Nudd, p. 54.

\(^2\)Nudd, p. 53.
A number of studies have been completed which looked at roommate compatibility as a function of either specific institutional environmental factors or an individual roommate's habits and background. Although evidence is inconclusive, a review of a few of the studies adds to one's understanding of the complex task of assigning roommates in a residence hall.

At Kansas State University, the effects which five major conditions might have on roommate compatibility were studied. The conditions were:

1. Roommate happiness situation;
2. Mutual roommate selection;
3. Sex;
4. Academic class; and
5. Residence Hall type.

It was concluded that in making roommate assignments, high priority should be given to the variables of visual privacy, smoking habits, GPA, bedtime, study habits, beer usage, and academic major.  

Gehring, in 1969, hypothesized that no significant differences in variables studied in his roommate compatibility research would be significant between students assigned as roommates at random and those assigned experimentally on the basis of:


\[2\] Muret, p. 47.
1. Educational level of the subject's father;
2. Size of the enrollment of the subject's high school;
3. Whether or not the subject attended church regularly;
4. The subject's smoking habits; and/or
5. The subject's predicted grade point average.

Gehring's method of determining the effect of the five variables is similar to that used in the writer's study. Therefore, the method is briefly reviewed.

The subjects consisted of 244 first quarter freshmen men who requested housing. After the control group was selected, 90 of the remaining subjects (45 pairs) were matched for each of the five variables. These 45 pairs constituted the experimental group. All room changes were approved and changes made wherever physical arrangements permitted, which means that one must take into account, in the final results, those people who requested roommate changes but were not able to obtain a change.  

By using chi-square analyses, Gehring found that each of the definitions yielded no significant differences; therefore, it was necessary to retain the hypothesis that there is no significant difference in compatibility between students assigned to residence hall rooms at random and those assigned experimentally on the basis of the five experimental

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variables.¹

Paolone selected the demographic variables of sex, religion, marital status, cumulative grade point average, major field of study, sibling position in family, mother's level of education, father's level of education, father's primary occupation, and term standing for a study designed to explore the variables' relationship to student maturity. Paolone used junior and senior undergraduates to investigate the relationship between the principal independent variable, place of residence, and the dependent variable, the maturational development of students.² Student background factors, in terms of their relationship to student maturity and their places of residence, were also considered. The findings indicated that, "not only are certain background factors differentiating the manifestation of student maturity, but the background factors also seem to be related to a particular living area and perhaps, to satisfaction with that chosen living area."³

What with all the concern about roommate compatibility, one would think that an adequate checklist, test, or inventory could be developed to help housing administrators assign roommates. Pace utilized the Edward's Personal Preference Schedule; Mudd designed a roommate checklist.

¹Gehring, p. 60.
²Paolone, p. 10.
³Paolone, p. 151-152.
Other researchers have developed their own questionnaires, interviewing techniques and data collection instruments. Nothing has been found by the writer to be the answer which would insure the matching of two people together as completely compatible roommates and which would satisfy the many definitions of compatibility.

In 1970 Haines tested the Fundamental Interpersonal Relations Orientation-Behavior Questionnaire (FIRO-B) and the Edwards Personal Preference Schedule for predicting the assignment of compatible roommates. A secondary purpose of the study was to describe the personal traits which might characterize a compatible roommate relationship. Neither questionnaire was found to be a valid predictor of compatibility between college roommates, nor did the study support the hypothesis that special combinations of personal traits might exist between compatible roommates.¹

Additional roommate studies and references are cited throughout this paper. However, because this section is the major review of relevant roommate compatibility/assignment literature, perhaps one needs to consider what Garrison wrote in 1973:

> From the lack of real evidence that roommate matching was effective when matched on ability, age, home background, curriculum, interest, or any other stated criteria, it should, perhaps, have been evident long before R.A. Pierce (1970) that compatibility was

¹Haines, p. 2173.
a poor goal. If the housing program expects to become an integral part of higher education, then the thought of Pierce, (housing offices should match roommates according to the purpose for existing), and N. Sanford, ( . . . free the student from the claims of any peer culture) must be considered with great sincerity.¹

Perhaps Garrison has effectively stated the crux of the problem. The author of this study feels that housing administrators must not only first define their purpose for existing, but they must also define their motive for hiring professionally trained student personnel administrators to match roommates and to serve, whenever necessary, as effective facilitators between roommates which appears to be a relationship which influences perception and adjustment to the total collegiate and academic environment.

Cohesiveness

Cohesiveness, for the purposes of this study, is defined by the writer as the tendency for a group of people, who lived among one another for one year, to choose to live among members of the same group within a residence hall setting for a second year. The writer feels that people who live closely together form friendships and peer groups within living units which often extend in time beyond the immediate physical boundaries to which they have initially been assigned.

In a study to determine the relationship of physical proximity to friendship among students in high-rise residence halls, it was found that both males and females chose more friends from within their respective corridors than from other corridors in the residence hall.\(^1\) This theory, however, may only be valid for first year students living in residence halls as hypothesized by Priest and Sauer. They stated that among students living in a residence hall, cohesiveness, because of physical location and college class, declines after the students' initial year of living in a residence hall; friendships increasingly span distance and class as the time students live in the residence halls increases.\(^2\)

Social cohesion did not appear to be a unitary concept, but rather, the concept of cohesion was felt to be of importance in determining social interaction and of theoretical interest by Newcomb and Wilson. They described the first dimension of cohesion as being based on the social satisfaction of group members; the second dimension as based upon interaction as individual group members.\(^3\)

Some writers feel the indicators of cohesiveness are multi-dimensional, which may influence the development of cohesive residence hall reference groups. Chickering

\(^{1}\)Menne, p. 29.

\(^{2}\)Priest, p. 633.

\(^{3}\)Newcomb, *College Peer Groups*, p. 176.
felt that if a residence hall was to become an impactful subculture for its members, a reference group must be developed and the values and behavioral norms of the group become the background against which individual decisions about behavior, values, and attitudes are viewed. Four principles, taken from Chickering's research on reference groups, may be used in understanding the development of reference groups within residence halls. They are:

1. Associations are fairly long-lasting.

2. Members face common problems, share common tasks, or otherwise engage in meaningful activities together.

3. Status and roles are varied enough so that longevity of association and being a "good" member is rewarded and recognized.

4. The boundaries with respect to other social establishments are reasonably clear; one knows who is "in" and who is "out".

There have been studies conducted regarding the type of conditions and variables present in a living environment which can potentially increase the chances of the formation of an influential cohesive reference group. These studies range from looking into the background experiences and characteristics a student brings to a new group to the effect an all-freshmen hall has on a student's adjustment to the new culture of a residence hall. However, studies seem to show that most changes in attitudes, values,

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1Chickering, Education and Identity, p. 153.

2Chickering, Education and Identity, p. 229.
future plans, aspirations, and intellectual interests appear to occur during the first and second years of attendance at a university as students come to grips with fellow students and college subcultures. As students find their place within the college subculture, this new peer group influences individuals to the extent to which the group helps individuals fulfill self-defined immediate and long-range objectives. The writer feels that through association with such a cohesive peer group, individuals will base their identity upon that group and seek to retain membership for as long as the group is attractive and provides for some development of the personal ego.

Two studies illustrate specific characteristics which could lead to the development of a cohesive peer group. Wolfe stated that working class students, who feel that individualism is bad and are afraid of large groups, have found the answer in small collectives, which grow slowly, if they grow at all. The forces of selectivity operate continually on a residence hall floor which may also be defined as a collective. Selectivity allows a small

1Chickering, Commuting Versus Resident Students, p. 137.
2Chickering, Commuting Versus Resident Students, p. 88.
4Feldman, p. 204.
collective to form on a floor without membership in the collective being irreversible. The reversibility of membership allows students within the collective to leave one group and become a member of another potentially cohesive group without too much stigma attached.

In a study done at Colorado State University it was found that groups of male college freshmen, who differed in their level of self-actualization and who were required to live in certain types of living arrangements, differed significantly in their preferred living arrangements and in their actual living arrangements. Females seemed more dissatisfied, in general, with their living arrangements; no relationship was found to exist between the level of self-actualization and dissatisfaction with living arrangements for females.

In a study done by Stover at Columbia University it was found that residents' of women's halls, when compared to residents' of men's halls, had stronger perceptions of propriety and community environments; however, the women's perceptions of the scholarship and awareness environment was noted to a lesser extent than

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1Byron S. Wills, "The Relationship Between Level of Self-Actualization and Dissatisfaction with Selected Living Arrangements," Journal of College and University Student Housing, 4 (Summer, 1974), 17.

2Wills, p. 18.
what was indicated by the residents of men's halls.\textsuperscript{1} It appears, in this study, that women do feel that an environment on a residence hall floor must, at least minimally, meet the standards of what is considered attractive.

There may also be a difference among various ability levels of students in terms of what is considered to be personally attractive, mutually supportive of a cohesive peer group, and a secure reference point. DeCoster found that:

1. High-ability women students seem to do better academically when assigned homogeneously to residence hall living units.

2. High-ability students seem, by their own report, to perceive homogeneously assigned living units as more desirable.

3. There may be significant sex differences in the learning process that could necessitate modifications in assignment policies designed to facilitate academic growth for male and female students.\textsuperscript{2}

At some universities, freshmen are assigned together as roommates in an all-freshmen residence hall. Scholmer and McConnell found that it was the all-undergraduate women's hall, composed of women from all grade levels, that appeared to have significantly more positive


\textsuperscript{2}DeCoster, p. 77,78.
effects on freshmen women's grades than an all-freshmen hall.¹

Sorrell studied freshmen who were exposed to an environment which was neither freshman-like nor upperclass-like; another group of freshmen were exposed to a predominantly freshman environment. His results showed that freshmen academic performance did not appear to be related to degree of contact with upperclassmen nor did the attitudes and values of the freshmen who were living in the upperclass residence units differ from those who were living in freshmen or university-ratio residence units.² Living in close proximity to upperclassmen was not a major factor in affecting attitudes and values other than results did show that a greater number of freshmen did withdraw in the upperclass hall than in the other two groups. In general, all of the freshmen in Sorrell's study tended to become more mature, flexible and less stereotyped in attitudes and beliefs and less traditional in their value orientation as their collegiate experience progressed.³

The writer suggests that commonality of interest, personal habits and attitudes, and socio-economic status,


³Sorrell, p. 1675A.
which may be a major force behind the development of cohesive peer groups, could increase the likelihood of cohesive peer groups extending beyond the first year in college. However, when people have been housed together by major area of study, it was found that such assignments served only to strengthen those which already existed and that rather than engaging in new and different activities, housing similar majors together stimulated the subjects to pursue activities in areas in which they were already interested.\(^1\) Even as early as 1951 Powell stated, in a study conducted among thirty-five women and one residence counselor, a group structure had developed after just thirty-seven days, where previously there had been only a minimal amount of contact.\(^2\) What group structure did develop appeared to be surface in nature revolving around habits and activities such as visiting, mealtimes and roommate selections.

Financial Aid

A working knowledge of the concept behind the offering of financial aid to prospective college students must be understood in order to understand the influence of awarded aid packages upon roommate compatibility and

\(^1\)Brown, p. 550.

cohesiveness on a floor within a residence hall. The writer will not make an attempt to explain all of the variables which can potentially influence the amount of awarded aid; neither will an attempt be made to thoroughly explain and discuss the many and various loan, grant, and scholarship programs available to the college student of today.

The writer of this report believes that financial aid is a student personnel function on a university campus but that, administratively, financial aid counselors must have direct access to University services, i.e. counseling center, admissions, deans' offices, student residences. Financial worries associated with students attending particular colleges can be the source of emotional and adjustment problems. Through assistance to students encountering these problems, financial aid counselors cannot help but be involved with a student's values, objectives, plans and sense of reality.¹ This writer feels that through direct contact with university resources, a financial aid counselor can more adequately assist students with putting what may seem to be monumental monetary and adjustment problems into a more understandable framework. In 1964 Moon, speaking about the need for planning future methods of awarding student financial aid, included the

importance of having information available regarding students' nonacademic characteristics and environment as well as their level of academic achievement and ability. Therefore, it is the belief of the writer that financial aid should be thought of as a part of the total counseling service available to all students at all institutions.

In 1970 Roose claimed that financial aid to students was fourfold.

Aid to students leads to a more effective use of resources and consequently, enhances the national welfare. Aid can enlarge educational opportunity for low income and disadvantaged groups; requires institutions and educational programs to be more responsive to consumers and makes possible continued and effective competition between public and private institutions of higher education.

Financial aid may be classified as one of several developmental services available at universities.

Financial aid may properly be classified as an investment in students' attainment of their full potential; it is indeed also a means of aiding students to rise above their class origin and to avoid the degradation of poverty and other forms of deprivation associated with limited financial resources. As viewed from the perspective of society, financial aid is a factor in the cultivation of natural resources --human potentiality; it serves as one of the forces that aid individuals and society, and utilizes education for the purpose of development of society's unused human resources.

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2 Kenneth D. Roose, "Aid to Students--or to Institutions?" Educational Record, 51 (Fall, 1970), 367.

3 Williamson, p. 309, 310.
Sharon and Horch talked of parental responsibility for contributing financially to a student's collegiate education. They felt that the major purpose of student financial aid programs was to provide monetary assistance to students who could benefit from further education, but who could not do so without such assistance. In a text used by a number of institutions to train future student personnel workers, Williamson and Biggs define financial aid from many sources as "an investment in students' attainment of their full potentiality and an investment of society in the cultivating of natural resources--human potentiality". For the purpose of this study, financial aid is defined as a means of encouraging, assisting and contributing to an individual's undergraduate education through awarding monetary resources which enable an individual the opportunity to attend the institution of his/her choice regardless of economic background or cost of institution. Money, in and of itself, is seldom an insuperable problem when taken in isolation; however, it may be the decisive factor for the student who is undecided about whether he/she wishes to attend college. Accordingly, it might be said that if the desire on the part of students

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1Sharon, p. 448.
2Williamson, p. 309, 310.
3Jencks, p. 298.
who wish to attend an institution of higher education is
great and their financial need is felt to be substantial,
their attempts to procure aid will be more persistent, thus
making it easier to prove financial need.\(^1\) However, the
large number of financial, living condition, and employment
problems reported by students receiving little financial
support from home indicates that financial aid programs
have not solved the financial difficulties of all students.\(^2\)
Perhaps it can be hypothesized that different values are
placed on education by different income groups.\(^3\) The
writer suggests that there are different values placed on
education by those students who are awarded a financial aid
package than by those students who are not awarded financial
aid. Wright predicted that students in lower and higher
income levels perceive themselves and their environment
differently, have different motivations for achieving
academically and use different means of maintaining or
improving self-concept.\(^4\) Socio-economic background was
listed by Lozier as one of three reasons explaining roommate

\(^1\)Edward Carpenter, "A Study of Needs and Activities
of Financial Aid Recipients and Non-Recipients," \textit{Journal

\(^2\)Bunnett, p. 146.

\(^3\)Wright, p. 116.

\(^4\)Wright, p. 113.
incompatibility and roommate changes.¹ Nudd's data from his study on roommate compatibility appeared to indicate that dissatisfied roommates tend to differ in their valuing of the economic to a degree significantly greater than did satisfied roommates.²

A financial aid officer usually determines the amount of aid to be awarded through a process called needs analysis. Through needs analysis, a family's socio-economic background, gross family income, assets, and home/business equity are studied in order to determine a student's calculated financial need which results, depending upon institutional resources, in an awarded financial aid package.

Needs analysis relies on a family's self report of current income and estimated next-year income. Yet, in a study done in 1968-70 by the Educational Testing Service it was estimated that reported income was lower than actual current income for each of the groups studied. This result suggests that the average family at each income level either believed that their next-year income would drop or that they were less than honest in estimating future income.³ Correction formulas may need to be used with


²Nudd, p. 37.

³Sharon, p. 450.
individual families at specific income levels. A
corrective formula can offset intentional or unintentional
distortion of a family's self projected yearly income.

Astin alleged that students had a better chance of
staying in college if they received a major part of their
support from their parents, a scholarship, or personal
savings.\(^1\) In 1968 Jencks stated, "students who drop out
are probably getting slightly less financial help from
home, even though their parents have no less money."\(^2\)
However, this same study failed to find a significant
correlation between parental income and a college fresh-
man's chances of earning a degree. Perhaps it can be
stated that whether students finish college or not depends
upon their perseverance and creativity in developing alter-
native sources of funding for their education. These
efforts may be influenced by their values and by socio-
economic background factors.

In 1973 Joesting found that concern about financing
students' education did not differ significantly among
income groups, but there was a significant difference in

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\(^1\)Alexander W. Astin, College Dropouts: A National
Profile, American Council on Education Reports, (Washington,

\(^2\)Jencks, p. 297.
the major source of financing for college expenses. Even though differences in financing a college education may reflect a family's values, in 1975 Bunnett found no relationship between parental support and "disliking financial dependence on others." She stated that those students who remained in college with little financial support from home did so under greater financial pressures than those students largely supported by their parents; however, no support was found for the hypothesis that parental financial support of young adults in college contributed to problems between students and their parents. However, Chickering stated, "extended financial dependence on parents impedes students' development of instrumental independence."

According to a report from the Carnegie Foundation for the Advancement of Teaching, the average financial burden for a family with children in college has gone down in the past four decades. The report alleges that states will continue to play a more important role in the support and development of higher education institutions.


2Bunnett, p. 147.

3Bunnett, p. 147.

4Chickering, Education and Identity, p. 71.

What effect this will have upon a student's adjustment to college remains to be seen.

Awarded financial aid packages and socio-economic class cannot be considered as independent variables. In 1968 Schlekat found that a larger proportion of financial aid applications from the higher economic classes was rejected than from the lower economic classes; similarly, combinations of grants and loans were offered more frequently to lower economic class applicants than to high economic class applicants.¹ In a later study completed at the University of Texas, an overwhelming percentage of those who never applied for aid claimed that their present sources of income for the school year were adequate.² This trend was similar to the one Schlekat observed, "the lower the socio-economic class level, the lower the probability of a reject decision."³

Once a student from a lower-income background enters college, he/she is more likely to obtain a degree within four years than the student who received no financial aid from the institution.⁴ Different values are placed upon achievement and completion of education by those


²Carpenter, p. 9.

³Schlekat, p. 148.

⁴Holmstrom, p. 19.
students who come from lower income families than by those students who attend college from higher income families. The anxiety which students from lower income brackets experience because of financial worries through their college years may serve as an effective motivator to complete a college career.¹

What is the influence of awarded financial aid packages on students' educational decisions and academic achievements?

It has been found that well-educated parents with low incomes spend more on their children's college education than do poorly educated parents with high incomes.² It is hardly surprising, therefore, to discover that parental income has relatively little influence on a child's actual chances of attending college. In fact, parental incomes have been found not to be significantly correlated with choice of loan plans, even though low income students were more likely to cite scholarships, grants, personal savings and other gifts rather than direct support from parents as their main means of financing a college education.³

Indications are that there may be forces which influence the ways which low-income students choose to finance their college educations. A financial aid officer,

¹Wright, p. 117.
²Jencks, p. 294.
³Holmstrom, p. 13.
and the institution for which the officer works, may expect that a certain amount of money be counted into the financial analysis as potentially able to be earned by students themselves, either through accumulated gift money or summer work earnings. With a loan probably not covering the entire college expense and with the unwritten implication that the college aid officer expects students to rely upon other means of financing before borrowing from the University itself, the theory that there is bias against borrowing as well as bias in favor of using traditional sources of funds for financing higher education in general still appears to be supported.\(^1\) In 1965 the Guaranteed Student Loan Program (GSLP) was initiated under the Higher Education Act. The main thrust of the plan was to allow student aid funds to go farther rather than to replace student grants, scholarships or work-study programs.\(^2\) Since the GSLP has no income limit, the program allowed a middle-class family to both buy a new car and send a student to college even though that prior to the purchase of the new car, there probably would not have been need for a loan.\(^3\) This type of program asks financial aid officers and their represented institutions to sanction

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\(^1\) Jessie C. Hartline, "Student Financial Aid and the Role of Student Loans," *College and University*, 47 (Winter, 1972), 114.

\(^2\) Hartline, p. 107.

\(^3\) Hartline, p. 114.
loans through a program which says need is not a factor.

In 1966-67, Equal Opportunity Grants (EOG) were first made available to prospective college students who could meet a rigorous criterion of financial need. The EOG program was initially clouded by beliefs that the recipients would have a much greater attrition rate than would the non-recipient student population. This appeared to be substantiated by Wright, who in 1966 found significant relationships between family income levels and academic achievements of students from those families.¹

Loans, grants and scholarships often have an impact upon a student's educational decisions and academic achievements which cannot be seen and are oftentimes intangible. In 1964 an Economic Opportunity Act included a work-study program which was designed to stimulate and promote the part-time employment of students in institutions of higher education who were from low income families and were in need of the earnings from such employment to pursue courses of study at these colleges. The program has had a large effect on students and the institutions which they attend.²

The program provides a potential labor force for universities, many of whom, especially private institutions, could not continue to operate if the program were not

¹Wright, p. 115.
available. There has been controversy over the amount individual institutions have chosen to pay their work-study students. Discussions still continue on the question of the number of hours a student should be able to work and still maintain a satisfactory academic record.

It is necessary that financial aid officers consider the many variables which may influence a student's academic achievement prior to assigning work-study as part of a total financial aid package. Kaiser and Bergen suggest that three important variables which have a measurable effect on a student's academic standing include ability level, load of classes and physical and personal demands. Work-study may not be psychologically possible for a student if the student has not shown some achievement success in the past, if the load of classes is unusually heavy and if there are unique physical and emotional needs and demands placed upon him/her.

On the other hand, Carpenter found that "loafing" is one activity almost all students appear to indulge in; yet, it appears to be most prevalent among the non-financial aid applicants, 49% of whom say they "loaf" sixteen or more hours per week while the corresponding figures for the recipients and rejected for financial aid

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are 40% and 39% respectively. Carpenter also found an unusual congruence in the amount of time expended by the three groups in fraternal club and religious activities; however, non-applicants spend more time in sports and watching movies and television.\(^2\)

Kaiser and Bergen found that part-time employment during the first semester had no adverse effects on academic achievement.\(^3\) In 1967 Henry found that there were no significant differences between the mean grade point average of those students who worked and those who did not at any ability level.\(^4\) Also, in 1969 Hay and Lindsay found that taking into account prior studies, the weight of the evidence pointed to no differences in grades when employed and non-employed students were compared.\(^5\) They did find, however, that students working 16 or more hours per week had consistently lower mean term GPA's than non-employed students.\(^6\) This finding certainly has implications upon the new regulations published by the U.S. Office of Education. It is now

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\(^1\)Carpenter, p. 13. \(^2\)Carpenter, p. 12-15
\(^3\)Kaiser, p. 385.
\(^6\)The Student in Higher Education, p. 114.
permissible for a student to work 20 hours per week and if that allocation will not meet the student's financial need, the institution's financial aid office may authorize up to 40 hours of work per week.¹

From the writer's viewpoint, colleges and universities are concerned about the attrition rate of students enrolled in institutions of higher education. It is not unnatural to find large amounts of monetary resources being allocated each year by an institution for financial aid purposes to attract and admit a highly qualified student population to its student body.

In the minds of some researchers, awarded financial aid packages do play a part in the persistence of individual students toward the completion of their college educations. However, perhaps the belief that awarded financial aid packages do have an influence on the persistence of students in college is only a myth. Students may have a fatalistic attitude toward financial difficulties or simply find that financial problems are more easily verbalized reasons for failure to persist in college.² In a study conducted by Astin in 1972, it was alleged that parental income,

¹"Work Study Regulations," American College and University Housing Officers' News, 16 (December, 1976).

which influences the amount available to be contributed toward a college education, showed no consistent relationship to persistence in college.¹

In 1973 Fields and LeMay found that aid recipients and non-recipients achieved at their expected levels, but that the differences in GPA were a function of a difference in scholastic aptitude and not a result of awarded aid.² A new dimension was added through a study conducted by Selby in 1973. His data suggested that no significant relationships existed between persistence and the amount of financial aid received for any racial sub-group or the total group of students.³ Baber and Caple noted in 1970 that the family factors and the types of amounts of financial aid provided did not yield sufficient bases for differentiating between persisters and non-persisters.⁴ However, if a larger sample had been used, differences might have been observed between Equal

¹Astin, p. 38.


Opportunity Grant persisters and nonpersisters on certain subcategories used in the study.¹

While studies have not shown that awarded financial aid packages are sole and independent forces contributing to non-persistence in what is traditionally known as the academic classroom, it has been suggested that students who are worried and in debt are forced to economize by using inexpensive and inadequate housing and by reducing or eliminating social activities.² The writer feels that while educational persistence may not be significantly influenced by awarded financial aid packages, it does seem logical that extra-curricular growth potential opportunities would be limited on the part of students if their "free" time were used to secure resources to meet basic living expenses. Hence, the educational process and positive growth potential may be hampered by financial worries.

In 1974 Quesada-Fulgado stated that students who were asked about ways in which financial aid affected their college lives were, for the most part, enthusiastic; over four-fifths of the recipients said it had a positive effect.³ However, it has been pointed out that while financial assistance might attract additional youth to

¹Baber, p. 118.
²Fritzgerald, p. 267.
³Carpenter, 13.
college, findings also raise the question of how long would those who did go to college stay if no effort were made to influence the social support which they receive from significant others in their major social networks?¹

¹Yamamoto, p. 116.
Chapter 3

METHODOLOGY

In the middle of July of 1976, permission was received from the Office of Student Life, Drake University, Des Moines, Iowa, to review a University computer print-out listing all of the financial aid packages awarded for the 1976-77 academic year. The June 10, 1976, computer print-out list was received from Drake University's Financial Aid Office. The purpose for obtaining the computer print-out listing the 1976-77 awarded financial aid packages was to enable the researcher to experimentally match a group of roommates on the basis of the amounts and types of awarded financial aid packages. Fourteen pairs of freshmen women and fourteen pairs of freshmen men were matched as roommates using the awarded financial aid package data obtained from the June 10 computer print-out.

To be eligible for financial aid at Drake University, students and their families must complete a Financial Aid Form (FAF) by March 1 preceding the academic year in which they wish to enroll. The completed FAF is forwarded to the College Scholarship Service (CSS) where it is analyzed and evaluated. The evaluation, which contains a student's calculated financial need is sent
to the school to which the student has requested the information be forwarded. Using the materials by CSS, schools evaluate students' needs according to institutional procedures and practices and federal guidelines established for campus-based financial aid programs. A complete list of the types of financial assistance available through Drake University can be found in Appendix A.

After the FAF is evaluated in the Drake University Financial Aid Office, an aid package is put together and offered to the student. The student may then choose either to accept or decline parts or all of the offered package. For the purposes of this study it is important to realize that when the twenty-eight pairs of men and women were matched as roommates, the matching was based upon awarded financial aid packages as of June 10, 1976, not accepted or declined packages. Appendix B shows the type of aid awarded to the experimental and control groups.

For the control group, thirteen pairs of freshmen men and fourteen pairs of freshmen women were matched through the traditional freshmen roommate selection procedure utilized at Drake University. This procedure includes matching freshmen roommates according to the college in which he or she is enrolled and smoking or non-smoking. Freshmen students who come from the same high school are not matched as roommates unless a special request is made. The researcher did not take part in matching any roommates of the control group. This was
handled by the Administrative Assistant and a secretary employed by the Office of Student Residences. The two individuals make all room assignments in the University's residence halls.

It should be noted that the experimental group was also matched by the researcher through the traditional freshmen roommate selection procedure; however, in addition to the normal variables considered by the Office of Student Residences at Drake University, the researcher also matched roommates on the basis of awarded financial aid packages for the academic year, 1976-77.

The two groups of men (experimental and control) were housed in Goodwin Residence Hall on two different floors, but which have similar floor plans. The fourteen experimental pairs of male freshmen roommates were housed in the same wing on the second floor in adjoining and across-the-hall rooms. The thirteen control pairs of male freshmen roommates were housed in the same wing on the third floor in adjoining and across-the-hall rooms except for three cases where a room of upperclassmen separated the male freshmen control group.

The two groups of women (experimental and control) were housed in Kirk Residence Hall on two different floors, which also have similar floor plans. The fourteen experimental pairs of female freshmen roommates were housed in the same wing on the third floor in adjoining and across-the-hall rooms. The fourteen control pairs of
female freshmen roommates were housed in the same wing on the fourth floor in adjoining and across-the-hall rooms except for four cases where a room of upperclasswomen separated the female freshmen control group. The floor plans and room locations of the men and women control and experimental groups can be found in Appendix C.

Goodwin and Kirk Residence Halls were chosen by the researcher as the halls in which the study would take place because of the similarity in design and staffing. In addition, both because of size and a comparatively low retention rate of upperclassmen, the two halls offered the researcher maximum flexibility to match roommates according to awarded financial aid packages while still providing the researcher space to establish a comparative control group.

Both Goodwin and Kirk were staffed with a new Hall Director; a student Resident Assistant (R.A.) was located on every floor somewhere within the four groups. This is normal Drake University Office of Student Residences procedure. The two Hall Directors were informed that a study was taking place; the resident assistants were not told of the study. Because of the R.A.'s close proximity to the control and experimental groups, it was feared that the R.A.'s knowledge that a study was taking place might influence his/her reaction to the students involved in the research.

The study was carried on through the 1977 spring
vacation "break". Beginning in December and continuing through April of 1977, students in the four groups who had changed rooms and had received awarded financial aid were interviewed privately by the researcher in the Goodwin Hall Director's office located in the lobby of Goodwin Residence Hall. The lobby in which the office was located joins together Goodwin and Kirk Residence Halls. The questions used by the researcher were designed to elicit data from the members of the experimental and control groups in the study as to their perceptions of roommate compatibility and group cohesiveness. The subjective questions utilized can be found in Appendix D.

The students interviewed by the researcher were told that the information given would be confidential and at no time would the information obtained be used in determining their personal future room assignments or financial aid awards. The students were also told that their own name and the name of their roommate would be coded so that they could not be identified by anyone other than the researcher. This precaution was taken because financial aid packaging is a sensitive issue for many individuals. The University itself deems the awarded financial aid package to be a confidential matter between the student and his or her family and the institution. Therefore, the participating students were assured that at no time would their names be revealed in the study.

All of the interviewees were told that the infor-
mation obtained would be used for three purposes. First, the information provided would increase the researcher's knowledge of perceived important roommate compatibility factors to be used in the future assignment of roommates in residence halls. Second, the information would be used by the researcher and, in some cases, by the Financial Aid office to help determine the impact of awarded financial aid packages upon a student's decision to enroll and re-enroll in Drake University for the following year. Third, the interviewees were told that the information would be used by the researcher to help determine whether a student's awarded financial aid package had an influence upon students' day-to-day interaction pattern with members of their residence hall floor.

Beginning in February of 1977 students in the four groups who did not change roommates and were not on financial aid (this would involve only those students within the two control groups) were privately interviewed by the researcher in the Goodwin Hall Director's office. Beginning in March of 1977, a random sample of those students in the four groups who did not change rooms were also interviewed privately in the Goodwin Hall Director's office.

The same information sought by the researcher from those students within the four groups who did change rooms and had received awarded financial aid packages was sought by the researcher from those students randomly
selected within the four groups who did not receive awarded financial aid packages and who did not change rooms. The only difference in the questions asked was that the researcher attempted to discover whether the awarded aid packages or lack of similar awarded financial aid packages had anything to do with two people remaining as roommates up to the time of the interview in the 1976-77 academic year. Upon establishing that a student was planning to return to Drake University for the 1977-78 academic year, the researcher attempted to determine where and with whom those students who did not change roommates throughout the year planned to live during the 1977-78 academic year.

It has been stated previously that the roommate assignment procedure traditionally used by the Office of Student Residences at Drake University and the compatibility variables normally considered were also utilized by the researcher in matching all four groups of roommates during the summer of 1976. Therefore, the criteria for judging whether awarded financial aid packages influenced roommate compatibility at Drake University consisted of the following. First, if fewer roommate changes occurred in the two experimental groups than in the two control groups, the relationship between awarded financial aid packages and roommate compatibility was considered to be positive. Second, if the amount, type or specific awarded financial aid package was noted as an influence in roommate compati-
bility a greater number of times by those students inter-
viewed in the experimental group over the number of times
noted by those students interviewed in the control group,
the relationship between awarded financial aid packages
and roommate compatibility was considered to be positive.
Third, if more orginally assigned roommate pairs in the
two experimental groups anticipated returning to Drake
University and planned to live together as roommates for
the 1977-78 academic year over the number who were origi-
nally matched and who choose to do the same in the two
control groups, the relationship between awarded financial
aid packages and roommate compatibility was considered
to be positive.

Criteria for measuring group cohesiveness in the
two experimental and two control groups consisted of the
following. If more students assigned to the two exper-
imental groups decided to return to Drake University and
live in the same residence hall on the same floor and/or
as roommates with one or more members of their floor
over the number of students in the two control groups
who choose to do the same for the 1977-78 academic year,
the relationship between awarded financial aid packages
and group cohesiveness was considered to be positive.

To insure that the results of the study would not
be influenced by the researcher, she (the researcher)
was not involved with any of the room changes either as
a consulting resource in the Office of Student Residences
or as a tabulator and collector of the normal required
Drake University Office of Student Residences' room change
forms. The rosters of the four groups of students, (two
experimental, two control) were held by the secretary and
the professional staff member normally in charge of room-
mate matchings and updates of the residence hall rosters
for Drake University. The experimental groups were written
in red and the control groups were written in blue on the
Goodwin and Kirk rosters; this allowed for quick
recognition of roommate changes in the four groups by the
Office of Student Residences' personnel and by the
researcher. The coded rosters and notations of where room-
mate changes did take place can be found in Appendix F.

Population and Sample of the Study

The population of the study was defined as all
incoming Drake University freshmen students who planned
to live in one of the University's Residence Halls for
the 1976-77 academic year.

The experimental sample for the study was deter-
mined to be twenty-eight Drake University freshmen men and
twenty-eight Drake University freshmen women who planned
to live in one of the University's Residence Halls during
the 1976-77 academic year, had applied for financial aid
for the 1976-77 academic year, could be matched as roommates
based upon the traditional roommate selection procedure
utilized at Drake University, and were awarded financial
aid packages according to the Drake University financial aid computer print-out dated June 10, 1976.

The control sample for the study consisted of twenty-six Drake University freshmen men and twenty-eight Drake University freshmen women who were assigned, through the traditional roommate selection procedure utilized at Drake University, their residence hall priority number and/or special request, to third floor, Goodwin Residence Hall or fourth floor, Kirk Residence Hall.
Chapter 4

PRESENTATION OF DATA

An attempt was made to discover, through personal interviews, tabulation of roommate changes both in the experimental and control groups, and tabulation of the number of individuals in the study who anticipated returning to Drake University the following year and to live as roommates and/or with one or more members of their floor in one of the University's residence halls, whether the amount and types of awarded financial aid packages influenced roommate compatibility and group cohesiveness in a Drake University residence hall.

The methods to be used in reporting the results of the study will include a summary of the subjective responses of students personally interviewed through the use of questions designed by the researcher, frequency count data, and the chi-square ($x^2$) test.

Subjective Results of Control and Experimental Group Interviews

The interviews of control and experimental group members were conducted by the researcher between the dates of December, 1976, and April, 1977. Interviews were held with all experimental and control group members who were involved with a roommate change during the period the study
was being conducted. Students interviewed in the control and experimental groups who were not part of a roommate change were randomly chosen by the researcher. A total of fifty-one interviews with fifty-one different students were conducted by the researcher.

Fourteen different questions were used by the researcher to elicit data from the members of the experimental and control groups as to their perceptions of roommate compatibility and group cohesiveness. The following is a summary of the subjective responses to the fourteen questions given by students interviewed from the men and women control and experimental groups. A group code was utilized to identify men and women control and experimental groups.

- \( E \) = Experimental Women
- \( EM \) = Experimental Men
- \( C \) = Control Women
- \( CM \) = Control Men

The following responses to the fourteen questions are broken down among men and women control and experimental groups.

1A. A roommate change took place in your room this year. Tell me why, in your opinion, the roommate change took place.

\( E \) (7 students)--Answers varied from personal problems such as late hours and the presence of a boyfriend to no problems between the roommates; one of the roommates became better friends with another woman down
FM (3 students)--In one case, the roommate dropped out of school. In both of the other cases, the two roommates were felt to be completely different in such personal habits as music tastes and fraternity affiliation.

C (11 students)--All interviewees cited one (or a combination) of the following reasons for a roommate change:

1. No real problems, but there was a better friend down the hall with whom the roommate wanted to live.

2. Personalities and habits clashed (i.e. moodiness, study hours, and/or morals).

3. The roommate transferred or dropped out of school. One student did state that her roommate was not like her because she, herself, was "middle class" while her roommate, she felt, was wealthy.

CM (8 students)--In two cases, the roommate dropped out of school. Other reasons given for the roommate change included having nothing in common with each other to no real problems, but the people involved just wanted to live with someone else on the floor. Three men made it a point to state that their old roommate and they were still very good friends.

18. This year you and your roommate lived together the entire year. Did you ever talk with your roommate about a change? Why, in your opinion, did the two of you decide to live together the entire year?

E (6 students)--Only one person said she ever
mentioned a roommate change to her roommate. The remainder stated that their roommate, they felt, was considerate and they became close friends.

C (4 students) -- Again, only one out of four even mentioned changing roommates. The other three said that they got to know each other well and found that their backgrounds and way of living in a room were similar.

EM (8 students) -- Only one person acknowledged ever thinking about a roommate change and it was because he hardly ever saw his roommate because of his roommate's athletic commitments. All stated that things were sometimes "strained" between them, but that they had become friends and really enjoyed living with each other.

CM (4 students) -- Only one person mentioned talking to his roommate about a roommate change. Two people went to the same high school and a third set met at summer orientation and requested each other. One person mentioned a difference in life-styles; however, the student felt that the personalities of the two "mixed" well together.

2. How long did you and the roommate to which you were assigned live together?

E (7 students) -- Average stated was two months.

EM (3 students) -- All stated approximately two months.

C (11 students) -- Three lived together one month; eight lived with their assigned roommate the first semester.

CM (8 students) -- Four sets of roommates lived
together one month; four sets lived together one semester.

3. Do you (have you) worked this year? Does your roommate work this year? Where?

E (13 students)--Three people did not work, ten worked in work-study positions on campus. Three roommates did not work; two people did not know whether their roommate worked; eight said that their roommates worked on campus.

C (15 students)--Three people worked--one was on work-study; the other two worked only to obtain additional money. All three worked on campus. Twelve people did not work at all. Five people said their roommates worked on campus; ten said their roommate did not work.

FM (11 students)--All of the individuals interviewed worked and all except one worked on campus through the work-study program. All of their roommates also worked; two of them worked off-campus and nine worked on-campus under the work-study program.

CM (12 students)--Five people did not work; seven people worked (four of them off-campus; three on-campus). Seven of the people interviewed said that their roommates did not work (one even stated that his roommate was rich and another mentioned that his roommate attended Drake University on a full-ride academic scholarship). Five people said that their roommate did work and all of their jobs were on-campus.

4. Are you on financial aid? If not, have you
ever applied? Is your roommate on financial aid?

E (13 students)--All of the experimental group were on financial aid and knew that they were on financial aid. Regarding their roommates, two people did not know whether their roommate was on aid; the remaining eleven knew their roommate was on aid.

C (15 students)--Nine said they were not on aid and only one of them had applied for aid and been rejected. Six said they were on aid. Out of the six who said that they were on aid, four clarified and told the researcher that their aid was mostly scholarship. Five people said their roommate was not on aid; seven people said their roommate was on aid and three people said they didn't know whether their roommate was on aid.

FM (11 students)--All eleven people interviewed were on financial aid and knew that they did have aid. Ten people said their roommate had aid (although three people said they didn't know about their roommate's aid but could talk about their roommate's work-study award). Only one person said that he didn't know whether his roommate had aid.

CM (12 students)--Seven people stated that they did not have aid and none of them had ever applied for aid. Five people had been granted financial aid and knew that they did have it. Six people thought their roommate had aid and six people did not think that their roommate had aid.
5. Do you and your roommate ever discuss financial aid? If so, tell me what you can remember about the content and substance of those conversations.

F (13 students)--Ten people said their roommates and they had discussed financial aid. Their discussions appeared to center around how the aid was needed to meet the cost of attending Drake University. If a comparison was made, it was done on grants, scholarships and work-study. Only one set of roommates compared all types of aid (including loans) and specific amounts.

Three people never discussed financial aid with their roommate. In two cases, the subject never came up; in one case, the student felt that it was none of the roommate's business and she did not want anyone to know that she was on aid.

C (15 students)--Seven people in the control group did discuss financial aid with their roommate and in those cases, the topic came up in general conversation. The three topics of conversation were the increasing costs of attending Drake University, perceived parental hardship in financing the student's education and the actual composition of the aid package.

Eight people could never remember discussing financial aid with their roommates. The subject either never came up or it was considered not-applicable by the interviewee. (Where aid was considered not-applicable, either the interviewee or the roommate was not receiving
any financial aid.)

**EM (11 students)**--Ten people did discuss financial aid with their roommates; five compared specific packages, (i.e. types of aid awarded and amounts). The remaining five said that they discussed their aid packages with their roommates but the conversation was very general. Other than in one case where the specific amount of scholarship was compared, no amount or type of award was discussed.

Only one person said that he and his roommate never discussed their individual financial aid packages.

**CM (12 students)**--Six people talked about their aid packages with their roommates; four actually compared amounts of the awarded package and two talked only about the possibility of getting some loans. Six people never discussed financial aid with their roommate either because it was not applicable or because financial aid just never came up in any conversations.

6. Do you and your roommate ever discuss the costs of attending Drake University? If so, tell me what you can remember about the content and substance of those conversations.

**E (13 students)**--Ten people said that the high tuition cost was a prevailing subject in their conversations with their roommates. In general, their opinion was that Drake was too expensive, but only three related their aid package to the cost of attending Drake. Three people had not discussed the cost of Drake University with their
C (15 students)--Eleven people had discussed the costs of attending Drake University with their roommates, but only two out of the eleven said their conversation was of a serious nature; the remaining nine said that they had only briefly touched upon the costs with their roommates. Four people said that they had never discussed costs with their roommates; in fact, one student said that she "didn't really know how much it costs to attend Drake--my father just pays the bills!".

EM (11 students)--Seven people said that they had discussed the costs of attending Drake University with their roommate, but only one said that he had talked seriously about how expensive it was to attend Drake University. Two people did say that they did discuss the costs of attending Drake compared to the extent to which they felt they were benefitting by attending Drake. Four people said that the topic of cost to attend Drake University never came up in their conversation.

CM (12 students)--Eleven people said that they could recall conversations with their roommates regarding costs of attending Drake University. Five of those eleven said that the conversations included either joking about the costs or were very casual. Six people indicated that their conversations had been serious and, in some cases, included discussions about being lucky to be at Drake and concern about the possibility of not being able to return
the following year because of the high costs. One individual could not remember whether he had ever discussed the costs of attending Drake with anyone.

6A. Do you and your roommate ever discuss how much money each of you have to spend on personal items and/or needs such as clothing? dates? If so, tell me what you can remember about the content and substance of those conversations.

E (13 students)--Eight people said that they had talked with their roommates about their personal spending money. Their discussions centered around where their money had come from, i.e. summer jobs, parents, work-study. Only three could not say how much their roommates had to spend on personal items. Five people stated that they had never talked with their roommates about personal spending money.

C (15 students)--Nine people said that their personal spending habits were talked about with their roommates. Two out of the nine said that they had even discussed how each of them felt about personal spending money. Two pairs of roommates had money from their parents put into their accounts and, in some cases, even pooled their money to buy food and necessities for the room. Six people stated that no discussion took place regarding personal spending habits; however, the students did notice whether their roommates "wasted" money or appeared to keep a close eye upon personal expenditures.
EM (11 students)--Five people said that they talked with their roommates about how much money they had to spend on personal necessities and from where that money came. Three people got their money in similar ways and in those three cases some joint decisions were made on how they would spend their personal money together. Six people could not really remember any discussions with their roommates regarding personal spending money.

7. Do you have any knowledge of the floor and/or groups of women (men) on your floor discussing financial aid? If so, tell me what you can remember about the content and substance of those conversations.

E (13 students)--Only one person said that she did not discuss financial aid with women on her floor. She stated that "it (financial aid) is a personal matter". The twelve other students said that they knew of and had taken part in financial aid discussions on the floor. Three of the twelve said the talk was minimal and reserved for conversations among close friends. But nine people said that they could remember many conversations about aid among members of the floor. Some said that the amounts of aid were matched up. There were also many comments from the women regarding the discussion of their work-study jobs; the jobs were seen as an indicator of the many people on financial aid.

C (15 students)--Eleven people said that they could remember conversations on their floor regarding
financial aid. A lot of their conversations revolved around how people were paying for their education. Precise talk about aid was mostly in relation to scholarships and work-study jobs. Four people could not recall any discussion on the floor regarding financial aid. In all four cases, however, the students said that they weren't on the floor very much, so their knowledge of floor discussion topics was, perhaps, minimal.

EM (11 students)--All of the men interviewed from the experimental group said that there had been discussions on the floor regarding financial aid. From the men interviewed in this group, there were comments from them regarding the possibility of a "financial aid floor" existing. In their conversations on the floor, the men compared amounts of aid, the jobs they "seemed" to all have, and the loans or scholarships they were using to pay for Drake. Some of the men interviewed also mentioned that they felt close to the men on their floor.

CM (12 students)--Seven of the twelve people interviewed said that they could remember conversations about financial aid taking place on their floor. However, all of the seven said that the talk was not serious and in most cases, very limited. Five people said that they could not recall any conversation regarding aid with the men on the floor.

8. Please describe any feelings you can identify and/or remember when you discovered other women/men on your
floor were also on financial aid.

F (13 students)--The conversations ranged from four people saying the fact of perceiving many other women on her floor as receiving aid had no effect upon her to comments such as, "Neat! I really felt at home when I found out other people were like me." One person said the idea of living with so many people who had aid was not relevant because she assumed that most people at Drake would be on aid because it was so expensive to attend.

C (15 students)--Seven of the students said they could not identify any specific feelings regarding other people on the floor being on aid. Two students said that knowing other people were on aid was "comforting". Six people said that their knowledge of other students on their floor being on aid only strengthened their impressions about financial aid in general. These impressions ranged from feeling that the way aid was given was unfair because they didn't feel that some students who had aid really needed it, to the feeling that they were happy that those who needed the help were able to obtain it.

EM (11 students)--Two students said that whether a person had financial aid or not was unimportant even though both appeared to know that their peers around them were all on aid. All of the other men interviewed said that discovering that so many others were on aid changed their whole opinion of Drake, they felt more at home, the floor was felt to be "closer", it was good to be around
other people who worked, and that knowing others were on aid allowed all of them on the floor to start out on equal terms. Two comments seemed to be prevalent among the members of the floor: "I wonder about the reasoning of placing so many people on financial aid on the floor," and "I feel that the fact so many of us on the floor do have financial aid has a real affect on how well the people get along on the floor".

CM (12 students)--Seven of the twelve interviewed said that they had no feelings about other people on the floor being on financial aid. Three people had a negative impression about aid either because they perceived financial aid as too easy to obtain or it being too difficult for the middle class to take advantage of the aid possibilities. Two people had really good feelings about those people on their floor who had aid; they seemed to feel that financial aid was a good thing and that in the end, "it all equals out".

9. Have you and your roommate ever discussed how much money each of your parents earn? What does your (father) (mother) do? What does your roommate's (father) (mother) do?

E (13 students)--Eight students out of the thirteen said that they never discussed how much money their parents earned. Two people said the subject was brought up but never discussed in detail and three people said that their roommates and they had discussed the salaries of
their parents.

C (15 students)--Nine students out of 15 said that they never discussed how much money their parents earned. Six students said that they had discussed the earnings of their parents with their roommates.

FM (11 students)--Nine out of eleven students interviewed from the experimental men's group stated that no discussion took place between their roommates and themselves about their parents' salaries. Two said the topic, including exact figures, had been discussed.

CM (12 students)--Four students out of twelve said that no discussion took place between their roommates and themselves regarding the amount of money their parents earned. Eight students said that their roommate and they had discussed their family earnings.
9. What does your (father) (mother) do? What does your roommate's (father) (mother) do?

<table>
<thead>
<tr>
<th></th>
<th>E=13</th>
<th>C=15</th>
<th>RH=11</th>
<th>CM=12</th>
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<tbody>
<tr>
<td></td>
<td>Self</td>
<td>Room</td>
<td>Self</td>
<td>Room</td>
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<tr>
<td>Professional Owns Business</td>
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<td>1</td>
<td>8</td>
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<tr>
<td>Laborer</td>
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<td>3</td>
<td>5</td>
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<td></td>
<td>MO</td>
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<tr>
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<td>MO</td>
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<td></td>
<td>MO</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
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<td>Retired/disabled</td>
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<td>1</td>
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<td>Sales/Secretarial</td>
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<td></td>
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<td></td>
<td>MO</td>
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<td>7</td>
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</table>
10. When were you accepted to Drake University?

Do you plan to return next year? Where do you plan to live? Does your roommate plan to return to Drake University next year? Where does he/she plan to live?

<table>
<thead>
<tr>
<th>Group and Number Interviewed</th>
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<tbody>
<tr>
<td>E-13</td>
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<tr>
<td></td>
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<tr>
<td>Time of Year Accepted to Drake University</td>
</tr>
<tr>
<td>Fall 1975</td>
</tr>
<tr>
<td>Spring 1976</td>
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<tr>
<td>Summer 1975</td>
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<tr>
<td>Return to Drake Univ.</td>
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<td>Rmmt</td>
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<td>Where Plan to Live</td>
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<td>Rmmt</td>
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ll. Were you and the roommate to whom you were originally assigned the same major? Do you feel that assigning roommates together with the same major is important? Why or why not?

E (13 students)--Eleven students had a roommate of the same major; two did not have a same major roommate. Seven felt that students who had the same majors should not be assigned together as roommates primarily because of competition problems. The students also felt that "majors" were always together and the arrangement limited other contacts. The four who felt that majors living together was a good idea thought the experience would help students in their studying; they also stated that the common interest of same major was a good starting point for roommate relationships.

C (15 students)--Six of the fifteen students interviewed had roommates who shared the same major; nine originally had roommates in another major. Seven felt that assigning alike majors together as roommates was not very important. Their reasons ranged to a possibility of competition problems to a danger of being bored with a roommate who had the same major. The eight students who felt that assigning roommates of the same major together was important said that sometimes it is hard for different majors to live in the same room; the students also liked the idea of helping each other out when majors between roommates were shared.
FM (11 students)--Seven people were assigned to a roommate of the same major; four students had different majors from their roommates. Only two people felt that it was not important for alike majors to be assigned together as roommates. One of the two suggested that it would be more appropriate to match by interest in activities. The nine students who stated that roommates sharing majors was important felt that alike majors increased cooperation and information sharing between the two people involved. There was sentiment for freshmen being matched as roommates with identical majors because of the limited number of things freshmen roommates share. Perhaps alike majors would be a beginning point towards forming a friendship.

CM (12 students)--Five people had roommates who had the same major; seven did not share the same majors. Four students said that it was not a good idea to match roommates together who had the same major. Competition was again stated as the major problem. The eight who said that assigning students with same majors as roommates was a good idea said the major benefit was studying together.

12. Do you smoke? Does your roommate smoke? Do you feel that assigning roommates together on the basis of their smoking habits is important? Why or why not?

E (13 students)--Twelve students said that they did not smoke; eleven of the students' roommates did not smoke. All of the thirteen students interviewed felt
that the assignment of roommates on the basis of smoking habits was very important primarily because of the discomfort the habit caused to people.

C (15 students)--Nine students interviewed did not smoke; nine of the roommates did not smoke. All fifteen thought using a student's smoking habits as a criterion for matching roommates was very important because of the discomfort the habit caused non-smokers.

EM (11 students)--None of the eleven students smoked; only one of their roommates smoked. Only one of the eleven thought that it was not important to match people on their smoking habits. The other ten definitely felt that smoking habits should be used as a criterion for matching roommates because "smoke bothers a lot of people" and that the rooms in the residence halls were too small for smoking.

CM (12 students)--One person said that he smoked; his roommate was also the only one who smoked of all the roommates of students interviewed. Three people felt that roommate matching based on smoking habits was unimportant; however, they cited no reasons for their beliefs. One answer from a student summarized the feelings of nine who felt the smoking - non-smoking criterion was an important factor to be considered. The student stated, "I just don't like it (smoking); the room should be a place to relax."

13. If you could "create" your own roommate, what
would you consider the most desirable traits for your roommate to possess?

E (13 students)--The response most often given was "consideration" and an ideal roommate would "give and take". Compromise and being open were also cited as characteristics of the "created" roommate.

C (15 students)--"Consideration" was again most often mentioned by the fifteen people interviewed. Understanding of the differences between roommates was also felt to be an important trait of a "created" roommate.

E (11 students)--Students interviewed cited a "belief in God" or being "religious" as necessary traits of the "created" roommate. "Studious" roommates and a "sharing of common interests" were also mentioned as desirable traits.

CM (12 students)--"Similar interests" was the most often quoted desirable trait of the "created" roommate given by the twelve students interviewed.

14. Do you feel that financial aid packages had anything to do with you and your roommate remaining or not remaining together this year?

Control Group--Two women and no men cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate.

Experimental Group--One man and one woman cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate.
Frequency Count Data

A numerical count was made of the number of roommate changes which took place in both the control and experimental groups, the number of students who anticipated living with the same roommate or with one or more members of their floor for the 1977-78 academic year, and the number of students who cited financial aid as an influence in compatibility with their roommates. Numerical data is also presented on interviews control and experimental group members had with the researcher and the number of times control and experimental group members talked with their resident assistant about a possible roommate change.

Experimental Group

(14 pairs of women roommates = 28 students)
(14 pairs of men roommates = 28 students)

Interview Data (12/76 - 4/77)

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women interviewed who were either directly or indirectly involved with a roommate change</td>
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</tr>
<tr>
<td>Number of men interviewed who were either directly or indirectly involved with a roommate change</td>
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</tr>
<tr>
<td>Number of women roommate pairs who actually talked to their resident assistant about a possible roommate change</td>
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</tr>
<tr>
<td>Number of men roommate pairs who actually talked to their resident assistant about a possible roommate change</td>
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</tr>
<tr>
<td>Number of women selected at random to be interviewed who were not involved, either</td>
<td></td>
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</tbody>
</table>
directly or indirectly, with a roommate change

Number of men selected at random to be interviewed who were not involved, either directly or indirectly, with a roommate change

<table>
<thead>
<tr>
<th>Frequency</th>
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<tbody>
<tr>
<td>6</td>
</tr>
<tr>
<td>8</td>
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</table>

Compatibility

| Number of actual women roommate changes | 6 |
| Number of actual men roommate changes | 3 |

Number of women interviewed who cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate

| Number of originally matched women roommate pairs who anticipate living together, as roommates, for a second year at Drake University | 2 |

Number of men interviewed who cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate

| Number of originally matched men roommate pairs who anticipate living together, as roommates, for a second year at Drake University | 2 |

Cohesiveness

| Number of women who will live as roommates or on the same floor with one or more members of their floor for the 1977-78 academic year | 13 |

| Number of men who will live as roommates or on the same floor with one or more members of their floor for the 1977-78 academic year | 16 |
Control Group

(14 pairs of women roommates = 28 students)
(13 pairs of men roommates = 26 students)

Interview Data (12/76 - 4/77)

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women interviewed who were either directly or indirectly involved with a roommate change</td>
<td>11</td>
</tr>
<tr>
<td>Number of men interviewed who were either directly or indirectly involved with a roommate change</td>
<td>8</td>
</tr>
<tr>
<td>Number of women roommate pairs who actually talked to their resident assistant about a possible roommate change</td>
<td>8</td>
</tr>
<tr>
<td>Number of men roommate pairs who actually talked to their resident assistant about a possible roommate change</td>
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</tr>
<tr>
<td>Number of women selected at random to be interviewed who were not involved, either directly or indirectly, with a roommate change</td>
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<tr>
<td>Number of men selected at random to be interviewed who were not involved, either directly or indirectly, with a roommate change</td>
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Compatibility

<table>
<thead>
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<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of actual women roommate changes</td>
<td>10</td>
</tr>
<tr>
<td>Number of actual men roommate changes</td>
<td>6</td>
</tr>
<tr>
<td>Number of women interviewed who cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate</td>
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</tr>
<tr>
<td>Number of men interviewed who cited the amount, type, or specific awarded financial aid package as an influence in compatibility with their roommate</td>
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</tr>
<tr>
<td>Number of originally matched women roommate</td>
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</tbody>
</table>
pairs who anticipate living together, as roommates for a second year at Drake University

Number of originally matched men roommate pairs who anticipate living together, as roommates for a second year at Drake University

Cohesiveness

Number of women who will live as roommates or on the same floor with one or more members of their floor for the 1977-78 academic year

Number of men who will live as roommates or on the same floor with one or more members of their floor for the 1977-78 academic year

Chi-Square ($x^2$) Test

A chi-square ($x^2$) test was performed on the data. Findings appeared to be significant at the .05 level for a difference between total experimental and control groups on compatibility. For compatibility and cohesiveness, findings appeared to be significant at the .01 level between the experimental men and control men for compatibility and between the experimental men and control men for cohesiveness. For compatibility and cohesiveness there were no significant findings between the experimental women and control women for compatibility and between the experimental women and control women for cohesiveness. When the experimental and control groups (including both men and women) were compared for compatibility, findings
appeared to be significant at the .05 level and for cohesiveness, there were no significant findings.

Degree of freedom (df) = 1

.01 = 6.63
.05 = 3.84

I. Roommate Compatibility

A. Chi-square test for a difference between experimental men and control men for roommate compatibility was 6.86, significant at the .01 level.

B. Chi-square test for a difference between experimental women and control women for roommate compatibility was 3.44, not significant at the .05 level.

C. Chi-square test for a difference between experimental and control groups (pairs which experienced a roommate change) for roommate compatibility was 5.44, significant at the .05 level.

II. Group Cohesiveness

A. Chi-square test for a difference between experimental men and control men on group cohesiveness was 8.55, significant at the .01 level.

B. Chi-square test for a difference between experimental women and control women on group cohesiveness was .73, not significant at the .05 level.

C. Chi-square test for a difference between total experimental and control groups on cohesiveness was .73, not significant at the .05 level.
Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this study, the researcher matched experimental and control groups of 110 freshmen together as roommates through the traditional roommate assignment procedure used at Drake University in 1976. The two experimental groups of students were also matched as roommates on the basis of similarity of the amount and types of awarded financial aid packages for the 1976-77 academic year. Through the use of personal interviews conducted by the researcher utilizing fourteen questions designed to elicit subjective data from fifty-one interviewees, frequency count data and the chi-square test, the researcher attempted to answer the following two questions:

1. In what way is the compatibility between students assigned as roommates on the basis of the amount and types of awarded financial aid packages similar and dissimilar to the compatibility between students assigned as roommates through the traditional freshmen procedure utilized at Drake University?

2. What is the extent of the difference in group cohesiveness among the members of the two groups of students assigned as roommates in both the experimental and control groups?

Frequency count data appeared to show that compared to the students in the control groups the male and female students in the experimental groups were not as directly
or indirectly involved with roommate changes, did not talk
to their resident assistant as much about possible room-
mate changes, and were involved with fewer roommate
changes.

For compatibility, chi-square \((x^2)\) test findings
appeared to be significant at the .05 level for a difference
between the total (male and female) experimental and
control groups. However, when the male and female experi-
mental and control groups are studied separately, chi-
square \((x^2)\) test findings appeared to be significant at
the .01 level for a difference only between the experimental
men and control men for compatibility.

Through the data obtained in the interviews,
awarded financial aid packages did not appear to have
influenced roommate changes in either the experimental or
control groups. However, a difference in personal spending
habits, the perceived socio-economic backgrounds of
roommates, and whether one or both of the roommates worked
while attending school did appear to influence roommate
satisfaction in situations where one of the roommates was
receiving financial aid.

Frequency count data appeared to show that group
cohesiveness was greater in the experimental male group
than in either the experimental female group or the control
groups. Over one-half of the men in the experimental group
anticipated living together for the 1977-78 academic year
either as roommates or on the same floor with one or more
floor members with whom they lived during the 1976-77 academic year.

For cohesiveness, using the chi-square ($x^2$) test, findings appeared to be significant at the .01 level for a difference only between experimental men and control men. No significance on group cohesiveness was found between the experimental and control women's group.

Through data obtained in the interviews, it was the men in the experimental group who overwhelmingly said that there had been discussions on the floor regarding financial aid. It was also in the male experimental group where feelings of closeness with the other men on the floor were shared with the researcher. Although the females interviewed from the experimental group said that they felt more at home when they discovered that other students on their floor were also on financial aid, the men in the experimental group, with the exception of two, felt that living on the same floor with other students who they knew were on financial aid "changed their whole opinion of Drake" in that all of them being on aid allowed them to start out their college career on equal terms. Coincidentally, it was only in the male experimental group where the students interviewed asked the researcher whether the "fact" that all of their floor was on financial aid was "planned".

Interview data also showed that only one out of eleven or less than 10% of the male experimental students
interviewed said that he had never discussed his or his roommate's individual financial aid package; only one of the eleven male students interviewed did not know whether or not his roommate had aid. It was also in the male experimental group where the interviewees said that the members of their floor had become friends; this feeling was also true among the females in the experimental group.

Therefore, data obtained through interviews appeared to show that awarded financial aid packages appeared to have influenced cohesiveness in both the male and female experimental groups. However, a high number of women in the control group were also planning to live together as roommates or with members of their floor in the 1977-78 academic year. Because the number of men in the control group who were planning to live together was so low compared to the control women, the researcher feels that there may have been an uncontrolled variable present and not taken into account on the female control group's floor.

The findings of this study, within severe limitations, appeared to show that the chances for roommate compatibility and roommate cohesiveness were greater for those students assigned together as roommates on the basis of awarded financial aid when combined with traditional roommate assignment procedures such as those used at Drake University. Furthermore, findings appear to be stronger for male roommate pairs than for female roommate
pairs.

However, the population used in the study was small (110 freshmen students), and significance found was low to non-existent for some control and experimental group comparisons made for compatibility and cohesiveness as influenced by the amount and types of awarded financial aid.

The limitations of this particular study which should be taken into account by any researcher in the future who may wish to duplicate all or parts of this study, include some of the following concerns of the writer:

1. The research was conducted with only freshmen. By using only freshmen, the writer feels that one can almost guarantee that a strong cohesive peer group will form.

2. Although subjective interviews obtain a great deal of data, it is difficult to reduce the data to a form which can be effectively analyzed and tested in order to validate the findings.

3. The confidentiality and sensitivity of financial aid data create tensile restrictions on a researcher's access to and use of socio-economic information available on the population being studied.

4. Confidentiality and sensitivity of financial aid data may cause resentment and anger on the part of the population being studied should any members of the population discover that they are part of a study involving the use of family financial and socio-economic data provided to an institution's financial aid office on the basis that such information will be kept confidential.

5. Because each institution's financial aid packaging strategy is different, the results of studies conducted at a particular institution may be applicable only to that institution or, at the very most, to a similar institution whose resources and strategy
for packaging financial aid are similar.

6. This particular study does not account, in any way, for the influence of non-experimental values and variables.

The writer concludes, through the review of a vast number of roommate studies, of which the majority sought to analyze similarities and differences among roommates who were or were not compatible, that no one single study can ever hope to be the final answer to the housing administrator's dilemma of how to assign two or more people to live together compatibly. Therefore, she recommends the following for consideration by future researchers conducting studies in the areas of roommate compatibility and cohesiveness:

1. A study involving roommate compatibility and group cohesiveness using awarded financial aid packages should be designed and carried out in a public college or university.

2. A larger sample should be studied using the same criteria for judging whether awarded financial aid packages influence roommate compatibility and group cohesiveness.

3. Future studies involving the use of awarded financial aid packages should be designed with the use of an opinionnaire to elicit data from participants rather than the use of personal interviews.

4. Researchers continually need to look for additional variables which can be administratively determined and which can be utilized as effective precipitators of compatible roommate pairs and cohesive peer group formations.

5. A determination should be made by future researchers using awarded financial aid packages when assigning roommates, whether such a practice maximizes total potential development on the part of an individual student or whether such a decision perpetuates those biases and prejudices already present on the part of
many entering freshmen students.

6. Variables of importance to students receiving awarded financial aid packages need to be identified so that they can be controlled when studying the effect of awarded financial aid packages and any possible social ramifications incurred as a result of the awarded financial aid packages.

Finally, the writer contends that the ability to develop both a compatible roommate relationship and a cohesive peer reference group may be influenced by a student's socio-economic background, which, in turn, influences the amount and types of awarded financial aid. The writer hopes that this study, and the studies referred to throughout this report, will add a broader dimension to the important responsibility housing administrators face each year—that of assigning students together as roommates.
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APPENDIXES
APPENDIX A

TYPES OF FINANCIAL ASSISTANCE AVAILABLE THROUGH DRAKE UNIVERSITY, 1976-77

**National Direct Student Loan (NDSL)**

**Health Professions Loan (HPL)**

National Direct Student Loans awarded to all undergraduate students, except pharmacy students, are based upon calculated financial need. The amount is limited to $1,500 per student per academic year at Drake University. The three percent interest does not accumulate during a student's enrollment at Drake. A portion of the loan repayment may be cancelled after graduation if the student teaches in a disadvantaged school or goes into specified military duty.

For the academic year, 1976-77, three percent interest upon HPL loans will begin one year following graduation or less than one-half time enrollment in the College of Pharmacy.

**Basic Educational Opportunity Grant (BEOG)**

Basic Educational Opportunity Grants are awarded by the federal government based upon financial need. For 1976-77, the non-repayable grants ranged between $650 and $1,400 for the academic year.
Supplemental Educational Opportunity Grants (SFOG)

The non-repayable Supplemental Educational Opportunity Grants are awarded in addition to one or more financial aid awards. Grants are given to a limited number of undergraduate students with exceptional financial need. SEOG grants ranged from $200 to $1,000 in the 1976-77 academic year.

College Work-Study (CWS)

College Work-Study program funds are allocated to Drake University from the federal government. Students receiving financial aid are generally expected to earn some of their expenses through part-time employment. Employment awards for 1976-77 ranged from $500 to $900 per academic year.

Drake Grant-In-Aid (DGIA)

Funds for these non-repayable grants are made available through Drake University. The grants are awarded to students through the Financial Aid Office who show calculated financial need.

Drake University Scholarship (DU)

A scholarship is a non-repayable gift given by Drake University to students based upon calculated financial need and academic performance. Qualifications include, for entering freshmen, a qualifying ACT score and a class rank of 15% in their high school graduating
Presidential Freshman Scholarship (PFS)

Freshmen who enter Drake University and are first in their high school class and score well on their ACT examination receive a Presidential Freshman Scholarship of $200.00. Freshmen who graduate in the top ten percent of their high school class and score well in their ACT examination receive a PFS of $100.00. Both Presidential Freshman Scholarships are based upon academic excellence and are available only to freshmen who meet the eligibility requirements.

Iowa Tuition Grant (ITG)

Iowa Tuition Grants are given to eligible undergraduate Iowa residents who plan to attend a private institution. Monies for this program are appropriated through the State of Iowa legislature. Priority is given to the neediest students.

State of Iowa Scholarship (ISS)

The State of Iowa Scholarship program is available to qualifying Iowa residents who rank in the upper 15% of their high school class and take the ACT by October of their senior year and show academic ability as measured by the American College Testing Program. Scholarships through this program are granted only to students enrolling as freshmen and are renewable for the sophomore year only,
provided that the recipient maintains satisfactory academic standing and continues to need financial assistance.

**Outside Scholarships (OSS)**

**Departmental Awards (DEPT)**

A number of Outside Scholarships are available to students who apply for them directly through corporations, civic and/or educational groups. Qualifications for these scholarships usually vary.

Various academic departments at Drake University also award non-repayable monies to students. These monies are awarded to students based upon calculated financial need, academic scholarship and/or performance, in the case of College of Fine Arts' or Athletic awards.

**Federally Insured Student Loan (FISL)**

Although not awarded as part of a student's financial aid package, under the Federally Insured Student Loan program, a student may borrow up to $2500 per year from a bank or other financial institutions. Loans are processed by Drake University and approved by a participating lending agency. This loan is not need based; however, total financial aid awards plus a FISL may not exceed the student's educational budget for the current academic year. Repayment of the loan begins nine months after the student graduates or ceases to be enrolled on at least a half-time basis.
APPENDIX B

CALCULATED FINANCIAL NEED AND TYPES OF FINANCIAL ASSISTANCE AWARDED TO STUDENTS IN THE TWO EXPERIMENTAL AND TWO CONTROL GROUPS

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1EX means the student is a member of the experimental male group.

2Calculated financial need is the cost of attending Drake University, or the student’s educational budget, minus available family resources as determined by the Financial Aid Form submitted by the student and his/her family.
| STUDENT NUMBER | CALCULATED NEED | FINANCIAL ASSISTANCE | TOTAL AID | OPERA \\n|----------------|------------------|----------------------|-----------|-----------------|-----------------|
| 3032 | $1070 | $1000 | $700 | $900 | $1250 | $3950 |
| 3033 | $1150 | $1000 | 450 | 900 | 1250 | $3350 |
| 3034 | $1400 | $1176 | 1600 | 900 | 500 | $4626 |
| 3035 | $1250 | 1600 | 676 | 1600 | 900 | 400 | $600 |
| 1912 | $3377 | 900 | 800 | 300 | 1100 | $100 |
| 3011 | $2933 | 1600 | 900 | 250 | 900 | $3050 |
| 3036 | $452  | 700 | 876 | 300 | 700 | 476 | 200 | $1300 |
| 3037 | $4270 | 700 | 626 | 600 | 700 | 1550 | 120 | $350 |
| 3038 | $2727 | 1600 | 450 | 900 | $2306 |
| 3039 | $2953 | 700 | 676 | 700 | 1050 | 200 | $2306 |
| 3040 | $4115 | 900 | 776 | 600 | 700 | 100 | 1300 | $750 |
| 3041 | $4115 | 900 | 776 | 600 | 700 | 100 | 1300 | $4126 |

¹ CH 6 and the student in a member of the control male group.
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APPENDIX C

FLOOR PLANS AND ROOM LOCATION OF THE MEN EXPERIMENTAL AND CONTROL GROUPS

EXPERIMENTAL

Bath

PA. Room

PA. Room

Bath

CONTROL

Bath

PA. Room

PA. Room

Bath
FLOOR PLANS AND ROOM LOCATION OF THE WOMEN EXPERIMENTAL AND CONTROL GROUPS

Experimental

Control

- Bath
- R.A. Room
- Bath
- Social Room

A14, A13, A12, A11, A10, A9, A8, A7, A6, A5, A4
C24, C23, C21, C19, C17, C16, C15, C14, C13, C11, C9, C8, C7, C3
APPENDIX D

SUBJECTIVE QUESTIONS USED WITH STUDENTS FROM THE CONTROL AND EXPERIMENTAL GROUPS

1A. A roommate change took place in your room this year. Tell me why, in your opinion, the roommate change took place.

1B. This year you and your roommate lived together the entire year. Did you ever talk with your roommate about a change? Why, in your opinion, did the two of you decide to live together the entire year?

2. How long did you and the roommate to which you were assigned live together?

3. Do you (have you) worked this year? Where? Does your roommate work this year? Where?

4. Are you on financial aid? If not, have you ever applied? Is your roommate on financial aid?

5. Do you and your roommate ever discuss financial aid? If so, tell me what you can remember about the content and substance of those conversations.

6. Do you and your roommate ever discuss the costs of attending Drake University? If so, tell me what you can remember about the content and substance of those conversations.

6A. Do you and your roommate ever discuss how much money each of you have to spend on personal items and/or needs such as clothing? dates? If so, tell me what you can remember about the content and substance of those conversations.

7. Do you have any knowledge of the floor and/or groups of women (men) on your floor discussing financial aid? If so, tell me what you can remember about the content and substance of those conversations.

8. Please describe any feelings you can identify and/or remember when you discovered other women/men on your floor were also on financial aid.
9. Have you and your roommate ever discussed how much money each of your parents earn? What does your (father) (mother) do? What does your roommate's (father) (mother) do?

10. When were you accepted to Drake University? Do you plan to return next year? Where do you plan to live? Does your roommate plan to return to Drake University next year? Where does he/she plan to live?

11. Were you and the roommate to whom you were originally assigned the same major? Do you feel that assigning roommates together with the same major is important? Why or why not?

12. Do you smoke? Does your roommate smoke? Do you feel that assigning roommates together on the basis of their smoking habits is important? Why or why not?

13. If you could "create" your own roommate, what would you consider the most desirable traits for your roommate to possess?

14. Do you feel that financial aid packages had anything to do with you and your roommate remaining together this year?
APPENDIX E

CODED FLOOR ROSTERS
TWO EXPERIMENTAL AND TWO CONTROL FLOORS

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