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Psychosocial factors relating to student living group satisfaction in a living learning college community

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ABSTRACT

The effects of living learning programs have yet to be systematically studied, nor have they been considered in the broader context of research on college student living groups, which has shown the residential experience to have important consequences for the health and development of undergraduate students. An investigation of psychosocial factors that may contribute to the impact of living learning was therefore undertaken using a systems theory approach, a three-phase longitudinal study was conducted in the residential community of an experimental college housing approximately 220 students. Phase I: Three exploratory studies and a college-wide questionnaire survey in spring 1979; Phase II: Before and after comparisons of questionnaire data from participants in a one quarter living learning program provided in fall 1979; Phase III: A second college-wide questionnaire survey and followup study on college residents including program participants still living in the community.

The questionnaires included Schutz's (1966;1967) FIRO-B; his Perception of Parents (POP) rater; and two other instruments with items on personal background, attitudes toward group living, and perceptions of the college. Discriminant analysis of the results of the baseline survey showed that students who were satisfied or happy with their living groups were: 1.) younger; 2.) from higher SES

families; 3.) more socially oriented; 4.) more communally oriented; and 5.) less academically oriented.

These discriminant functions were used to classify fall quarter program participants in terms of probable satisfaction (PS/PNS) and probable happiness (PH/PNH) with their living groups. Five of the nine hypotheses that were formulated concerning these groups appeared to be confirmed: 1.) Individuals whose parents were attentive to them as children scored higher on expressed inclusion; and 2.) were more often classed as PS. 3.) At the end of the quarter, there was no difference in the rate of reported satisfaction for the PS and PNS groups; and 4.) there was no difference in the rate of reported happiness for the PH and PNH groups; 5.) Attitudes related to happiness showed the anticipated pattern of change for the PNH group in the direction of conformity to those of the PH group.

Discriminant analysis of the followup results showed program participants to be more communally oriented than other residents, and also more academically oriented. It therefore appeared that the program had been relatively successful in promoting social and academic integration. No differences were found in the rate of reported satisfaction or happiness with group living when students who had participated in the living learning program were compared to non-participants. However, early parental attention was positively related to living group satisfaction for program par-

ticipants, and there were indications that some students had used the living learning experience to address unresolved developmental issues.

DEDICATION

This dissertation is dedicated to Dr. Gerald Lesser who started me on the road when he gave me his copy of *The American College* and to all the teachers, friends, and colleagues who have helped me along the way since then. It is also dedicated to Dr. George Stone with sincere gratitude for his commitment to my successful completion of the journey and to my mother, Mrs. Nubra W. Floyd, without whose prayers and loving support it would probably not have been possible for me to make it.

BIOGRAPHY

The author, NUBRA FLOYD was born on June 1st, 1946 into a family of Black working people who were living in Cleveland, Ohio at the time. She attended the Cleveland public schools and was enrolled in a program for academically talented students from the age of eight until she graduated from highschool in 1964. She earned a BA in English literature from Hiram College in 1964, an MFA in Theater Arts from Brandeis University in 1971, and in 1975 an EdM from Harvard University in Learning Environments and Human Development.

It was while she was at Harvard that she first became interested in alternative learning communities, and in 1978 she was offered a community consulting internship at Kresge College, UCSC that subsequently led to the dissertation research. Since then she has worked at UCSC as a teaching assistant, lecturer, research associate, and most recently as a training consultant.

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PREFACE

During the late 1960s and early 1970s living learning programs were formed on a number of American college and university campuses as part of a student-oriented reform movement in higher education that involved not only students, but also a number of faculty, staff, and administrators at various institutions throughout the country (see: Smith, 1968). In addition to curricular reforms and changes of institutional procedure, some of the more visionary critics of American higher education (e.g. Taylor, 1971) were calling for greater integration of the academic and residential sides of college life as a means of increasing student involvement in the educational enterprise, and living learning seemed to be a viable approach to accomplishing such a goal.

On one level the impetus for change tended to be the series of political disturbances that occured on campuses throughout the country in the late 1960s and began with student protests at the University of California's Berkeley campus in 1974 (see: Heath, 1973; Lipset & Wolin, 1965; Wolin & Schaar, 1970). There were, however, definite indications of a widespread need for institutional reform well before the free speech demonstrations occured at Berkeley, and social psychologists were among the first to advocate a college curriculum that involved greater emphasis on the

student's individual needs and personal development.

In a compendium of social psychological perspectives on the American college (Sanford, 1962), higher education was described as becoming increasingly bureaucratized to the detriment of human individuality, and it was noted that more interesting and effective ways were needed to engage young people in the college experience. It was further suggested that the individual development of the student should be the primary aim of college education, and Sanford (1967) subsequently insisted that all of the institution's available resources should be organized in such a way as to achieve an educational environment informed by a theory of personality and designed to maximize the student's personal growth and development.

The results of a four-year study (Katz, 1968) conducted by Sanford and a group of his colleagues at the Stanford University Institute for the Study of Human Problems were offered as further support for the concept of a personal development oriented college. Longitudinal interviews with Stanford students between 1961 and 1965 yielded a vivid picture of the social issues of the undergraduate and suggested that colleges as institutions were doing relatively little to assist students in dealing with a complicated and often critical phase of their lives. It was concluded that the institutional form would have to be adapted to the various ways that students tended to develop during those years and

further noted that as individuals students should be expected to differ not only in their abilities and interests, but also in their purposes, learning styles, backgrounds, and personalities.

A massive review of research on the effects of higher education that was undertaken at the University of Michigan's Ann Arbor campus (Feldman & Newcomb, 1969) also stressed the importance of considering individual differences and the role of peer relations. In a chapter on residential groupings it was observed that students' close associations in residence and dining halls might well be critical sources of influence but had seldom been subjected to systematic study, and in a later work (Feldman, 1972) considerable attention was devoted to the interpersonal processes that occur in residential and other nonacademic settings.

Thus the living learning concept seems to have evolved from a concern for the total development of the student combined with a growing recognition of the contribution of the interpersonal environment to the ultimate impact of the college experience. As a result it has sometimes been used interchangably with the term, cluster college, which actually designates a particular type of educational innovation that does not necessarily involve living learning. Gaff (1970) has indicated that cluster colleges existed or were planned for approximately 50 campuses by the end of the

1960s and that most of these newly created subcolleges were characterized by an emphasis on student centered education, but it is clear from early evaluation reports (e.g. Dressel, 1971) that many of them were not specifically intended as living learning communities.

Furthermore the living learning approach has frequently been employed in settings other than the cluster college. In a comprehensive inventory of academic innovations compiled for the Carnegie Commission on Higher Education, Heiss (1973) classified cluster colleges as "institutions within institutions" and living learning units as "innovative changes by academic subunits within conventional colleges and universities." The distinction is a useful one but obviously does not apply in cases where cluster colleges have been designed as living learning communities.[1] Even where it does apply, there is such wide variation in the content and structure of the programs that it is still difficult to know precisely what is meant by any given use of the term "living learning."

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[1] Gaff (1970) provided a listing of 43 of these subcolleges that were in existence by 1969 including 9 that have been described elsewhere in the literature as living learning programs (Morrill, Briggs, and Madison Colleges as Michigan State University; The Residential College at University of Michigan; Centennial College at the University of Nebraska; Raymond and Covell Colleges at University of the Pacific; Johnston College at University of the Redlands; and The Experimental Program at the University of Vermont). Heiss (1973) noted the existence of over 250 living learning units that had been developed on a more modest scale with the main purpose of improving a campus's residential program.

Some living learning programs involve students enrolled in an academic program or course of study living together in a designated house or dormitory (Madson, 1976; McKelfresh, 1980; Schroeder & Belmonte, 1979; Schroeder & Griffin, 1976; Stewart, 1980; Taylor, Roth & Hanson, 1971). Others aim more at bringing faculty into the residential program and drawing together a diverse group of students within the context of a liberal arts curriculum (Brown, 1972c; Lacy, 1978; Leean & Miller, 1981 Pascarella & Terenzini, 1981; Thompson, 1973). There are also projects that have been set up with the primary intention of providing a residential setting in which individuals can pursue their various academic and extracurricular interests (Brown, Knoll, Donaldson & Ensz, 1975; Fisher & Andrews, 1976; Grass, 1974; Jerome, 1971; Spinks, 1970) or have access to special support services (Tollefson, 1975). The basic theme unifying this diverse array of programs seems to be commitment to the notion that the learning process is enhanced in some way by close personal interaction with faculty, staff and/or with fellow students.

CHAPTER I: INTRODUCTION

The research that will be reported in this dissertation deals with the relationship between selected psychosocial variables and college student response to group living in an experimental residential setting. This relationship was also investigated for students participating in a one quarter living learning program conducted in that setting. Living learning in defined in this case as an educational approach that combines formal coursework and structured social activity with a group living experience in order to assist students in the effective integration of the academic and social areas of college life. The living learning program was also expected to enhance personal development and thereby to influence student response to the college residential environment. As such, this research represents the application of social psychological theory and practice to a process oriented examination of the outcomes of an innovative educational program.

STATEMENT OF THE PROBLEM

While considerable attention has been devoted to articulating the objectives of living learning programs, researchers have yet to identify the circumstances under which they are likely to bring about measurable changes in

the desired direction. The various designs in use have not been systematically compared to determine whether or not they differ substantially in terms of their effects, and, despite the fact that the frequent adoption of living learning centers on American campuses may be largely attributed to the advocacy of social psychologists, few, if any, of these educational innovations have been informed by an adequate theory of the social and psychological processes involved.

Proponents of the living learning approach have stressed the educational benefits of combining the academic and residential experiences by suggesting that opportunities for closer personal contact with faculty help to improve the student's motivation for academic work and to increase the faculty member's sensitivity to social and developmental issues that are likely to affect the student's performance (Ardnt, 1975). It has also been noted that faculty tend to play an important role in the deepening of student's intellectual concerns over the course of the college years; in their choices of a major field of study; in their vocational decisions; and even in the extent to which other students seek them out for academic advice (Baird, 1976).

Conversely the living learning concept has been offered as a solution to problems arising from the fact that students' needs for emotional security, personal support, and social competence are not adequately met by the academic

side of college life (Bess, 1973a). The residential program has been described as an ideal laboratory for learning about social organization, social process, and the principles of citizenship given that each new school year occasions a resurgence of enthusiasm for efforts to create a comfortable and satisfying social environment (Barger & Lynch, 1973). In a similar vein, academic residential units have been advocated as a strategy for college management that will reduce student dissatisfaction (Schroeder & Freesh, 1979) and vandalism (Schroeder, 1976) as well as attrition from the college residential community (Haslun, 1974; "Living learning makes education," 1973).

However, living learning has also been criticized by those (e.g. Gordon, 1974) who tend to question its feasibility citing the exigencies of contemporary academic life and the fact that the demands of scholarship often compete with those of collegiate community building. The social relevance of such experiments has likewise been challenged on the grounds that their egalitarian orientation runs counter to the competitive tendencies of human nature and that cohesive residential groups, even if obtained, would never represent a model that could be widely reproduced or readily initiated (Brothers & Hatch, 1971).

The assumption that living learning courses would necessarily be better than those taught in the traditional manner has been called into question by Nudd and Stier

(1969) with their assertion that the nature of the course and the personality of the instructor are more critical to the facilitation of learning than the setting in which the course is offered. Studies on the effects of residential programs reviewed by Williams and Reilly (1972) have in fact suggested that living learning dorms have little or no impact on the academic achievement of their residents, even though they do appear to improve the social atmosphere in the larger, more impersonal residence halls.[1]

Gordon (1974) has noted that many students see their living area as a place to unwind from the pressures of academic work and would resent the intrusion of formal classroom activities in the private domain. Wolf (1970) has taken such concerns one step further by suggesting that reduced formality in student-faculty relationships may interfere with the social and political development of students rather than enhance it, and Kegan (1981) seems to have been expressing a similar view in noting that students at Hampshire College became overly concerned about their academic progress as a result of merging the living and learning experiences.

The possibility that individuals may be adversely affected by the personal growth aspects of an academic residential program has been suggested by a study (Goldman &

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[1] Their primary source for this observation seems to have been Centra (1968).

Olczak, 1980) in which the treatment group showed less of a gain on personality measures than a control group and another (Goldman & Olczak, 1976) in which there was actually a decline in the scores of the treatment group. This decline was no longer evident in a one year followup study involving half of the original group of subjects, but it served to call attention to the potentially stressful nature of an innovative program that "focused largely on values, feelings, and emotions rather than the traditional accumulation of information" (p. 337).

Obviously some of the criticisms that have been noted are more speculative than evaluative, and those that have some grounding in research may still be mitigated by the particular methodology used. For example, if an academic residential program actually does promote intellectual development, such growth may not be immediately evident in student grade point averages. Likewise positive or growth producing changes in the areas of self knowledge and personal competence may be difficult to assess and, if detected, would still be impossible to attribute to any one aspect of the overall educational program. Even a simple measure like withdrawal from the college or the residential program is likely to be influenced by a number of factors other than the living learning curriculum.

While the outcomes of living learning programs have rarely been rigorously investigated, there have been a

number of systematic studies of the effects of more traditional types of college student living groups, and this literature may be used in conceptualizing factors that are likely to interact with programmatic input. In addition, the recent literature on college student development has suggested several approaches to the application of social psychological theory in this area.

STATEMENT OF PURPOSE

This dissertation therefore seeks to provide a more thorough understanding of the social and psychological processes determining student response to a living learning program by:

1.) Reviewing the existing literature on the effects of college student living groups and also selected theories of college student development in order to identify the range of variables that are likely to influence the outcomes of a living learning program;

2.) Developing a conceptual framework for research on the effects of a living learning program;

3.) Formulating and testing hypotheses concerning selected variables that are likely to be associated with the outcomes of a living learning program.

STATEMENT OF APPROACH

A living learning program consisting of a one quarter environmental studies course on intentional community for students living in small groups and an oncampus communal living project was conducted within the context of an experimental college.[2] The extent to which program participants differed from other residents in reporting satisfaction or happiness with their living groups was selected as the outcome of interest for a correlational study using questionnaire data.

The concept of satisfaction was seen as providing a relatively straight forward measure of students' responses to their immediate households and was defined as the acceptability or desirability of that particular residential experience. In keeping with Gutek's (1978) suggestion that studies measuring satisfaction also include data on related constructs, respondents were also asked to indicate the extent of their happiness with the living group, and happiness was defined in terms of active enjoyment. These indicators seemed less likely to be confounded by the type of extraneous factors that might arise with more global measures such as academic achievement or personal growth.

Satisfaction or happiness with the living group also

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[2] The research setting was Kresge College at the University of California's Santa Cruz campus and will be discussed in more detail in chapter 2.

offered the advantage of being generally accessible to self-report and was presumed to be a pre-condition for continued involvement with the specific household in question, and, perhaps, with the residential community as a whole. The investigation initially focused on the identification of variables that were expected to influence an individual student's satisfaction with group living and subsequently involved testing the impact of a programmatic intervention designed with some attention to these variables.

The research involved a three-phase longitudinal study that was carried out in a college residential community housing approximately 250 students. Phase I included a series of exploratory studies done between winter 1978 and spring 1979 and a college-wide survey that was conducted in spring 1979 as a baseline study. Phase II consisted of a before and after comparison study of the questionnaire responses of students who participated in a special living learning program during fall quarter 1979, and a second college-wide questionnaire survey conducted in the spring of 1980 formed Phase III of the research. That survey was also a followup on program participants who were still living in the college residential community at that point.

This research was largely exploratory and was intended as a basis for designing future studies in which social and psychological variables are more specifically considered in efforts to promote student satisfaction with the college

residential experience. It is also expected that the findings will be helpful in determining appropriate followup strategies for assessing the longterm effects of an experimental college environment and in the articulation of underlying issues that are likely to influence the outcomes of even the most carefully designed living learning programs.[3] The remainder of this chapter will be devoted to a review of the relevant literature and to the development of a conceptual model that will provide the theoretical framework for the research.

REVIEW OF THE LITERATURE

THE EFFECTS OF COLLEGE STUDENT LIVING GROUPS

Feldman and Newcomb (1969) have provided an extensive review and analysis of research on the impact of college residential groups from which they concluded that such groupings achieved their effects mainly by accentuating the initial differences that tended to attract a student to one living arrangement rather than another. That would still suggest, however, that various types of residential groups will differ in their effects on the students living in them. For example, several researchers reported that individuals who were affiliated with fraternities or sororities were

[3] See Chickering (1971) for an detailed discussion of the rationale for action research in this area.

less likely than independents to withdraw from college and that members of Greek letter societies were typically more satisfied with their colleges and with their living situations.

It is possible that such research findings have simply reflected differences in the backgrounds of students who join Greek organizations and those who do not. However, a series of more recent studies conducted by researchers at Stanford University's Social Ecology Laboratory have shown that it is also important to consider differences in the environments of these living groups. Their work was based in part on Lozoff's (1968) indepth study of Stanford undergraduates and began with the development of a University Residence Environment Scale (URES) in order to assess the social climates of university student living groups (Gerst & Moos, 1972).

The URES consisted of 10 subscales. Involvement and emotional support were conceptualized as relationship dimensions assessing the extent to which students and staff helped each other and participated in living group activities. Another group of five subscales were conceptualized as personal development dimensions measuring emphasis within the living environment on personal, social, and academic growth, and the third group consisted of three subscales that dealt with system maintenance and system change dimensions.

In one study conducted by Moos, DeYoung and Van Dort (1976), URES was administered to 1,080 students from 42 living units on two different university campuses. The students completed the scales during the fall and spring of their freshman year, and the results indicated marked differences in the ways that they appeared to be affected by the various types of social environments in their living groups. Most notable was the finding that groups with a strong emphasis on academic achievement produced students who were hostile, inhibited, exhausted, and unhappy; whereas students in groups emphasizing involvement and emotional support tended to describe themselves as calm, cooperative, easy-going, and happy.

Moos and Van Dort (1979) subsequently developed the Physical Symptom Risk Scale as a subscale of URES, which they administered to 1,290 students living in male, female, or coed groups. Higher levels of physical symptoms were reported by students living in groups that were perceived as low in involvement and support and high in competition. In a related study (Nielsen & Moos, 1977), it was found that women who resisted developing physical symptoms in such settings were more dominant, more religious, and less socially involved than those who increased their level of reported symptoms. Men who tended to resist symptom development showed a higher frequency of chess playing and a much lower level of alcohol consumption.

It is interesting to note that despite the existence of a relatively large body of research on the impact of college student residence, Moos and his colleagues at Stanford appear to be the only group of investigators who have been specifically concerned with the psychological climate of the residential group as a whole. Although satisfaction with the living group was not directly determined in these studies, it seems likely that stressful living environments would also be less satisfying and that factors affecting the social climate may be viewed as potential determinants of satisfaction.[4] It is more a source of concern that most of this research has focused on institutional level phenomena to the exclusion of processes operating at the individual level, but it provides a useful starting point for the present investigation.

INSTITUTIONAL LEVEL DETERMINANTS OF SOCIAL CLIMATE

ENVIRONMENTAL FACTORS: Smail, De Young and Moos (1974) used URES to compare the group climates of living units at a large, state university in a small town setting with those of a small, private, church-related university located in a congested urban area. Students at the state university

[4] Student satisfaction received relatively little attention in research on higher education until recently when increased student mobility (see Cope & Hannah, 1975) and a rising trend toward student consumerism (see Riesman, 1981) seem to have inspired more interest in that direction (e.g. DeVore & Handal, 1981; Kegan, 1978a; 1978b; Maxwell, 1977; Ryback, 1980).

rated their living groups higher on involvement, emotional support, friendship, and interaction among members, and, as a whole, they felt greater commitment both to their living groups, and to the other students living in them. These findings may be contrasted, however, with those reported from another study (Moos, Van Dort, Smail & DeYoung, 1975) sampling living units at 16 colleges and universities nationwide, which indicated that relationship oriented living groups and those with a traditional social orientation were more often found on the campuses of private than public schools.

The architectural and organizational features of the living group have also been found to have a systematic effect on its social environment. Moos (1978) reported that groups with a greater proportion of single rooms placed more emphasis on academic achievement and less emphasis on social interaction, friendship, or concern for other members of the living group. Holahan and Wilcox (1978) found that freshmen assigned to high-rise dormitories formed fewer friendships and were less satisfied with their residential arrangements than those assigned to low-rise structures. Likewise, residents have reported favoring smaller dorms, because they facilitate friendship formation and social interaction (Sinnett, Sachson & Eddy, 1972).

ACADEMIC FACTORS: Using URES and a typology derived from Holland's theory of vocational choice, Hearn and Moos

(1976) investigated the social climates of 42 residential groups. Those with a high proportion of students who were majoring in education, nursing, physical therapy, the social sciences, social work, or speech correction were classified as "social" according to Holland's definition of types and received high URES ratings on support and traditional social orientation. Groups with more students in the majors defined as "enterprising" (i.e. history, hospital administration, hotel administration, industrial relations, political science, public administration) had particularly low ratings in those areas.

Data from two living groups that were found to be perfectly homogeneous in terms of Holland types served to illustrate the fact that support and traditional social orientation were not necessarily related dimensions of the residential experience. One group consisted of 14 male medical students who were typed as "investigatives," and the other was a coed dorm group made up of 22 students from a college of fine arts and crafts. The medical students scored higher on traditional social involvement but the "artisitc" group had higher scores for personal involvement and support.

Decoster (1968) compared the effects of random versus homogeneous assignment of high ability students who lived in residence halls at the University of Florida. Over a two year period high ability students living in close proximity

to one another more frequently reported that their living quarters were conducive to study and informal discussion of educational values. They more often said that their fellow residents were considerate and respectful of others and generally perceived their residential arrangements as more desirable.

The benefits of housing students according to common curricular interests have been detailed in studies reporting favorable results from living learning environments for female prepharmacy students (Schroeder, 1980; Schroeder & Belmonte, 1979); undergraduates in engineering (McKelfresh, 1980; Schroeder & Griffin, 1976); and freshmen at an institute of technology (Taylor, Roth & Hanson, 1971). In each case the academic residential unit was found to increase student satisfaction with the curriculum as well as with the living environment. It is also notable that in the McKelfresh study freshmen expressed a higher level of satisfaction with the group spirit and rapport of the living unit, whereas the nonfreshmen were more satisfied with the opportunities for extracurricular involvement.

When Beale and Williams (1968) investigated student satisfaction with living units made up of all college class levels as compared with those that separated freshmen and upperclassmen, they found differential effects for males and females. First year men who were assigned to mixed class housing indicated more satisfaction with their college

experience than those living in all freshman units. First year women appeared to be equally satisfied regardless of the class composition of their living units, but women who were upper level students seemed somewhat more satisfied when they had separate housing.

The impact of faculty involvement in the residential program was demonstrated in a study conducted by Pascarella and Terenzini (1981), which compared the freshman year outcomes for students in a living learning program and those living in conventional residence halls. By the end of the year the 100 freshmen assigned to the experimental building had had more frequent contact with faculty and reported greater satisfaction with their relationships to faculty members. They also reported a higher level of satisfaction with the freshman year program.

The authors concluded that the program's innovative structural organization was of less consequence than the opportunities it afforded for close student-faculty contact, which is consistent with findings reported elsewhere on the role that faculty can play as socializing agents within an experimental college (Lacy, 1978; Newcomb et al, 1970). Such observations also serve to underscore the importance of the interpersonal dimension in what are termed institutional level effects and suggest the need for further inquiry into the personal experiences of individual students.

SUMMARY: According to the results of studies that have

focused on institutional level factors, student living groups with a favorable social climate are more likely to be found on private campuses or in state schools located in small town settings. Low level and small scale structures and those with fewer single rooms appear to be more conducive to the development of such groups; and housing students together by academic ability, major, or field of study seems to help, particularly if there are also opportunities for contact with faculty within the context of the residential program. There is some indication, however, that academic residential programs are generally more satisfying for freshmen than for upper level students and that the degree of social orientation characterizing such units is likely to vary according to the subject area in which the residents are majoring.

INDIVIDUAL LEVEL DETERMINANTS OF SOCIAL CLIMATE

CULTURAL FACTORS: Newcomb's (1943) study of women at Bennington during the late 1930s clearly showed the effects of social class identification on college student peer groups, but the influence of such factors on the living group has received little research attention. According to Newcomb (1958), the student who sought group membership was required to take on whole patterns of interrelated values, attitudes, and behaviors. He noted that some students had considerable difficulty reconciling the liberal politics

advocated at Bennington in the thirties with the values held by their wealthy and conservative families. Those who persisted in their conservatism were much less likely to report favorable feelings toward the college community or active involvement in the campus social life.

Daniel's (1976) study of Black sororities at a large, integrated state university has suggested the possibility that Black students may face a similar situation as social isolates on predominately White campuses. The sororities were found to be a partial retreat from the marginal status associated with their racial identity and to represent an effort at maintaining some tie with a prior reference group. This was found to be particularly true for those women who were from lower socioeconomic backgrounds, but, according to other studies (e.g. Stewart, 1977, Willie & Levy, 1972), Black women in general have tended to be dissatisfied with their experiences in racially integrated living groups.

Toupin and Luria (1974) reported that many of the Black women they studied felt at a social disadvantage in such situations and preferred being with others who shared their "social-sexual-career dilemma." However, this may also be the case for women of other racial groups who give evidence of having strong concerns about such issues. Sauber (1972) administered the Mooney Problem Checklist to 150 undergraduate women at Florida State University and found that sorority members reported more problems in the areas of court-

ship, sex, and marriage than did dormitory residents, and they also reported more severe problems related to personal development.[5]

Moos, Van Dort, Smail & DeYoung identified mark differences in the types of social climate characterizing a sample of 100 living groups that varied in sex composition. Most (84%) of the 31 male units were described as competition oriented with reference to such activities as dating and grade achievement. A smaller proportion (29%) of the 44 female units and even fewer (14%) of the 28 coed living units were were said to be of this type. All of the units that were termed relationship oriented with regards to the degree of commitment and emotional support shown to others in the living group were either female, or coed in composition. This was also the case for units that emphasized such traditionally social activities as dating and parties and for all but one of the units that stressed both the social support, and the academic achievement dimensions.

These findings were interpreted as indicating that undergraduate women tend to exert some influence on the development of a supportive atmosphere in coed residence groups. The possibility that men who opt for such living

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[5] Since most of the earlier studies of Greek letter societies (e.g. Lozoff, 1968) found members tending to be better adjusted than dormitory residents, these findings may have reflected sex differences in college adjustment. It is also possible that such social organizations had begun to attract a different type of student by the end of the 1960s.

arrangements may differ from other males in ways that affect cooperative interaction was not considered, but Schroeder and Lemay's (1973) comparison of initial scores on personality measures showed both male, and female students who chose coed residence halls to be more mature, more flexible in their values, and more able to develop meaningful relationships than those who chose single-sex residence halls.

PERSONALITY FACTORS: The role of student personality characteristics has generally not been considered in living group research. One notable exception is a study of group composition effects done by Schroeder, Warner, and Malone (1980) at a large state university located in a rural area of the southeast. The Myers-Briggs Type Indicator was used to categorize entering male students according to their dominant mental processes (sensing, intuition, thinking, feeling) and four homogeneous living groups were created with 14 members to a dormitory section.

Early in the fall quarter URES was administered to these 56 students and to a 16 member living group made up of two pairs of each type. All five groups completed the scales again at the end of the quarter along with an information inventory. Predicted between-group differences were found on both sets of scores with the intuitives scoring consistently higher than the other groups on the measures of traditional social orientation and supportive interaction. It was also the intuitives who most often selected their

living group members as friends, and they were observed to participate in more social activities on the floor than were the other groups.

SUMMARY: Studies of individual level factors seem to indicate that living groups composed of students from the same socioeconomic and racial backgrounds will be more likely to have a close and supportive social climate, and that this is also the case for all-female or coed groups. Separation by academic class may further contribute to satisfaction, particularly in women's living groups, and residential units composed of highly intuitive males may be more conducive to social interaction than those consisting of other personality types. While each of these findings is less than conclusive, they all tend to support the contention that students are generally drawn to groups with which they can identify in some way.

CONCLUSION: The literature on individual level factors influencing the social climate of the college living group is surprisingly scant when compared to the number of studies dealing with institutional level factors, and there are virtually none that consider the combined effects of person and environment. In the absence of a more comprehensive approach to the study of the college residential experience, it seemed reasonable to turn to the general literature on college student development in seeking an appropriate theoretical orientation for research in this area.

THEORETICAL MODELS OF COLLEGE STUDENT DEVELOPMENT

Baird (1978) has observed that colleges and universities are complex social institutions; that surprisingly few theories have been proposed to explain their operation; and that such theoretical bases are needed if these environments are to be adequately understood and effectively assessed. He has further suggested the application of existing social psychological models to research in this area and has offered role theory, organizational psychology, and social ecological analysis as three possible approaches to producing testable hypotheses about the effects of the college environment.

While it is true that research in higher education has generally tended to be atheoretical and more oriented toward evaluation than experimentation,[6] there have also been notable efforts by educational researchers to develop a more theory based approach to the study of college student development (see Walsh, 1973). The use of empirically oriented models may therefore be more appropriately viewed as a departure from earlier conceptualizations that have failed to meet the criteria for effective theorizing. According to Walsh (1973) those criteria should include comprehensiveness, clarity and explicitness, operational

[6] Suchman's (1967) distinction between evaluation studies and evaluation research that uses empirical methodology in conducting such studies may be applied here.

adequacy in measuring persons and the environment, inclusion of empirical findings, parsimony, and the generation of empirical questions.

BASIC SYSTEMS MODEL:[7] As part of a large scale program of longitudinal research on college student development conducted for the American Council on Education, Astin (1970) proposed a model representing the impact of college in terms of student inputs, the institutional environment, and student outputs (see fig. 1). The underlying schema is relatively clear and explicit, but an attempt to fit it to the existing data on college student living group satisfaction reveals certain critical limitations in both the research, and the theory (see fig. 2).

The fact that all of the variables that would be placed in the inputs category are demographic to the exclusion of personality variables represents a major conceptual shortcoming, while the wide range of variables that must be accommodated by a single category designated as the environment does not reflect well on the operational adequacy of the model or its comprehensiveness. Still, an input-output model can be useful in that it encourages the careful delineation of educational objectives, and it serves to emphasize the student's contribution to the individual-environment interaction.

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[7] Miller and Rice (1967) have provided an effective treatment of the basic principles of systems analysis.

Astin (1968, p.301) has gone so far as to state that:

> Any obtained relationship between educational practice and student output is necessarily ambiguous so long as no control is exercised over differential student input.

This observation has particular relevance for research dealing with experimental college programs, since, as Brown (1972a) has noted, such innovations tend to attract a select group of bright, adventurous, liberal minded students and are therefore likely to produce results that are atypical of colleges in general.

INTEGRATED SYSTEMS MODEL: Feldman (1972) detailed a social psychological framework in which the college's interactional settings were conceived of as events in a given context occurring over time with the characteristics of the general society, the organizational features of the college, and the attributes of various members of the college community all seen as determining the individual's experience (see fig. 3). Similarly, Benezet (1975) has advocated an organizational approach to the study of student development that would involve assessment of the college's mission; of the ways in which it carries out its purposes; and of the extent to which students felt identified with the college in its operations as well as its purposes.

A slightly different version of this approach was suggested by Pervin's (1967a) notion of the college as a social system in which integration was defined as compatibility

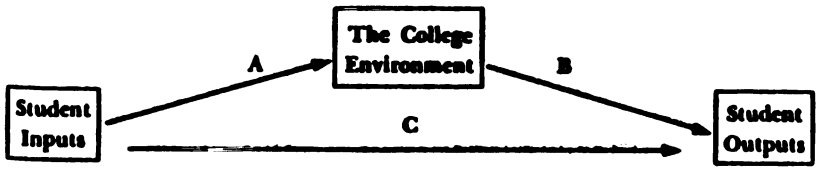

Figure 1. Input-Environment-Output Model of Student Development in Higher Education (Astin, 1970)

between the values of faculty, students, and administration; between the formal learning and the student's growth as a person; and between what goes on in the college and the events of the "real world."

Studies (Pervin 1967b; 1967c) done at Princeton and 21 other colleges and universities provided support for the individual-environment interaction model by using the semantic differential to measure perceptions of college, self, and ideal self. Perceived similarity was found to be the best predictor of satisfaction on an individual level, and for institutions as a whole mean discrepancy scores tended to show a positive relationship to mean scores for dissatisfaction.

Likewise a study of the eating clubs at Princeton (Pervin & Smith, 1968) found perceived self-club similarity to be positively related to satisfaction with the eating club environment, which suggests that the model may be appropriate for residential groups as well.[8] When it is applied, however, a further limitation of the existing living group data is revealed in that they provide little or no information about the various interactions in which students who live together are likely to be involved. Also the antecedents category becomes so overloaded that the model fails to suggest anything about the relationships among the

[8] A study by Perkins (1977) showing a relationship between roomate value similarity and residential satisfaction lends further support to this assumption.

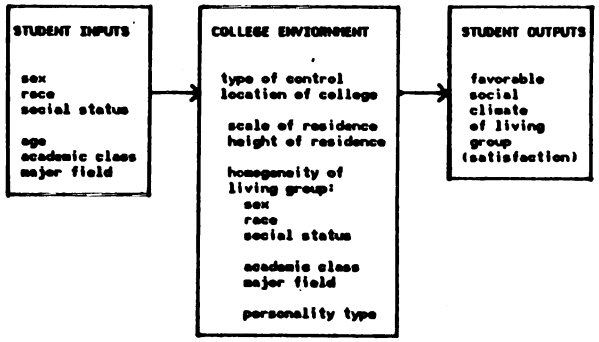

Figure 2. Basic Systems Model of Student Living Group Satisfaction

variables included there (see fig. 4).

DUAL INTEGRATED SYSTEMS MODEL: Tinto (1975) has devised a conceptual framework for the analysis of factors leading to college student dropout that can also serve as a relatively elegant and empirically oriented version of the throughput model of college impact. A distinction between the college's academic and social systems constituted a unique feature of the model, according to which a student's commitment to the school was expected to be equally dependent upon: 1.) academic integration in terms of grade achievement and intellectual development; and 2.) social integration in terms of successful relations with peers, faculty, and staff (see fig. 5).

When the reported findings on student living groups are fitted to this type of schema, the scope becomes more comprehensive and the interrelationship of variables is more explicit than would be the case with simpler models. It might be improved, however, by including family background as a part of the social system and considering it as a factor in the formation of institutional commitment. Pre-college schooling should likewise be included in the academic system as an antecedent to goal commitment, and institutional image as a mediating variable in the relationship between student attributes and the formation of commitment (see fig. 6).

Although Tinto's model has yielded a number of testable

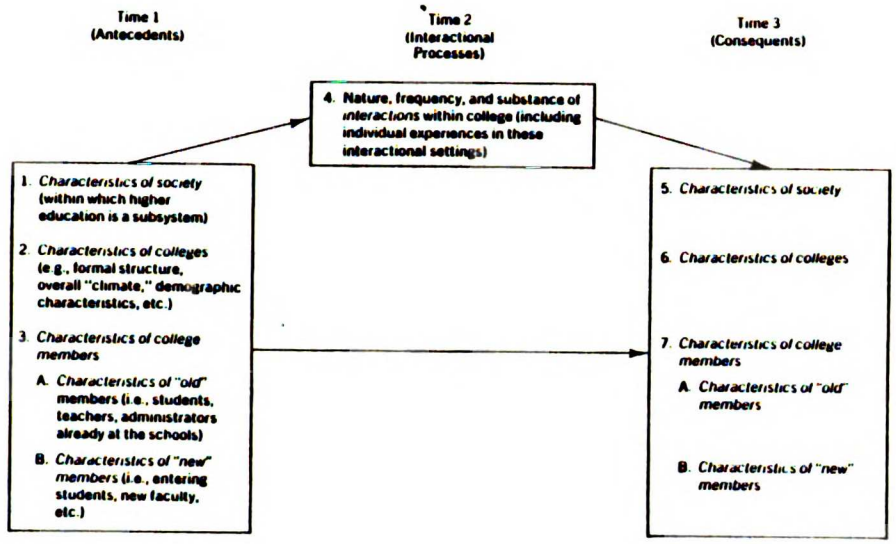

Figure 3. Diagram of the Antecedents and Consequents of Interactions Among College Membership (Feldman, 1972)

hypotheses, subsequent studies (e.g. Bean, 1980; Pascarella & Terenzini, 1980) have tended to emphasize elements of the institutional environment. Consequently, as the systems model has become more comprehensive the relative importance assigned to student characteristics has tended to decline. In addition to producing testable theoretical propositions, a conceptual approach should, as Pace (1969b) has noted, give evidence of a balanced concern for individual and institutional factors, if it is to adequately represent the complexity of a "real world" system. Bess (1973b) has provided a rare example of this kind of balanced approach in a study of 30 academic departments in 15 American universities that used measures of organizational effectiveness and individual need satisfaction to discriminate between high and low quality departments. It is interesting to note that the high quality departments were found to be more effective in their operations but no more satisfying to work in than those rated as having low quality.

CONCLUSION: While systems theory provides a viable approach to the study of issues of college student development, it would appear that a more detailed representation of the social system is to be preferred if testable hypotheses are to be generated and a balanced view of the factors operating in a "real world" setting is to be obtained. Just as procedural efficiency may fail to show a relationship to individual need satisfaction in the academic departments of universities, evaluations of student residential programs

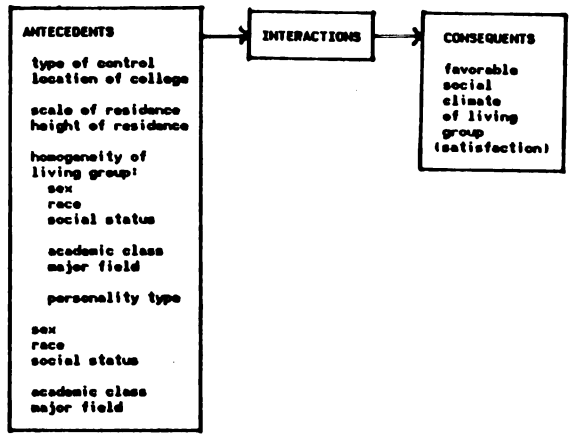

Figure 4. Integrated Systems Model of Factors Related to Student Living Group Satisfaction

that emphasize administratively defined criteria of effectiveness may fail to detect the personal reactions of individual students that are incompatible with those objectives.

Therefore, in order to develop a conceptual model of the factors that influence student living group satisfaction, a two level theory that incorporates elements of what has been termed ecological psychology with a psychodynamically oriented view of the student's interpersonal needs will be proposed as the basis of the dissertation research. The discussion of conceptual development will include a review of the relevant research in each of these areas and the elaboration of a conceptual schema that was synthesized from the literature review.

CONCEPTUAL DEVELOPMENT

SOCIAL ECOLOGY THEORY AND STUDENT DEVELOPMENT

ORIGINS OF THE THEORY: The field of ecological psychology is a relatively new one and is frequently identified with the longterm program of research (Barker, 1968; 1978; Baker & Schoggen, 1973) that began in 1947 with a series of studies at Stanford University's Midwest Psychological Station. Barker (1968) states that the social ecological method was designed on the model of biological research to allow the study of human behavior in its natural

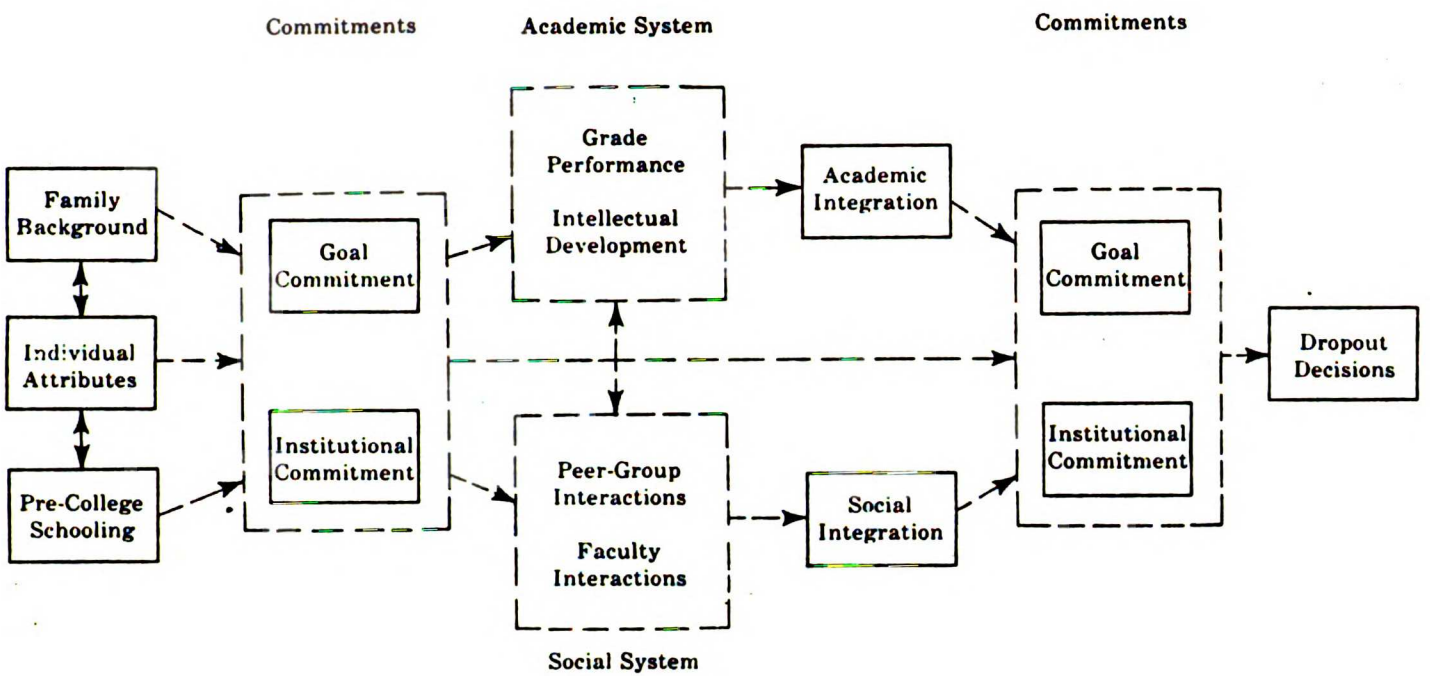

Figure 5. Conceptual Schema for Dropout From College (Tinto, 1975)

environment and may be distinguished from experimental psychology by its concern with events that are termed "psychologist-free," that is to say its concern with how people behave in conditions that exist outside of laboratories and clinics.

As a theoretical posture this work was based in part on Brunswik's (1955) conceptualization of the environment-organism-environment (E-O-E) arc in that it was intended to encompass the entire range of E-O-E phenomena but also to extend beyond that level of representation by incorporating the interaction of persons with objects and events in the nonpsychological environment. Its close relationship to Lewin's (1951) field theory was also reflected in the fact that ecological psychology was defined as including both the psychological environment that Lewin referred to as the "life space," and that preperceptual context for behavior that was to be termed the "ecological environment."

This definition clearly echoed Lewin's assertion that a scientific psychology would have to deal with person and also with environment. It must be noted, however, that Barker and his co-workers chose to pursue the study of so-called molar behaviors rather than the more molecular approach of Lewinian analysis, and the observation that people have ceased to be the only apparent source of behavior variance with the increasing diversity of their environments seems to have provided the basis for this choice of focus.

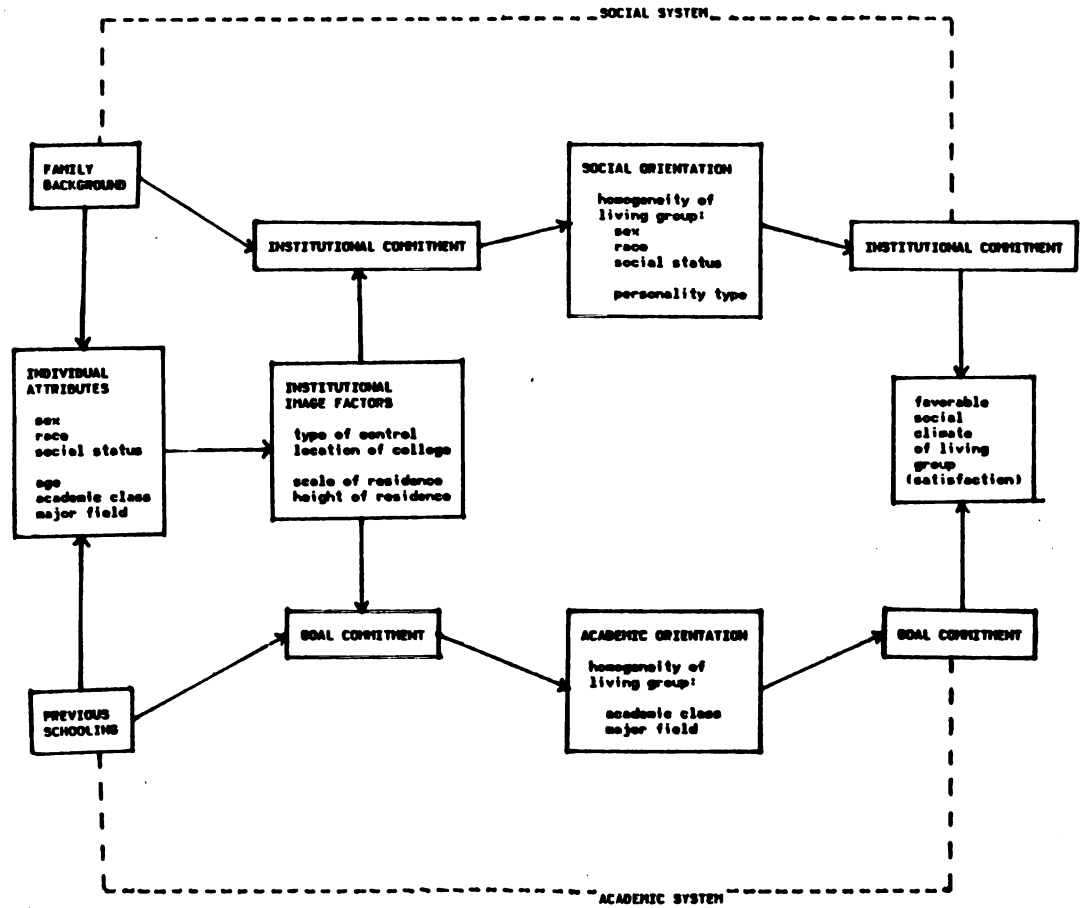

Figure 6. Integrated Dual Systems Model of Factors Related to Student Living Group Satisfaction

Still, social ecology theorists have drawn from Lewin's theory of social equilibrium states to explain the forces that determine behavior in a particular environment as well as from Heider's (1959) distinction between "medium" and "thing" to account for the consequences of interactions involving such conceptually irrelated phenomena as human behavior and its physical context.

ELEMENTS OF THE THEORY: Barker (1968) represented the ecological environment as consisting of a structure of stable and related parts including a set of dynamic units that he called behavior settings, which were self-generated in a specific time-space locus and contained a completely bounded internal pattern (see fig. 7). Behavior settings were also defined as having both structural, and dynamic attributes and were said to consist of "standing patterns of behavior" that occurred in a specific constellation of non-behavioral phenomena referred to as a "milieu." In addition to being circumjacent to behavior, the milieu was said to be synomorphic, that is similar in form, to the behavior, and the behavior-milieu components were said to have a greater interdependence than relationship to parts of other settings (see fig. 8).

The properties of behavior settings were defined as: 1.) having a precise position in space; 2.) occurring at a designated time or series of times and with a certain duration; 3.) having a definable population of participants; 4.)

being occupied for a specifiable number of person-hours; 5.) having inhabitants whose functional positions could be specified; 6.) having action patterns that could be identified as aesthetic, educational, religious, etc.; 7.) involving behavior mechanisms such as affective or gross motor functioning; 8.) exerting various types of pressure on certain population groups to participate; 9.) involving functions that were influenced to varying degrees by outside occurrences; and 10.) catering to the needs of specific population groups.

In addition the internal utility and coerciveness of the behavior setting was said to be supported by several sources of behavior-milieu synomorphy including the physical arrangements, the social forces encouraging conformity, and those built in physiological mechanisms that dictate responses to such features of the nonpsychological environment as room temperature and noise level. Personal perceptions of spatial configurations, learning processes, and the mutual selection processes by which individuals became members of the population group inhabiting a given behavior setting were also said to be important factors in molding standing patterns of behavior.

Accordingly each behavior setting was assumed to be psychologically meaningful for its inhabitants and was expected to contain routes to goals that were important to them as individuals in addition to the programs of action

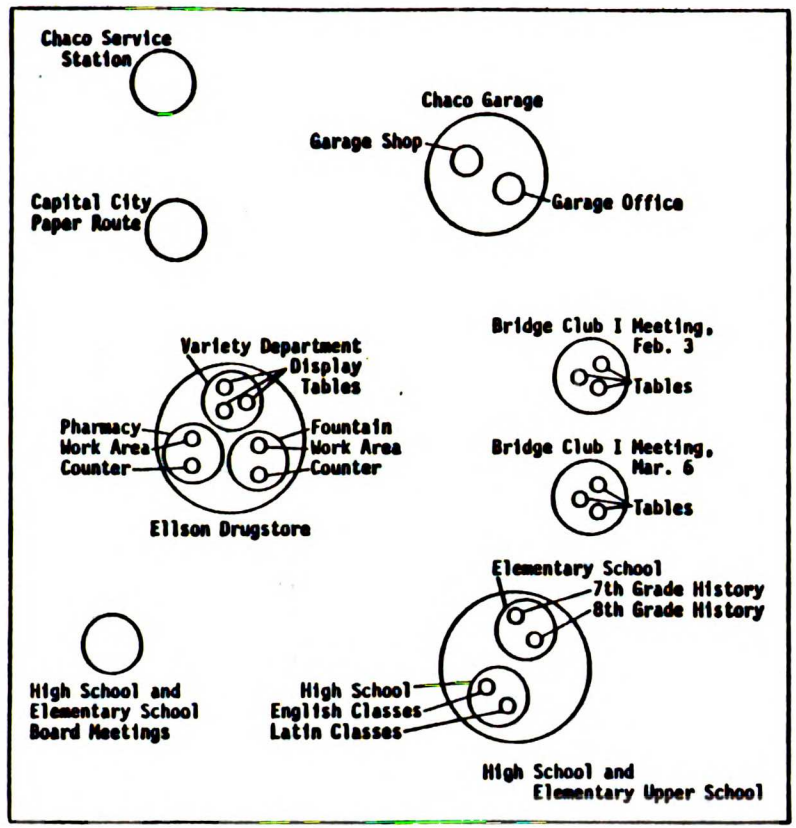

Figure 7. Synomorphic Structure of a Part of Midwest (Barker, 1968)

that were the schedules of ecobehavioral occurrences in that particular milieu. The continued existence of the setting was said to be contingent on its providing inhabitants with traversable routes to their individual goals as well as on the extent to which inhabitants had access to the appropriate program of action.

If inhabitants perceived a setting as inadequate, they were expected to exercise a control maintenance function that involved changing or eliminating those components of the behavior setting that were unsatisfactory. Such components might be aspects of the program of action or they might be individual inhabitants who were seen as jeopardizing the program of action, and that control function might be located in an individual inhabitant, such as a member of the formal authority system, or distributed among different inhabitants (see fig. 9).

In addition to maintaining the integrity of the behavior setting, the control system was observed to provide a basis for anticipating the actions of an individual in that setting. Barker has noted that although the Midwest Project began with a person oriented approach, it soon became evident that some aspects of individual behavior could be more readily predicted from knowledge of the behavioral characteristics of the setting in which it would occur. Thus social ecologists have come to focus on the study of contextual determinants, which is the approach that

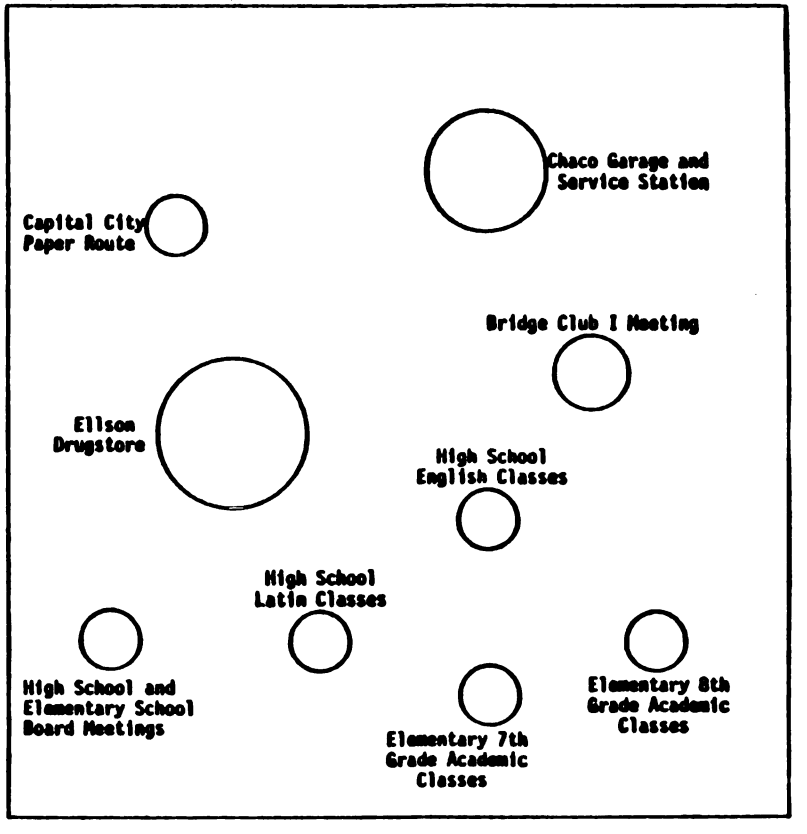

Figure 8. Behavior Setting Structure of a Part of Midwest (Barker, 1968)

characterizes most of the research on college student living groups discussed in the previous section as well as a number of earlier studies of the college environment that were derived from the social ecological perspective.

APPLICATIONS OF THE THEORY: The most systematic efforts to develop a field of student ecology have been part of a program of research (Pace, 1979; Pace & Stern, 1958; Stern, 1965) undertaken at Syracuse University and by the Center for the Study of Evaluation at the University of California's Los Angeles.[9] Using Murray's (1938) concept of need as a self-directing personality trend and of press as an externally controlling situational pressure, Pace and Stern (1958) compiled the College Characteristics Index (CCI) and the Activities Index (Stern, 1965) as reciprocal measures of environment and the individual. The AI yielded 12 personality traits that were represented as three continuous dimensions (intellectual orientation, dependency needs, and emotional expression), and the CCI yielded 11 environment factors that were reduced to two dimensions (intellectual climate and nonintellectual climate).

When these scales were administered to a sample of 1,993 juniors and seniors from 32 colleges and universities varying widely in terms of size, affiliation, and type of curriculum offered, the characteristics of the different

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[9] Pace and McFee (1960) have reviewed earlier studies of the college environment.

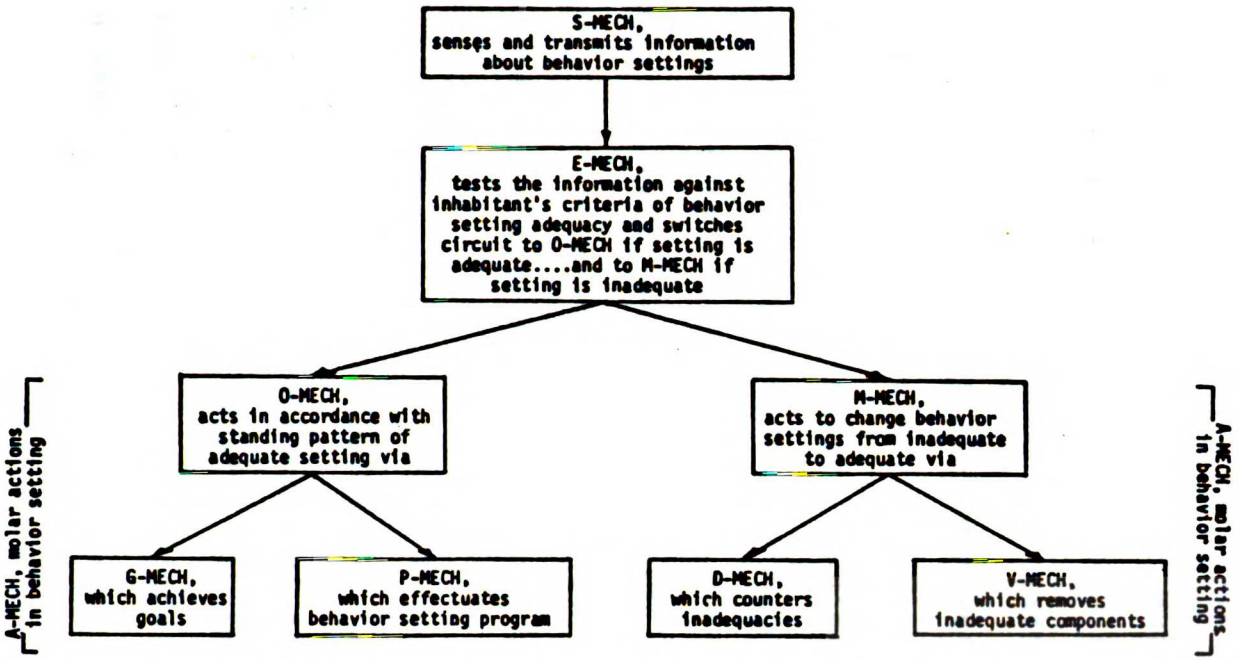

Figure 9. Parts of the Control Unit of an E-O-E Circuit (Barker, 1968)

student bodies were found to be markedly similar to the attributes of their respective college programs. Analyses of freshman samples also showed each group to be quite similar to upperclassmen in their institution which led to the conclusion that the colleges studied were tending to attract and to select a distinctive type of student.

Similar studies (Astin & Holland, 1961) conducted by the National Merit Scholarship Corporation were also based on the social ecological notion that much of the environmental press is transmitted through other people but used an Environmental Assessment Technique (EAT) to measure those forces. A total of 335 institutions were characterized in terms of Holland's (1959) six vocational types (realistic, intellectual, social conventional, enterprising, artistic) by classifying various college majors and determining the proportion of students who obtained bachelors degrees from each school in each type of field. The total undergraduate enrollment and the mean scores of entering students on the National Merit Scholarship Qualifying Test (NMSQT) were also considered.

When the EAT was cross-validated with the CCI using data from 36 of the colleges, each of its measures were found to be positively correlated to the 30 CCI scales with 39% of the 240 coefficients significant at the p=.05 level, and when the three institutions from the original 335 that scored highest on each of the six Holland's type orienta-

tions were identified, their categories were found to be consistent with generally held images of the schools. A lack of information about the faculty was acknowledged as a limitation of the approach, but the results were taken as indicating that the attributes of the student body reflected a major portion of the college's environmental press.

The College and University Environment Scales (CUES) were developed as a refinement of these earlier scales and tended to be less personality oriented than the CCL but more so than the EAT. In its original form (Pace, 1963), it consisted of five scales that measured practicality, community, awareness, propriety, and scholarship. Two scales were later added (Pace, 1969a) that assessed campus morale, and the quality of teaching and faculty-student relations. It has been widely used in research on higher education (see: Pace, 1967; Pantages & Creedon, 1978), but more recent studies suggest the need for caution in the interpretation of the results of some of this research.

Duling (1979) administered CUES to returning juniors at Colorado State College in Greeley and found that various subgroups perceived the college environment in significantly different ways. Women tended to see the school as more group centered, conforming, and cooperative than men did, and students who were involved in Greek letter societies tended to view it as more practical and group oriented than independents. Hamilton (1979) reported comparable findings

from a study that used the CCI to compare the environmental perceptions of domestic and international students attending the same university. The international students perceived more academic pressure and more press toward vocational orientation but also more support from administrators and more social support from peers.

Garza and Widlak (1976) found significant differences in the academic and demographic antecedents of students' perceptions of the institution when they administered CUES to 145 Anglo-Americans and 79 Mexican-Americans attending a university in Texas. Anglo students who indicated a more favorable view of the university were older, had lower grade point averages, and tended to have fathers who were not as well educated, whereas Chicano students who were married and those majoring in the life sciences tended to view it more favorably. When a group of 100 Anglo students and 61 Chicano students at the University of Wyoming completed CUES, the Chicano students were found to score higher on the scale measuring practicality (Vela, 1977).

CONCLUSION: While researchers in the field of student ecology initially proceeded on the assumption that the perceptions of individual students taken collectively would provide a reasonably accurate picture of the university environment as a whole, more recent findings lend support to the notion of studying specific subenvironments where homogeneous populations of students are likely to be found.

Unfortunately studies such as those conducted at Stanford's Social Ecology Lab have generally tended to follow the lead of earlier environmentally oriented researchers in concerning themselves mainly with what social ecologists term programs of action rather than with the implicit goals that individual inhabitants may be expected to bring to a social setting. It therefore becomes important to supplement such an approach with a perspective that emphasizes interpersonal relations and the psychosocial background of the student.

INTERPERSONAL NEEDS THEORY AND STUDENT DEVELOPMENT

ORIGINS OF THE THEORY: Various methods have been used to study interpersonal behavior (see: Golding & Knudson, 1975), however, Schutz's (1958; 1966) conceptualization was relatively unique in rigorously applying the techniques of scientific philosophy to the task of theory building in the area. The resulting formulation attempted to identify the fundamental aspects of interpersonal behavior while making liberal use of the psychoanalytic perspective in the designation of personality types (i.e. Freud, 1940/1949; 1931/1959; Fromm, 1947; Horney, 1943) and in defining the relationship between personality and group processes (i.e. Bion, 1949; Leary, 1957).

Schutz has indicated that the preliminary development of the theory began in 1952 while he was in the military and assigned to do research on the Navy's Systems Coordination

Division. The work was subsequently continued as part of the Systems Analysis Project at Harvard University's Department of Social Relations where much of the refinement and extension of the basic propositions was carried out drawing from the various student populations that were available in the immediate area.

ELEMENTS OF THE THEORY: Schutz (1966) defined inclusion, control, and affection as the three basic needs that were necessary and sufficient to account for the full range of interpersonal phenomena and said that they were expressed in efforts to establish and maintain satisfactory relations in each of the three areas. The personality types associated with varying levels of these needs were described as being: undersocial, oversocial, and social for need inclusion; abdicrat, autocrat, and democrat for need control; and as overpersonal, underpersonal, and personal for need affection.

According to the postulate of relational continuity, an individual was expected to express interpersonal behavior that would be similar to the behavior he experienced in his earliest interpersonal relations. More specifically, the principle of constancy said that an adult perceiving himself as subordinate in a relationship would behave as he had toward his parents (or other significant authorities) as a child, while the principle of identification said that an adult in the dominant position would behave as his parents

(or other significant authorities) had behaved toward him. The less balanced personality types were therefore seen as resulting from parental mishandling in the three basic areas of need (see fig. 10).

According to the postulate of compatibility, a group composed of individuals who were compatible in terms of interpersonal needs was expected to be more successful in achieving its designated goal than an incompatible group would be. Using expressed and wanted dimensions of the basic need areas, four types of interpersonal compatibility were defined: 1.) reciprocal compatibility in which Person A expressed the amount of inclusion, control or affection wanted by Person B; 2.) originator compatibility in which Person A wants more inclusion, control, or affection than he expresses and Person B expresses more of the respective need than he wants; 3.) interchange compatibility in which an individual both expresses and wants the same amount of inclusion, control, or affection as is actually provided in a specific social context; and 4.) need compatibility in which two or more persons are mainly concerned with the same need area (see fig. 11).

While the FIRO theory dealt mainly with personal and interpersonal dynamics, the social context or environment of behavior was not totally excluded from consideration. Group situations were said to be defined by their characteristic amount of interchange in each need area and by the amount of

differentiation of originating and receiving behaviors involved. High differentiation was said to exist when each individual member of a group had a distinct and unambiguous role with respect to the origination of a certain type of behavior, and the example of the fraternity rush week was used to illustrate different levels of inclusion origination. The prerogative of old fraternity members to exclude or to include without the possibility of being excluded themselves was described as high inclusion origination, whereas the position of candidates who could be included or excluded but were unable to exclude anyone was said to be a case of low inclusion origination.

APPLICATION OF THE THEORY: Schutz's (1966) Fundamental Interpersonal Orientations Behaviors (FIRO-B) Scale is one of several instruments he developed to measure various aspects of interpersonal relations.[10] The FIRO-B measures interpersonal orientation based on self-reported behaviors in the three need areas (inclusion, control, and affection), and each has an expressed and a wanted dimension making six independently scored subscales: Inclusion Expressed (IE); Inclusion Wanted (IW); Control Expressed (CE); Control Wanted (CW); Affection Expressed (AE); Affection Wanted (AW). It has been widely used in personality research (see:

[10] In addition to FIRO-B, Schutz (1977) has also developed FIRO-F to measure interpersonal feelings, and three other scales measuring coping mechanisms, educational values, and parental attitudes related to interpersonal behaviors and feelings.

This Type of Parental Behavior toward Child		is Called	and Leads to This Type of Behavior by the Child
TOO MUCH	Inclusion	Enmesh	Oversocial
	Control	Dominate	Autocratic
	Affection	Smother	Overpersonal
TOO LITTLE	Inclusion	Abandon	Undersocial
	Control	Undirect	Abdicrat
	Affection	Unlove	Underpersonal
IDEAL	Inclusion	Include	Social
	Control	Respect	Democrat
	Affection	Love	Personal

Figure 10. Summary of Parent-Child Relations and the Resultant Adult Behavior (Schutz, 1966)

Wiggins, 1968) as well as in research on the effects of group process (see: Smith, 1975). Of particular interest here are those studies in which FIRO-B has been used to investigate aspects of the college student personality that are likely to influence the living group experience or general group processes that may also occur in the context of a college residential program.

Gorlow and Barocas (1965) analyzed the responses of 50 undergraduates at Pennsylvania State University to FIRO-B and a Q-sort of 63 propositions about ways to live and found two "affectional involvement" factors that showed a positive relationship to both the expressed and wanted scales for inclusion and affection; an "energetic action and power" factor that showed positive correlation to expressed and wanted control; and a factor combining affectional and active involvement that was positively correlated to the expressed and wanted affection scales. In a similar study (Di Marco & Kapnick, 1974) conducted at a pharmacy school in the midwest, students who scored high on a dimension reflecting group oriented values also scored high on each of the six FIRO subscales, whereas those who scored high on a dimension dealing with values toward the organization scored high on the expressed and wanted inclusion scales.

Babladelis (1978) conducted a study at the California State University in Hayward involving 163 undergraduates who completed FIRO-B and a sex role inventory along with other

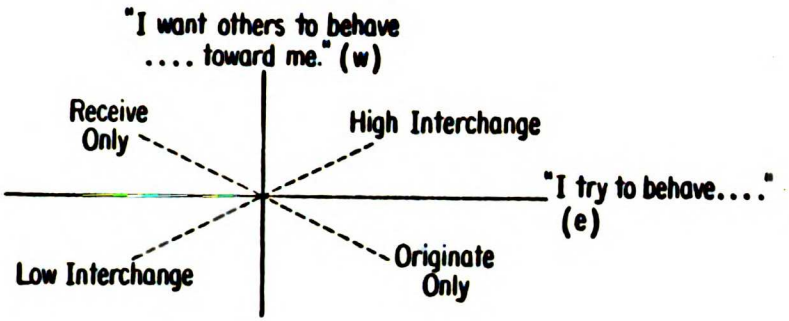

Figure 11. General Schema for Interpersonal Behavior Measured by Firo-B (Schutz, 1966)

personality measures. Males were found to have significantly higher scores on expressed inclusion than females, and those individuals who were typed as masculine on the basis of the sex role inventory (regardless of actual sex) had higher scores for expressed control than those who were typed as feminine or as androgynous. On the other hand feminine individuals showed higher scores on the expressed and wanted affection scales than either masculine, or androgynous individuals. In a study (Meredith, 1976) examining the interaction of sex and race, Japanese American students in Hawaii were found to have higher control wanted scores than Caucasian American students, but the females of both racial groups scored higher than the males on the expressed affection scale.

The relevance of such findings to an understanding of the dynamics of student living groups is indicated by a study (Adinolfi, 1970) of friendship choice among freshman dormitory residents in which frequently chosen women were found to have significantly lower scores for expressed control than unpopular women, and frequently chosen men more often had high scores on expressed inclusion than their unpopular counterparts. The contribution of individual needs to the emotional climate of a group is further suggested by a study (Vraa, 1974) in which 7 female and 17 male graduate students were assigned to three discussion groups on the basis of their inclusion wanted scores (high, low, and mixed) and interaction analysis was used to rate the

levels of warmth, hostility, and flight behavior shown in each group. Over the course of eight sessions, the high inclusion group tended to show more warmth and fewer flight behaviors than the other two groups but also more open hostility.[11]

CONCLUSION: Despite some interrelationship of the need areas, the inclusion needs appears to be uniquely associated with valuing formal organization and purposeful involvement with others. Its expression tends to be seen as socially desirable for college males, and it may be important for the development of a supportive group climate. The control need appears to be specifically related to energetic activity and to a masculine self-identity, is less likely to be a associated with popularity for college females, and may be a source of difference in the interpersonal styles of students who vary in terms of cultural background. The need for affection is particularly related to an actively affectionate style that is more frequently adopted by feminine individuals. Taken as a whole these studies suggest that FIRO-B may be preferred over simple demographic data for measuring those individual differences that are potential determinants of living group satisfaction.

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[11] Since speaking time has been found to be positively correlated with expressed inclusion (Markel, Bein, Campbell & Shaw, 1976), competition for "air time" may have contributed to the hostility level in the high inclusion group.

MODEL OF STUDENT LIVING GROUP SATISFACTION

A substantial amount of research on college student living groups and on theoretical models of college student development has been surveyed. It therefore seems appropriate at this point to recapitulate the theoretical propositions and relevant research findings in the context of a proposed model for predicting student living group satisfaction (see fig. 12). Each component of the model is designated as an antecedent (A), an interaction (I), or a consequent (C) and given specific consideration in the following discussion, after which the preliminary research questions are formulated.

FAMILY BACKGROUND (A): Tinto's model is the only one that specifically included family background as a variable of interest, though presumably it is included in what others have labeled as characteristics of the entering student. While some research has dealt with social background as a group composition effect, the issue of whether individuals of certain backgrounds tend to be more easily satisfied with their living groups regardless of composition has not been investigated. The reported studies have also been silent on the subject of the family as a social setting that may predict adjustment to the college living group experience.

PREVIOUS SCHOOLING (A): The term previous schooling may be distinguished from what is referred to in Tinto's model as "pre-college schooling" in that the latter term suggests

immediately preceding as in the case of entering freshmen who have recently completed highschool, whereas "previous" conveys more of the range of possible time spans involved. It may be important to consider the possibility that students who have lived oncampus in the past, transfer students, and those who have worked or traveled before entering college will each have different bases for evaluating their living group experiences. Although two of the studies reviewed reported separate findings for first year and upper level students, neither examined sources of within group variability that may have reduced the apparent magnitude of the differences.

PERSONALITY ATTRIBUTES (A): This term is used as a variant of the category in Tinto's model called individual attributes in order to denote a focus on the interpersonal dimensions of the student's living group experience. The effects of personality attributes on satisfaction with the residential group have not been directly investigated, but certain types of individuals have been found to be more socially oriented than others and also much more inclined to continue affiliating with one another after living together for a period of time.

THE META-ENVIRONMENT (A): The term meta-environment will be used to refer to the wider social and political context including what Feldman's model described as the characteristics of the society in which the educational institu-

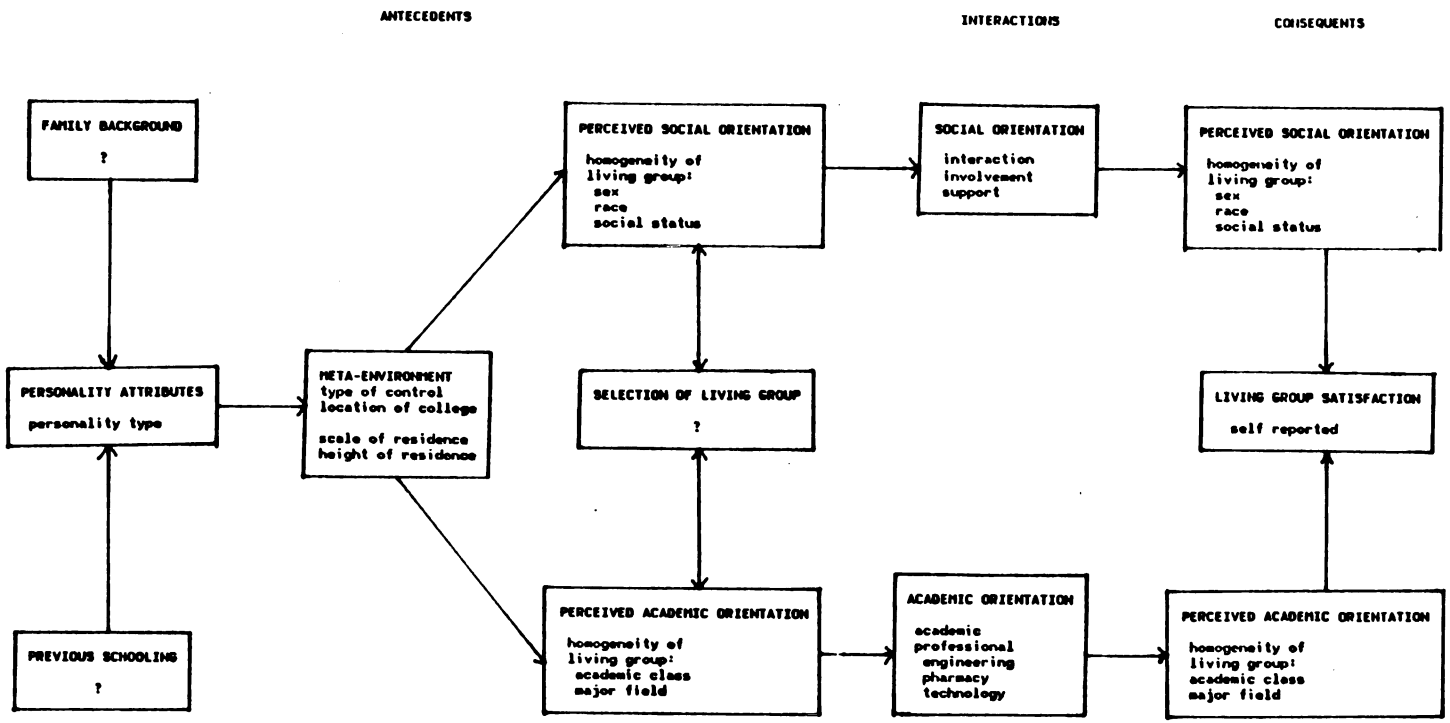

Figure 12. Factors Related to College Student Living Group Satisfaction (Literature Review)

tion is a subsystem or what Pervin (1967c) called the "real world." It also includes such characterisitics as the formal structure, overall climate, and demographic composition of the college. Since the proposed model deals with the subenvironment of the residential group rather than with the college or university as a whole, these variables will also be considered at the level of the living group. There is no clear evidence from the existing research about the extent of the influence that society may exert on college student living group satisfaction, but there is some indication that the existence of racial segregation as a broader social norm makes it difficult for some students to adjust to interracial living situations in college.

According to other studies, colleges or universities set in small towns are more likely to provide their students with satisfactory residential experiences than are those located in congested urban centers, private institutions are more likely to do so than public ones, and the size of the surrounding community appears to be more critical than the public-private variable. In terms of the living group environment, low level structures seem more conducive to satisfaction than high rise residential complexes, and small scale buildings to be more effective in this regard than larger ones, although criterion dimensions have not been specified. The possibility that support programs aimed at community building might be used to counter the adverse effects of oversized facilities has been suggested but has

not yet been adequately investigated.

PERCEIVED SOCIAL CLIMATE (A): None of the theoretical models reviewed has specifically considered the entering students perceptions of the institution's social climate, but it is reasonable to assume that this would be an important factor in later assessment of the living group experience. Tinto's concept of institutional commitment and Pervin's version of the person-environment fit come closest to articulating this factor, and it is implicit in repeated references in the literature to the fact that students seem to be attracted to schools and to residential situations on the basis of the images generally associated with them.

Presumably, all-female and coed living groups tend to have an image that attracts students who are interested in creating a supportive living environment and who will probably be more satisfied in such a setting. This may also be the case for some sororities and fraternities as well as for other groups that are relatively homogeneous in terms of personal background or social orientation. In addition, although researchers have yet to investigate the effects of disconfirmed expectations, there is some indication that students who find themselves living in an unexpectedly adverse situation may be inclined to evaluate it even more negatively than would otherwise be the case.

PERCEIVED ACADEMIC CLIMATE (A): The entering student's perceptions of the institution's academic climate are best

represented in what Tinto's model termed goal commitment, since other aspects of the institution's image have been found to be largely determined by the composition of the student body. Students who show a strong orientation toward the goal of academic or professional success may be more inclined to live with others in their major field of study or else with other academically oriented students, and such situations have been found to be more satisfying for those involved.

SELECTION OF LIVING GROUP (A): While choice of a certain type of living group is represented here as an antecedent to the interaction phase, it may also be seen as a consequent of the other antecedent factors. Both case material, and empirical research have shown self-selection to be an important variable in the residential experience and a potential determinant of its influence, but no effort has made to compare the outcomes of self-selected and assigned groups.

SOCIAL ORIENTATION (I): What Feldman's model described as the nature, frequency, and substance of interactions and individual experiences within college settings was more concisely represented in Tinto's model as the academic and social systems. The social system consisted of interactions with faculty as well as with members of the peer group, and to that may be added interactions with administration and staff. Living groups oriented toward involvement or toward

social support and those emphasizing traditional forms of interaction such as parties and dating have all been found to be more satisfactory for certain groups of students. Involving staff and/or faculty in the residential program also appears to contribute to student satisfaction.

ACADEMIC ORIENTATION (I): In Tinto's model, success in the academic system is defined in terms of both grade performance, and intellectual development. Likewise, the academic orientation of the living group may be reflected not only in support for course related activities, but also in fostering a broader perspective on life and personal experience. It has been shown that academic residential programs increase residential satisfaction for students in such fields as engineering, pharmacy, and technology, and that academically oriented students may be more satisfied when they live near other students who are similarly inclined. There is also some suggestion that these students are more socially oriented in such living situations than they might otherwise be.

PERCEIVED SOCIAL ORIENTATION (C): What Tinto's model represents as the resulting institutional commitment may be viewed as analogous to the perceptions of the living group's social orientation that a student develops as a consequence of the interactions that have occurred there. The initial assumptions that attracted the student to a particular living group may or may not have been confirmed with the pas-

sage of time, which should lead to a more informed set of attitudes and expectations in this area. According to the existing evidence, students will be more satisfied in groups where they can identify with the other members, but it is not clear that the areas of ultimate identification must be the same ones that were initially thought to be important.

PERCEIVED ACADEMIC ORIENTATION (C): The perception of the academic orientation of the living group that develops over the course of the year may be similarly related to what Tinto's model shows as the resulting goal commitment. Perceptions of the academic orientaion of living groups have most often been measured in studies evaluating academic residential programs. In one such study freshmen and upper level students were found to focus on different aspects of the same program in the yearend assessment, which suggests that their initial perceptions and expectations may have led the two groups to have different kinds of experiences in the program and therefore differences in their later perceptions.

LIVING GROUP SATISFACTION (C): Although living group satisfaction has been designated as the outcome of interest for this investigation, it should be remembered that most of the studies reviewed did not directly measure satisfaction. They did, however, measure responses to the social and/or organizational climate of the living group, which may be assumed to influence student satisfaction. Those studies

that actually included satisfaction as an outcome measure dealt with such factors as the structural aspects of the residential environment, special academic support programs, separate housing by academic class, separate housing by sex or racial group, and the influence of Greek letter societies.

PRELIMINARY RESEARCH QUESTIONS

This model of factors leading to student living group satisfaction provides an organizing framework for the findings that will be reported here. However, the actual investigation evolved more gradually than this formal presentation of the conceptual schema may suggest. Phase I of the research began with a preliminary study aimed at delineating the broader college environment and identifying factors related to student satisfaction there. The research questions addressed in that phase of study were as follows:

1.) How did the college residential community reflect the its metaenvironmentof the institution as a whole?

2.) How did the students living there view the residential community?

3.) How was a successful student living group defined by the students living there?

4.) What factors were generally related to satisfaction or

CHAPTER II: PRELIMINARY RESEARCH

PREVIOUS STUDIES OF THE RESEARCH SETTING

DESCRIPTION OF THE INSTITUTIONAL CONTEXT

ACADEMIC PROGRAM: The University of California consists of a statewide network of nine campuses, and the first six (Berkeley, Davis, Los Angeles, San Diego, San Francisco, and Santa Barbara) had already developed distinguished reputations for specialized research and graduate education when the other three (Irvine, Riverside, and Santa Cruz) were established in the 1960s as primarily undergraduate institutions. According to Gaff (1970) the cluster college approach has usually involved no more than two or three subcolleges established as part of an existing university campus, but UC Santa Cruz was uniquely planned to consist entirely of cluster colleges with an eventual goal of 20-30 such schools comprising the campus. Each of the colleges was to have its own separate staff and facilities, an interdisciplinary faculty, and a target population of 600-800 students (see: Ring, 1972).

Cowell was established in 1965 as a humanities college, Stevenson in 1966 as a social sciences college, Crown in 1967 as a natural sciences college, Merrill in 1968 as a college for third world and international studies, and a

fifth college was opened in 1969 for students of the arts[1] The original concept of UCSC as a collegiate university was inspired by the model used at Oxford and Cambridge and called for the colleges to provide substantial academic programs, so that students would use only laboratories and libraries on a campuswide basis. It had already become clear, however, by the end of the 1960s that the collegiate plan was too complicated and costly (see Trombley, 1970), and a more conventional form of organization had begun to emerge in which the boards of study and the academic divisions were chiefly responsible for approving course offerings and determining degree requirements.

Ring (1971) has compiled a list of various evaluation projects undertaken during the initial stages of UCSC's development. Included are academic planning statements of goals and purposes for the campus which indicate that by 1970 the academic primacy of the colleges had eroded to the point where even disciplinary themes were no longer favored, and for the first time faculty research was being given a higher priority. By contrast, an interview survey of key administrators and selected faculty and students that was conducted in 1970 showed all three of these groups advocating increased academic responsibility and a more individual

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[1] In 1982 this school was renamed Porter College, but it will be referred to here as College Five, which is how it was identified at the time of the dissertation research and is also the name used in the reports of earlier studies conducted at UCSC.

approach to the colleges. Factors mentioned in the same survey as constraints on the growth and development of the campus included: a.) poor communication among students, faculty, and staff; b.) the push toward centralization; reflected in the construction of campuswide academic facilities; c.) the colleges' lack of autonomy; d.) the resistance of natural science faculty to participation in college life; and e.) the overinvolvement of students in their peer culture. The students interviewed particularly emphasized the need for greater integration of the academic and residential programs.

RESIDENTIAL PROGRAM: UC Santa Cruz is located 75 miles south of the San Francisco Bay area on a 2,000 acre natural preserve overlooking the Monterey Bay. The town of Santa Cruz has a population of approximately 40,000, and, as a resort area, attracts a large number of tourists and temporary residents for the summer months. During the rest of the year, it tends to be a center for artists, musicians, professional psychics, and holistic health practitioners. In keeping with the general atmosphere of such a locale, the UCSC campus was designed to reflect a vigorous concern for the natural environment. Construction was planned so that as much as possible, the meadows and redwood forests would be kept intact and incorporated into the design (see: Gregory, 1979). The individuality and integrity of the colleges was also assured by a policy of separate architectural contracts that resulted in distinctively different designs

for each of the schools (see: Pastier, 1979a).

It was observed, however, in a national report on student housing produced by the Educational Facilities Laboratories ("Student housing," 1972) that the architecture appeared to be "oriented more toward the surrounding beauty of the countryside than the community spirit of the individual colleges" (p. 37), and it was suggested that the planners might have given more careful consideration to the type of students likely to be attracted to a highly innovative university. Students who lived at Cowell, Stevenson, and Crown were provided with two or three story dormitories called "houses" that had an average capacity of 50 students to a building, whereas Merrill and College Five were designed with four and five story residence halls that were considered high-rise by comparison and in some cases housed as many as 40 students on a "double loaded" corridor. Even the colleges with small scale structures had the regulation dorm rooms and "gang baths" typical of large public institutions, and students at each of the colleges were required to purchase food service along with their housing contracts.

The occupancy rate for UCSC's student housing declined from an average 98.8% for the 1965-66 school year to 86.4% for 1969-70, which was almost 10% below the anticipated rate and resulted in a serious financial deficit. A survey of the 1969 graduating class indicated that the most frequent reasons for leaving the residence halls were: the need to

get away from campus (18%); objection to university rules (17%); objection to using the food service (16%); the need to get away from dormitory noise (16%); and the desire to save money on living expenses (15%). Financial reasons were also given by a substantial proportion (18.6%) of the students requesting release from their housing contracts in 1968-69 and 1969-70, but the reason most frequently given was simply that they were unhappy living on campus (Ring, 1971).

STUDENT PROFILE: There is some evidence to suggest that the Santa Cruz image did initially attract a distinctive type of student. Heist and Bilorusky (1970) compared first year students entering UCSC's Stevenson College in 1966 with those who enrolled at UC Berkeley that year, and, although there were no striking intellectual differences between the two groups, certain personality differences were noted. The Santa Cruz students scored significantly higher on measures of altruism, were more "protest oriented," and were more concerned about selecting their own courses and being able to participate in academic policy matters. The reason most often given (84%) for attending Berkeley was its general academic orientation, whereas most (88%) of the Santa Cruz students said they were attracted to the idea of a closeknit college community, and academic reputation was the second most (74%) frequently given reason for attending the school.

Ring (1971) compared data for all Santa Cruz first year students entering between 1966 and 1969 with national norms derived from the American Council of Education (ACE) surveys and found Santa Cruz students to be well above average for each year in terms of academic preparation and interest in pursuing advanced degrees, but more of them were undecided about career objectives and fewer were concerned about achieving professional prominence or success in business. Ring also reports that a survey of seniors graduating in 1970 showed students at Cowell placing more emphasis on expertise and leadership than those at the other colleges; Crown students as more concerned about professional recognition; and Merrill students as primarily interested in achievement in the arts. On the campus as a whole, most students considered themselves above average in academic ability, political liberalism, and understanding of others.

Indepth interviews with 40 UCSC students conducted in 1972 led Grant and Riesman (1978b) to conclude that the school appealed to students who were intellectually able but seeking less competitive and less demanding career paths. The students were seen as reluctant to abandon the material comforts afforded by their parents' status and achievement but were also said to be ambivalent about "the value and costs of the achievement ethic." It is noted that in a survey of 1,143 alumni conducted in 1974, the largest number of respondents (72%) listed student friendships as the most important factor at the time they attended UCSC, and the

second largest number (67%) listed pass/fail grading and the narrative evaluation system. The atmosphere in the colleges was listed as important by almost half of the total respondent group and by 56% of those who had been affiliated with Cowell or Stevenson.

SUMMARY: The University of California at Santa Cruz began as an ambitious educational innovation that was to involve the creation of a system of small autonomous learning communities on the model of the elite British universities, but a rapid proliferation of new colleges without an effective means of coordinating their various programs had led to the de-emphasis of the collegiate model by the end of the 1960s. There were still, however, staunch supporters of the college system among UCSC's faculty and administration who urged instead a renewal of the campus' original commitment to residential education.

These individuals may have recognized that the bright, sensitive, noncompetitive students who had come to Santa Cruz looking for a sense of community were inclined to avoid institutional forms and procedures that seemed to be inconsistent with the experimental image of the campus. In any case, supporters of the college system pointed with some concern to the fact that, despite extensive efforts to create a highly stimulating academic environment at UCSC, former students still saw the peer culture as having provided their most important undergraduate experiences, and

this was a problem they sought to address with fuller integration of academic and residential life in the colleges.

DESCRIPTION OF THE RESEARCH SETTING

ACADEMIC PROGRAM: Kresge opened in 1970 as the sixth[2] liberal arts college on the Santa Cruz campus. It was specifically designed as a living learning experiment with a curriculum that emphasized the relationship between community development and the protection of the natural environment, and it began with an effort to create a college community that was both self determining and self sustaining. The founding faculty[3] wanted to establish a participatory democracy with consensual decision making and an egalitarian approach to the development of college policy in order to foster in students a strong sense of personal worth and social responsibility.

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[2] Two other colleges have since been established at UCSC. Oakes began in 1970 also but was formally opened in 1972. College Eight began in 1971 and has yet to obtain its own physical plant.

[3] According to Grant and Riesman (1978a), the Kresge founding faculty consisted of: Dr. Robert Edgar, a microbiologist who was the college's first provost; Dr. Michael Kahn, a clinical psychologist and avid student of comparative literature; Dr. Henry Hilgard, a biologist specializing in medical research; Dr. Matthew Sands, a physicist and former vice chancellor for the sciences at UCSC; Dr. Carol Proudfoot, a clinical psychologist and student of ethics with a background in social activism; and William Everson, a gifted poet and former Dominican monk.

An interdisciplinary core course was developed with the title "Man and His Environment," and it involved a combination of multimedia presentations, lectures, group discussions, and student projects. Collaboration between natural and social scientists was also an important theme in the course, and the notion that saving the environment would require new modes of human relationship was a fundamental premise that permeated the entire program of the college. Humanistic approaches to the solution of social problems tended to be favored, and there was a prevailing emphasis on the psychological processes that occur in groups (see Kahn, 1981b).

Kresge's governing structures were largely inspired by the theory and method of applied behavioral science developed at NTL Institute.[4] Sensitivity training groups similar to the ones conducted at NTL were used to enhance interpersonal awareness and communication skills, and a system of faculty sponsored kingroups, which served as a community mental health program for what were presumed to be well functioning individuals was devised as a means of unifying the academic and social systems of the college (see Kahn & Kroeber, Note 1). Considerable attention was also

[4] NTL Institute was established in 1946 as the National Training Laboratories and was originally part of the National Education Association, but by the 1960s it had become a private training organization with an internationally known professional development program and a large clientele from business and industry as well as from government and social service agencies (see Lubin & Eddy, 1972).

given to the needs of the self directed learner and a conscientious respect for individuality and diversity of opinion was reflected in the college's staunch commitment to consensual decision making.

In the fall of 1971 Kresge's enrollment increased from 40 students participating in a " Creating the College" course to a total of 275 students, most of whom were assigned to the newly opened residential facilities with little knowledge of the college's innovative program. In fall 1972 the enrollment nearly doubled, and by the fall of 1973 there were a total of 590 students affiliated with Kresge, although only 282 of them lived on campus. The college's Community Affairs Committee (CAC) had begun by holding open sessions that drew 20-35 students each week, but there were only about 8 in the stable group that attended regularly. By spring 1973 the frustration of trying to use a consensual process with a dropin membership had led to a policy of limiting the decision making group to no more than 15 individuals who would self-select at the beginning of each quarter and make a commitment to attend all meetings for that ten week period (Slater, Note 2).

There was some protest from feminists in the college over the title of the core course, and by 1976 it had been changed to "Our Human Environment." The course was otherwise well received and the multimedia presentations were particularly successful. However, the time and energy

required to produce it eventually proved prohibitive for the original developers, and other faculty were generally unwilling to become involved in such a demanding project. Many of the faculty had also found themselves unsuited by training and/or inclination for the task of facilitating the kin-groups and t-groups[5] that were initially required, and some became annoyed and embarrassed by Kresge's image as a "touchy-feely" college. Furthermore, the growing pressure to publish and maintain closer connections with their disciplines tended to greatly reduce the commitment of faculty members to the college (see Grant & Riesman, 1978a; Kahn, 1981a).

There were also protests from ethnic minority group members and others who objected to what they viewed as a synthetic and coercive approach to community building and favored instead a more natural process of evolution for the college. It was partially in response to such criticisms that Kresge began in the spring of 1974 to develop a program of courses that was increasingly diversified and included such areas as communications media, Native American studies, and women's studies. Starting in the fall of 1974, the personal growth and community building program was offered on an elective basis only in what was termed the "Corner of the

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[5] The terms t-group, sensitivity training group, and encounter group have been used interchangeably in most accounts of the original Kresge program. Historically, however, they have represented distinct types of group experience (see Kahn, 1981c; Schutz, 1973).

College," with about 60 students and 6 faculty and staff involved. Despite attempts to diversify the curriculum, and despite the fact that Kresge's first provost had made considerable effort to maintain a working distinction between the concept of intimacy and that of community, the image of the intimate community that became associated with the college in its formative stages continued to be a major part of it's campuswide reputation (see Kahn, 1981a).

RESIDENTIAL PROGRAM: Kresge College was designed by the San Francisco based architectural firm of Moore and Turnbull in the style of a Mediterranean village with a long winding central street lined on either side by two story apartment blocks constructed on different angles and levels to avoid any suggestion of regimented uniformity (see: Bloomer & Moore, 1977; Lym, 1980; Pastier, 1979b). When they were first built, the residential facilities were expected to house 320 students with most living in eight person suites that consisted of four single and two double rooms and a small lounge, all opening into a large, institutional style bath. The others were to live in four person flats or eight person octets that had open sleeping areas and residential style kitchens and bathrooms.

All of the apartments were equipped with light weight modular furnishings, and students were permitted to paint and decorate their rooms, to construct lofts, staircases, and interior walls, and to otherwise alter the space in ways

that met their needs for privacy or personal expression. Clearly the residential facilities at Kresge were designed with the express intention of satisfying students. Those who didn't like the food service or wanted to save money by preparing their own meals could live in the kitchen equipped flats and octets. Individuals who wanted more privacy could opt for a single room in a suite, and those who wanted more communalism could choose to share their sleeping area with as few as one or as many as seven other people.

The new design may have satisfied more of the students' needs than the other types of oncampus housing, but the presence of clearly visible alternatives also tended to generate new sources of discontent. Most of the students assigned to suites objected to using the campus food service when they saw students in nearby flats or octets reaping the benefits of having their own kitchens. The small lounge areas were soon converted into kitchens by adding refrigerators, stoves, and suitable furniture.[6] The open sleeping areas proved unacceptable for many of the people living in flats, and the separating structures that were devised frequently failed to pass local building inspection codes. Eventually standard dividing walls were constructed in each of the flats making the one large sleeping area into two

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[6] In later years students were to complain that these tiny kitchens were overcrowded with the result that a wall was removed in some of the suites converting one of the single rooms into part of the kitchen/living area.

double bedrooms. Likewise, residents found the eight person open plan units impossible to negotiate, so the number of students assigned to them had to be reduced to six, changing them to sextets.[7]

When Kresge's facilities were opened in January of 1972 they included a town hall for community meetings; a delicatessan and laundromat that were commercially operated, and a recreational complex with sauna, racquetball court, and game room that the college's students could use free of charge. The idea was to provide the kind of amenities students might find in a private apartment complex offcampus. By spring of 1973, however, the deli had been replaced with the student-run Idler Cafe and the Kresge Food Coop, which students owned and operated. The sauna had been quite well received by students, but the residential staff housed nearby often complained about the noise of late night parties, and there were structural problems that eventually required that it be closed[8] The noise level of the recreational and residential areas also made it difficult at times for faculty conducting classes in the college.

STUDENT PROFILE: Given Kresge's original emphasis on individuality and diversity of expression and the fact that the college has always attracted a large proportion of

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[7] Guddemi (Note 3) has provided a rich and detailed account of the living group culture of the sextets.

[8] By the fall of 1977 the sauna was no longer operational and had become a source of sporadic complaint from students who wanted the facility reopened.

students who knew nothing about it's academic programs but wanted an alternative to dormitory living, there is probably little validity in the notion of a typical Kresge student. Accounts of the college's history and development (e.g. Coles, 1978; Grant & Riesman, 1978a; Kahn, 1981a; Lym, 1980) have referred to a stereotypical image of countercultural self-indulgence and academic irresponsibility, but there have also been indications that Kresge students were not appreciably different from those at other UCSC colleges.[9]

During the fall of 1976, a group of seven students at Kresge conducted an interview survey of the college's entire residential community that focused on educational values and life objectives. According to the survey summary (Friedman, Note 4), most of the estimated 250 students who were interviewed placed considerable importance on strong working relationships and on making a contribution to society, but they also expressed concern about developing their individual abilities. Most respondents admitted that coming to school was not so much a matter of getting an education as it was a means of getting away from home; meeting parental expectations; proving intellectual worth establishing independence; avoiding responsibility; meeting marriage or sexual partners; or just being able to have fun for a while.

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[9] It is interesting to note that students at other living learning colleges have been similarly characterized, but usually not in such perjorative terms (see Leean & Miller, 1981; Lyon, 1979, Magnarella 1975; 1979; Thompson, 1973).

Page (Note 5) used selected mental health indicators to compare a sample of 57 (26 male and 31 female) students who had been living at Kresge for at least a year in spring 1977 with 45 (22 male and 23 female) students who had been living at Crown and 50 (18 male and 32 female) students who had been living at College Five. The Kresge students were found to be no more cooperative and no less competitive than the ones at the other colleges. They showed no lower incidence of interpersonal stress and no fewer psychological crises, and they were no more likely to perceive the college as facilitating their personal growth or their interpersonal goals. They were also no more satisfied with their college experience. However, the Kresge students did perceive themselves as being less alienated from their college's environment and reported more self disclosure to others in the college than did students at Crown or Five.

SUMMARY: Kresge College began in 1970 as UCSC's most radical experiment in undergraduate education with what were termed "apartment style dormitories" and recreational facilities built in close proximity to classrooms and faculty offices. Faculty members were also assigned to work closely with student residential groups throughout the school year, and an interdisciplinary core course was created through the cooperation of faculty in the natural and social sciences. The course encouraged new ways of thinking about the relationship of community to environment and used the daily experiences of individuals living and working together in

the college as a laboratory for social learning.

Organizational problems soon emerged, however, as the college's enrollment rapidly expanded during the first three years of operation, and the Kresge community was led to a major reassessment of it's original orientation. For a while the Corner program continued as a special effort on the part of some of the faculty to provide a setting in which personal growth and interpersonal relationship were still highly valued. Despite the various curricular changes, Kresge's anti-intellectual image continued to be a source of of unfavorable comment. However, its students appeared to be quite similar to others at UCSC in their strong orientation toward the peer group and their insistence on personal expression as an important part of the educational experience.

RESIDENTIAL SURVEY - WINTER 1978

Purpose of the Winter 1978 Survey

The dissertation research project evolved as an effort to more carefully assess the impact of this innovative residential community on the students living there. The importance of the living group as a focus of study was not immediately evident when approaching the college from the more curriculum oriented perspective suggested by the accounts of its development and by the prevailing concerns

of the faculty and staff then affiliated with the school. Still, the results of these preliminary studies are included here, because they contributed in major ways to the development of the method that was subsequently used for the dissertation research.

During the academic year 1977-78, the author undertook a survey of Kresge's student residential community as part of a one year community consulting internship that was offered under the auspices of the provost's office. The internship involved developing an analysis of the college's political structure with particular emphasis on the role played by students in governing and maintaining the community, and the survey was aimed at assessing student opinion in this area. Morale had become a major problem in the residential community and in the college overall as faculty began to more clearly establish allegiances and affiliations elsewhere. Kresge's second provost[10] took office in the fall of 1975, and that was also the last year that the Corner program was offered for students who wanted to learn about community building. With the supportive presence of the Corner faculty withdrawn, the Community Assistants (CA) program had also begun to decline, and in the spring of

[10] This was Dr. May Diaz, an anthropologist and administrator who had started the Women's Reentry Program at Berkeley before coming to UCSC. Grant and Riesman (1978a) have suggested that the simultaneous appointment of Dr. Elliot Aronson, a prominent social psychologist and member of NTL, was intended as a concession to the Corner faculty, but by 1977-78 Women's Studies was the only program still visible in the college.

1977, the coordinator who had worked with the program since its inception had resigned as well.[11]

At the beginning of fall quarter 1977, the student occupancy rate at Kresge was only about 85% of capacity, and less than half of these (41%) were students who had lived at the college the previous spring. The Kresge administration seemed to feel that without the involvement of faculty and staff who were committed to the concept of a self sustaining community, the large number of new and uninformed students would make it virtually impossible to maintain a participatory approach to the school's policy making. It was further assumed that most students were not really interested in becoming involved with the college, since few had expressed a willingness to serve on the Community Affairs Committee (CAC) for the fall quarter, and six of the nine who did self-select for the committee were CAs who tended to consider CAC membership as part of their jobs.

The issue of student empowerment was frequently broached during the fall quarter CAC meetings, and members of the committee often expressed concern over the fact that they were not a representative body and did not have sufficient information to judge the needs and preferences of the other students in the college. Residents said their opportunities for interaction with individuals outside their

[11] This was Parker Page, who had first come to Kresge in 1973 to do a doctoral internship in clinical consulting psychology.

immediate households were limited by the apartment style living arrangements, and offcampus students complained of being particularly isolated, because they had so little opportunity to meet and socialize with other people in the college. Even the CAs, who had occasion to make contact with students in their assigned living areas, tended to express a need for more communication with the residential community as a whole (see Floyd, Note 6).

Method of the Winter 1978 Survey

Respondent Group for the 1978 Survey

All of the 261 undergraduate students who were living at Kresge during the winter quarter 1978 were approached in their residences and asked to participate in an open ended interview about the college. A total of 258 (134 males and 127 females) agreed to respond to the protocol questions. Two of the other three students were willing to talk informally about their experiences in the college, and one student was unwilling to talk at all. Only the information provided in response to the interview protocol was recorded for analysis. The respondent group was observed to be predominantly White with an estimated 5% who were Asian, Black, or of Latin extraction.

Procedure Used in the 1978 Survey

The author, who is a Black female and was 31 years old at the time of the survey, conducted all of the interviews. The interview protocol consisted of eight questions that were used to prompt discussion of: 1.) decision making processes at Kresge; 2.) the desirability of a communitarian emphasis for the college; and 3.) Whether it Was seen as being a therapeutic community.[12] These three issues were selected because they represented aspects of the original college program that had neither been specifically endorsed by the college's current administration, nor clearly repudiated. As such these issues tended to give rise to confusion and miscommunication throughout the college, and it was expected that this would also be evident in the responses students gave to these interview questions.

The length of the interview varied from about 3 minutes to as much as 3 hours, but the average session lasted 20 or 30 minutes. Most of the interviews were conducted in the bedroom or living area of the student's apartment depending on the time of day or evening that they occurred. Since the sessions were not prearranged, and it was difficult to know when a particular student would be available, regular rounds were made in the residential community between 4 p.m. and midnight from Sunday to Thursday throughout the winter

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[12] The instruments and procedures used in the dissertation research were approved by the Human Subjects Committee at the UC Santa Cruz campus. Copies of this interview protocol and of instruments used in subsequent phases of the research will be found in the Appendix.

quarter. As a result, residents became very familiar with the project and comfortable with the researcher's presence, and the tone of the interviews tended to be quite open and relaxed.

Results of the Winter 1978 Survey

Decision Making Processes

Although a substantial majority (91%) of the students who responded indicated that they believed the whole college community (students, faculty, and administration) should be involved in defining the direction or revising the structure of the college, a much smaller proportion (57%) favored the use of participatory democracy as a decision making process. In addition almost half of those who did thought it should involve some type of representation or self-selection. Concern was often expressed that participatory democracy might be ineffective, and some people said they would start with full participation as the first stage and then reduce it to a representative group for more detailed work on issues, whereas someone else noted that it might work better to have a small committee prepare issues for the full community meeting. The source of this widespread reluctance to commit to a process of full participation was probably best expressed by the respondent who noted that one's power to change the college was "limited by the larger superstructure

and our past prgramming" and then went on to say it would also take more commitment to running the college than students could afford.

Communitarian Emphasis

A relatively large majority (83%) of the students who responded said that they favored Kresge having an academic emphasis that included courses on various aspects of communal living and provided credit for students who were involved in maintaining the college as a community. However, there were relatively few (37%) who expressed a personal desire to be more involved in the Kresge community. In part, this may be attributed to the fact that although there were only 32 reports of involvement in official governing committees,[13] and these represented multiple activities listed by about a third as many individuals, there were 338 reported involvements in other areas of community service. In some cases these were also multiple involvements, but that figure still accounted for over half of the college's oncampus students. Many of those who declined more involvement may therefore have been saying that they were already quite active in the college community.

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[13] In addition to serving on the Community Affairs Committee (CAC) and its various subcommittees, students were also serving as members of the Academic Affairs Committee (AAC) and on the college's Judicial Committee.

Therapeutic Community

More than half (56%) of the students who responded said that they felt Kresge should be a place where individuals in crisis would be supported while working on personal or relationship problems, and, while not as many (37%) viewed it as being such a place already, a sizable number (26%) were equivocal in their response with such statements as "it is somewhat;" "it can be for some people;" "it is for me but not for other people;" "it is for other people, but not for me;" "yes and no;" "in some ways it's therapeutic, and in some ways it's the opposite of therapeutic--emotionally damaging." Comments were also frequently made about the potential benefits and/or the psychological stresses of living so closely with such a large number of people, and some of the respondents felt there should be more effective support services to help in dealing with the problems that were encountered, whereas others specifically objected to the idea of providing a therapeutic program for everyone in the residential community.

Discussion of the Winter 1978 Survey Results

Interpretation of the Findings

The results of this survey tended to suggest a pattern of discrepancy between desired options and intended actions for a number of students who felt they should have the right

to participate in governing the college without having the responsibility to do so, and, like the faculty, many of them seemed to be struggling with the problem of divided allegiance. Those students who seemed to be clearest about their academic priorities were also most likely to dismiss involvement in the college as impractical and time consuming. On the other hand, students who were very active in the college often expressed resentment of those who simply wanted a convenient place to eat, sleep, and study, since they were unwilling to support the community in the ways that seemed necessary to keep it alive.

This feeling was particularly strong on the part of students who served on CAC or other such committees requiring long hours of tedious meetings to make difficult decisions about the allocation of funds or the adoption of policies for the residential community as a whole. As they saw it, they were the loyal few supporting the college single handedly only to have their efforts repeatedly challenged, criticized, or ignored by other students who had not even bothered to participate. From the perspective of the absent majority, however, they too were contributing to the life of the college in various ways, and they tended to see its formal governing processes as being too remote and institutionalized to warrant much of their attention. In fact, the interview results served to highlight a fundamental communications problem in the college that was structurally reinforced by its physical design.

An Ecological Perspective

The problem may be graphically represented using the data on community involvement obtained in the survey as the basis of an ecological analysis of the type shown in Barker (1968). When the synomorphic structure of the college is represented in terms of the estimated occurrences (O), estimated duration (D), and estimated population (P).[14] there appear to have been a total of 9 behavior settings in which 2% or more of the residential students were regularly involved. Most of these, including the Kresge Food Coop, the Idler Cafe, and the Music Coop were located near the Town Hall at the upper end of the main street and totally out of view of the college offices on the lower street where committee meetings were generally held. These offices operated between 8 a.m. and 5 p.m. on weekdays, so meetings were rarely scheduled at other times, whereas the services at the other end of the street were in use in the afternoon and evening hours and often required weekend workers (see fig. 13).

There were only 15 reports of residential student involvement in college classes, and 8 of these were of membership in the women's studies collective. With one exception (teaching assistant for a Kresge course), the oth-

[14] These estimates were based on participant observation of the college residential community during winter quarter 1978 as well as on the results of the survey.

ers all seemed to be independent study arrangements. It therefore appears that relatively few of the students living at Kresge were also taking courses in the college and it seems likely that most were away from the residential community during the workday hours. As a result, they probably had more exposure to the upper street activities where large numbers of students were visibly involved in providing various kinds of services. Thus the governing committees and the remainder of the student residential community held polar perceptions of the college that corresponded to the physical polarity of the lower and upper streets.

It also emerged from the interviewing process that the living areas were actually the settings in which residents invested the greatest proportion of their time and energy at Kresge. The significance of this investment became increasingly evident as residents repeatedly gave indications of being so absorbed in problems related to group living that they had little or no sense of the college beyond their immediate households. Given that this was the case, it is perhaps understandable understandable that such a large proportion of these individuals were concerned about communal living and about the need for therapeutic community.

While the college had originally been intended to offer students the advantages of a smaller and potentially more intimate subenvironment within the context of the larger university, the design of its facilities tended to focus

(O) Estimated Occurance (total days/quarter)
(D) Estimated Duration (total hours/quarter)
(P) Estimated Population (total residential student involvements)

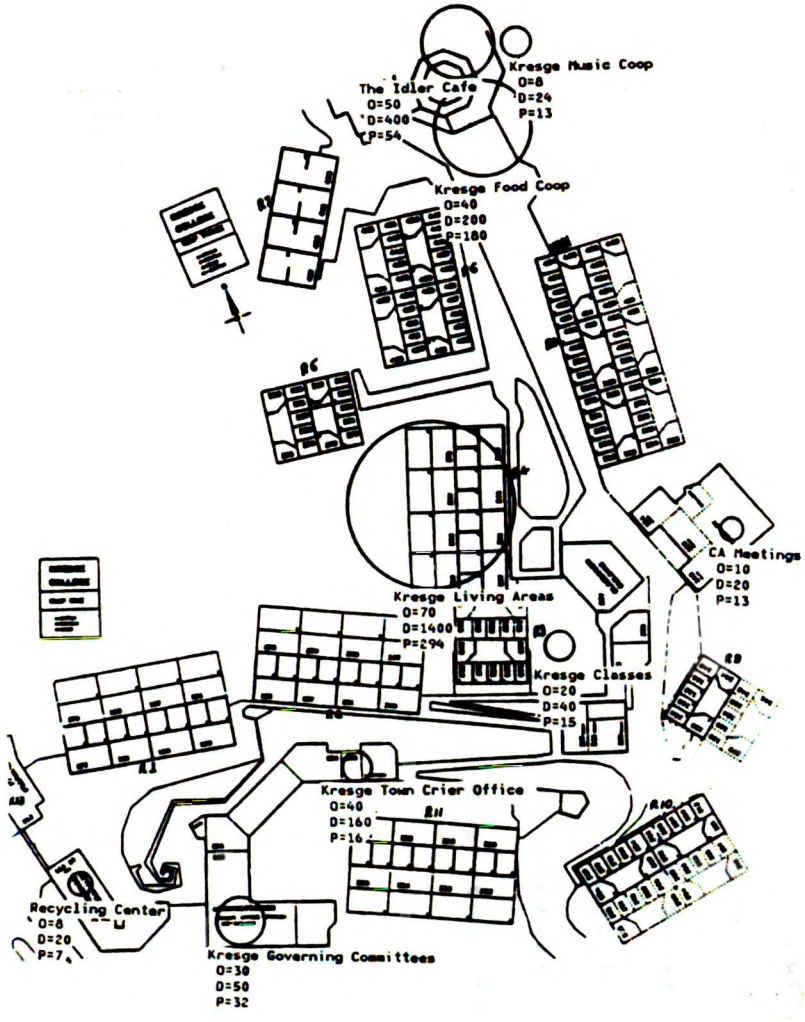

Figure 13. Behavior Setting Structure of Kresge College (Winter 1978)

their attention and energies into the still smaller subenvironment of the living group. It therefore seemed likely that any study of student adjustment in this residential community would benefit from careful attention to the living groups and to the factors associated with their perceived success. It was for this reason that student living group satisfaction became the outcome of interest in subsequent phases of the research.

Expected Findings for the Baseline Study

Although the questionnaire survey that was conducted during spring quarter 1979 was more quantitative in approach, it was still somewhat exploratory, and formal hypotheses would have been premature. The findings from the 1978 interview survey as well as participant observation of the residential community did, however, suggest that the following relationships would be found when the data was analyzed:

1.) Residents' perceptions of the college would be consistent with their attitudes toward group living (e.g. those students who valued a socially oriented household would also give social reasons for living at the college);

2.) Interpersonal orientations would be better predictors

of student satisfaction with the living group than demographic characteristics, perceptions of the college, or attitudes toward group living; and

3.) The stability of the living group as measured by the tendency of its members to stay together throughout the school year would provide a more indirect measure of response to the living group that was generally consistent with reported satisfaction.

CHAPTER III: THE BASELINE STUDY

RESIDENTIAL SURVEY - SPRING 1979

Purpose of the Spring 1979 Survey

As a solution to the administrative problems that had resulted from the complexity of its original collegiate design, it was decided that UC Santa Cruz would undergo a campuswide reorganization at the end of the 1978-79 academic year, and that the colleges would be officially deemphasized in favor of the boards of study and the academic divisions. In January of 1979, a special committee of faculty, staff, and students was appointed to consider the impact that the reorganization was likely to have on student life and housing. In March the committee submitted its final report to the campus community noting that the colleges were vital centers of student growth and should be strengthened rather than weakened ("Reorganization," Note 7). The report also stressed the importance of determining those aspects of the college experience that "students found to be essential and most satisfying."

Since Kresge's provost had also announced that her term of service would end in June of that year, it seemed likely that the college would be subject to a major revision of its academic and residential programs at that time. The recommendations of the reorganization committee on student life

were therefore particularly relevant to the situation at Kresge and provided some of the impetus for developing the dissertation research there. The author had returned to the Kresge residential community at the beginning of winter quarter 1979, six months after having completed a community consulting internship there, and was living in a suite with five other graduate students while working as a teaching assistant for the Psychology Board.

During the winter quarter, a set of questionnaires was developed for the express purpose of investigating factors related to student living group satisfaction at Kresge and was pretested on undergraduate psychology students. After conducting an exploratory pilot study early in spring quarter, the author undertook a second collegewide survey of the residential community in order to obtain the data for correlational analyses of variables that were expected to show some relationship to living group satisfaction. It was also expected that the pilot and survey studies would provide a basis for developing a living learning and for testing the extent to which the same factors were related to satisfaction with group living in that context.

Method of the Spring 1979 Survey

Respondent Groups for the 1979 Survey

Pilot group: During the first week of spring quarter

1979 six Kresge households that had remained largely intact over the course of the school year were identified, and each was found to be a four person group living in a flat. Three of these groups had kept the same composition since the fall quarter, and two of them had replaced a single member. The other group had two of its original members and two members who had lived there since the beginning of winter quarter. This group was included primarily because it was the only coed group to stay together for so long. Two of the groups that had remained totally intact were all female households, and one was a household of males. One of the groups that had replaced a single member was all female and the other was all male.

The members of each group were approached individually in their residences and asked to participate in what was described as a pilot study for later research. It was indicated that the pilot study would involve meeting individually with the author for a one hour session during which they would be asked to respond to a series of questions about group living and about their personal backgrounds. They were also told that their groups were of special interest because they had remained together longer than most other households in the college. All 24 (14 female and 10 male) students agreed to participate in the procedure and did so. This will be referred to as the pilot group.

Survey group: Later that quarter approximately 160

other students were approached in their residences and asked to attend a one hour group session in order to complete a set of questionnaires dealing with attitudes and behaviors related to group living. These were all of the residents who could be contacted with repeated callbacks at various times of day and night rather than a true random sample, since the entire population of students residing at the college was of interest in this exploratory study. It was also seen as desirable to obtain as large a number of cases as possible in order to enhance the statistical power of the tests that would be used to analyze the data. A total of 153 (82 female and 70 male) students said they would participate when contacted, and 123 (66 female and 56 students male) actually came to a session and completed the set of questionnaires. This will be referred to as the survey group.

Shortform group: As a check on sample bias, additional efforts were made to contact individuals who had not been reached previously and to recontact those who had refused to come to a session or had failed to come after agreeing to participate. Approximately 47 students were contacted, and each was asked at that time to complete a short version of the survey. The 26 (17 males and 9 females) who were willing to complete this abbreviated questionnaire will be referred to as the shortform group. The total number of respondents in the three groups was 173 (89 females and 83 males),[1] or 83% of the estimated 212 Kresge students then

[1] One respondent did not indicate sex.

living oncampus.

Instruments Used in the 1979 Survey

Four paper-and-pencil measures were used to obtain data for correlational analysis. In addition to the Fundamental Interpersonal Orientations-Behavior (FIRO-B) scale and the Perception of Parents (POP) rater, there were two other measures developed expressly for use in the study. These were the Living Group Questionnaire (LGQ) and the Kresge Residents Survey (KRS). There was some variation in the method of administering these instruments to the three groups, which will be described in the section on procedures, however, the specific items included in each instrument were the same for all respondents.

Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B): This scale was developed by Schutz (1966;1967) as a measure of interpersonal orientation based on self reported behaviors in the three need areas of inclusion, affection, and control. There are scales for the expressed and wanted dimension of each behavior area and these six subscales are termed expressed inclusion (IE), wanted inclusion (IW), expressed control (CE), wanted control (CW), expressed affection (AE), and wanted affection (AW). The following are sample items from each of these subscales:

IE1. I try to be with other people (how often?)

IW1. I like people to include me in their activities (how often?)

CE1. I try to be the dominant person when I am with people (how often?)

CW1. I let other people decide what to do (how often?)

AE1. I try to be friendly to other people (how many people?)

AW1. I like people to act friendly to me (how often?)

Each item is followed by a set of six response alternatives ranging from "most people" to "nobody" or from "usually" to "never." Each of the six subscales is scored separately and consists of nine items arranged in a Guttman scale.

The theoretical and empirical derivation of the FIRO-B was given detailed consideration in chapter 1 along with a review of the relevant personality and small group research that has been conducted with college students using using the scales. The discussion that follows will therefore be limited to consideration of those studies that may have methodological implications for the current use and interpretation of the FIRO-B.

The construct validity of FIRO-B has been tested by three different studies (Froehle, 1970; Gluck, 1979; Kramer,

1967) in which subjects were asked to estimate their scores after completing the scales. Kramer reported rank order correlations ranging from r=.33 for the IE scale to r=.83 for the IW scale. Froehle was only able to replicate for the CE scale (r=.49), but Gluck obtained correlations that ranged from r=.87 for the CW scale to r=.95 for the AE scale. Williams (1977) used 135 University of Northern Colorado students to cross validate the FIRO-B with the 18 scales of the California Psychological Inventory (CPI) and found a number of significant and positive correlations between the two instruments for both pre-treatment and post-treatment measures.

Schutz (1966) has reported a mean reproducibility coefficient of r=.94 for the subscales and a test-retest coefficient with a mean value of r=.76 using students who were Harvard undergraduates. Gilligan (1973) reported norms and a mean reliability coefficient of r=.69 for undergraduates at the University of Idaho, and Goodman (1971) has confirmed Schutz's (1966) finding that 70% of those with high scores fall in the same position when retested, while 50% of those in the middle remain the same. The fact that student and young adult populations have been used extensively in the development and testing of FIRO-B and that there has been considerable research using it as a measure of personal development or interpersonal compatibility was the basis of its selection for use in the dissertation research.

Perception of Parents (POP): This rating scale was also developed by Schutz (1966) and had been primarily used to test his postulate of relational continuity according to which an individual's interpersonal behavior is expected to be similar to the behavior experienced in childhood family relations. The POP rater consists of paired descriptions of three distinct aspects of parental behavior, which are attention, discipline, and warmth. The first two passages refer to parental attention and begin as follows:

> P1. In my home my parents spent relatively little time interacting with me...
>
> P2. In my home my parents centered their attention around me...

Respondents are asked to indicate on a six point scale which of the two descriptions comes closer to accurately representing their family experiences as they recall them. There are six paragraphs in all and each pair is scored separately.

Schutz (1966) reported finding a consistently positive relationship between scores on the POP and an earlier form of FIRO-B that was called FIRO2 and specifically dealt with behavior in group situations. Respondents who scored high on participation also tended to have high scores on parental attention; those who scored high on autocratic behavior more often showed high scores on parental discipline as well; and

those who scored high on personal closeness were also high scorers on parental warmth. Such an instrument seemed likely to provide a personality based measure of family background that would not only show significant relationship to interpersonal orientation, but might also serve as a useful predictor of the individual's satisfaction with the living group. For this reason, and because it represented a more global measure and yet was still readily quantifiable, the POP was selected for use in the dissertation research.

Living Group Questionnaire (LGQ): This questionnaire consisted of a list of 25 items that were derived from individual interviews with 10 (6 female and 4 male) Kresge students who were employed part time by the college as residential community assistants (CAs). The interviews were conducted during winter quarter 1979, and also represented a partial followup on the previous year's survey, since all but one of the students had participated in the earlier study.[2] On the basis of their involvement with the individuals in their buildings and using their own experience as residents, the CAs were asked to indicate what they saw as key factors in the success or failure of Kresge living groups. The most frequently mentioned items and those that were given considerable emphasis by one or two respondents were included in the questionnaire.

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[2] These interviews and all of the procedures described in the remainder of the dissertation were conducted solely by the author.

Respondents were asked to indicate on a six point scale how important it was for them to live with various types of people. The following are sample items from the LGQ:

L1. People who observe the same dietary practices as you do?

L5. People who observe personal space and/or privacy rules?

L10. People who accept singing and/or dancing in common living areas?

L17. People who are all the same sex?

It was expected that initial administrations of the questionnaire would provide a test of agreement between the CAs observations and the self reported attitudes of the student residential community.

Kresge Residents Survey (KRS): This brief survey instrument originally consisted of a checklist of ten reasons for living at Kresge and was obtained from the winter 1978 survey in which the 215 students who said they favored a communitarian emphasis for the college were asked to indicate why that was the case. Perusal of their responses had yielded several frequently mentioned statements about the advantages of such a residential setting. The following are examples of items from the KRS:

K1. Living at Kresge provides a rare opportunity for

communal living in this society.

K4. Living at Kresge makes it easier to form close relationships?

K9. Living at Kresge is a good way to avoid using the food service?

In its final form the KRS also included demographic items and questions about the respondent's living group history including the following two items:

How satisfied are you with your current living group? (SC)

How happy are you with your current living group? (HC)

Each of these was to be answered on a six point scale ranging from "very satisfied" to "not at all satisfied" and "very happy" to "not at all happy."

Pretesting the instruments: The FIRO-B, LGQ, and POP were pretested on 19 students recruited from a large undergraduate course in human experimental psychology that was taught at UCSC during winter quarter 1979. A Q-sort technique using color coded cards for each of the instruments was developed by the author as a means of administering them individually in order to allow observation of response patterns. Most individuals found the items on LGQ easier to interpret than those on the the FIRO-B, and comments were frequently made to the effect that it was difficult to fit

their experiences into the POP passages that referred to patterns of discipline. It was noted, however, that everyone was able to complete the procedure with a reasonable amount of speed and no apparent discomfort.

Procedures Used in the 1979 Survey

Pilot Group: A one hour session was conducted with each of the pilot group students in a faculty office located in the college administration building at the lower end of the Kresge street. They were asked to complete the LGQ, the FIRO-B and the POP using the Q-sort technique that had been developed for pre-testing the instruments. Individuals were then asked to do a personal rank ordering of the ten items in the KRS and to project how the community as a whole would rank order the same items. During the remainder of the session they were asked to talk about their family relations and about the dynamics of their living groups. The session ended with a series of demographic questions and a request for feedback about the procedure. The comments were generally positive, but it was noted that some respondents had had strong emotional reactions to the POP, which tended to facilitate discussion of the family background but suggested that it might be an inappropriate instrument for large group administration. It was therefore omitted from the survey group procedure. Each resident was paid $2.00 an hour for participating in the pilot study.[3]

Survey group: Paper-and-pencil questionnaires were given to groups of approximately 20-25 students at a time in a small classroom located in the center of the college residential community. The author began each session by explaining the purpose of the study and the source and nature of the questions that would be asked. The LGQ was administered first, followed by the FIRO-B and then the KRS. The items on each instrument were read aloud at a moderately slow pace and clarification of the intent or wording of items was provided if requested. There were, however, few questions or requests for clarification. When all of the items had been read and everyone in the group had completed the questionnaires, they were collected. Payment forms were then circulated and before leaving each person was paid $2.00 for having participated in the study.[4] Each of the sessions lasted an hour, and a total of six sessions were held during the last two weeks of the quarter prior to the start of final examinations.

Shortform group: These individuals were asked to take time when contacted to fill in the LGQ and the KRS. In most cases the forms were completed in about five minutes, and questions or requests for clarification were quite infrequent. Respondents were thanked for their cooperation but were not paid, since they did not participate in the more

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[3] All participants were paid from a research grant provided by the National Fellowships Fund.
[4] Survey group participants were paid with a grant from the University of California Patent Fund.

time consuming procedure required to generate a full set of data.

Results of the Spring 1979 Survey

Demographic Analysis

As indicated in the demographic analysis (see tab. 1), the spring 1979 survey group was more female than male, and there were more 19 year olds (22%) than any other age group. The distribution by class level was roughly equal with juniors somewhat overrepresented and seniors somewhat underrepresented, and about half (51%) of all of the respondents had only been enrolled at UCSC since the beginning of that academic year. A great majority of the respondents were of European descent, and most said their families were either middle or upper middle class and of Protestant background. The shortform group did not differ significantly in any of these areas,[5] and participant observation of the residential community suggested that the survey sample was indeed representative of the college overall.

Attitudes and Perceptions

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[5] Since the test for sample bias consisted of comparing the results obtained from the survey and shortform groups, it will be discussed after the data for the survey group has been presented.

Table 1
Demographic Analysis of Spring 1979 Survey Sample

Selected Variables	Percent of Respondents
Sex	99
Female	57
Male	42
Age	100
17-18 years old	19
19-20 years old	36
21 years old or over	45
University Class Standing	100
Freshman	27
Sophomore	22
Junior	33
Senior	18
Quarters Attending UCSC	100
1-3	67
4-6	24
7-9	6
10 or more	3
Ethnic Background	97
African (Black)	2
Asian	2
European (White)	91
Latin	2
Socioeconomic Background	98
Lower Class	1
Working Class	11
Middle Class	50
Upper Middle Class	35
Upper Class	1
Religious Background	96
Catholic	21
Jewish	9
Protestant	41
Other	5
Combination	5
None	15

Note. The total sample n=123

As a test of the view that perceptions of the college would tend to be consistent with attitudes toward group living, canonical correlation analysis was used to determine the degree of relationship between responses to the KRS and to the LGQ. Warwick (1975) has described canonical correlation analysis as a technique in which two presumably related sets of variables are reduced to pairs of linear combinations called canonical variates that are analogous to the principal components derived from a single set of variables in factor analysis. The first pair is selected to have the highest possible intercorrelation, and each successive set accounts only for residual variance, so that all pairs are uncorrelated with one another.

SPSS subprogram CANCORR (Nie, Hull, Jenkins, Steinbrennner, & Bent, 1975) was used to compute canonical variates from the survey group's responses to the LGQ and the KRS.[6] Variable means and standard deviations were also generated along with the correlation matrix. One significant variate pair was extracted that had an eigenvalue of .48 and a canonical correlation of r=.69. While this suggested a relatively high degree of relationship between the two measures, the fact that less than 50% of the variance in one part of the canonical pair was accounted for by the

[6] The Statistical Package for the Social Sciences (SPSS) is an extensive collection of computerized statistical procedures expressly designed for social science research. It was used for all of the major statistical analyses that were done in the dissertation research.

other was taken as an indication that continued use of both instruments would be justified..

In order to determine the substantive meaning of this canonical variate, structure coefficients were computed using SPSS subprogram PEARSON CORR. According to Cooley and Lohnes (1971), these coefficients may be interpreted in terms of the relationship between the canonical variate of one set and the individual variables comprising the other set. The LGQ variate showed significant positive correlations with six items from the KRS suggesting what may be termed a living learning motive for choosing the college. The KRS variate showed significant correlations with four LGQ items that were positive and two that were negative suggesting an involvement versus control dimension in living group values (see tab. 2).

The assumed positive relationship between perceptions of the college and attitudes toward group living did appear to be substantiated by the findings. The items that showed a positive relationship to the canonical variates suggested that students who perceived the community as a place to work on social and emotional development also tended to value intimacy and involvement in the living group and to be less concerned about homogeneity in terms of age or noise tolerance. The fact that the correlation between perceptions of the college and attitudes toward the living group was found to be relatively moderate was taken as an indication that

Table 2
Canonical Correlation of Kresge Residents Survey (KRS)
And Living Group Questionnaire (LGQ)
Spring 1979 Survey

Items Included in KRS Variate[a]	
Living at Kresge makes it possible to:	
K10	work on emotional problems
K2	learn how to keep a household
K6	learn how communities work
K4	form close relationships
K5	pursue academic interests
K9	avoid the food service

Items Included in LGQ Variate[b]	
It is important to live with people who:	
L15	accept hugging and kissing
L6	cooperate in decorating
L2	eat meals together
L12	accept open emotional release
It is not important to live with people who:	
L8	share level of noise tolerance
L18	are close to the same age

[a]Correlations ranged from .25 to .41 ($p<.01$)
[b]Correlations ranged from .22 to .27 ($p<.01$)

both the LGQ and the KRS should be used in subsequent stages of the research.

Interpersonal Orientation and Satisfaction

As a test of the assumption that interpersonal orientations would tend to be the best predictors of living group

satisfaction, discriminant analysis was used to determine the relative contributions of sex, age, socioeconomic background (SES), FIRO-B, LGQ, and KRS scores to reported satisfaction and reported happiness with the living group. Because it was assumed that there was a critical distinction to be made between those students who were likely to be satisfied or happy and those who were not,[7] discriminant analysis was used rather than multiple regression. It also seemed likely that an intervention aimed at improving student response to group living would show differential effects depending on which of these categories might apply.

According to Klecka (1975) discriminant analysis may be used to distinguish between theoretically defined groups on the basis of linear combinations of discriminating variables and may be viewed as a form of canonical correlation analysis in which the groups represent a set of dummy variables to be correlated with the set of predictors. The maximum number of discriminant functions that can be derived is therefore one less than the number of groups or equal to the number of discriminating variables, whichever is smaller. The mathematical assumptions underlying discriminant analysis are as follows: 1.) There must be two or more groups; 2.) There must be at least two cases in each group; 3.) The number of discriminating variables must be at least

[7] As a test for response bias in the outcome measures, the inter-correlations of items were obtained. The results of this analysis will be discussed in the following section.

three less than the total number of cases; 4.) The discriminating variables must be measured at the interval level; 5.) No discriminating variable may be used that is a linear combination of any of the others; 6.) Special formulas must be used if the covariance matrices are not approximately equal; and 7.) Each group must be drawn from a multivariate normal distribution of the discriminating variables. It was further noted that the method tends to be fairly robust and is likely to tolerate some violation of the assumption of multivariate normal distribution (Klecka, 1980).

Reported satisfaction with the current living group was recoded as satisfied (scaled responses 1-3) and not satisfied (scaled responses 4-6) for the survey group data. SPSS subprogram DISCRIMINANT (Hull & Nie, 1981; Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) was then used to compute discriminant scores for the two groups by a stepwise selection of the discriminating variables based on Wilk's lambda, which reflects both differences between groups, and within group cohesion (Klecka, 1980). Means and standard deviations were also generated for all variables along with the correlational structure matrix, and Box's M was computed as a test of the equality of the group covariance matrices.

Given two groups, only one discriminant function could be derived. This function had an eigenvalue of .50 and a canonical correlation of r=.58. There were 14 of the original 46 discriminating variables included in the function.

The covariance matrices appeared to be equal (m=132.77 p=.23), and inspection of the structure matrix of pooled within group correlations of the function and the predictor variables showed five significant correlations. The highest was with the IE scale, but two items from the KRS and one from the LGQ showed similar coefficients, and SES showed significant correlation to the function as well (see tab. 3).

Those in the satisfied group seemed to be more socially oriented and more inclined to see the college as a good place to form close relationships. They were also more concerned about avoiding the campuswide food service and placed more importance on cooperation in decorating the common living areas. They placed less importance, however, on living with people who shared their class standing in the university. On the average, students in the satisfied group had described their socioeconomic backgrounds as slightly above middle class, whereas those in the not satisfied group had described their families as slightly below middle class.

Reported happiness with the current living group was analyzed in the same manner and produced a function with an eigenvalue of .73 and a canonical correlation of r=.65 that included 19 of the 46 discriminating variables. The covariance matrices appeared to be equal (m=275.75 p=.11), and the matrix of pooled within group correlations showed seven discriminating variables that were significantly correlated

Table 3
Canonical Discriminant Function
For Satisfaction with Living Group
Spring 1979 Survey

Items Predicting Satisfaction		Regression Coeff.[a]
SES	socioeconomic status	0.50
L3	use or not use drugs	0.20
L6	cooperate in decorating	0.44
L9	share taste in music	0.29
L20	share academic interests	0.28
L25	four more other people	0.30
K2	learn to keep household	-0.38
K4	form close relationships	0.57
K8	possible to live coed	0.31
K9	avoid using food service	0.44
IE	Expressed Inclusion	0.54
IE	Wanted Inclusion	-0.23
CE	Expressed Control	-0.20

Items in Structure Matrix		Correlation Coeff.*
IE	Expressed Inclusion	0.32
K4	form close relationships	0.31
K9	avoid using food service	0.29
L6	cooperate in decorating	-0.26
SES	socioeconomic status	0.24

[a]Due to direction of scaling on the LGQ positive loading is indicated by a negative sign.
* $p<.01$

to the function (see tab. 4). The happy group tended to perceive the college as providing a rare opportunity for communal living and as a good place to learn about communities, but they were less likely to describe it as a place to pursue academic interests. Individuals who said they were happy also placed more importance on living with people who

Table 4
Canonical Discriminant Function
For Happiness with Living Group
Spring 1979 Survey

Items	Predicting Happiness	Regression Coeff.[a]
AGE	age in years	0.29
L2	eat meals together	-0.43
L4	use drugs together	0.18
L5	personal space/privacy	0.44
L7	cooperate in cleaning	-0.34
L12	accept open emotions	-0.49
L13	converse regularly	0.50
L14	comfortable touching	0.42
L16	willing to have sex	0.24
L19	same university class	-0.35
L23	share ses background	0.41
K1	communal living	-0.27
K2	learn keep household	0.27
K5	pursue academics	0.23
K6	learn communities	-0.30
K10	work emotional problems	-0.22
IE	Expressed Inclusion	-0.32
IW	Wanted Inclusion	0.24
CE	Wanted Control	0.37

Items	in Structure Matrix	Correlation Coeff.*
L13	converse regularly	0.30
K5	pursue academics	-0.27
L14	comfortable touching	0.27
K1	communal living	0.26
K6	learn communities	0.25
AGE	age in years	0.24
L19	same university class	-0.23

[a]Due to direction of scaling on the LGQ positive loading is indicated by a negative sign.
*p<.01

conversed with one another regularly, and on living with people who were comfortable touching one another, but were

less concerned about living with others who shared their class standing in the university. They were also a year younger on the average than those who said they were not happy with their living groups.

In general, residents who were satisfied seemed to place greater importance on self expression and involvement than those who were not satisfied, and happy residents were more communally oriented than those who were not happy. On the other hand, individuals who indicated dissatisfaction with their living groups were more likely to value a homogeneous household than those who were satisfied, and respondents who said they were not happy with the living group seemed to be more academically oriented than those who said they were happy. The assumption that interpersonal orientation would be the best predictor of student living group satisfaction did appear to be justified on the basis of the results, but only for expressed inclusion, which suggested a more specific focus on that subscale for the next phase of the research. It was also clear, however, that other variables were likely to make important contributions as well and that students' perceptions of the college community and their attitudes toward group living tended to be of greater importance in predicting happiness with the living group than any of the measures of interpersonal orientation.

Tests For Response Bias

Correlations between respondents' rating of their previous and their current living groups were inspected as a check on response bias. The satisfaction ratings were found to show a low but significant correlation ($r=.26$ $p<.01$), whereas the happiness ratings did not approach significance ($r=.11$ $p>.10$). This was taken as support for the assumption that the students were being selective in their assessments of the living group. SPSS subprogram CROSSTABS was run for the recoded satisfaction and happiness scores, and the results showed that 41% of the students who indicated that they were not happy with the living group said that they were satisfied with it, and 23% of those who described themselves as not being satisfied with the living group still reported that they were happy with it.

Group Stability and Satisfaction

The data collected from the pilot group were used to test the assumption that stability of the living group would provide a useful measure of satisfaction. Actual ratings of satisfaction and happiness with the living group were not obtained for these individuals. This omission resulted partly from the fact that the pilot study was conducted at the beginning of the quarter and the survey at the end, which meant that the ratings would not have been strictly comparable if they had been obtained along with the other data. It would have, of course, been possible to recontact

these individuals at the end of the quarter, but it seemed that they had already been subjected to more scrutiny than was entirely comfortable for some of them, so yearend evaluations of their living groups were not requested.[8]

There were, however, more qualitative assessments that tended to emerge from each member's discussion of the living situation. Individuals frequently stated that they felt the group's reasons for staying together were not particularly good ones. Several people said they were too lazy or too fearful to seek out a better arrangement for themselves. There were also signs of power struggles in at least two groups where a member or members had refused to be "driven out" by the others.

When SPSS subprogram T-TEST was run to determine mean differences between the pilot and survey groups on LGQ items, FIRO-B scale scores, and selected demographic variables, the only significant difference found was for item L25 ($t=3.92$ $p<.001$). Living with four or more other people was less important for the pilot group, which was consistent with the fact that everyone in the pilot group lived in four person flats, and suggests that they were generally satisfied with the small group aspect of the living arrangement. As an additional check on the possibility that there would be a relationship between stability and satisfaction for the

[8] It also seemed very likely that their yearend assessments would have been strongly influenced by participation in the pilot study.

survey group, subprogram PEARSONCORR was run to determine the extent to which reported satisfaction and reported happiness were correlated with duration of residence or the number of people lived with for periods of time ranging from one quarter to more than three quarters. None of the correlations were found to be significant.

Variables Related to Perception of Parents

When t-tests were used to compare the pilot group's scores on the POP with their responses to the LGQ and the FIRO-B, individuals who rated their parents as having been relatively inattentive were found to have scored significantly higher on the IE scale ($t=2.05$ $p=.05$) and to be less concerned about living with people who shared their academic interests ($t=4.17$ $p<.001$) than were those who said their parents paid a good deal of attention to them. Individuals who described their parents as offering little or no guidance placed more emphasis on living with four or more other people ($t=2.16$ $p<.05$) than did those who said they had received stricter discipline. In addition individuals who said their parents wer more affectionate were found to place greater importance on living with people who shared their level of noise tolerance ($t=2.87$ $p<.01$) and their academic interests ($t=2.64$ $p=.01$) than those who said their parents were more reserved.

Since that individuals in the survey group who had

higher scores on the IE scale were more likely to report satisfaction with their living groups, and the pilot group showed a higher mean IE score for those who said their parents had been inattentive, it appeared that parental attention would also show an inverse relationship to residential satisfaction. However, this seemed counterintuitive and would also have been quite inconsistent with Schutz's (1966) postulate of relational continuity. Given that individuals who had not actually accepted their parents' inattention might continue to express a relatively high need for inclusion, it was assumed that the pilot group represented a less parent identified sample and therefore did not express a level of inclusion that was consistent with the type of treatment they had received. The high incidence of reported conflict within their households, however, suggested that what were perhaps compensatory efforts in this direction were not entirely successful.

The finding that pilot group members who had received less parental attention were also less interested in having an academically-oriented household may have indicated that such individuals were more concerned about social interaction with their housemates as a consequence of the lack of early attention in the family. It is also conceivable that they experienced less pressure to do well academically, because they had viewed their parents as being unconcerned about their behavior in the past. Likewise, the tendency of those who had lacked parental discipline to favor larger

living groups may be accounted for by the possibility that parental permissiveness had led to more involvement with the peer group and/or greater enthusiasm for the kind of lifestyle that was positively valued by the peer culture.

The connection between noise tolerance and parental affection was more difficult to interpret. It might have meant that individuals from warm, interactive families liked to make more noise, that they tended to be more sensitive to other people's noise, or both. Their tendency to prefer an academic household was also puzzling in that it seemed they would be more like the communally oriented students in the survey group who were generally less interested in such a living arrangement. In may be, however, that individuals in the pilot group were more concerned about controlling their sociable tendencies, since they saw themselves as (and were, in fact,) more academically-oriented than the rest of the residential community. In any case these results seemed to indicate the need for further investigation into the influence of family background on the living group experience.

Tests for Sample Bias

T-tests of mean difference were used to compare the survey group's responses to the LGQ and the KRS with those obtained from the shortform group. Significant differences were found on four of the LGQ items with the survey group placing greater importance on each of them than the

shortform group, and three of these were critical discriminating variables (see tab. 5).

Table 5
Comparison of Mean Item Ratings
For Survey and Shortform Samples
Spring 1979 Survey

Items Showing Significant Mean Difference		Sample Group Surv(n=123) Mean	S.D.	SF(n=26) Mean	S.D.	t*
L3	Drug use	3.19	1.58	4.04	1.51	-2.51
L5	Personal space	1.79	1.17	2.50	1.61	-2.15
L12	Open emotions	2.30	1.46	3.20	1.47	-2.80
L22	Same religion	5.21	1.15	5.63	0.77	-2.19

Note. Total sample n=149
*p<.05

The proportion (58%) of the shortform group reporting satisfaction with the living group was also found to be significantly less than the satisfied proportion (80%) for the survey group (chi square=6.08 p<.05). The proportion (62%) who said they were happy with their living groups was less than the survey group's (72%) but not significantly so.

It would appear that socially-oriented students were overrepresented in the survey group. However, the lower rate of satisfaction reported by those in the shortform group (who tended to be less available and less willing to devote attention to the issues of group living) seemed to further confirm the relationship between involvement and

living group satisfaction obtained for the survey group. It was therefore concluded that an analysis based on the survey data might reasonably be applied to the residential community as a whole and would certainly be valid for that population of students who would choose to participate in a course dealing the issues of group living.

Discussion of the Spring 1979 Survey Results

The Findings Applied to the Theoretical Model

The results of the spring 1979 survey are discussed below in terms of the theoretical model of living group satisfaction presented in chapter 1 (see fig. 14). The implications of these findings for the intervention phase of the research will be discussed in the following section.

Family background (A): Individuals who reported satisfaction with the living group tended to be from a slightly higher socioeconomic background, and those who said they were happy with the living group were a year younger on the average than those who said they were not.[9] Although the evidence was less than conclusive, there seemed to be an indication in the pilot group data of a relationship between

[9] Since age related behaviors may be viewed as culturally, socially, and economically determined, the student's age when living oncampus was viewed as a family background variable.

parental attention and living group satisfaction that might also have been mediated by expressed inclusion.

Personality attributes (A): Interpersonal orientation toward expressing social inclusion was found to be positively associated with living group satisfaction.

Social orientation (I): The measures of the residential group's social orientation were indirect, but results from the survey sample suggested that students who placed importance on cooperation in decorating common areas were more likely to be satisfied with their living groups, and those who placed more importance on living with people who conversed regularly and were comfortable touching one another were more likely to be happy with their living groups.

Academic orientation (I): For the pilot group, there was a positive relationship between parental affection and interest in an academically-oriented household, but individuals in the survey group who were less interested in living with people who shared their class standing in the university were more likely to say they were happy with their living groups.

Perceived social orientation (C): By the end of the school year, residents in the survey group who viewed the college as a place to form close relationships and living there as a good way to avoid using the food service were more likely to say they were satisfied, and those who saw

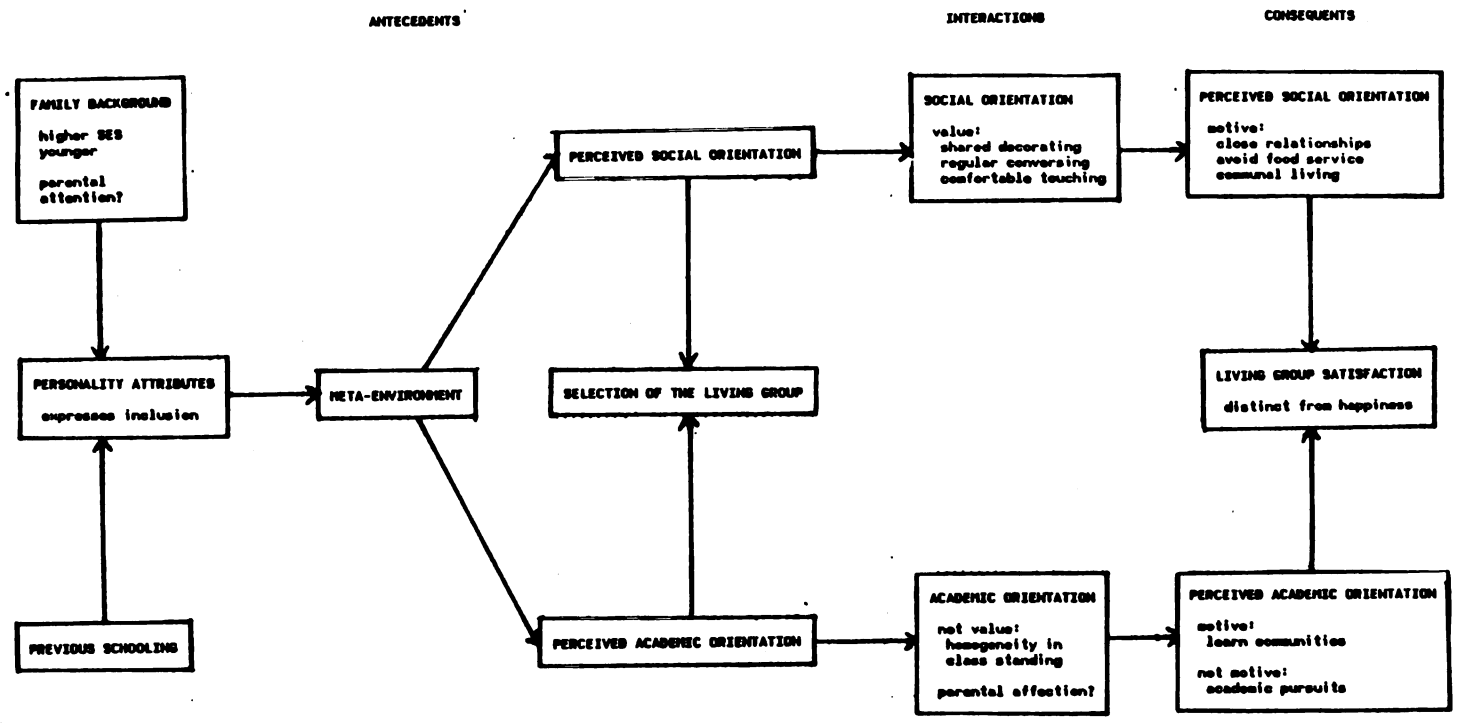

Figure 14. Factors Related to Satisfaction or Happiness with the Living Group (Spring 1979)

the college as an opportunity for communal living were more likely to say they were happy with their living groups.

Perceived academic orientation (C): Students in the survey group who said at the end of the year that they saw living at the college as a good way to learn about communities were more likely to report happiness with their living groups, but those who said it was a good way to pursue their academic interests were less likely to say they were happy.

Living group satisfaction (C): Satisfaction and happiness with the living group were found to be distinctly different constructs for a substantial number of residents, and satisfaction was more often reported than happiness.

Conclusion: Overall the results obtained in this initial phase of to the research tended to lend support to some aspects of the theoretical analysis developed in chapter 1. Individual level determinants of student living group satisfaction were found to be of considerable importance, and interpersonal orientation as measured by the FIRO-B expressed inclusion scale was found to be a major factor in satisfaction, though not in happiness with the living group. In addition, findings from earlier studies, which suggested that students living in situations characterized by social interaction, involvement, and intimacy would tend to be more satisfied appeared to be supported in that individuals who described the college in such terms and who valued that kind

of living environment were more likely to report satisfaction or happiness with their living groups.

Earlier studies had pointed up the importance of the peer group for students who were attracted to the UCSC campus as well as for those who came to this particular college, and it appeared that this was still the case as Kresge approached the end of its first decade of operation. Social interactions were found to play a major role not only in satisfaction with the living group, but also in overall perceptions of the residential community as a desirable place to live. Furthermore, it appeared that the CAs and other students who were interviewed had been quite accurate in their identification of the issues that were likely to contribute to the success of the living group, although some factors proved to be more important than others.

Implications for the Course Intervention

Based on the results of the phase I research that was conducted during the period from winter 1978 to spring 1979, a living learning program was designed for the fall quarter of 1979. It was to include some emphasis on the family experience as a factor in the dynamics of the living group and was expected to provide an opportunity for more careful inquiry into the relationship between personal background and living group satisfaction. It was also designed to promote the kind of concern with social involvement and

interpersonal intimacy that had been expressed by students who said they were satisfied or happy with their living groups.

Since students who stayed together did not appear any happier or more satisfied with their living groups than those who did not, it was decided that a programmatic intervention designed to enhance living group satisfaction should emphasize among other things, appropriate techniques for creating and sustaining new relationships. This was also suggested by the higher expressed inclusion scores for students who were satisfied with their living groups. The fact that various types of interpersonal skills training have been shown to affect interpersonal behavior (see Hartman, 1979; Lieberman, 1976) was taken as further support for adopting such a method of intervention.

In his review of controlled studies on the effects of sensitivity training, Smith (1975) reported that 8 out of 11 studies using FIRO-B as an outcome measure showed significant changes in participants of groups that ranged from 20 hours to 3 days in duration. Only one of these studies found changes in expressed inclusion, however, and these were in the direction of increased congruence with wanted inclusion. Presumably the brief duration of the groups accounted for the fact that expressed inclusion was so rarely affected.

In any case, a high degree of intercorrelation has been

found for the inclusion and affection scales (Schutz, 1966; Wiedemann, Waxenberg & Mone, 1979), which would suggest that inclusion and affection may actually constitute a more general warmth dimension rather than two distinct need areas, and studies dealing with orientation toward affection may therefore have implications for inclusion behavior as well. There is also evidence from other research (i.e. Harrison, 1965; Harrison & Lubin, 1965; Schutz, 1961) indicating that individuals may be expected to show greater behavior change if they are stimulated by the experience of being in a group with others who have a different interpersonal orientation.

This notion appears to have been supported by Reddy's (1972) study of a five day sensitivity training program in which two groups that were composed of individuals with distinctly different scores in the affection need area changed significantly more on the Personal Orientation Inventory (POI) in both inner directedness, and feeling reactivity than those in two randomly composed groups. Smith and Linton (1975) also found significant increases on the inner directedness and feeling reactivity scales of the POI for members of three groups in a five-day human relations training program that were heterogeneous in terms of FIRO-B affection needs, and Pollack (1971) found more behavior and attitude change in t-groups that were heterogeneous in terms of expressed and wanted control than in those that were homogeneously composed.

Given that satisfaction with the living group and happiness with it appeared to be distinctly different constructs for a number of the students who responded to the spring 1979 survey, it was assumed that the outcomes might be more appropriately conceptualized as ranging from "satisfied and also happy" to "neither satisfied, nor happy." This led to an assumption that students who would be attracted to such a course would be mainly of two types: 1.) Those who were generally well adjusted individuals and would probably end up being happy with their living arrangement in any case but would be more satisfied in a living learning program that integrated the academic and residential experiences; and 2.) Those who were not so well adjusted and were likely to be neither satisfied, nor happy with their living groups without some assistance in their social development. It was further assumed that such a program would have differential effects on these two types of students and that those who were less socially competent to begin with would show substantial gains after having participated, whereas individuals who were already capable in this area would be expected to show little or no improvement due to the likely existence of "ceiling effects."[10]

Jacobson and Smith (1972) have reported finding such a pattern of results for 20 San Diego State College students

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[10] Feldman and Newcomb (1969 p.63) and Astin (1970) have discussed the ways in which such effects may increase the liklihood of type II errors in studies of college student development.

participating in a weekend encounter group and also for 20 professional people attending a weekend group at the Center for the Study of the Person. In both groups low scorers on expressed inclusion, expressed affection, and wanted affection increased their scores, whereas high scorers remained the same. These findings were attributed to the possibility that low scorers would behave in ways that were more discrepant from the norms of an encounter group and would therefore be confronted more often about their behavior. In the terms of ecological analysis, this might be seen as the inhabitants of a setting exercising a control maintenance function in order to change the behavior of other inhabitants who were seen as jeopardizing the existing program of action It seemed reasonable that such mechanisms would also operate within the context of an experimental living learning program where some attitudes and behaviors were clearly defined as more appropriate than others.

Hypotheses for the Intervention Study

The discriminant functions derived from the spring 1979 survey group data were used to classify a group of residents who responded to these same questionnaires at the beginning of fall quarter 1979 according to the liklihood that they would be satisfied or happy with their living groups. Since these students had not yet formed their living groups when they responded to the questionnaires, the classification was

in terms of the predisposition reflected in their responses to the discriminating variables rather than an actual rating of their residential arrangements. The two groups that were identified by applying the satisfaction function were therefore referred to as probably satisfied (PS) and probably not satisfied (PNS) and the two that were identified by applying the happiness function as probably happy (PH) and probably not happy (PNH) with their living groups. The following hypotheses were to be tested using data collected during the fall 1979 course intervention study:

Parental Attention and Living Group Satisfaction

1.) It was predicted that students' ratings for the POP item dealing with parental attention (RPA) would be positively related to probable satisfaction (PS); and

2.) That ratings for parental attention (RPA) would also show a positive relationship to scores on the FIRO-B Expressed Inclusion (IE) scale.

Changes in Interpersonal Orientation

3.) After a quarter in the living learning program it was expected that the probably not satisfied (PNS) group would have increased their scores on the IE scale so that there would be no significant difference between their scores and those of the probably satisfied (PS)

group.

Changes in Living Group Attitudes

4.) After a quarter of participating in the program, it was expected that the PNS group would have changed their ratings of LGQ items related to satisfaction so that there would be no significant difference between their attitudes and those of the PS group; and

5.) The probably not happy (PNH) group would have changed their ratings of LGQ items related to happiness so that there would be no significant difference between their attitudes and those of the probably happy (PH) group.

Changes in Perceptions of the College

6.) It was also expected that the PNS group would have changed their selection of items on the KRS related to satisfaction so that there would be no significant difference between their perceptions and those of the PS group; and

7.) The PNH group would have changed their selection of items on the KRS related to happiness, so that there would be no significant difference between their perceptions and those of the PH group.

Probable and Reported Outcomes

8.) It was further predicted that by the end of fall quarter there would be no significant difference between the PS and PNS groups in their ratings of satisfaction with the current living group (RSC); and

9.) There would be no significant difference between the PH and PNH groups in their ratings of happiness with the current living group (RHC).

CHAPTER IV: THE INTERVENTION STUDY

LIVING LEARNING PROGRAM - FALL 1979

Purpose of the Fall 1979 Intervention Study

UC Santa Cruz underwent campuswide reorganization during the summer of 1979 as planned. At that time most of the faculty were removed from what had been interdisciplinary arrangements in the various colleges and reaggregated by boards of study. All but two of the colleges ceased to offer any formal academic program,[1] and, in some cases, the faculty offices were reassigned for use by the boards of study or by the academic divisions. The women's studies program continued to be located at Kresge, and the American studies program was moved there from Merrill. The graduate programs in literature and history of consciousness were moved to the college that summer as well, and, in the fall of 1979, Kresge's third provost took office.[2]

With so many major changes occurring at once, it seemed to be a less than ideal time for testing the effects of any one intervention. Yet, the tumultuous state of the campus during that period also made it somewhat easier to obtain

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[1] Oakes and College Eight were allowed to continue as they were due to the special nature of their programs (see "The Colleges," Note 8).

[2] This was Dr. Helene Moglun, a scholar in the field of women's studies, who also held the position of Dean of the Humanities Division.

the necessary support for an experimental living learning program. Despite the fact that the reorganization involved an attempt to create a more centralized university, efforts were also being made to ensure the continued viability of college life at UCSC. The intervention study was therefore undertaken with full awareness of the limits to methodological rigor imposed by the circumstances and was mainly intended as a test of the applicability of the spring quarter findings.[3] In addition, it was expected to provide some indication of the changes that participants in a living learning program would undergo, even though the use of a nonexperimental design meant that any obtainable effects would not be clearly attributable to the program.

Method of the Fall 1979 Intervention Study

Respondent Groups for the 1979 Intervention

At the beginning of the fall quarter, precourse measures were obtained from 52 UCSC undergraduates who had expressed initial interest in taking an upper division course offered by the environmental studies board and taught by the author. A total of 41 students actually enrolled in

[3] Campbell and Stanley (1963) have noted that every experiment is likely to be less than perfect and that the researcher working in a natural setting should design the best possible study and then go ahead with experiment and interpretation, fully aware of the points on which the results are equivocal.

the course, and there were 9 who did not enroll but participated in the communal living project that was set up at Kresge in conjunction with the course. The group of 40 who completed the postcourse questionnaires included 3 of these students from the living project who were not enrolled in the course (see tab. 6).

Table 6
Comparison of Pre and Posttest Respondents
Fall 1979 Intervention Study

Selected Groups	Percent of Respondents Pre(n=52)	Post(n=40)
Kresge Students	78.8	77.5
Course Enrolled	61.5	70.0
Female	32.7	32.7
Male	28.8	32.5
Not Course Enrolled	17.3	7.5
Female	11.5	5.0
Male	5.8	2.5
Other Students	21.2	22.5
Course Enrolled	17.3	22.5
Female	7.7	10.0
Male	9.6	12.5
Not Course enrolled	3.9	0.0
Female	3.9	0.0
Male	0.0	0.0

Note. Figures for Kresge and Other Students categories total 100%

Procedures Used in the 1979 Intervention

Communal living group: All undergraduate students

requesting residence at Kresge for fall quarter 1979 were redquire to complete housing office questionnaires. Included was an item asking them to indicate whether they would like to take a course called "Utopianism and Communal Living." They were also asked if they would be willing to change their priorities for the type of apartment they wanted in order to live with others in the course. With the cooperation of the college bursar,[4] a building of four suites designated as R-6 29 residents who wanted to live communally while enrolled in the course and a CA, who would be assigned by the college. In addition to the 19 (11 male and 8 female) individuals who said they definitely wanted to participate in the project, another 10 (7 females and 3 males) were selected from among those who had expressed tentative interest. Since all 10 had indicated a preference for suite living, it was assumed that they would not object to living in R-6 even if they decided not to take the course.

Late in August of 1979 information about the communal living project was mailed to the prospective participants along with a course outline, reading list, and a brief description of the dissertation research. They were asked to arrive on the first day if they wished to participate in the living project, and approximately half of the selected individuals did arrive on that day. They met as a group

[4] Alan Hiromura held this position as the college's chief financial officer throughout the period of the dissertation research and provided assistance on more than one occasion.

that evening to complete the questionnaires. All but one of the others arrived the following day and met to complete the instruments at that time. The same procedure that had been used for the spring 1979 survey group was used for these respondents with the exception that they were not paid for participating in the study. There were 28 questionnaires completed in these two sessions.

Course interest group: During the spring of 1979, the author submitted a fall quarter course proposal that was accepted by the Environmental Studies Board at UCSC, and, although it was too late in the year for the course to be included in the regular listings, it was publicized in the course offerings addenda. Typically at UCSC the first class meeting of the quarter was devoted to providing an overview of the course for the benefit of students who were there to see if they actually wished to enroll. The questionnaires were administered at the end of the first course meeting after those students who were mainly shopping and those who had already completed them for the communal living project had been given an opportunity to leave. It is therefore likely that all of the individuals who remained had considerable interest in taking the course as it had been described, although two of them later decided not to enroll. The same procedure that had been used for the communal living group was used for the course interest group, and there were 24 questionnaires completed in that session.

Postcourse group: All of those students who had enrolled in the course and who attended the last class meeting, and those participants of the communal living project who had not enrolled in the course but were willing to attend the last class meeting, were asked to complete a second set of the questionnaires at that time. Since everyone involved was presumably familiar with the instruments by that time, the individual items were not read aloud, but the author was available during the entire session to answer questions and provide clarification. There were no questions or requests for clarification. A total of 40 questionnaires were completed during the session.

Design of the Living Learning Course

Goals: The course which served as the basis of the 1979 intervention study was entitled "Utopianism and the Intentional Community" and was designed to:

1.) Provide an experience that would help students to more fully integrate their academic and social lives;

2.) Enhance personal development by encouraging students to more clearly define their individual needs as well as potential means of self-fulfillment.

3.) Promote living group satisfaction by assisting students in their efforts to improve their interpersonal

effectiveness;

Structure: The course met once a week on Thursday evenings from 7:30 to 11:30 p.m. The first two hours were generally devoted to various maintenance activities followed by a lecture presentation. After a 15-20 minute break, the class would reconvene for a large group discussion of the readings and lecture materials, and, during the last hour or so, students frequently had the option of participating in structured exercises aimed at enhancing their communication skills. A major requirement for enrollment in the course was that the individual be living in some kind of group arrangement, and the students were expected to meet once a week in 7 or 8 person assigned groups to discuss their living group experiences.[5]

Content: The course was designed to provide historical, sociological, and psychological perspective on nonsectarian intentional communities. Brook Farm of the 19th century and Twin Oaks of the 20th century were used as comparison cases for sociological analysis (see Kanter, 1972a), and the relationship of theory to social planning and practice was drawn from comparisons of Walden (Thoreau, 1854/1971), Walden Two (Skinner, 1948/1976), and the Walden Two experiment that was conducted at Twin Oaks (Kinkade, 1973). The unconscious

[5] In addition to the 32 students living at Kresge, there were 4 who were living in a student coop at Merrill called PAD, 3 living in offcampus groups, 1 living on a dorm floor at Crown, and 1 was a married student living offcampus with his family.

processes operating in group life were also explored with lectures and readings (i.e. Freud, 1918/1962; 1921/1975; Grant & Riesman, 1978a; Kanter, 1973; Slater, 1963), and students were asked to develop some of the themes that were articulated in a series of one or two page papers dealing with issues that were occurring in their living groups.

The weekly discussion groups were without designated leadership and functioned as a peer support system rather than as a formal program of sensitivity or interpersonal skills training (see Levy, 1976; Lieberman, 1975). However, lectures.[6] and course readings on various aspects of creating and maintaining a sense of community were possible sources of perspective on the process of living in a group, and there were also regular opportunities for directed group activity during and after class meetings. In addition, techniques designed to enhance sensory awareness as well as verbal and nonverbal communication were used on several occasions (see Morris & Cinnamon, 1974; 1975; Pfeiffer & Jones, 1975).

Evaluation: At the end of the course, each student was expected to write a final paper in which key issues from the ongoing process of the living group were abstracted and then elaborated in terms of the theory and case material found in

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[6] Richard Fairfield was guest presenter for one of the class sessions and provided first hand accounts of a number of American communes of the 1960s including Twin Oakes (see Fairfield, 1970; 1971).

the readings. Since competent performance of this task was likely to require both interpersonal sensitivity, and the ability to adopt an objective view of the situation, it was considered to be a definitive expression of the student's success in integrating the social and academic experiences. Progress in such areas as interpersonal effectiveness and personal growth was, in some cases, noted in comments on the final paper but was not specifically referred to in the formal evaluation that each student received upon satisfactory completion of the course.[7]

Development of the Communal Living Project

Schutz (1958;1966;1973) has defined three basic stages in group development that correspond to the fundamental need areas of inclusion, control, and affection. The inclusion stage is said to begin with the formation of the group and to involve a focus on issues of commitment. Once the group has become more established, it is said to move to the control phase where struggles for leadership are evident, and finally, when these have been resolved to some extent, the group enters the affection stage and feelings of intimacy may be freely expressed. The formal interactions that occurred between the author and members of the communal liv-

[7] UCSC had come close to abandoning the narrative evaluation system during the 1977-78 academic year. However, the faculty voted by a narrow margin to continue providing students with written assessments of their work rather than letter grades.

ing project during fall quarter 1979 strongly suggested such a thematic progression.[8]

The inclusion phase: When 28 of the individuals who were selected for the communal living project had arrived, a two hour evening meeting was held for the purpose of allowing them to organize themselves into four living groups. This was done through a spontaneously generated process of mutual selection and negotiation that was facilitated by the author using a technique that consisted mainly of providing information as requested without offering direction.[9] Once the groups had been formed, the intergroup process of deciding who would live where in the building was made easier by the fact that two of the four suites had been converted to seven-person units by the removal of the wall between one of the single rooms and the kitchen area. Since there was only one group with eight people (the group that included the CA), the seven member group that agreed to take an eight person suite was given first choice of the two units and the option of selecting the person who would replace the male student who had decided not to come.

There were two individuals (one male and one female)

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[8] The following discussion draws heavily from psychoanalytic systems theory, which proved highly useful as a means of conceptualizing these covert processes (see Bion, 1959; Durkin, 1972; Gibbard, 1974; Klein, 1959; Rioch, 1975b; Slater, 1968).

[9] A similar process had been used successfully during the previous spring quarter when the author facilitated the formation of the PAD student coop housed at Merrill.

who had expressed an interest in participating in the project after arriving oncampus and learning of its existence. A two hour meeting was held to decide which of them would move into the vacancy, and, once again, the author facilitated the session in a nondirective manner. Although participation was limited to the members of the household in question and the candidates for selection, other R-6 residents were allowed to form an outer circle of observers. The woman was eventually selected after a long and serious process that involved an extensive discussion of personal needs and values. Everyone (even the observers) seemed to feel exhilarated at the end of the session, but, when a female member in one of the other groups decided to leave school after the first few days, that household was unwilling to undergo such a process, and she was not replaced.

The control phase: About a week after the selection meeting, another two hour session was scheduled to facilitate the process of members beginning to accept more responsibility for the living project. A number of them seemed to be finding it difficult to relinquish the idea of the author as primal agent, which tended to interfere with their capacity for autonomous functioning. This was stated by the author early in the session, and group members were asked to express their views about the situation. Two of the men adopted openly critical stances toward the author, and one of them challenged her to a wrestling match but then acted as though he was unable to get the best of her despite an

obvious size advantage. Another who happened to be the CA for the building, expressed distrust of her motives but was not willing to engage in a more direct discussion of his fears or to deal with issues related to his own ability to exercise authority in the group.

Several of the women expressed a desire for more personal support or an interest in developing a closer relationship with the author but seemed to be confused about how to achieve such closeness. No attempt was made at that time to discuss the transference processes that seemed to underly these statements of confrontation, but the fact that the group tended to divide along gender lines in expressing hostility and affection was pointed up. Toward the end of the session it was proposed that they act out the process of becoming both independent, and interdependent with a series of collective body sculptures, which were created and then discussed. A feeling of increased communication and mutual support was evident at the end of this activity, and most participants showed signs of feeling more comfortable with one another and with the author.

The affection phase: Halfway through fall quarter, several members of the R6 community requested that the author conduct a sensitivity training group that would assist them in dealing with the difficult dynamics that were beginning to emerge in their households. A ten member group made up of five females and five males self-selected to par-

ticipate in a total of six sessions over the course of a single weekend and a followup session that would be held a week and a half later. Each of the sessions was to be three hours long.

Shortly before the training group was to take place, however, the author was invited to a "pink party" organized by one of the women in the building. There were eight or nine members of the communal living project in attendance at this all-female event, which began as a parody of a baby shower and ended in a group ritual of self disclosure.[10] The author was apparently the guest of honor and participated fully in the sharing with the result that strong feelings of warmth and intimacy were generated during the course of the evening. When the t-group took place a few days later, some of the participants seemed to find it disappointing by comparison.

Each session began with a mini-lecture on group theory that was followed by a period of free process, which took the form of group discussion. During the first two sessions the author assumed the role of a psychoanalytically-oriented group process consultant (see Rioch, 1975a); for the second two sessions that of a traditional t-group trainer (see Tannenbaum, Weschler & Massarik, 1970); and in the final sessions that of a personal growth oriented encounter group

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[10] Guddemi (Note 3) has provided a more detailed description of similar Kresge rituals.

leader (see Schutz, 1973). Two of the male members and one female member declined to talk at all during the first phase of the group in what seemed to be both a mimicking of, and a protest against the uninvolved process consultant. their silence also appeared to represent a group fantasy of the author as part of a paired relationship, but efforts to interpret this phenomenon were met with various forms of disconfirmation.

Once the author became more interactive, there was also a tendency for everyone else to talk more freely, and some members began to express fears of intimacy and concerns about loss of self in the collective identity. Sexual fantasies were particularly prevalent during this phase, and one of the males who had been silent in the first two sessions began to talk about his attraction to some of the women in his living group. The problems encountered in coed living became the focus of discussion, and attention was specifically directed to the situation of men and women who were sharing double rooms "without benefit of a sexual relationship." The violation of traditional male prerogatives in initiating sexual relations was also an issue that surfaced in the course of the discussion.

In the last two sessions the author became more directive, moving the group toward visualization and fantasy work on an individual level while encouraging them to explore the fear of intimacy as a fear of self. After the first of

these sessions the member who had first raised the issue of interpersonal attraction told the author that he was experiencing sexual attraction toward her and expressed confusion about how to act on these feeling. She responded with some of her own concerns about sexuality and mentioned the role conflict that further complicated her relationships with other members of the college community. She also suggested that these issues be raised at the next session, so that others might benefit from their discussion. This appeared to be an unsatisfactory response, since he chose instead to drop out of the group. His absence seemed to inspire a deep sense of loss in the other group members, and at the end of the t-group they gave signs of greater emotional distance from one another as well as more detachment from the author.[11]

Conclusion: This series of structured and semi-structured encounters constituted the full extent of the

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[10] One of the major obstacles to effective use of sensitivity training techniques with college students may be the tendency of individuals who have yet to resolve the developmental issues of late adolescence to equate intimacy with sexuality. The boundary between sensitivity and sexual intercourse has been defined in terms of trainer ethics (see Morris & Cinnamon, 1976), but the more subtle issues of seduction and control that may arise in any type of educational relationship have yet to adequately addressed.

[11] The feeling of sadness was not simply attributable to the loss of a member, since the man who had left the group continued to live in the communal building and to attend the class meetings. It more likely represented a shared sense of hopelessness about prospects for continuing intimacy within the context of the t-group (see Bion, 1959 p. 151-152).

author's formal interaction with those individuals in the communal living project who were not enrolled in the course, but each of these experiences gave clear indications of having considerable impact on everyone involved, including the author. It should also be noted that while there was more emphasis on residential concerns and less on academic issues, the goals informing the communal living project were much the same as those delineated for the course. That is to say, these interventions were also intended to promote: 1.) integration of the academic and the social experience; 2.) satisfaction with the living group; and 3.) the personal development of the student. The course and the living project were therefore viewed as closely inter-related treatment conditions, and both were expected to contribute to the overall effect of the living learning program.[12]

Results of the Fall 1979 Intervention Study

Demographic Analysis

The group of 52 students completing the precourse measures was strikingly similar to the spring quarter survey group in terms of the demographic variables that were con-

[12] If more separation had been possible between the course and the communal living project, comparison of the outcomes for these two groups might have proved useful. As it was 14 of the 17 residents of the living project who completed the end of the quarter measures had also been enrolled in the course.

sidered (see tab. 7). Once again there were more females in the sample than males and more 19 year olds (21%) than any other age group. The distribution by class level was also similar, but seniors were even more underrepresented than they had been in the survey group, and more that half (58%) of the respondents were new to UCSC that quarter. As in the survey group, almost all of the respondents were of European descent, and most said their families were middle or upper middle class and Protestant.

Statistical comparisons of those who enrolled in the course with those who did not revealed only one significant difference. The proportion (78%) of the course enrolled students who had been raised in one of the three major religions (i.e. Catholicism, Judaism, or Protestantism) was significantly larger than the proportion (27%) of the students not enrolling who had had that type of upbringing. Since individuals indicating one of these three religious backgrounds had totaled 72% of the spring survey group, the course group also appeared to be quite similar to the baseline sample in that regard.

Group Classification Procedure

Preliminary to testing the hypotheses that had been formulated, SPSS subprogram DISCRIMINANT (Hull & Nie, 1981) was used to output group covariance matrices from the spring 1979 survey data for both the satisfaction, and happiness

functions.[13] These matrices were then applied to the fall 1979 precourse data with the result that 71% of those who had responded were classified as having a high probability of being happy with their living groups. Although a larger proportion (80%) of the spring survey group had said they were satisfied, the difference was not significant, and the proportion (72%) of the spring sample indicating that they were happy had been almost the same. There was, however, a significant difference in the proportion of happy but not satisfied students obtained by these two methods with this response pattern attributed to a larger proportion (21% versus 5%) of the fall quarter group (chi square=12.70 $p<.001$).

Parental Attention and Satisfaction

Rating of parental attention: Due to the somewhat evocative nature of the POP items and to the fact that group administrations were again used in the fall quarter study, the POP had been omitted, and no measure of early parental attention was obtained prior to the course. Students in the course were, however, asked to write essays on their family backgrounds, which were used to derive more quantitative estimates of parental attention. A total of 38 essays were submitted by 21 females and 17 males. Most were about 600

[13] Tau statistics calculated from the spring data showed a value of .61 for both the satisfaction, and the happiness functions.

Table 7
Demographic Comparison of Spring 1979 Survey
And Fall 1979 Intervention Samples

Selected Variables	Percent of Respondents by Sample S79(n=123)	F79(n=52)
Sex	99	100
Female	57	58
Male	42	42
Age	100	100
17-18 years old	19	23
19-20 years old	36	35
21 years old or over	45	42
University Class Standing	100	100
Freshman	27	27
Sophomore	22	31
Junior	33	33
Senior	18	9
Quarters Attending UCSC	100	100
1-3	67	92
4-6	24	6
7-9	6	2
10 or more	3	0
Ethnic Background	97	96
African (Black)	2	0
Asian	2	1
European (White)	91	94
Latin	2	1
Socioeconomic Background	98	100
Lower Class	1	0
Working Class	11	13
Middle Class	50	52
Upper Middle Class	35	35
Upper Class	1	0
Religious Background	96	98
Catholic	21	16
Jewish	9	20
Protestant	41	31
Other Denomination	5	5
Combination	5	9
None	15	17

Note. Total sample n=175 including repeated measures

words in length, and, although they tended to vary a good deal in terms of content and style, all of the essays seemed

to provide a reasonably good sense of the individual's family experience.

Four content raters were hired to convert the essays to scaled values using the POP descriptions of attentive and inattentive parents. They were also asked to rate each essay in terms of how satisfied and how happy the writer seemed to be with her or his family experience on six point scales that ranged from "very satisfied" to "not at all satisfied" and from "very happy" to "not at all happy." SPSS subprogram RELIABILITY was run to obtain a standardized alpha statistic for each of the four sets of ratings. The inter-rater reliability coefficient for parental attention was a=.84, and for the ratings of satisfaction (a=.91) and happiness (a=.89) with the family experience this index of agreement was even higher.

Two of the raters were graduate students in sociology at UCSC, and two had been undergraduates there. Two were male, and two were female. All four had had enough exposure to social science research methods to be reasonably comfortable with the task of rating the material. One had been a Kresge student and had participated in the winter 1978 survey, the CA interviews conducted during the winter of 1979, and the spring 1979 survey. She had not, however, been involved in any way with the living learning program that was conducted during the fall of 1979, and the other raters gave no indication of having had any contact whatsoever with

the college. Still, the passages were typed and assigned code numbers in order to protect the anonymity of the writers before they were given to the group of raters. All of the rating was completed in one afternoon session with the author present to provide instructions and clarification as needed. There were, however, relatively few questions or requests for clarification. Each of the raters was paid $12.00 an hour.[14]

Contrary to theoretically derived expectations, results from the spring quarter pilot study had suggested the possibility of a negative relationship between parental attention and living group satisfaction. An effort was therefore made to test not only the degree of association between parental attention and predicted satisfaction, but also the effect of the student's attitude toward the family as an intervening variable. As a test of Hypothesis #1, that there would be a positive relationship between probable satisfaction (PS) and the ratings of parental attention (RPA), a Pearson correlation coefficient was computed for RPA by PS. The hypothesis was confirmed in that there was a significant positive relationship ($r=.40$ $p<.05$) between RPA and PS.

Partial correlations were also computed controlling for rated satisfaction with the family (RSF) and for rated happiness with the family (RHF). The correlation between RPA

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[14] The raters were paid with a research grant from the University of California's Patent Fund.

and PS was found to be even higher for students who were high on RSF ($r=.61$ $p<.01$) and for those who were high on RHF ($r=.63$ $p<.01$), whereas there was no significant relationship between RPA and PS for students who were low on RSF and none for those who were low on RHF. As a test of Hypothesis #2, that individuals who had higher scores for parental attention (RPA) would also tend to have higher scores for expressed inclusion (IE), a t-test was run comparing the average IE scores of the high and low RPA groups. The hypothesis was confirmed in that there was significant mean difference between the IE scores of the high and low RPA groups ($t=-2.47$ $p<.05$).

The apparently positive relationship between early parental attention and expressed inclusion was seen as providing support for Schutz's (1958;1966) postulate of relational continuity. The obtained relationships for parental attention and probable satisfaction under differing conditions of satisfaction with the family experience were also consistent with the theory in that expressed inclusion had been an important discriminating variable in the function used to predict satisfaction with the living group, and these findings were further viewed as an indication that the individual's experience of the parental treatment was likely to be a critical factor in determining the effect that it would have on adjustment in this area. Apparently those students who responded favorably to having a good deal of attention from their parents were more inclined to express a

relatively high level of inclusion behavior, and were therefore more likely to be satisfied with their living group experiences.

Changes in Interpersonal Orientation

At the beginning of the fall quarter, the probably satisfied (PS) group showed a significantly higher mean score on the FIRO-B Inclusion Expressed (IE) scale than the probably not satisfied (PNS) group ($t=2.52$ $p<.05$). In order to test Hypothesis #3, that by the end of fall quarter the PNS group would have increased their IE scores to the level of the PS group, a second t-test of mean difference was run comparing the postcourse scores of the two groups. Paired t-tests were also used to determine the pattern of change, and, as a means of eliminating the potentially confounding affects of statistical regression, the differences between the difference scores for the two groups were tested rather than simply comparing the significance of the pre and postcourse differences for each groups (see Campbell and Stanley, 1963 p.23; Hays, 1973 p.408).

Although there was no significant difference between the PNS and PS groups in their IE scores at the end of the quarter, the hypothesis was not confirmed in that the pre and postest comparisons did not show the expected pattern of stable scores for the PS group and higher scores for the PNS group (see fig. 15). Instead the PS group showed

significantly lower IE scores on the posttest ($t=2.09$ $p<.05$), and the IE scores of the PNS group showed showed no significant change. Comparison of the IE scores for the PS group a the beginning of the fall quarter with those of the group that had reported satisfaction in the spring 1979 survey also revealed a significantly higher mean for the fall quarter group ($t=-3.46$ $p<.01$). It therefore appeared that individuals in the PS group may have started the school year with an inclination to express more than the optimal level of social inclusion for this particular college residential environment. Accordingly, their lower IE scores at the end of the fall quarter may have reflected the fact that highly social behavior was found to be inconsistent with meeting other demands of the living situation, such as academic survival.

Changes in Living Group Attitudes

Attitudes related to satisfaction: At the beginning of fall quarter, the probably satisfied (PS) and probably not satisfied (PNS) groups had shown significant mean difference on three of the five LGQ items that were included in the satisfaction function. Drug use (L3) and shared taste in music (L9) were initially less important and decorating common areas (L6) was initially more important for those in the PS group (see tab. 8). In order to test Hypothesis #4, that by the end of fall quarter the PNS group would have changed

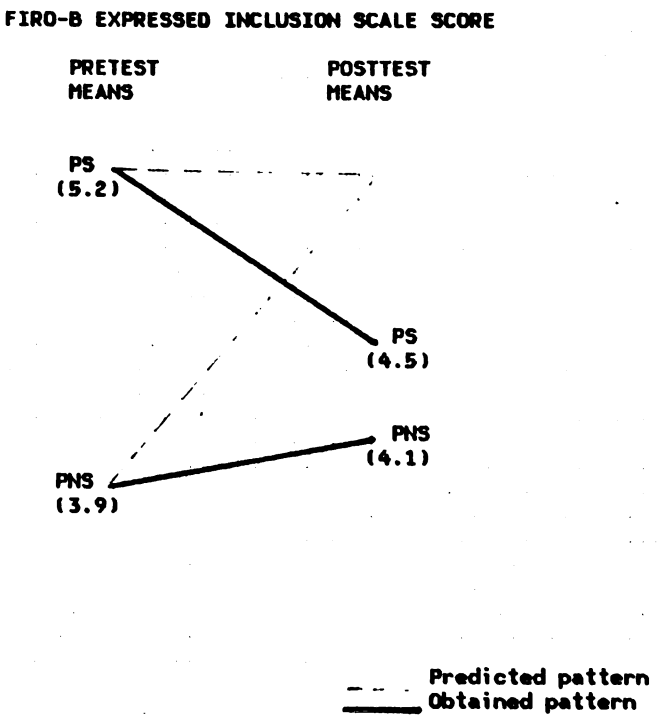

Figure 15. Changes in FIRO-B Expressed Inclusion Scale Scores (Fall 1979)

Table 8
Comparison of Pretest Mean Item
And Scale Ratings for Predicted Groups
Fall 1979 Intervention Study

	Pretest Items Related to Satisfaction	Group Predicted Sat(n=28) Mean	S.D.	Not Sat(n=12) Mean	S.D.	t
L3	Drug use	3.27	1.68	2.00	0.94	2.26*
L6	Decorating	2.67	1.09	3.40	0.97	-1.89*
L9	Taste in music	3.30	1.12	2.50	0.71	2.11*
IE	Inclusion	5.20	1.50	3.90	1.10	2.52*

	Pretest Items Related to Happiness	Group Predicted Hap(n=30) Mean	S.D.	Not Hap(n=10) Mean	S.D.	t
L4	Sharing drugs	3.57	1.53	5.08	1.17	-3.06**
L16	Having sex	3.86	1.56	4.83	1.27	-1.91*

Note. Total sample n=40
*p<.05
**p<.01

their ratings of these items to conform to those of the PS group, t-tests were run comparing the posttest ratings of the two groups, and paired t-tests were used to determine the pattern of change.

Although there was no significant difference between the PS and PNS groups in their posttest ratings of the items, the hypothesis was not confirmed in that the paired t-tests failed to show the predicted pattern of stable scores for the students in the PS group and conforming

scores for those in the PNS group (see fig. 16). The PNS group did show lower mean scores for L3 and L9 and a higher mean score for L6 at the end of the quarter, but the pre and post scores were not significantly correlated for any of these items. The PS group had significantly correlated scores but, contrary to expectation, showed lower mean post test scores for each of the three items. Furthermore, the difference between the difference scores was not found to be significant for L3 or L6, and was in the opposite direction from the predicted effect for L6
(see tab. 9).

Attitudes related to happiness: At the beginning of the fall quarter, the probably happy (PH) and probably not happy (PNH) groups had shown significant mean difference on two of the ten LGQ items included in the happiness function. Shared drug use (L4), and willingness to have sex (L16) were initially rated as more important for those in the PH group (see tab. 8). In order to test Hypothesis #5, that by the end of fall quarter the PNH group would have changed its ratings of these items to conform to those of the PH group, t-tests were run comparing the posttest ratings of the two groups, and paired t-tests were used to determine the pattern of change. This hypothesis appeared to be confirmed in that the PNH group showed a significant increase in their mean scores for both of the discriminating items by the end of the quarter, and their pre and post scores were significantly correlated for both items (see fig. 17). The pre and

post scores for the PH group were significantly correlated as well and showed no significant difference on either item. Also as expected, the differences between the difference scores were significant for both of the items. (see tab. 9).

The two different findings concerning attitude change were perhaps partly attributable to the fact that a large proportion (80%) of the Kresge students had been new to the college and to the residential community at the beginning of the year and would, no doubt, have required a period of adjustment before some of their living group attitudes had stabilized. However, their views on such issues as the social use of drugs or the importance of sexual relationships may have shown the predicted effect in spite of the newness of the situation, because they reflected more deep seated values. In fact, judging from from the " pink party" and the t-group, and from the course papers, issues of intimacy and social involvement were highly salient for these students and also a major motivation for involvement in the living learning program.

Changes in Perceptions of the College

Perceptions related to satisfaction: At the beginning of the fall quarter, the probably satisfied (PS) and the probably not satisfied (PNS) groups had shown a significant difference in their responses to one of the five KRS items

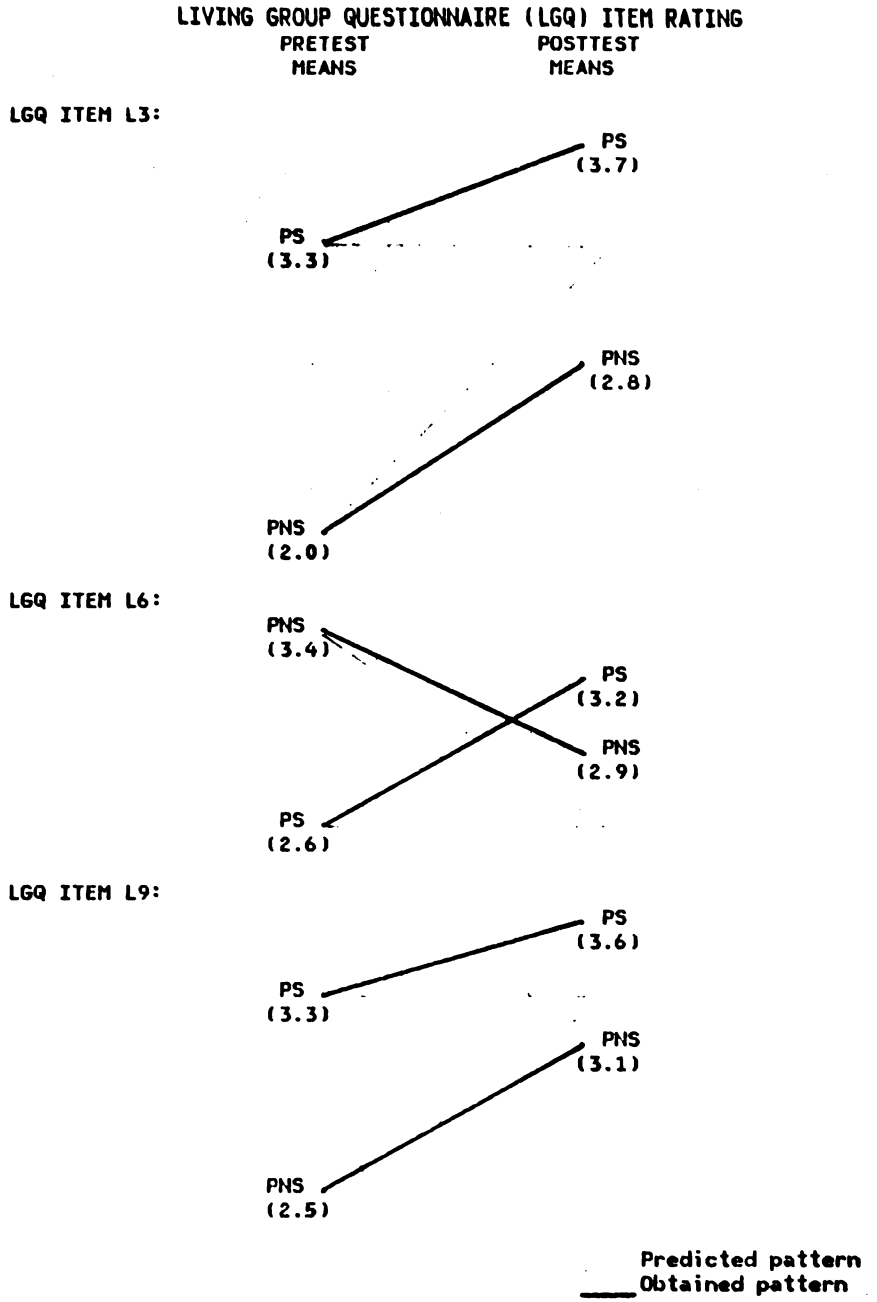

Figure 16. Changes in LGQ Items Related to Satisfaction (Fall 1979)

Table 9
Comparison of Pre and Posttest Mean Item Ratings
For Living Group Attitudes of Predicted Groups
Fall 1979 Intervention Study

Pretest Items Related to Satisfaction		Group Predicted Sat(n=28) t	r	Not Sat(n=12) t	r	Diff. t
L3	Drug use	-1.38	0.50**	-1.27	-0.15	-0.62
L6	Decorating	-2.69	0.44*	-1.10	-0.07	2.67*
L9	Shared music	-1.36	0.44*	-2.29*	0.54	0.61

Pretest Items Related to Happiness		Group Predicted Hap(n=30) t	r	Not Hap(n=10) t	r	Diff. t
L4	Shared drugs	-0.94	0.43*	2.80*	0.70*	2.19*
L16	Having sex	-1.28	0.40*	1.88	0.63*	2.02*

Note. Total sample n=40
*p<.05
**p<.01

included in the satisfaction function. At that point coed living (K8) was more often listed as a reason for living in the college by the PS group (see tab. 10). In order to test Hypothesis #6, that by the end of fall quarter the PNS group would have changed its responses to this item to conform to those of the PS group, crosstabulations were done on the postcourse distribution of responses by group and on the separate pre and post course distributions of each group.

Although there was no significant difference in the proportion of the PS and PNS groups that were interested in

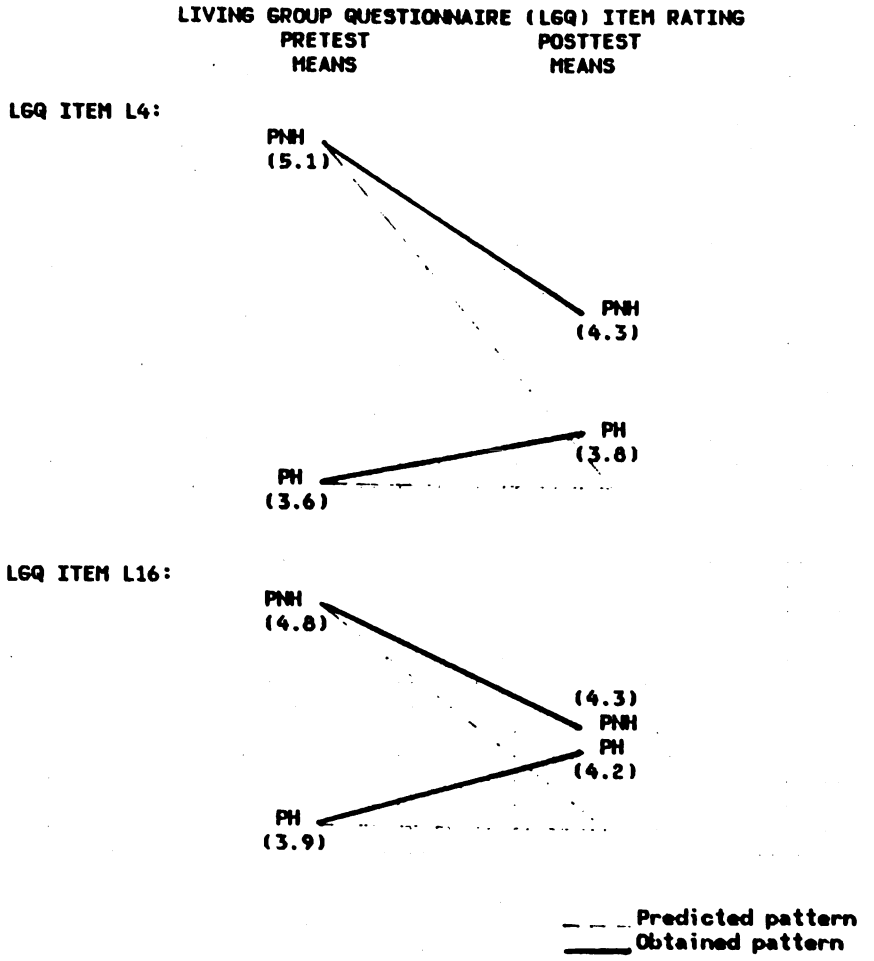

Figure 17. Changes in Living Group Questionnaire Items Related to Happiness(Fall 1979)

Table 10
Comparison of Pretest Differences in Proportions
For Perceptions of College by Predicted Groups
Fall 1979 Intervention Study

	Pretest Items Related to Satisfaction	% Group Predicted Sat(n=28) Yes	Sat(n=28) No	Not Sat(n=12) Yes	Not Sat(n=12) No	Phi
K8	Coed living	52.2	47.8	12.5	87.5	0.35*

	Pretest Items Related to Happiness	% Group Predicted Hap(n=30) Yes	Hap(n=30) No	Not Hap(n=10) Yes	Not Hap(n=10) No	Phi
K5	Academic pursuits	26.1	73.9	75.0	25.0	0.44*
K10	Emotional work	43.5	56.5	0.0	100.0	0.41*

Note. Total sample n=31
*p<.05

coed living at the end of the quarter, the hypothesis was not confirmed in that the predicted pattern of change was not obtained. Less than a third of the PS group had actually been stable in their pre and post responses to the item, and the proportion of the PNS group that changed their posttest responses in the direction of conforming to the pretest responses of the PS group was similarly low.

Perceptions related to happiness: At the beginning the fall quarter, the probably happy (PH) and the probably not happy (PNH) groups had shown significant difference in their responses to two of the five items included in the happiness function. Academic pursuits (K5) was less often listed as a

reason for living in the college and emotional work (K10) was more often listed as a reason by the PH group at that point (see tab. 10). In order to test Hypothesis #7, that by the end of fall quarter the PNH group would have changed its responses to this item to conform to those of the PH group, crosstabulations were done for the posttest distribution of responses by group and for the distribution of pre and posttest responses of each group.

Although there was no significant difference in the proportions of the PH and PNH groups who listed academic pursuits as a reason for living in the college by the end of the quarter and also no significant difference in the proportions of each group listing emotional work as a reason, the hypothesis was not confirmed in that the predicted change pattern was not obtained. Although the posttest responses of the PNH group did show the anticipated amount of shift in the direction of conforming to the pretest responses of the PH group, only a small proportion of the PH group had been stable in their pre and post responses to each item.

The fact that perceptions of the residential community did not tend to show the expected pattern of change was seen as reflecting not only the adjustment process of the student, but also the fact that the college as a whole was undergoing a major transformation of values during that period as well. The individuals who did not list coed liv-

ing or emotional work as a reason for living in the college and those who did list academic pursuits, may actually have been more accurate in their initial impressions of the school, given the priorities of the incoming administration.

Probable and Reported Satisfaction

In order to test Hypothesis #8, that by the end of fall quarter the probably satisfied (PS) and probably not satisfied (PNS) groups would show no significant difference in their reported satisfaction with the current living group (RSC), a t-test was run comparing the mean ratings of RSC for the PS and PNS groups. The hypothesis was confirmed in that there was no significant difference in the mean ratings of the two groups. As a test of Hypothesis #9, that by the end of the fall the probably happy (PH) and probably not happy (PNH) groups would show no significant difference in their happiness with the current living group (RHC), a t-test was run comparing the mean ratings of RHC for the PH and PNH groups. The hypothesis was confirmed in that there was no significant difference in the mean RHC ratings of the two groups.

However, despite the fact that the anticipated results were obtained for these tests of the relationship between initial predictions and subsequent self-report, there was still the question of interpretation. Finding no significant difference between these designated groups by the end

of the fall may have meant that changes had occurred leading to a reduction in initial differences, or that no initial differences had actually existed. In the absence of pretest measures of satisfaction or happiness with group living, the accuracy of the functions used to predict satisfaction and happiness with the living group could not be directly determined. However, given that nine of the discriminating variables showed significant pretest differences for the fall sample, and none of them showed significant posttest differences, it seemed reasonable to assume that the college environment and the events of the quarter had been influential to some degree.

Summary of Hypothesis Tests

There were nine correlational hypotheses to be tested by the data from the fall 1979 intervention study, and five of the nine appeared to be confirmed:

Hypothesis #1: Early parental attention (RPA) showed a positive relationship to probable satisfaction (PS);

Hypothesis #2: Early parental attention (RPA) showed a positive relationship to expressed inclusion (IE);

Hypothesis #5: Individuals initially classed as not likely to be happy (PNH) with their living groups showed the predicted pattern of change in their living group attitudes (LGQ) over the course of the quarter;

Hypothesis #8: Probable satisfaction (PS) showed no significant relationship to reported satisfaction (RS) at the end of the quarter;

Hypothesis #9: Probable happiness (PH) showed no significant relationship to reported happiness (RH) at the end of the quarter.

The other four hypotheses did not appear to be confirmed by the findings:

Hypothesis #3: As expected, there was no significant relationship between probable satisfaction (PS) and expressed inclusion (IE) by the end of the quarter, but the predicted pattern of change was not obtained;

Hypothesis #4: As expected, there was no significant relationship between probable satisfaction (PS) and living group attitudes (LGQ) by the end of the quarter, but the predicted pattern of change was not obtained;

Hypothesis #6: As expected, there was no significant relationship between probable satisfaction (PS) and perception of the college (KRS) by the end of the quarter, but the predicted pattern of change was not obtained;

Hypothesis #7: As expected, there was no significant relationship between probable happiness (PH) and perception of the college (KRS) by the end of the quarter, but the predicted pattern of change was not obtained.

Conclusion: Judging from the results of the hypothesis tests, the spring 1979 survey results did have a certain degree of applicability for the individuals who chose to participate in the fall quarter living learning program, and they were useful in predicting some of the changes that participants would undergo over the course of the quarter. Programmatic emphasis on the relationship between family background and adjustment to the living group also appeared to be quite appropriate, but it was not clear that the use of techniques aimed at enhancing the student's ability to create and sustain new relationships was totally successful. Individuals who were predicted to be less well adjusted did show evidence of changes in the direction of seeking more social involvement and most assessed their living situations in favorable terms at the end of the fall quarter. However, those who were expected to be more well adjusted also showed some change in the opposite direction, which raised important issues about the actual nature of the change process that was involved.

Discussion of the Fall 1979 Intervention Results

The Process of Change

At the beginning of fall quarter 1979, the two groups that had been identified as probably satisfied (PS) and probably not satisfied (PNS) using the satisfaction function

derived from the spring survey data showed significant differences in their levels of expressed inclusion, and in their concern about drug use, taste in music, decorating common living areas, and coed living. They also tended to show significant differences in the amount of parental attention they had received in those cases where there were indications of a favorable attitude toward the family.

By the end of the quarter, these differences were no longer evident, and there was also no difference in the rate of reported satisfaction with the current living group for the individuals who had been initially classed as probably satisfied or probably not satisfied. However, the probably satisfied group, which was expected to be relatively stable, had actually shown considerable change in interpersonal orientation and in the attitudes and perceptions that had previously been related to living group satisfaction.

The two groups that had been identified as probably happy (PH) and probably not happy (PNH) using the happiness function derived from the spring data showed significant differences in their attitudes concerning shared drug use, and sexual involvements as well as in the emphasis they placed on emotional development and academic pursuits. By the end of the quarter these differences had also ceased to be evident, and their rates of reported happiness with the current living group were found to be comparable. Further more, comparisons of initial and final ratings for attitudes

related to happiness showed the predicted pattern of stable ratings for the probably happy group and conformity for the probably not happy group. However, the probably happy group also showed an unanticipated amount of change in their perceptions of the college during this period.

Overall the results of the intervention study were seen as suggesting the operation of certain conformity processes that may or may not have been enhanced by involvement in the living learning program. Conceivably the program served to facilitate some of the processes of attitude and behavior change that were reflected in the findings by bringing a number of students into more regular and intimate contact with one another than might otherwise have been possible. These changes may have occurred in any case, given that most of the students were living in such close proximity to one another.[15] From a social ecological perspective, students who were coming together to form new households were likely to be functioning largely in the maintenance channels of the social environment (Barker, 1968). Initial behavior that was consistent with the expectations of other living group members would tend to be supported, whereas deviancy would be "countered" or "vetoed" (see fig. 9).

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[15] While sensitivity training has been criticized as a conformity inducing educational technique e.g. Argyris, 1972; Odirone, 1970; Pages, 1969), it has also been noted by other researchers (e.g. Brown, 1972b; Newman & Newman, 1978; Stern, 1962) that the residential college offers considerable opportunity for peer influence regardless of the nature of the curricular or extracurricular program.

Since about a quarter of the students was initially classed as not likely to be satisfied with their living groups, and the same proportion was classed as not likely to be happy, they may have been in the minority in their living groups as well as in the program as a whole, and the pressure to conform may have been quite strong. At the same time, there seemed to be social pressures exerted by the wider institutional environment that were operating to counter the kind of communally oriented values that had been characteristic of the residential community in previous years. Consequently, students who were primarily interested in social interaction or valued intimacy and involvement more than academic pursuits may have found themselves in the minority within the newly reorganized college, which could have accounted for the fact that a converging pattern of responses was obtained for the living learning group as a whole rather than the predicted pattern of unilateral change for those individuals who were less likely to be satisfied or happy with their living groups.

Implications for the Followup Study

Harrison (1970) has noted that the outcomes of various types of human relations and sensitivity training groups may be expected to show variation over time and should therefore be measured at more than one point in time. He has outlined a three stage change process involving: 1.) the unfreezing effect of the training program; 2.) the change process

during which high activity levels and considerable inconsistency may be observed; and 3.) refreezing into a more "steady state" pattern of behavior. In the study of FIRO score conformity in heterogeneous groups that was cited earlier, Jacobson and Smith (1972) found notable differences in the delay of effect for the two groups that were compared. The encounter group made up of professional people showed change on both the postgroup, and the followup measurements, but the group made up of college students showed more change on the followup than immediately after the group.

An additional study was therefore undertaken in order to determine whether the findings obtained from the fall quarter posttest represented change that was still in the process of occurring, or a more enduring pattern of responses. This followup was also viewed as a partial replication of the correlational study that was made using the spring 1979 survey data and that had provided the basis for the fall quarter program intervention. The 1980 survey was aimed at identifying:

1.) The relationship between parental attention and reported satisfaction at the end of the school year;

2.) Factors related to reported satisfaction with the living group by the end of the school year;

3.) Factors related to reported happiness with the living group by the end of the school year; and

4.) Factors related to participation in the fall quarter living learning program.

CHAPTER V: THE FOLLOWUP STUDY

RESIDENTIAL SURVEY - SPRING 1980

Purpose of the Spring 1980 Survey

During the 1979-80 academic year Kresge's new faculty and administration made various efforts to redefine the college along more traditional lines. In the campuswide housing brochure that had been mailed to incoming students, the residential community was described as "mature, varied, and highly verbal," and it was suggested that Kresge students would have a good deal of personal freedom in a community that was "self-contained and self-reliant." Students arriving oncampus in the fall of 1979 found the Idler Cafe had been converted to a commercial restaurant specializing in gourmet Schezuan dinners, the Food Co-op had been moved to the rear lower level of one of the residential buildings, and some of the redwood trees had been cut down in the course of constructing an additional parking lot for faculty and staff.

In addition, the Community Affairs Committee (CAC) had been eliminated along with its various subcommittees, and the students who were employed as Community Assistants (CAs) were no longer expected to devote time and energy to activities specifically aimed at promoting a sense of community in the college. While most of these changes had been

contemplated long before the reorganization, returning students tended to view them as an arrogation of authority on the part of the new provost and as a violation of Kresge's tradition of student participation in college policy making. As one resident noted in a yearend survey conducted by the newly established Housing Advisory Committee (Note 8):[1]

> All Kresge's past sense of community and its heritage have been destroyed by certain reorganization personnel changes. A sense of continuity is lacking, resulting in general Kresge apathy towards building community. This isn't a community (any more), this is a nice residential area with parties!![sic]

There were also indications that the fall quarter living learning program, which was expected to ease the transition, had actually heightened the conflict between "old Kresge" and "new Kresge" values. It therefore seemed appropriate to also obtain measures of the attitudes and perceptions of students in the wider residential community as part of assessing what appeared to be developmental trends for those participating in the experimental program. The spring 1980 followup study was designed for this purpose and was also intended as an opportunity for further investigation of factors that were found to be related to satisfaction or happiness with the living group in the spring of 1979.

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[1] Liz Slusarz, who became the Kresge Housing Coordinator that year provided the author with access to the results of this survey and also estimates of the occupancy rates in the college from fall 1977 to spring 1980.

Method of the Spring 1980 Survey

Procedure Used in the 1980 Survey

A total of 172 (87 female and 83 male) undergraduates living at Kresge during spring quarter 1980 were approached in their residences and asked to complete a set of questionnaires concerning their living group attitudes, personal backgrounds and perceptions of the college. These were all the individuals who could be contacted with repeated callbacks at various times of day and night rather than a statistically random sample of the college residential community. All of the students who were contacted agreed to complete the questionnaires, which were left with the understanding that the author would return the next day to collect them. Completed questionnaires were collected from 134 (69 female and 63 male)[2] residents, including 22 (12 females and 10 males) who had participated in the fall quarter living learning program. The respondent group as a whole represented 61% of the estimated 220 undergraduate students then living in the college.

Instruments Used in the Spring 1980 Survey

Each repondent was asked to complete the LGQ, the POP,

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[2] There were two individuals who did not indictate sex.

and the KRS. Since they would be responding to the questionnaires in relative privacy rather than in a group administration, it was assumed that an emotional response to the POP items was less likely to be a problem. In addition, this more direct measure of early parental attention would be used to test the concurrent validity of the results obtained from independent ratings of the family experience. However, the FIRO-B scales were omitted from the spring 1980 survey in the interest of having a more manageable set of instruments and one that students would be willing to complete. This decision seemed to be further justified by the fact that expressed inclusion, the only subscale that had shown a significant relationship to satisfaction in the earlier study, had also been positively correlated with parental attention.

Results of the Spring 1980 Survey

Demographic Analysis

The spring 1980 respondents were quite similar to the 1979 survey group in several respects (see tab. 11). There was less difference between the number of females and the number of males in the 1980 sample, but once again more females had responded. There were other similarities to the previous year's sample as well: The proportion of 19 year olds was larger than for any other age group; freshpersons

were overrepresented, whereas seniors were underrepresented; and a little over half (53%) of the respondents had only been at UCSC since the beginning of the academic year. Again a large majority of them were of European descent with middle or upper middle class backgrounds, and most said they were raised as Protestants. Still, there were notable differences between the two samples. The proportion of middle class students in the 1980 group was significantly smaller (chi square=8.88 $p<.01$), and the proportion of upper middle class students was larger, though not significantly so. The proportion of students from Protestant backgrounds showed a significant decline in 1980 (chi square=5.50 $p<.05$), and there was a significantly higher proportion that had been exposed to more than one religious influence (chi square=9.03 $p<.01$). It was not clear whether these differences reflected actual shifts in the demographic makeup of the college residential community, the limitations of the sampling technique that was used, or the effects of variation in the data collection procedure.[3] The test for sample bias used in the 1979 study showed no significant difference between the survey and shortform groups on any of these variables, and the proportion of the estimated residential population responding in 1979 (58%) had been similar to the 1980 proportion (61%). The possibility that the setting in which the questionnaire was completed tended to influence response to these particular items could not, however, be ruled out.

Table 11
Demographic Comparison of Spring and Fall 1979
With Spring 1980 Survey Sample

Selected Variables	Percent Of Respondents By Sample		
	S79(n=123)	F79(n=52)	S80(n=134)
Sex	99	100	98
Female	57	58	51
Male	42	42	47
Age	100	100	100
17-18 years old	19	23	13
19-20 years old	36	35	50
21 years old or over	45	42	37
University Class Standing	100	100	100
Freshperson	27	27	32
Sophomore	22	31	25
Junior	33	33	30
Senior	18	9	13
Quarters Attending UCSC	100	100	100
1-3	67	92	68
4-6	24	6	27
7-9	6	2	3
10 or more	3	0	3
Ethnic Background	97	96	95
African (Black)	2	0	1
Asian	2	1	1
European (White)	91	94	89
Latin	2	1	4
Socioeconomic Background	98	100	99
Lower Class	1	0	0
Working Class	11	13	8
Middle Class	50	52	31*
Upper Middle Class	35	35	46
Upper Class	1	0	4
Religious Background	96	98	99
Catholic	21	16	18
Jewish	9	20	17
Protestant	41	31	26**
Other	5	5	7
Combination	5	9	18*
None	15	17	13

Note. Total sample n=309 including repeated measures
*p<.05
**p<.01

Parental Attention and Satisfaction

When the concurrent validity of the independent ratings of parental attention (RPA) that had been derived from family histories written in the fall (RPA) and the students' own ratings (PA) was tested by computing the Pearson Correlation coefficient for RPA by PA, the two measures were found to be highly correlated ($r=.70$ $p=.001$). In addition, crosstabulation showed 100% agreement in the ratings of students whose parents were relatively inattentive as compared to 67% agreement for those who said their parents had been more attentive to them as children.

In order to test the relationship of early parental attention (PA) as measured by the POP to students' reported satisfaction with the living group in the yearend followup study (FSC), a Pearson correlation coefficient was computed for PA by FSC. The two measures were not found to be significantly correlated for the total sample of 134, but partial correlations controlling for participation in the fall quarter program did show a significant relationship between PA and FSC for the 21 respondents who had been program participants ($r=.59$ $p<.01$), and crosstabulations indicated that all of those who said their parents had been attentive reported satisfaction with the living group, while only half of those whose parents had been inattentive said they were satisfied. No relationship was found between PA and FSC for students who had not participated in the living learning program.

It therefore appeared that the individuals who had chosen to be in the living learning program differed from other students in the college in terms of the importance of early family experiences for their adjustment to the group living situation. It also seemed possible that these students were influenced by their experience of the program in some way that made the family experience more salient. However, given the higher degree of correspondence between independent and student ratings for those whose parents had been relatively inattentive and their lower rate of reported satisfaction, it would appear that these students were using the family history task, and perhaps the program in general, to deal with their concerns in this area. It also seemed likely that these issues were related in some way to living group adjustment.

Variables Related to Program Participation

The LGQ, POP, and KRS items, and students' ratings of satisfaction and happiness with the living group were used to discriminate between students who had participated in the living learning program and those who had not. The function that was derived had an eigenvalue of .29 and a canonical correlation of r=.47 with 11 of the 40 variables included. The covariance matrices appeared to be equal (m=86.58 p=.37), and the structure matrix of pooled within group correlations showed eight variables that were significantly

correlated with the function. Program participants were more interested in learning about communities, more oriented toward living with people who shared their academic interests, and more concerned about living with people who shared their level of noise tolerance. They were less concerned about living with people who were willing to have sex with one another, and they were less interested in living with people of the same age or class standing in the university. Individuals who had participated in the program also tended to say that they had received less discipline from their parents when they were growing up (see tab. 12).

Since only 68% of the original group of program participants were still living in the college residential community by the time the spring 1980 survey was conducted, there was some question as to whether these students were representative of the participants as a whole. T-tests were therefore run comparing those who responded to the spring quarter survey with those who did not in terms of their demographic characteristics, living group attitudes and perceptions of the college residential community at the beginning of the fall quarter. No significant differences were found in their ratings of the LGQ and KRS items, but the students who had persisted in the residential community tended to come from families of lower socioeconomic status and had a higher class standing in the university.

These results seemed to provide further evidence that

Table 12
Canonical Discriminant Function
For Living Learning Program Participation
Spring 1980 Survey

Items	Prediciting Participation	Regression Coeff.[a]
L13	converse regularly	0.57
L15	comfortable hugging/kissing	-0.51
L16	willing to have sex	0.63
L20	share academic interests	0.26
L22	share religious background	-0.39
L24	no more than three others	0.47
PA	Parental Attention	-0.45
PD	Parental Discipline	-0.38
PW	Parental Warmth	0.64
K4	form close relationships	-0.31
K6	learn communities	0.52

Items	in Structure Matrix	Correlation Coeff.*
L24	no more than three others	0.39
K6	learn communities	0.35
L16	willing to have sex	0.23
L20	share academic interests	-0.23
L8	share noise tolerance	-0.23
L18	close to same age	0.22
L19	same university class	0.22
PD	Parental Discipline	-0.20

[a]Due to direction of scaling on the LGQ positive loading is indicated by a negative sign.
*$p<.05$

the living learning program may have attracted a distinctly different type of student and may have served to sustain some of the differences despite countering influences exerted by the general student community. Furthermore, although the fall quarter program participants were similar to the spring 1979 survey group in terms of demographic

profile and in terms of their orientation toward community, they were found to be more rather than less academically oriented than other residents by the end of the school year. The program may therefore have been relatively successful in promoting integration of the social and academic experiences.

Variables Related to Satisfaction

Discriminant analyses were performed on the spring 1980 survey data using sex, age, socioeconomic status (SES) as well as the POP, the LGQ, and the KRS to identify variables related to reported satisfaction and reported happiness with the current living group. The satisfaction function that was derived had an eigenvalue of .42 and a canonical correlation of r=.54 with 13 of the 41 variables included. The covariance matrices appeared to be equal (m=133.65 p=.20), and the structure matrix of pooled within group correlations showed four items that were significantly correlated with the function. Those in the satisfied group tended to place less importance on privacy and personal space and were less concerned about living with people of the same age or class standing in the university, but they were more concerned about living with people of the same ethnic background and more inclined to see the college as a place to form close relationships (see tab. 13).

The happiness function had an eigenvalue of .46 and a

Table 13
Canonical Discriminant Function
For Satisfaction with Living Group
Spring 1980

Items Predicting Satisfaction		Regression Coeff.[a]
AGE	age in years	-0.26
L5	cooperate in decorating	0.94
L7	cooperate in cleaning	-0.42
L8	share noise tolerance	-0.31
L9	share taste in music	0.56
L11	accept meditating	0.37
L12	accept open emotions	0.46
L13	converse regularly	-0.40
L14	comfortable touching	-0.35
L19	same university class	0.54
L21	share ethnic background	-0.68
K4	form close relationships	0.28

Items in Structure Matrix		Correlation Coeff.*
L5	personal space/privacy	0.39
K4	form close relationships	0.28
L18	close to same age	0.25
L19	same university class	0.21
L21	share ethnic background	-0.19

[a]Due to direction of scaling on the LGQ positive loading is indicated by a negative sign.
*p<.01

canonical correlation of r=.56 with 10 of the 41 variables included. The covariance matrices were apparently equal (m=81.20 p=.10), and the structure matrix of pooled within group correlations showed seven items that were significantly correlated with the function. Students who were happy with their living groups tended to place more importance on eating meals together and on cooperation in

cleaning the common areas. They were more inclined to live with at least four other people, but they were less concerned about living with people who shared their taste in music, people who accepted singing or dancing in the common areas, or people who were comfortable with open display of emotion. On the average students who said they were happy with their living situations were about seven months younger than those who said they were not (see tab. 14).

Although ethnic group homogeneity seemed to be more important for the 1980 residents, and certain forms of social interaction tended to be more at issue, it still appeared that the values of that year's residents were not entirely different from those of students who had lived there earlier, since an interest in forming close relationships was positively correlated to residential satisfaction for both the 1979, and the 1980 samples.[4] Sharing meals within the household was more important for satisfied residents in 1980, and although perceptions of the college as a community or as a place for communal living no longer distinguished those who were happy with their living groups from those who were not, it was still the younger students who were most likely to report happiness.

Happiness and Satisfaction

[4] The results of the spring 1979 discriminant analyses were summarized in chapter 3 (see tab. 3 & 4).

Table 14
Canonical Discriminant Function
For Happiness with the Living Group
Spring 1980

Items	Predicting Happiness	Regression Coeff.[a]
AGE	age in years	-0.52
SES	socioeconomic status	0.26
L2	eat meals together	0.46
L5	personal space/privacy	-0.44
L7	cooperate in cleaning	0.77
L9	share taste in music	-0.63
L10	accept singing/dancing	-0.47
L12	accept open emotions	-0.31
L25	four or more others	0.39
K10	work emotional problems	-0.26

Items	in Structure Matrix	Correlation Coeff.*
L10	accept singing/dancing	-0.32
L9	share taste in music	-0.30
L2	eat meals together	0.27
L7	cooperate in cleaning	0.21
AGE	age in years	0.21
L25	four or more others	0.21
L12	accept open emotions	-0.21

[a]Due to direction of scaling on the LGQ positive loading is indicated by a negative sign.
*p<.01

Chi-square comparisons of the percentage of students in the spring 1979 and spring 1980 samples who said they were satisfied or happy with the living group with the percentage of program participants indicating satisfaction or happiness at the end of the fall and spring quarters showed no significant differences. There were also no significant differences between these obtained ratings of households and the

predicted ratings for the fall quarter group that were generated by applying the spring 1979 functions to the fall pretest data. On first consideration, such results did not appear to be entirely commensurate with the objectives of the living learning program. However, the finding that there were also no significant differences in the obtained ratings of the individuals who were predicted to be satisfied or happy and those who were not may have indicated that the program had a positive impact for those students who were prone to adjustment problems in such a residential community.

Discussion of the Spring 1980 Survey Results

Findings Applied to the Theoretical Model

The results of the followup study are discussed below in terms of the theoretical model of student living group satisfaction first presented in chapter 1 (see fig. 18):

Family background (A): Students' ratings of early parental attention were positively related to reported satisfaction with the living group, but only for those who had participated in the living learning program. Age when living oncampus was also related to reported happiness with younger students more often saying they were happy with the living group.

Social orientation (I): Valuing privacy and wanting to live with other people of the same age were found to be negatively related to satisfaction, whereas wanting to live with others of the same ethnic background was positively related to satisfaction with the living group. A high value on eating meals together, cooperation in cleaning, and living with four or more other people was positively related to reported happiness, while an emphasis on shared taste in music and wanting to live with people who accepted singing or dancing in common areas was negatively related to happiness with the living group.

Academic orientation (I): Wanting to live with others who shared the same class standing in the university was negatively related to reported satisfaction with the living group.

Perceived Social Orientation (C): Students who said at the end of the school year that they viewed the college as a good place for forming close relationships were more likely to report satisfaction with their living groups that those who did not.

Living Group Satisfaction (C): Satisfaction and happiness were again found to be distinct though related constructs with satisfaction reported somewhat more often than happiness.

Conclusion: The results of the followup phase of the

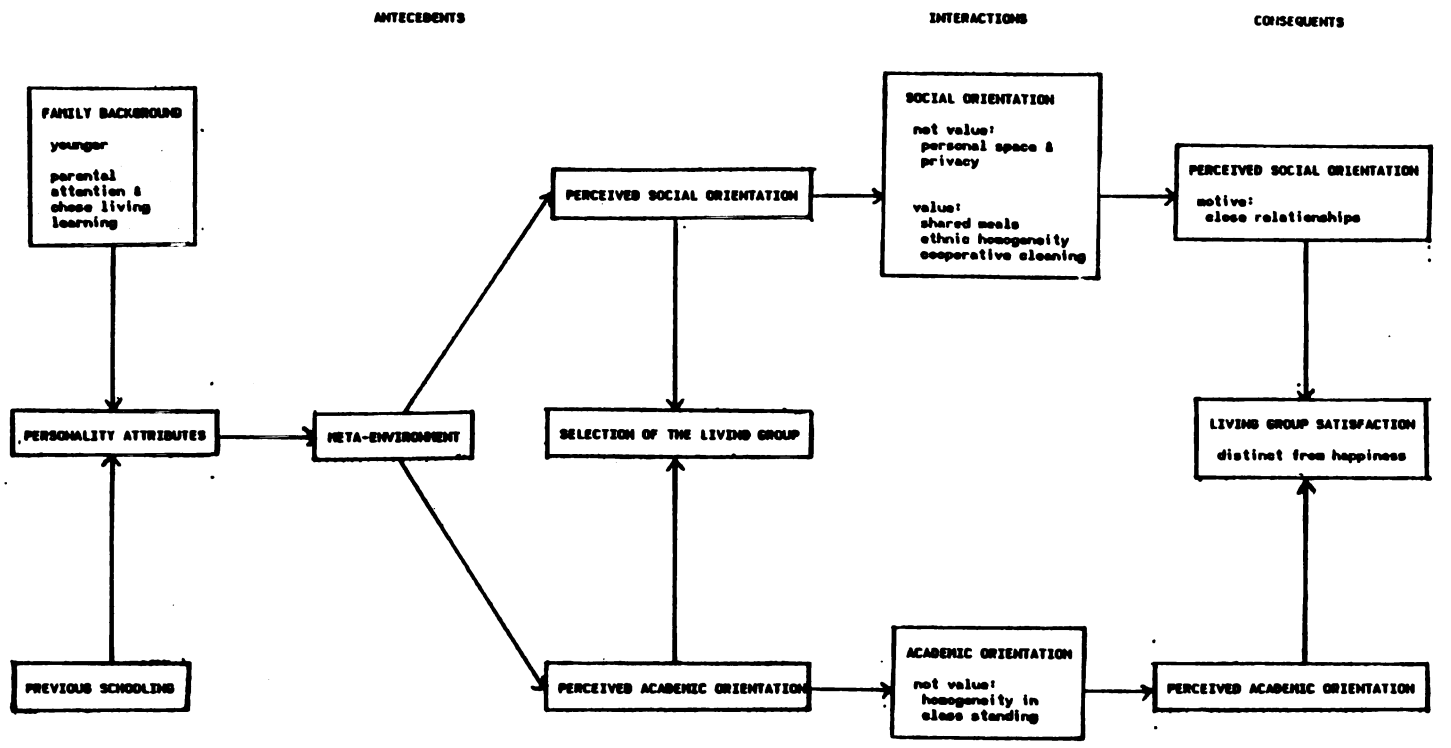

Figure 18. Factors Related to Satisfaction or Happiness with the Living Group (Spring 1980)

research were generally similar to the earlier findings in that individual level factors and the quality of social interaction that characterized the residential environment were again found to be important determinants of student satisfaction or happiness with the living group. For those students who had chosen to participate in the living learning program, one aspect of the family interpersonal dynamic, early parental attention, proved to be a major contributing factor as well.

There also appeared to be differences in the type of social interactions favored by students who said they were satisfied, which may have reflected the various changes that were instituted in the college during the period between the 1979 and 1980 surveys. The different variables that emerged from the two years' analyses may, however, have resulted from other factors such as self-selection into the residential community or the respondent group, or they may have been spuriously or artifactually produced. Still, the data strongly suggest that students living in the college continued to assess their residential arrangements in terms of social and interpersonal considerations rather than academic or professional goals.

CHAPTER VI: SUMMARY AND CONCLUSION

RATIONALE AND THEORY FOR THE RESEARCH

Over 250 living learning programs and as many as 9 living learning colleges were created on American campuses during the late 1960s and early 1970s with the expectation that they would contribute in some positive way to students' academic achievement, personal growth, and/or satisfaction with oncampus living. Few systematic efforts have been made, however, to determine the effectiveness of such programs, and those evaluations that were undertaken have not usually been informed by psychological theory. The research reported in this dissertation was therefore intended as a theory-based investigation of the processes by which a living learning program might be expected to influence college student development. Satisfaction or happiness with the living group was selected as the outcome of interest, because it was directly measurable and might be a precondition for achieving other programmatic goals.

Prior research on the effects of the college student living group had focused mainly on institutional level factors and suggested that groups with a favorable social climate were more often found on private campuses or at state schools located in small towns. It had also been found that residents of low level or small scale dorms and units with

fewer single rooms more often developed sociable households; that groups made up of individuals with comparable academic ability, students who had the same major, or those who were in the same field of study tended to be more satisfying; and that opportunities for faculty contact served to further insure satisfaction with such living arrangements. It appeared, however, that lower division students and individuals majoring in the more socially oriented fields of study were most likely to be satisfied with academically oriented residential facilities.

The few studies that considered the influence of individual level factors on the social climate of the living group tended to emphasize the relationship between homogeneity and satisfaction. Groups composed of students from similar socioeconomic or racial backgrounds were found to be less socially alienating. All-female groups were also found to be more socially oriented and were apparently more satisfying for upper division women when they were separated by class level as well. Coed groups were found to be more socially oriented than those made up entirely of males, and when intuitive type males were assigned together, they tended to be more sociable than groups made up of males of other personality types.

By drawing from the more general body of research on college student adjustment and development, a dual systems model of factors related to student living group satisfac-

tion was developed to integrate these various institutional and individual level findings. The antecedent variables considered in the model included the student's family background, personality attributes, and previous schooling as well as the meta-environment of the living group, student's initial perceptions of the social and academic climate of the residential environment, and selection of the living group. The actual social and academic orientation of the living group were represented as interaction variables and the student's subsequent perceptions of the social and academic orientation of the residential setting were included along with reported satisfaction and happiness with the living group as consequent or outcome variables.

This model was tested using a three-phase program of research that began in the winter of 1978 and ended in the spring of 1980. The research setting was the residential community of an experimental college that had begun with a living learning curriculum but was evolving toward greater separation of the academic and residential components during the time that the investigation was conducted. A review of previous studies of the setting and its metaenvironment indicated that the college had been expressly designed to offer many of the features that might be expected to enhance the social climate of student living groups. Among other things, it offered small scale and low level structures, a high proportion of shared sleeping arrangements, and the close proximity of academic and residential facilities.

PHASE I - PRELIMINARY STUDIES

An interview survey of the entire student residential community conducted during the winter quarter of 1978 showed a large majority of the students endorsing the idea of participatory democracy and a communitarian emphasis for the college but a substantially smaller proportion who were willing to be directly involved in running the college as a community. Although a relatively large number of students endorsed a view of the college as a therapeutic community, others insisted that living so closely with so many people was more stressful than therapeutic, and the need for improved support services was frequently pointed up during the course of the interviews.

Interviews with the college's Community Assistants (CAs) conducted the following winter suggested that, in this particular residential community, successful living groups were considered to be those that managed to remain together throughout the school year, and that such groups were usually composed of individuals who held similar attitudes toward various aspects of group living or those who shared similar social backgrounds. However, the results of a pilot study of six groups that had remained relatively intact by the spring quarter of 1979 did not tend to support the assumption that these students had stayed together because they were satisfied with their households. A questionnaire survey of the residential community conducted later that

quarter also revealed that this pilot sample did not differ significantly from the other residents in terms of their living group attitudes or perceptions of the college as a community, although they did appear to be more reluctant to risk forming new relationships by changing households.

Discriminant analysis of the spring 1979 survey results yielded several predictors of satisfaction or happiness with the living group, including aspects of the student's family background, personality attributes, social and academic orientation toward the living group, and yearend perceptions of the social and academic orientation of the residential community. More specifically, students who said they were satisfied or happy were younger and from families of higher socioeconomic status. They scored higher on expressed inclusion and placed more value on living with people who cooperated in decorating, conversed regularly, and were comfortable touching one another. They were also more inclined to see the college as a place to form close relationships, to live communally, and to avoid using the campuswide food service. On the other hand, these students placed less importance on living with others who had the same class standing in the university and were less likely to say living in the college made it easier to pursue their academic interests.

PHASE II - THE PROGRAM INTERVENTION

On the basis of these findings, a one quarter living learning program was developed for the purpose of promoting student residential satisfaction, and the second phase of the research consisted of a study of this intervention, which was conducted during the fall quarter of 1979. The functions derived from the discriminant analyses of the spring survey results were used to classify progam participants as probably satisfied or not satisfied and probably happy or not happy at the beginning of the fall quarter, and it was assumed that only those individuals who were not likely to be satisfied or happy with their living groups would show significant change on the discriminating variables by the end of the program. Five of the nine hypotheses that were formulated in terms of anticipated differences in these groups appeared to be confirmed, and four did not.

It was expected that those individuals whose parents had been relatively attentive to them as children would be more likely to express a high level of social inclusion and would also be more likely to make a satisfactory adjustment to group living in college. It was further assumed that after participation in the living learning program, those students who were initially less likely to be satisfied with their living groups would express a higher level of expressed inclusion and would show attitudes and perceptions that were more consistent with those of the students who were initially expected to be satisfied with their living

groups. As a result, it was predicted that there would be no difference between the two groups in their actual rates of reported satisfaction at the end of the fall quarter.

Although parental attention was found to be positively related to expressed inclusion and to probable satisfaction, the probably satisfied group did not maintain their relatively high scores for expressed inclusion over the course of the quarter. As hypothesized, there was no difference in the rates of reported satisfaction for those who were predicted to be satisfied and those who were not, but the attitudes and perceptions that were assumed to be related to satisfaction with the living group showed unexpected changes for the group that was predicted to be satisfied, and the resulting pattern of converging scores that was obtained seemed to reflect mutual conformity rather than the anticipated unilateral influences.

This was also the case for those perceptions of the residential community that were assumed to be related to happiness with the living group. However, attitudes related to happiness did show the hypothesized pattern of stable scores for the group of individuals who were predicted to be happy and conformity for those who were not. Living with people who shared in the use of drugs and were willing to have sex with one another had apparently become as important for the students who were initially less likely to be happy as for those were expected to be happy with their residen-

tial experience.[1]

PHASE III - THE FOLLOWUP STUDY

The residential survey that was conducted in the spring of 1980 constituted the third and final stage of the research and served as a followup investigation of the attitudes and perceptions of the wider college community, which appeared to provide an important frame of reference for participants in the living learning program. The study also provided an opportunity to further test the relationship between early parental attention and college living group satisfaction, and the relationship was again found to be positive, but only for those individuals who had participated in the fall quarter living learning program. Discriminant analysis also showed program participants placing more value on community and on group living and that they were less concerned about having a living group that was homogeneous in terms of age or one in which the members were willing to have sex with one another.

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[1] There is some evidence to suggest that drug use is typically higher among college students (Bachman & Johnston, 1979), and among highschool students who are heavily involved with the peer group (Bachman, Johnston & O'Malley, 1981). Apparently students in the PH group tended to fall into this latter category since they were more concerned about shared drug use even before living in the college. The tendency of the college environment to influence premarital sexual standards has also been noted in other research (e.g. Jurich, 1979; Weis & Slosnerick, 1981).

When discriminant analyses were run for satisfaction and happiness with the living group, the spring 1980 sample appeared to differ somewhat from the students who had lived in the college the previous year, but there were also some points of commonality. Family background, social and academic orientation toward the living group, and perceived social orientation were related to reported satisfaction or happiness for students in both samples, and in both samples it was the younger students, those who were not concerned about living with others who shared their class standing in the university, and those who saw the college as an easy place to form close relationships who were most likely to make favorable assessments of their living groups.

LIMITATIONS OF THE RESEARCH

THEORETICAL LIMITATIONS

The conceptual framework that was used in conducting the dissertation research was discussed in some detail in chapter 1. It involves a systems theory approach and combines elements of several models that have been proposed as the basis for research on college student development. In addition, it draws from social ecology theory and interpersonal needs theory, which have both been frequently applied to research in this area. The resulting schema is intended a balanced representation of the institutional and

individual level determinants of college student living group satisfaction and has proved useful as a means of delineating the total field of operating variables from which hypotheses may be derived. However, due to the exploratory nature of this research, the model has yet to be adequately tested, and it remains for future empirical studies to demonstrate its fruitfulness and practical relevance.

It would appear from this initial investigation that college residential groupings may be appropriately conceptualized as behavior settings in which students are encouraged by the structure of the social environment to adopt certain approved ways of functioning. It also appears that there are important individual differences in susceptibility to environmental influence that may be traceable to the early family experience of the student or to patterns of interpersonal behavior associated with that experience. What remains to be identified, however, are the conceptual linkages that may determine more specifically why one student adapts to the demands of the residential setting while another persists in importing an interpersonal orientation that is clearly ineffective.

METHODOLOGICAL LIMITATIONS

It should be noted that this investigation was conducted solely as a dissertation research project and was limited to a single college setting. That college was

relatively unique in terms of both its curriculum, and the design of its residential facilities, and it is conceivable that the results of research dealing mainly with institutional level factors would have limited applicability elsewhere. It is assumed, however, that the intrapersonal processes related to living group satisfaction will be similar in other college residential settings where students maintain such households, and may also apply to some extent for students living in groups offcampus.

All three of the major studies reported here were correlational. The fall 1979 study involved a planned intervention in the form of the living learning course but was nonexperimental, since no true control group was designated. Three factors influenced the choice of a no-control design: 1.) The intervention involved an elective course offered on an open enrollment basis, which technically meant that every student who indicated an interest in taking it that quarter had to be admitted; 2.) Even if it had been possible to deny or defer enrollment for some random group, the very fact that they were initially denied access to the course might have resulted in unintended adverse effects; 3.) There was also no reason to assume that a group of students who did not choose to enroll in the course would be strictly comparable to the group who did.

The fall intervention focused instead on comparisons of subgroups within the course and attempted to assess the

extent to which differential changes were evidenced by these groups of students after participating in a living learning program. It is not assumed, however, that the obtained effects were entirely or even mainly the result of participation in the program. In addition, although the research spans two academic years (1978-79 and 1979-80), no longterm followup was conducted. The results may therefore be taken as indicative only of the short range developmental processes that students appear to undergo in the course of an academic year.

RELIABILITY OF THE FINDINGS

The discriminant functions that were generated from the spring 1979 and spring 1980 survey results served as a means of delineating not only factors that were related to student living group satisfaction, but also the changes that students might be expected to undergo during a one quarter living learning program. Consequently, the fact that the reliability of these functions has yet to be tested represented a serious methodological limitation of this work. Neither of the survey groups was, however, large enough to permit a half-sample reliability check,[2] and combining the two

[2] Huberty (1975) has described a method for testing the reliability of discriminant functions when splitting the sample is not feasible. SPSS does not perform such a test, but there is a computer program that will (see Dixon & Brown, 1979 p. 718). The cost of converting the data to the appropriate format did not, however, appear to be warranted in this largely exploratory stage of the research.

samples for that purpose did not prove feasible, since there was considerable difference in the discriminating variables that predicted satisfaction and happiness for each year's sample. In future studies, the use of a larger sample or a test-retest design would also provide an opportunity to determine whether one of the survey groups was more similar to students living in other types of residential communities or more representative of the general college student population.

VALIDITY OF THE FINDINGS

INTERNAL VALIDITY: Campbell and Stanley (1963) have provided a thorough delineation of the critical threats to internal and external validity that are likely to arise in the type of pre-experimental research that was undertaken as the basis of this dissertation. The intervention study was conceptualized as a comparison group design with pre and post measures and no true control group. The students who were predicted to be satisfied and those who were predicted to be happy were expected to serve as baseline or reference groups that would not be appreciably affected by the program. It was the students who were not likely to be satisfied or happy with their living groups for whom significant changes were expected to occur over the course of the quarter.

Since this distinction and did not involve actual

separation of the groups, all of the students received the same treatment before, during, and after the course, and certain threats to internal validity may therefore have been minimized. Testing and instrumentation effects were assumed to be the same for all respondents. Maturation and selection would not be confounding factors, because they had been defined as independent variables, and the groups were expected to show initial differences on them. In addition, the effects of statistical regression were controlled by comparing the differences between pre and posttest ratings rather than merely evaluating posttest differences.

Still, the results suggested that there were major differences in the impact of what Campbell and Stanley (1963) referred to as "co-occuring historical events." Those residents who were predicted to be satisfied showed more attitude and behavior change in the direction of conformity with the wider college community than those who were not expected to be satisfied with their living groups. The resulting pattern of convergent ratings therefore suggested the influence of peer pressure more than programmatic intervention and raised questions about the feasibility of inducing similar outcomes for groups that differ initially on a set of criterion measures.

In fact, it was not entirely clear from these findings that certain students were likely to be better adjusted than others when they entered the college residential community.

It appeared that adjustment in one area could just as well be construed as maladjustment in another, since the goals and values of residential life tended to be incompatible with those of the academic program.[3] Still, regardless of which set of values students began by espousing, many of them seemed to be drawn toward the opposing view by a general openess to personal change that was perhaps characteristic of this particular student population.

When a design that involved comparison of program participants with a nonequivalent control group was used in the followup study, students who had been in the program were found to differ significantly from those in the wider college community in terms of program related variables, even though the rates of reported satisfaction or happiness with the living group did not show significant difference. By combining the two designs it was possible to ascertain not only the pattern of changes for the initially divergent groups, but also the extent to which the program may have influenced the change process. Random assignment to both treatment, and control groups would, of course, be preferable to this type of "patch-up" design but would have been incompatible with the student's right to choice. The design

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[3] According to Levine (1980) educational innovations are most likely to be successful when they are functionally compatible with the parent institution. Similarly, if the living learning program represents a subenvironment in which the values and goals of the meta-institution are not supported, its ultimate effectiveness will undoubtedly be limited

might still have been improved, however, by the addition of a pretest for the wider college community as well as by more extensive followup efforts for individuals who left the residential community before the end of the year.

EXTERNAL VALIDITY: Despite the problems of internal validity that it raised, the use of a posttest only design for the survey samples helped to rule out the interaction of testing and treatment as a threat to external validity, and comparison of the baseline and followup samples was helpful in reducing the threat of interaction between selection and treatment, since the baseline and intervention samples proved quite similar in terms of the program related variables. However, the reactivity of the measures and the interaction of multiple "treatments" represented major confounding influences that were recognized but could not be adequately controlled in the present design, given the choice of a naturalistic setting and the limited resources in terms of funding and personnel that were available.

The obtained results suggested the operation of processes of mutual influence involving not only groups of individuals within the program, but also participants and nonparticipants as members of the same residential community. However, early family experiences seemed to be more critical to the residential adjustment of students who had participated in the living learning program, and, by the end of the year, there were indications that the program may

have helped to maintain what were probably initial differences associated with self-selection into the course and/or the communal living project.[4]

By combining the roles of instructor, consultant, and researcher, the liklihood of inducing the obtained relationships and effects through personal rather than programmatic influence was no doubt greatly increased. In future studies, the first two functions might be more appropriately reserved for members of the faculty and staff respectively leaving the investigator to devote fuller time and attention to research related tasks. It would also be important to determine whether the same or similar effects would be obtained in other types of college settings through the adoption of an experimental living learning program.

In this case the institutional setting was part of a recently developed and comparatively small state supported university located in a Northern California resort town and had been expressly designed to promote close social interaction within the college community. Conceivably students living in such an environment are encouraged to see social relationships as an important part of the collegiate experience and develop their expectations of the living group accordingly. Likewise the living learning program that was

[4] The contribution of the student's interpersonal relationships with parents and peers to college adjustment has been pointed up in previous studies (e.g. Lundgren, & Schwab 1979; Rust, 1960), but deserves further research attention.

offered may have served mainly to bring students together in a large group context that would not otherwise have been available given apartment style living and the absence of Greek letter societies, organized athletics, or a college-wide student union.

It may also be that what contributed most to their satisfaction and happiness with the living situation was the validation of being told that interpersonal issues were important, difficult to manage well, and worthy of formal attention in an academic setting. Accordingly, the initial attitudes and perceptions of incoming students appeared to undergo some revision as they were confronted by the fact that the academic requirements of the university tended to conflict with the more social demands of the living arrangement.

Although a majority of the students who responded to the questionnaires said they were satisfied or happy, there is still the matter of the other one third of the student residential population who did not choose to respond. Judging from the shortform sample collected in spring 1979, these were the students who were most likely to register dissatisfaction with their living situations. It would also be helpful to have comparison ratings for students living in other types of college settings and to know more about the possible uniqueness of the sample that was obtained on this particular school.[5]

IMPLICATIONS OF THE RESEARCH FINDINGS

The overall pattern of the results suggests that certain factors were consistently related to living group satisfaction in the experimental college that was studied. However, some factors (e.g. interest in communal living or learning about communities) were only predictors of satisfaction when students were provided with programmatic support in these areas, whereas others (e.g. orientation toward social interaction and interpersonal involvement) continued to be reliable indicators even in the absence of programmatic support.

Although the actual effects of the living learning program could not be determined with the design that was used, it did appear that the program attracted a distinctive type of student in terms of family background, interpersonal orientation, and interest in communal living. Since both the course, and the communal living project emphasized awareness of self and others and also the process of creating and maintaining group relationships, it seems reasonable to assume that participants were influenced to some degree in these areas, if only in terms of retaining more of a

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[5] There is reason to assume that the Kresge sample was not actually that unique in their strong social orientation, since Bachman and Johnston's (1979) survey of freshmen entering various colleges in the fall of 1979 showed interpersonal relations as the top priority for most respondents. A good marriage and family life was rated as extremely important by 79% and strong friendships by 69% of those responding.

group orientation over the course of the year.

College faculty and administrators with an interest in living learning have tended to focus on issues of environmental and curricular design and have seldom considered the personal characteristics of students who may choose to participate in such a program. However, the findings reported in this dissertation point up the importance of identifying student needs and expectations in order to maximize the liklihood that they will be either met, or appropriately modified in the course of the living learning experience.

Initially some students will be seeking intensive exposure to the peer group, while others will be more concerned about parental replacement. For some the program will be seen as an opportunity to sustain or develop community values, while, for others, it will be more of a means of acquiring interpersonal skills in order to enhance their success in dating or mating. Without an awareness of such motivations and attention to the individual patterns or experience that they reflect, the growth goals of participants may not be adequately met, and other program goals may suffer as well.

It remains to be determined in future studies whether there is a particular type of personality profile and/or family experience that leads students to opt for a living learning arrangement. The results of this research indicate that such students may be highly oriented toward social

involvement but also quite concerned about academic success. Accordingly the dual emphasis of the program can become a source of heightened stress rather than improved functioning if these students are not assisted in such areas as values clarification, conflict resolution, decision making, and time management.

Although program participants tended to describe their parents as having been strict and relatively inattentive to them as children, contrary to what might be expected given the concept of identification, they were themselves initially inclined to express relatively little control over others and wanted very much to be involved with the people around them. Over the course of the fall quarter, the behavioral orientations of most individuals appeared to shift more in the direction of exercising control and limiting involvement in social relationships. It would be useful to know to what extent such changes are facilitated or inhibited by involvement in a living learning program.

The results also show that the assessment of developmental trends and longterm effects can provide a more meaningful picture of the process by which members of a living learning community appear to move from mutually influencing one another's attitudes and behaviors to mutually supporting one another in resisting the influence of norms and values that characterize the wider college or university environment. Future research focusing on the nature of social con-

formity in living learning communities as distinct from other types of college residential settings would represent a valuable extension of the current work.

APPENDIX

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date_____

residence_____ Kresge Questionnaire

respondent_____

1A. Who should define the direction or revise the structure of the college:

____a. the whole community;
____b. students only;
____c. faculty only;
____d. administration (provost & staff) only;
____e. other?

1B. By what process should decisions about the direction or structure of the college be made:

____a. participatory democracy;
____b. representative democracy;
____c. self-selected meritocracy;
____d. official mandate;
____e. other?

2A. Should Kresge have a communitarian emphasis?

a. yes____ b. no____ c. don't know____ d. don't care____ e. other____

2B. Why/why not?

_____

_____

3A. Do you see Kresge as an emotionally therapeutic community?

a. yes____ b. no____ c. don't know____ d. don't care____ e. other____

3B. Do you feel Kresge should be an emotionally therapeutic community?

a. yes____ b. no____ c. don't know____ d. don't care____ e. other____

4A. In what way(s) are you currently involved in Kresge governance?

_____

4B. What level of involvement would you like:

a. more____ b. same____ c. less____ d. other____

(1 is most important - 6 is least important)

LIVING GROUP PRACTICES & PREFERENCES

How important is it for you to live with:	Scale Value: 1	Scale Value: 2	Scale Value: 3	Scale Value: 4	Scale Value: 5	Scale Value: 6
1. People who observe the same dietary practices as you do?						
2. People who eat some or all of their meals together?						
3. People who use or do not use certain drugs (example: alcohol, marijuana, tobacco, etc.)?						
4. People who use certain drugs together?						
5. People who observe personal space and/or rules of privacy?						
6. People who cooperate in decorating the common living areas?						
7. People who cooperate in cleaning the common living areas?						
8. People who share your level of noise tolerance?						
9. People who share your taste in music?						
10. People who accept singing and/or dancing in common living areas?						
11. People who accept meditating in common living areas?						
12. People who accept open crying or similar emotional release?						
13. People who converse with one another regularly?						
14. People who are comfortable touching one another?						

(1 is most important - 6 is least important

LIVING GROUP PRACTICES & PREFERENCES

How important is it for you to live with:	Scale Value: 1	Scale Value: 2	Scale Value: 3	Scale Value: 4	Scale Value: 5	Scale Value: 6
15. People who are comfortable hugging and/or kissing one another?						
16. People who are willing to have sexual relations with one another?						
17. People who are all the same sex?						
18. People who are close to or the same age?						
19. People who have the same class standing in the university?						
20. People who share your academic interests?						
21. People who share your ethnic background?						
22. People who share your religious background?						
23. People who share your socio-economic background?						
24. No more than three other people?						
25. No less than four other people?						

FIRO-B (I/e)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I try to be with other people. *(how often?)*						
2. I join social groups. *(how often?)*						
3. I tend to join social organizations when I have an opportunity. *(how often?)*						
4. I try to be included in informal activities. *(how often?)*						
5. I try to include people in my plans. *(how often?)*						
6. I try to have people around me. *(how often?)*						
7. When people are doing things together I tend to join them. *(how often?)*						
8. I try to avoid being alone. *(how often?)*						
9. I try to participate in group activities. *(how often?)*						

FIRO-B (I/w)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I like people to include me in their activities. *(how often?)*						
2. I like people to invite me to things. *(how often?)*						
3. I like people to invite me to join their activities. *(how often?)*						
4. I like people to invite me to participate in their activities. *(how often?)*						
5. I like people to invite me to things. *(how many people?)*						
6. I like people to invite me to join their activities. *(how many people?)*						
7. I like people to include me in their activities. *(how many people?)*						
8. I like people to ask me to participate in their discussions. *(how many people?)*						
9. I like people to invite me to participate in their activities. *(how many people?)*						

FIRO-B (C/e)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I try to be the dominant person when I am with people. (how often?)						
2. I try to take charge of things when I am with people. (how many people?)						
3. I try to have other people do things I want done. (how often?)						
4. I try to influence strongly other people's actions. (how often?)						
5. I try to influence strongly other people's actions. (how many people?)						
6. I try to have other people do things the way I want them done. (how often?)						
7. I try to have other people do things the way I want them done. (how many people?)						
8. I take charge of things when I'm with people. (how often?)						
9. I try to take charge of things when I'm with people. (how often?)						

FIRO-B (C/w)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I let other people decide what to do. (how often?)						
2. I let other people decide what to do. (how many people?)						
3. I let other people take charge of things. (how many people?)						
4. I let other people strongly influence my actions. (how many people?)						
5. I let other people strongly influence my actions. (how often?)						
6. I let other people control my actions. (how often?)						
7. I am easily led by other people. (how often?)						
8. I let other people control my actions. (how many people?)						
9. I am easily led by people. (how many people?)						

FIRO-B (A/e)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I try to be friendly to people. *(how many people?)*						
2. My personal relations with people are cool and distant. *(how many people?)*						
3. I act cool and distant with people. *(how many people?)*						
4. I try to have close relationships with people. *(how often?)*						
5. I try to have close personal relationships with people. *(how often?)*						
6. I try to have close relationships with people. *(how many people?)*						
7. I try to get close and personal with people. *(how many people?)*						
8. I try to have close personal relationships with people. *(how many people?)*						
9. I try to get close and personal with people. *(how often?)*						

FIRO-B (A/w)

	usually most people	often many people	sometimes some people	occasionally a few people	rarely one or two people	never nobody
1. I like people to act friendly toward me. *(how many people?)*						
2. I like people to act cool and distant toward me. *(how often?)*						
3. I like people to act distant toward me. *(how often?)*						
4. I like people to act cool and distant toward me. *(how many people?)*						
5. I like people to act distant toward me. *(how many people?)*						
6. I like people to act close toward me. *(how many people?)*						
7. I like people to act close and personal with me. *(how often?)*						
8. I like people to act close and personal with me. *(how many people?)*						
9. I like people to act close toward me. *(how often?)*						

PERCEPTION OF PARENTS

Each of the following is a pair of statements about certain aspects of the home life of children. Please read each single statement carefully to see how it fits you. In some cases the statement may not describe exactly how you feel and act, so try to estimate which answer comes closest to describing your characteristic behavior and how your home actually was as you were growing up:

1	2
In my home my parents actually spent relatively little time interacting with me. I didn't have the feeling very often that they were very much interested in what I was interested in. They didn't spend much time just playing with me instead of doing what they wanted to do. As a result, I really didn't get to know my parents very well. That is, I'd never see them in very many situations so that I'd get to know how they act and feel in a large variety of circumstances.	In my home my parents centered their attention around me. As soon as they were home they would play with me and talk to me and take a great interest in whatever I was doing. We'd interact under all sorts of conditions so that I'd see my parents laugh and cry and get angry, be delighted, and feel fearful. As a result I got to know them very well so that I feel I understand them thoroughly and everything I do is of great interst to them.

MY HOME WAS MUCH MORE LIKE 1 THAN IT WAS LIKE 2 ____	MY HOME WAS SOMEWHAT MORE LIKE 1 THAN IT WAS LIKE 2 ____	MY HOME WAS SLIGHTLY MORE LIKE 1 THAN IT WAS LIKE 2 ____	MY HOME WAS SLIGHTLY MORE LIKE 2 THAN IT WAS LIKE 1 ____	MY HOME WAS SOMEWHAT MORE LIKE 2 THAN IT WAS LIKE 1 ____	MY HOME WAS MUCH MORE LIKE 2 THAN IT WAS LIKE 1 ____

3	4
My home was one in which there was strict discipline. My parents decided what was best for the children and enforced their decision. If we didn't comply we were punished for it. There was very little effort made to teach me how to do things on my own or to make me independent.	There was no guidance in my home. I was always given complete independence to do whatever I wanted. Even as a very young age I was on my own and had to do things for myself. There was hardly ever anyone around to show me how to do things or to tell me what was right and what was wrong.

MY HOME WAS MUCH MORE LIKE 3 THAN IT WAS LIKE 4 ____	MY HOME WAS SOMEWHAT MORE LIKE 3 THAN IT WAS LIKE 4 ____	MY HOME WAS SLIGHTLY MORE LIKE 3 THAN IT WAS LIKE 4 ____	MY HOME WAS SLIGHTLY MORE LIKE 4 THAN IT WAS LIKE 3 ____	MY HOME WAS SOMEWHAT MORE LIKE 4 THAN IT WAS LIKE 3 ____	MY HOME WAS MUCH MORE LIKE 4 THAN IT WAS LIKE 3 ____

PERCEPTION OF PARENTS

5	6
My home was very reserved and unemotional. My parents rarely expressed affection to me. They really did not believe in displaying emotions. It was more a matter-of-fact businesslike atmosphere. Expressions of affection either simply never arose or else were actively discouraged.	There was a great display of love and affection in my home. In their own ways both my parents expressed their love for me very openly and without reservation, so that I always had the feeling I was completely loved for myself alone. There was a great emphasis on expressing affection.

MY HOME WAS MUCH MORE LIKE 5 THAN IT WAS LIKE 6 ____	MY HOME WAS SOMEWHAT MORE LIKE 5 THAN IT WAS LIKE 6 ____	MY HOME WAS SLIGHTLY MORE LIKE 5 THAN IT WAS LIKE 6 ____	MY HOME WAS SLIGHTLY MORE LIKE 6 THAN IT WAS LIKE 5 ____	MY HOME WAS SOMEWHAT MORE LIKE 6 THAN IT WAS LIKE 5 ____	MY HOME WAS MUCH MORE LIKE 6 THAN IT WAS LIKE 5 ____

COMMENTS?

KRESGE SURVEY

Please indicate which of the following are important reasons for you to live at Kresge at this point (check as few or as many as apply):

1. Living at Kresge provides a rare opportunity for communal living in this society. _____
2. Living at Kresge provides as opportunity to learn how to keep a household. _____
3. Living at Kresge makes it easier to meet people. _____
4. Living at Kresge makes it easier to form close relationships. _____
5. Living at Kresge makes it easier to pursue academic interests. _____
6. Living at Kresge is a good way to learn how communities work. _____
7. Living at Kresge makes it easier to behave in unusual and socially unacceptable ways. _____
8. Living at Kresge makes it possible to live co-ed. _____
9. Living at Kresge is a good way to avoid using the food service. _____
10. Living at Kresge makes it possible to work on emotional problems and various kinds of self healing. _____

KRESGE SURVEY

Class standing: freshperson sophmore junior senior _____

Quarters enrolled at UCSC: 1 2 3 4 5 6 7 8 9 10 11 12 _____

Quarters living at Kresge: 1 2 3 4 5 6 7 8 9 10 11 12 _____

Quarters at current on-campus residence: 1 2 3 _____

Quarters as previous on-campus residence: 1 2 3 _____

How many of the people that you live with now have you lived with for one quarter ? _____

How many of the people that you live with now have you lived with for two quarters? _____

How many of the people that you live with now have you lived with for three quarters? _____

How many of the people that you live with now have you lived with for more than three quarters? _____

How satisfied are you with your current living group?

1 2 3 4 5 6
(very satisfied) (not at all satisfied

How happy are you with your current living group?

1 2 3 4 5 6
(very happy) (not at all happy

How satisfied were you with your previous living group?

1 2 3 4 5 6

How happy were you with your previous living group?

1 2 3 4 5 6

Age: _____ Sex: _____

Ethnic background: _____

Religious background: _____

Socio-economic background: _____

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