

THE RELATIONSHIP OF LIVING UNITS  
TO PERSONALITY CHARACTERISTICS  
OF RESIDENTS

by

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## INTRODUCTION

This is an exploratory study designed to discover if residing in some specific college living groups results in measurable changes in student personality characteristics.

Shortly after I<sup>1</sup> arrived at Kansas State University, it became clear to me that most of the members of the University community expected the college experience to do something to the student. Some people used the word "educate." Others said the obligation of the University was to facilitate growth. Often they were seeking ways to introduce students to more broadening influences, and to motivate students to respond to these influences.

The students seemed to expect much the same processes, but they were more inclined to use personal pronouns and active verbs. They said they wanted to "grow up," find out what they wanted to "be," or they wanted to "become" whatever their personal and vocational ideal of the useful, self-sufficient, respected citizen might be. They wanted to "become" engineers, or veterinarians, or journalists. They often talked about how they had changed while in college. But the change they spoke of was not toward their chosen vocation, nor did they feel they had grown closer to the kind of person they hoped to become than to say they were "more grown up." They often said that since they had been in college they related better to their peers, were more diplomatic and self assured, and had gained more general

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<sup>1</sup>This and the following four paragraphs are written in the first person as the evolution of the thesis research resulted from the personal experiences of the author.

social poise.

It was clear that both students and faculty members expected the university experience to effect some change other than the student's gaining knowledge from course work. They expected a deeper, more basic change, which would be reflected in many aspects of the student's personality.

Although some students appeared satisfied with their growth, other students complained that they were not changing. These students seemed to have been quite unaffected by their two, three, or four years at Kansas State. They described themselves as just as "lost," or just as "confused" as when they entered college. Some held to immature and rigid values and ideals, while certain others of their age, including classmates or curriculum mates, showed quite mature insight and understanding. Such differences in students raised questions about which factors or forces within the University seemed to be related to change.

Are there particular aspects of a student's life which produce the greatest impact? Since some students spoke of change in their peer relationships, could the peer group be a potent force for change? If so, would not some living units be influential peer groups, and thus a logical place to look for changes in the personalities of students?

#### Review of the Literature

The literature reveals that social scientists have been attempting to measure change in college students since well before World War II.

They have been interested in types of change that occur, and in establishing means of examining the processes involved. They have looked for environmental and personality variables, and their interrelationships, which play a role in the process of change. The investigators have found this a complex area. Most of the studies have been broad, exploratory and/or descriptive.

Two major questions appeared throughout the literature dealing with change in college students, along with a few observations noted by a number of researchers. These will be outlined here before a brief review of the literature pertinent to this study is presented.

I. What characteristics should be studied to find change in college students?

A. Many researchers identify certain "types" of students, very frequently ranging along a continuum of rigidity versus flexibility.

B. Some of the following studies used measures of attitudes, beliefs, and values and inferred underlying personality characteristics from these measures.

II. What influences to be found in the university should be studied?

A. A university's orientation appears to make a difference. Researchers have tried to identify units which produce change in students within a university's curricula, teachers and the peer groups.

B. Students appear to become more liberal between their freshman and senior years. It is suggested that this

may be due to maturation plus certain experiences students have at the university. Studies seeming to bear most on Question I will be reviewed first.

#### Studies Using Measures of Attitude and Personality

Katz and Allport (1930) were among the first researchers to study differences in the flexibility in attitudes of students. Using original attitude scales, they were able to discriminate two "types" of students living in fraternities.

The "institutionalists" were people who reified the fraternity, and used the notion of protecting its image as a defense against recognizing their own biases. The "individualists" saw the fraternity as a group manifesting the personalities of its present members, and accepted responsibility for their own biases. When fraternity and non-fraternity members were compared on numbers of prejudices and degree of rigidity, the individualists fell between the institutionalists and non-fraternity members, but were closer to the other fraternity members.

Katz and Allport's work is typical of much subsequent research, in that the use of measures of attitudes, beliefs, and values were used to discriminate "types" of people. As Newcomb, Murphy and Murphy (1938) pointed out, the general assumption was that such measures were manifestations of underlying personality variables.

Webster, Freedman, and Heist (1962) observed that knowledge gained from studies of student's attitudes formed the basis for more recent studies which are more closely related to underlying person-



ality variables. These authors used the Vassar studies (Sanford, 1956) to illustrate their point. During the course of these studies, several widely used measures of aptitudes, attitudes and interest were utilized. In addition, scales were developed to measure certain personality characteristics. Some typical characteristics measured were: Social Maturity, Dominance, Confidence, Social Integration and Masculinity-Femininity. Changes in these personality characteristics were reported to increase in magnitude with time spent in college, and to be greatest during the earlier part of college careers. In addition, the girls showed marked changes toward more liberal attitudes between their freshman and senior years at college.

Data obtained on personality characteristics in the Vassar studies (Sanford, 1956) enabled later researchers to compare personality characteristics across colleges (Webster, Freedman & Heist, 1962). The data also enabled Brown (1962) to distinguish a "type" which the Vassar faculty considered ideal, in that she would be the kind of student they would want at Vassar.

Stern and his colleagues, (Stern, Stein, & Bloom, 1956), hold that even reductions of attitudes to broad personality variables such as Dominance and Confidence and Social Integration are not sufficiently subtle for use in the identification of relationships between change in the student and the effects of his experiences. They feel that one must first discover what the individual needs from his environment, what he perceives he can get from it, and what perceptions of his environment are shared by all individuals in the same situation. In his efforts to learn such things about the individual, Stern (1963)

developed and used a set of scales based on Murray's (1938) theory of individual needs and environmental press.

Murray (1938) proposed a system for classifying the organizational tendencies that appear to give unity and direction to personality. He called these tendencies "needs." They are hypothetical constructs, inferred from behavior. Murray (1938) called the external counterpart of the need the environmental press. This refers to the phenomenological world of the individual. Press is ultimately unique and private, but there is a level at which the phenomenological worlds of people in the same situations merge, and people tend to have common interpretations of the events in which they participate, even though these interpretations may differ from those of a detached observer (Stern, 1962). Press, then, is a way to classify characteristic behaviors manifested by a group of individuals in the same situation. Like need, press is a hypothetical construct, inferred from group behavior.

Stern (1965) used the theory of need and press as a frame of reference for the measurement of the more narrow personality characteristics he felt were required. He developed two sets of scales. The Activities Index was used to measure certain personality needs of students, and the College Characteristics Index was used to measure presses in the University environment. Each of the presses are considered the correlates of the personality needs measured by the Activities Index.

It was found (Stern, et al., 1956) that the Activities Index and the College Characteristics Index were as successful at discriminating



"types" of students as whole batteries of projective and objective personality tests, interviews and other personality measurements at a considerable saving in time and money. These two sets of scales will be discussed further in Chapter II.

Stern and Cope (1962a) separated a group of students into classes according to personality "type" as differentiated by the Activities Index. They had one class of "stereopaths" (a personality type roughly equivalent to the authoritarian personality), one composed of "anti-stereopaths" (their polar opposites) and one of "rationals" (a type often thought of as the "scientist type" which is very logical, distrusts extremism, and has high theoretical interests). The experimenters assigned all three classes to one unsuspecting citizenship instructor at Syracuse. Just as Lewin, Lippitt and White (1939) tested the effects of authoritarian versus democratic leadership, Stern and Cope (1962a) tested the effects of peer groups composed entirely of one of the three types. Of the three classes, the major differences were found in the class of stereopaths. Most stereopaths seem to shy away from humanities courses, and do badly when forced to take them; however, this class showed significant gains in understanding and more liberal attitudes at the end of the semester.

#### University Forces Related to Change

The second major area of investigation (Question II) was the isolation and study of forces which contributed to change in college students.

One of the pioneer studies was Newcomb's (1943) work at Bennington College. It was the first study to relate expressed

attitude change systematically to both initial values of the student and the social and academic goals of the college community. This work emphasized the idea that peer groups are extremely important forces in the lives of college students.

In an effort to study the question of contributing factors, Jacob (1957) collected over 380 studies dealing with change (or the lack of change) in college students. These studies had used a number of different measuring instruments and they had investigated many different kinds of change in students. Therefore, it was difficult for him to categorize this research and draw inferences from it. In spite of these difficulties, the studies seemed to report a general trend: students grow more liberal and less rigid in their attitudes during their years in college. But Jacob found no clear-cut agents to which change could be attributed. On the other hand, he found many studies of experiences that are often provided with the express purpose of inducing change in students (such as humanities courses) which resulted in no directly related measured changes.

His inability to find change-producing forces led him to the conclusion that in most cases the liberalizing effects attributed to education are simply the effects of maturation. He felt that the student is the product of a society that grows constantly more liberal, and that the changes usually found in students between their freshman and senior years are a reflection of the general culture. Reports such as Newcomb's (1943) study of change in the students of Bennington College led Jacob to believe that a college becomes an agent of change under some very special, but not as yet understood conditions. He

noted that some colleges seemed to create a special atmosphere. In such colleges liberal attitudes, or some other characteristic considered desirable by the school, were very much enhanced in the students. Schools that created special atmospheres seemed to have in common the following features: (1) relative homogeneity of goals or values. He felt that at least three things contributed to the homogeneity--(a) selection procedures of the school, (b) the selection of that particular college by that student, and (c) geographical area; (2) such colleges often seem to draw a majority of one or another personality type; (3) peer group influence. The third component was inferred incidentally from the research: there were virtually no peer group studies *per se* in Jacob's collection.

Sanford (1962) would agree that there is a maturational factor in the drop in rigidity between the freshman and senior years. Drawing on developmental theory, especially the writings of Anna Freud, Sanford hypothesizes that ego strength can be represented by a negatively accelerated curve which continues to rise throughout the adult years. The strength of the ego is increased through learning from experience, thus the ego becomes more efficient in assimilating unconscious impulses and ideas.

Impulse strength, after the latency period, rises sharply from childhood through adolescence, and begins to level off at about seventeen or eighteen years of age. It takes a few years then for the individual to develop confidence in his now found control over his impulses. Sanford points out that people mature at different rates, so that we can only say generally that the ego begins to make sub-

stantial gains over impulse strength at about the freshman year in college. Until that time, the ego uses so much energy in one of its functions, that of control of the impulses, that there is little strength left over for its other function, reality testing. The testing of the more abstract ideas, and things most distant from the person, would not receive attention until there was energy available. This theory would explain the relative rigidity of the freshman. It would also explain the general confusion noted by Jacob (1937) and others as to the vulnerability of attitudes to external influences. There are ways, says Sanford (1962), to accelerate the rate at which the ego gains ascendancy, thus freeing more energy for reality testing. Furthermore, there are college experiences that are, and college experiences that are not, conducive to reality testing. The processes of the peer group, at this point, are vital to the acceleration or deceleration of individual development.

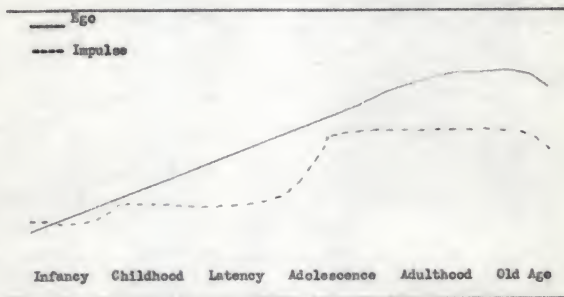


Figure 1. Development of the ego and of impulse according to dynamic theory of personality. (Reproduced by permission of the author)

Sanford (1962) draws from his Vassar studies to illustrate these points. When the typical freshman enters school, her values are not internalized, but have been "borrowed" from her family and home environment. She is bland, polite, and deferential to authority. She presents a picture of good mental health and supreme security. But, in time, former supports diminish, and she is confronted by new values in a new environment. She looks for external support for her old values in the new situation. Failing this, she may "buy" the new values wholesale. For this reason, she is especially vulnerable to the peer group. She has concerns about her ability to meet the stiffer social and academic competition, and she is concerned about her sex role. If her peers approve of her, she is "in" and they can often carry her through tough situations when she might otherwise leave college. At the other extreme, an incompatible roommate may create such an intolerable situation that Vassar students who have had the experience refer to it as "the year (or the semester) that I lost" (Bushnell, 1962).

Eddy (1959) observed and described processes in twenty college and universities in seventeen different states from California to New England, which he believed facilitated or inhibited the development of character in the student. He found that any effect great enough to be called a contribution to the development of character included as one of its components the experience of a genuine interpersonal relationship. For example, a student may date the beginning of a new insight from such a minor event as a conversation at the table with a professor who is lunching with his fraternity, or a teacher who shares with his

class his own sincere convictions, and at the same time retains his objectivity. Whatever the situation, it must be experienced as a person to person confrontation for conscious change to occur.

He wrote that he found the peer group to be a potent force in every aspect of campus life. When it was enlisted, the university accomplished its aim of real change in the student. Eddy deplored the lack of understanding of the college peer group processes. He felt that these groups should be manipulated to implement the goals of the school. He emphasized the impression he gathered that many students are eager for genuine, two-way personal relationships with experienced adults who are willing to share their philosophies of life. Eddy pointed out that when members of the peer group come together without established norms and without experienced leadership, they first attempt to fall back on tradition, as many Ivy League students do. If there is no tradition, and no non-peer leadership, the group establishes its own norms, whether they are consistent with the goals of the school or not. Eddy found that the general reaction of faculty and administration to the admitted power of the peer group was negative. They saw it as a threat to their own goals, and reacted with some form of withdrawal, the most common of which was to establish more rules. If the school attempted intervention in the peer group with no understanding of the processes involved, both school representatives and students were likely to feel threatened, and the student response was negative, even though possibly passive. In those living units where the reaction of the authorities was to willingly enter into cooperation with the peer group, and draw it into closer



relationship with the total school environment, the living unit became a potent force in effecting the goals of the school.

Newcomb (1960) met with a group of social scientists to consider how they could find out what happens to students in American colleges and universities and why. They decided on three major components of the change they had all observed in college students--in the following order of magnitude: (a) selection; that is, the student was prepared to change at the time of admission to college, (b) peer group influence, (c) faculty-administration influence. He observed that although most of us feel that college students do change as a result of the effects of peer groups, the literature on it is very, very scant.

Newcomb (1961) found that the most important factors in student peer group formation are (a) precollege acquaintance, (b) propinquity, and (c) similarity of attitudes and interests. After a few weeks in college, precollege acquaintance is likely to diminish in importance, but the many common interests of college students, and their relative isolation from non-students, family and parents, and the distance between students and faculty, makes the student ripe for peer groups. Newcomb (1961) reported four conditions that facilitate student peer groups' influence on their members: (a) Size of group--it should not be so large that members are not acquainted, nor so small that it discourages small, congenial subgroups. (b) Homogeneity--homogeneity of age, sex, social class, or religious affiliation increases the likelihood of already similar attitudes. (c) Isolation--the conviction of members in their group norms varies directly with the degree of

isolation from communication with members of groups with different norms. (d) Importance to individuals of attitudes that are group supported--"Other things being equal, the greater the importance to them of the attitudes the group holds, the greater the solidarity of the group, regardless of whether the sense of importance preceded or has been engendered by group membership" (Newcomb, 1962, p. 481).

Finally, Newcomb (1961) wrote that the living unit provides the student with his major single source of contact. This makes the living unit an ideal place to look for relationships between peer influence and personality change.

Siegel and Siegel (1957) wrote that one reason for the dearth of studies trying to isolate or measure processes of the living group on the college campus is that natural experimental situations are difficult to find. They have, however, reported one excellent example.

They were able to compare the effects of living group and reference group on authoritarianism, as measured by the E-F scale (Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950). They found that attitudes did not change when reinforced by a living group which was also the reference group, and composed of members with attitudes similar to those with which the college student started. Attitudes did change when the student lived with a group whose members were generally much lower on the E-F scale and the student retained a more authoritarian group as a reference group. Attitudes changed to a startling degree when the student adopted her living group, which contained members who were much lower on the E-F scale, as her reference group.

Scott (1965) developed original scales to measure twelve values.

Some of these were Intellectualism, Kindness, Loyalty, and Academic achievement. He tested the pledges and the actives of six fraternities and four sororities with these scales, as well as a control group of non-pledging freshmen. A year later, he retested his subjects. He found that the original similarity between the scores of pledges and actives within a house was, in general, greater than it was a year later. In other words, the values of the members of most of the houses became more heterogeneous rather than more homogeneous. However, in a few houses, the pledges did become more like the actives. Upon retest, the individual values did not differentiate the pledges from the non-pledging freshmen. However, when the patterns of all twelve values were considered, the pattern of the pledges was more like the actives' pretest pattern than it was like the pattern of the non-pledging freshmen.

#### Type of Peer Group Chosen for Study

The literature reported in the previous pages reveals that change in college students has been studied for a number of years. Although all of the previously mentioned researchers indicated that it appeared to them that the peer group was influential in the change or lack of change found in college students. However, little is known about the influences of peer groups on college students. The findings of some of the researchers, notably those of Siegel and Siegel (1957), Eddy (1959), Sanford (1962) and Scott (1965) indicate that the living unit, under certain conditions, appears to be a likely place to look for influential peer groups. Newcomb's (1943, 1951, 1960, 1962)

findings would suggest that living groups as large as sororities and fraternities, in which students are chosen and choose to live, might be excellent peer groups to study if one is looking for change in the personality characteristics of college students. Thus, it is in the living unit, specifically in sororities and a scholarship house, that this study proposes to look for measurable personality changes in college students.

Sororities and a University women's scholarship house were chosen for study in order to minimize the number of interacting influences which could be effecting measured change:

- (a) Sex--the study is restricted to females.
- (b) Physical conditions--the University places certain restrictions on where the girls may live.
- (c) Selection--sorority girls and scholarship house girls choose to live with their group and in turn are evaluated and chosen by the girls already living in the houses.
- (d) Living Unit Norms--with less authoritative influence than exists in the dormitories, these houses form their own norms--both those regarding specific situations and those regarding the meeting of external pressures. Scholarship House is a dormitory, and is subject to more University regulations (even though it is often categorised with the sororities) while sororities must meet the demands of alumnae and the national organization. The Scholarship House was built by an outside organization, and the girls feel some pressure to meet the expectations of this

organisation.

- (e) Vulnerability to University pressure--such pressure is more easily brought to bear on these units than on individuals living in the dormitories, since their survival as a group, or their group status and attending privileges can be more easily threatened.
- (f) Size--all have under 100 residents, as opposed to the dormitories with up to 600 residents so that the potential for group influence is greater.

These conditions combine to make these living units unique on the Kansas State University campus. They should enhance a potential for more group cohesiveness than other living units would have. Thus, these living units would seem most likely to be in a position to influence the personality characteristics of their members.

#### Questions Proposed for Study

The present study is a contribution to research on the influence of the living unit on student characteristics. The questions proposed for study are:

- (a) Do personality characteristics of girls who enter different sororities or live in a scholarship house differ significantly from one another before entering the living unit?
- (b) If they do not differ before entering the unit, do their personality characteristics change by the time they have lived with a group for a year, to become more like others in the same unit and less like those in other units?

- (c) Do the characteristics of the living units, as perceived by those within them, differ significantly from one another?

### Statement of the Hypotheses

More specifically, the hypotheses are:

H<sub>01</sub>: Groups of girls who will eventually join specific living units will not be discriminable on the basis of their personality characteristics.

H<sub>02</sub>: Living units will not be discriminable from one another by the personality characteristics of members who have lived in their respective house at least one year.

H<sub>03</sub>: Sororities will not be discriminable from one another by the personality characteristics of members who have lived in their respective houses at least one year.

H<sub>04</sub>: Sororities will not be discriminable from the scholarship house by the personality characteristics of members who have lived in their respective houses at least one year.

H<sub>05</sub>: Their perceptions of their house will not discriminate members of living groups from one another.

Because there was a possibility that the personality characteristics of girls would be more similar to other members who would eventually choose and be chosen by the same living group, a sixth hypothesis was added.

H<sub>06</sub>: Living units will not be discriminable from one another by the patterns of change in personality characteristics of their members.



## METHOD OF PROCEDURE

The previous chapter contains a review of the literature, a statement of the problem, a statement of the questions and the more formalized hypotheses. This chapter contains a description of the measures used, a description of the subjects and an account of the procedures used. The use of the discriminant function in analyzing the data and other treatments of the data will be discussed.

### Instruments

#### A Description of the Tests

The two instruments used in this study were the Stern Activities Index (Stern, 1963) and the Living Group Characteristics Index, a modification of Stern's College Characteristics Index (Stern, 1963). The Activities Index (AI) was developed during an empirical study of the usefulness of various approaches to the evaluation of personality (Stern, et al., 1966).

The AI consists of thirty scales of ten items each. These scales measure an assumed need, such as Abasement, Achievement, Adaptability, Deference and Energy. Each item states an action, and the individual is asked to mark that item Like or Dislike. Some typical items are: "Organizing a protest meeting," and "Playing practical jokes."

The College Characteristics Index (CCI) was developed to provide a measure of press, and thus present a clear picture of the person in the situation. Each of the thirty scales on the CCI is the environmental press corollary of the thirty needs scales on the AI. The items are statements about activities, policies, procedures, attitudes

and impressions which might be characteristic of various types of undergraduate college settings (Stern, 1962). Typical items are: "If a student wants help, he usually has to answer a lot of embarrassing questions," or "There are many foreign students on the campus." These items are to be marked True or False. The sixty scales of the AI and the CCI have an average Kuder-Richardson reliability of .67, which Stern (1962) points out is close to the practical maximum for scales of such short length, corresponding to a value of .92 if increased from ten to thirty items.

As Stern (1962) observed, it is difficult to describe characteristic press in terms which can be generalized beyond a specific type of setting. Because many items in the CCI refer to university facilities, faculty press and other aspects of a campus not specific to living units, these items were modified by the author of this paper to make the test appropriate to living groups. After items were modified, or discarded and new items written to replace them, the test was renamed the Living Groups Characteristics Index, or the LSCI. The LSCI then, is the operational definition of living unit press used in this paper.

A number of studies have been conducted over the years using the AI and the CCI. Stern (1962) presents, among others, the following uses of the tests, together with the studies that discovered or supported them.

- (a) Descriptions of behavior to be expected of an individual, based solely on his needs profile, appear to be recognized by those with whom he interacts, and confirmed by them as

well as by his subsequent behavior.

- (b) It is possible for those within an institution to recognize it from a description based solely on press profiles.
- (c) "Student bodies tend to be characterized by needs patterns readily recognizable as personalized versions of the prevailing press at their institutions, although there is greater variability among the needs of the students than in their descriptions of their college press. This is not attributable to the fact that the same students are the source of both sets of data, for there is generally little relationship between the needs preferences a student records for himself and the press characteristics he attributes to the college, either at the same institution (McPee, 1961) or across institutions."

#### Factors of the Tests

Stone (1962) did a factor analysis on the AI administered to freshmen entering Kansas State University in 1962 (945 males and 623 females). He found eight factors for women, and nine factors for men. As these were factors obtained from female students entering this university, these seemed to form a logical basis for a reduction of variables. Based on Stone's data, eight derived factors scores were obtained by using the simple sum of all scales weighing higher than .50 on the factors Stone obtained for the female students. The same factors were used for the AI and LSCI. The scales used on each factor are:

Factor Score I is the sum of the following scales--Aggression,

Dominance, Ego Achievement, Exhibitionism and Fantasied Achievement.

Factor Score II is the sum of Conjectivity and Order.

Factor Score III is twenty minus the sum of Narcissism and Sexuality.

Factor Score IV is the sum of Change, Energy, and ten minus Hama Avoidance.

Factor Score V is the sum of Nurturance and Succorance.

Factor Score VI is the sum of Scientism and Understanding.

Factor Score VII is the Objectivity scale score.

Factor Score VIII is the sum of Abasement and Adaptation.

An interpretation of these factor scores, based on Stern's description of the individual scales and on sentences in his descriptions of his factors when they obviously applied to a certain scale, will be found in Appendix I. An interpretation of the factors on the LSCI, which are corollaries of the factors on the AI, will be found in Appendix II.

#### Ranking of Houses on the LSCI

Stern (1962) pointed out that one of the phenomena of press is that there will be more consensus as to its specific aspects among those individuals within it than among individuals viewing it but not subject to that particular press. It was felt that it would be interesting to see if people outside the press of any particular house, yet familiar with all the houses and their members would tend to see these houses similar to one another, and similar to the way the members themselves saw these houses.

A printed description of each of the factors (the interpretation of the Living Groups Characteristics Index found in Appendix II) was given to each of three judges. They were asked to rate the houses one through seven according to how much of each factor they perceived the house as having. These judges were: the dean of women, the assistant

dean of women, and the coordinator of the Pan Hellenic Activities who is also an assistant professor of English at Kansas State University.

### Subjects

There were eleven Greek sororities on campus, plus a 4-H sorority and a women's scholarship house. These thirteen groups were offered the opportunity to participate in exchange for information gained as a by-product of the study. All thirteen groups indicated interest in participating in the study. However, six could not find available time for group testing due to end-of-the-year activities. The seven groups participating were six sororities and the women's scholarship house. The tests were given to all available members (between approximately 70 and 93 per cent) of those seven groups. Subjects used in the study were a random sample of twenty from each living unit, subject to the following restrictions: (a) She had lived in her house at least a year. (b) She had entered school in 1961 or 1962, and had taken the freshman AI. (c) She completed both the readministered AI and the LCCI. Thus, there were three measures on each subject, their initial AI ( $AI_1$ ), their readministered AI ( $AI_2$ ), and the LCCI.

One sorority had only twenty members who met the above criteria. All of these subjects were used. All of the scores of those members who met the criteria were collected from each of the other houses. A sample of twenty from each house was taken using a table of random numbers.

## Treatment of the Data

### The Multiple Discriminant Function

The primary focus of interest in this study was whether or not girls who lived in certain living units could be discriminated into groups using a constellation of their personality characteristics. For this purpose, a multivariate technique seemed most appropriate.

On the basis of Stone's (1963) data, there was reason to believe that if differences between groups reflected by the AI were found, they could be described in a few dimensions underlying the variables used. Overall (1961) considered the multiple discriminant function an especially useful technique when: (a) original variables are correlated to a significant degree, and (b) the object is to reduce the variables needed to describe differences between groups. Overall (1961) described the technique as passing a plane through an arbitrary section of the "true" multivariate space. Any differences will be found on the surface of that plane. The assumptions are the same as for univariate analysis of variance, but in this case they are linearity of multivariate combinations, and multivariate normality. The method is generally resistant to violations of these assumptions (Overall, 1964). It is considered that the assumptions are met sufficiently well to use the discriminant function in the treatment of the data used in this study.

The discriminant function operates in the following way: if the first function were to be significant, then one dimension (Hypothetical line), consisting of the sum of the means of each variable times a certain weight for that variable, would effectively separate the seven



groups from one another. If the second function were to be significant, it would mean that two such dimensions would effectively separate the groups. If a significant function has not been obtained by the time the maximum number of characteristic roots have been extracted, the null hypothesis must be accepted.

### Tests of the Hypotheses

The hypotheses were tested by doing four discriminant functions: one on the factors of the original AI ( $AI_1$ ), one on the factors of the readministered AI ( $AI_2$ ), one on the factors of the LSCI, and one on the difference in scores of each girl between  $AI_1$  and  $AI_2$ . The discriminant function on difference scores was done at the suggestion of Overall (1964) in the event that the discriminant function on the factors of AI was significant.

The significance of each discrimination was tested with the  $F$  approximation developed by Rao (1952). This formula is reproduced in Appendix III. To determine the number of significant differences, the variance accounted for by that discriminant function was computed (Overall, 1961). The function contributing the least amount of variance, and still not too close to zero, was systematically dropped and the  $F$  approximation recomputed. When significance was lost, this was the number of dimensions required to represent all significant differences minus one.

### Analysis of Variance

Although the discriminant function separates groups on the basis of a weighted linear combination of the variables used, it was felt

that it would be interesting to see if any of the factors were contributing significant amounts of variance to the total variance of any one test. Accordingly, using computations necessary in the discriminant function, three simple analyses of variance were done, one on the  $AI_1$ , one on the  $AI_2$ , and one on the LCI.

#### Outside Ranking of the Houses

Each of the three judges mentioned earlier independently ranked all seven houses on the printed description of each of the eight factors. The obtained means of each house were ranked from highest to lowest on every factor. The Spearman rank correlation was used to correlate the ranks of each judge with the other two judges, and to correlate the ranks with the obtained mean ranks. The Kendall Coefficient of Concordance ( $\bar{W}$ ) was computed to determine the association among the rankings the judges gave the houses on each factor.

#### Procedure

The AI was first administered to all freshmen entering Kansas State University in 1961 and 1962. The entire AI was readministered in the evening, at each of the seven houses, to all members who could be available in April, 1964<sup>2</sup>. The LCI also was administered at this time in April. Members who could not be at home that evening came to the Counseling Center to take the tests, or in the event that a number

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<sup>2</sup>The author owes a great deal of gratitude to Daryl Jenkins, Miss Frances Miller, Mrs. Carmen Templeton, Miss Mary Steinbrink, and especially to Gene Rubin for help in the administration of these tests, and for other assistance in the completion of this study.

of these members could be at home at a later time, the experimenter revisited the house.

Consistently, in each house, the order in which the tests were administered was counterbalanced, so that half of the girls took the AI, and half took the LGGI first.

## RESULTS

This chapter contains the results of the statistical tests of the hypotheses. Factors that appeared significant on any of the three tests are discussed. The results of a comparison of factor scores between  $AI_1$  and  $AI_2$  are presented. Data are presented on the correlations between the perceptions of living units by informed outside judges and the perceptions of members in the houses. A more extended discussion of these results will be given in Chapter IV.

### Results of Tests of the Hypotheses

Chapter II of this paper contains a section on Treatment of the Data, in which a description is given of the way in which the hypotheses were tested. In this section, the hypotheses will each be restated, and the results given of the appropriate discriminant function.

Hypothesis 1: Groups of girls who will eventually join specific living units will not be discriminable on the basis of their personality characteristics.

A discriminant function was performed on the factor scores taken from the girls' original AI ( $AI_1$ ). Table 1 lists the characteristic roots of the first four functions and the amount of the total variance accounted for by each root. Table 1 also lists the  $F$  approximation of the significance of the discrimination obtained by each function if only that function and the ones preceeding it were to be used. In the first four functions, the discrimination was highly significant ( $F_{1,64} p < .01$ ). This discrimination remained significant until all

but the first two functions were dropped ( $F = 1.53$   $p < .05$ ). The null hypothesis is rejected. At least for this sample, girls who are going to pledge a certain sorority or enter a scholarship house are more like each other than they are like the rest of the girls in the sample.

Table 1  
Results of Discriminant Function of Scores on AI<sub>1</sub>

Characteristic Roots	Percentage of variance accounted for		Significance of dis- crimination if succeed- ing root dropped
	%	C %	
1. 0.39768759	58%	58%	$F = 0.90$ non sig.
2. 0.18865685	28%	86%	$F = 1.41$ $p < .05$
3. 0.06651687	10%	96%	$F = 1.59$ $p < .05$
4. 0.01522744	2%	98%	$F = 1.64$ $p < .01$

df = 48,614

An inspection of Table 1 indicates that the first two functions accounted for 86% of the variance. In other words, all but 14% of the variance can be said to lie along two uncorrelated mathematical dimensions in the multivariate space with which we concerned ourselves in this discriminant function.

Hypothesis 2: Living units will not be discriminable from one another by the personality characteristics of members who have lived in their respective house at least one year.

A discriminant function was performed on the factor scores taken from the readministered AI (AI<sub>2</sub>). Table 2 gives the first four characteristic roots, the amount of total variance accounted for by each and the  $F$  approximations of the significance of discrimination using

each function plus those preceding it. The discrimination remained significant ( $F = 1.41, p < .05$ ) until all but the first three functions were dropped. The null hypothesis is rejected. At least for this sample, the personality characteristics of girls living within one house, as measured by the factors from the AI, are more similar to one another than they are to the members of other houses.

Table 2

Results of Discriminant Function of Scores on AI<sub>2</sub>

Characteristic roots	Percentage of variance accounted for		Significance of discrimination if succeeding root dropped
	%	C %	
1. 0.29325776	46%	46%	F non sig.
2. 0.23513885	37%	83%	F = 1.07 non sig.
3. 0.06301747	10%	93%	F = 1.41 p < .05
4. 0.03965259	1%	94%	F = 1.53 p < .05
df 48,614			

Eighty-three percent of the variance is accounted for by the first two functions. However, for significant discrimination, three uncorrelated mathematical dimensions must be drawn through the multivariate space which we have examined. Evidently the relationships between the living groups on the variables considered changed between the times the members took AI<sub>1</sub> and AI<sub>2</sub>.

Hypothesis 3: Sororities will not be discriminable from one another by the personality characteristics of members who have lived in their respective houses at least one year.

Hypothesis 4: Sororities will not be discriminable from the



scholarship house by the personality characteristics of members who have lived in their respective houses at least one year.

Hypotheses 3 and 4 were tested by the same discriminant function used to test hypothesis 2, the one computed on the factor scores of the  $AI_2$  (See Table 2). All of the houses were discriminable from one another after the third function. Therefore, Hypotheses 3 and 4 are rejected ( $F = 1.41$ ,  $p < .05$ ). At least for this sample, not only can sororities be discriminated from scholarship house, but they can be discriminated from one another.

Hypothesis 5: Their perceptions of their house will not discriminate members of living groups from one another.

A discriminant function was done on the factor scores of the LSCI. Table 3 gives the results of this discrimination.

Table 3  
Results of Discriminant Function of Scores on LSCI

Characteristic roots	Percentage of variance accounted for		Significance of discrimination if succeeding root dropped
	%	C%	
1. 0.81128629	52%	52%	$F = 1.21$ non sig.
2. 0.41122257	26%	76%	$F = 2.74$ $p < .01$
3. 0.23702825	15%	93%	$F = 3.35$ $p < .01$
4. 0.08843719	6%	99%	$F = 3.62$ $p < .01$

df = 48, 614

The discriminant function significantly separates the perceptions of the members into living units using only the first two functions ( $F = 2.74$ ,  $p < .01$ ). The null hypothesis is rejected. For this sample,

the perceptions of the members of the living unit as measured by the factors of the LGGI were unique to that house. They varied significantly from the members of other groups' perceptions of their own living unit. More than fifty percent of the variance was accounted for by the first function, and seventy-eight percent was accounted for by the first two functions. Thus, two uncorrelated mathematical dimensions, drawn through the multivariate space examined, would differentiate all of the living groups from one another.

Hypothesis 6: Living units will not be discriminable from one another by the patterns of change in personality characteristics of their members.

Difference scores between the scores on the factors of  $AI_1$  and  $AI_2$  were obtained for all 140 subjects. A discriminant function was performed on these scores. Its discriminating powers were found to be non-significant, ( $F = 0.83$ ) so other computations concerning it were abandoned. The null hypothesis was not rejected. The way in which the girls in our sample changed their personality characteristics did not reveal a pattern which was unique to their living group.

#### Summary of Findings on the Hypotheses

The girls in this sample differed in personality characteristics enough to be categorized into their living groups both before they pledged and after they had lived in their house at least a year. There were differences between the girls in each sorority as well as differences between the sorority girls and the scholarship house girls. However, their patterns of change of personality characteristics

failed to differentiate the girls into houses. No unique patterns of change due to houses can be claimed on the basis of these discriminant functions.

After a brief discussion of factors found to be significant in the  $AI_1$ , the  $AI_2$  and the  $LSCI$ , additional data on the change manifested by the houses on each factor will be presented.

#### Significant Factors on Each of the Tests

Before the change, or lack of it, of houses from the  $AI_1$  to the  $AI_2$  is discussed, those factors which apparently contributed significantly to the total variance accounted for on any of the three measures will be presented. Three analyses of variance were computed, one on the  $AI_1$ , one on the  $AI_2$  and one on the  $LSCI$ . The overall within sums of squares and the sums of squares for each factor were obtained from the computations of the discriminant functions. The probability of getting an  $F$  statistic significant at the .01 level by chance in eight  $F$  tests is less than .08. The probability of getting an  $F$  statistic significant at the .05 level by chance in eight  $F$  tests is less than .40. Table 4 gives the  $F$  statistics of the analyses of variance.

Factor III, the only significant factor to appear in the  $AI_1$ , is the reversal of the scales reflecting narcissism and vanity. A high score on this factor is a denial of these two needs. This factor did not appear significant on the  $AI_2$ , suggesting some change in girls across houses on this factor.

Two factors appeared significant on  $AI_2$ , neither of which were

significant on  $AI_1$ . Factor I reflects a kind of socially acceptable aggressiveness, including a need to seek social or political prestige. As Stone (1963) pointed out, his first factor was very similar to Stern's (1963) factor I, (Self Assertion). Since this was the first factor to be extracted from their respective data by both researchers, it appears that this is a stable factor in the Activities Index. Factor VII reflects a growing away from superstition toward a need for more objective or more mature thinking.

Table 4  
F Statistics for Simple Analyses of Variance of Factor  
Scores on the  $AI_1$ , the  $AI_2$  and the LCCI

F statistics			
Factors	$AI_1$	$AI_2$	LCCI
I	1.42	4.04**	2.00
II	2.15	0.28	0.33
III	2.63**	1.17	3.44**
IV	1.24	0.82	6.53**
V	1.15	2.08	4.56**
VI	1.99	1.38	6.34**
VII	1.59	3.12**	2.57*
VIII	1.19	0.09	4.73**

\*  $p < .05$

\*\*  $p < .01$

df = 6, 133

These data suggest the following: (a) that the girls in this sample either became more openly concerned with their physical attractiveness or became more aware and accepting of their needs for narcissism and vanity; (b) that the girls developed more needs for social

aggressiveness as they progressed through college; and (c) that the girls manifested more needs for objective thinking after two or more years at the university.

In contrast to the  $AI_1$  and  $AI_2$ , where most of the factors did not appear to be contributing significant amounts to the total variance, six of the eight factors on the LCCI appeared to be significant. The reader is referred to Appendix II, where the press attributed to these factors is described. The difference in the number of significant factors could be a function of the difference in the items on the two tests, or it could suggest that the girls were more consistent in their observations of their environment than they were in their observations of themselves.

#### Possible Impact of the Living Unit--Additional Data

No patterns of change were found among the seven houses, yet the change in significant factors from  $AI_1$  to  $AI_2$  indicated that some changes in the personality needs of the girls in this sample had taken place. It seemed possible that some of the house populations might be shifting on the individual factors, without manifesting a unique pattern. Therefore, difference scores between the  $AI_1$  and the  $AI_2$  were considered for each house on each factor. The null hypotheses of no change from the scores of the  $AI_1$  to the scores of the  $AI_2$  were tested by two tailed t-tests for correlated measures. Even though the chances of a type I error are enhanced by such a series of t-tests, this was a tentative approach to obtain more information than the discriminant functions yielded.

Table 5 gives the results of these fifty-six t-tests. About three of these tests could be expected to be significant at the .05 level by chance if there were no differences between groups. Nine of the tests are significant at the .05 level or beyond.

Table 5  
Value of t-statistic Obtained from Difference  
Scores Between  $AI_1$  and  $AI_2$

Factor	S H	$S_1$	$S_2$	$S_3$	$S_4$	$S_5$	$S_6$
I	2.59*	1.70	1.91*	1.81*	2.01*	1.54	-0.34
II	-2.61*	1.75*	1.01	0.67	1.80*	-2.33*	0
III	0.57	2.79*	1.25	-0.78	2.67*	0.72	1.09
IV	0.62	0.33	0.40	0.49	1.71	-3.34**	1.10
V	1.37	1.62	0.16	0.10	1.29	0	1.99*
VI	0.09	-0.99	1.60	1.13	1.56	1.73	0.59
VII	0.44	0.60	0.56	-1.02	1.33	-1.39	2.05*
VIII	-2.14*	-1.08	1.84*	-2.78*	-2.70*	-0.28	-0.66

- t sig. p .10  
 \* t sig. p .05  
 \*\* t sig. p .01  
 df 1, 16 in each case

Of the nine significant shifts, one house showed three of them. The girls in the scholarship house had significantly higher scores on factor I, the social aggressiveness factor, than they had on  $AI_1$ . They showed significantly lower scores on factor II, which reflects a need for structure and the organization of details, and on factor VIII, the self depreciation factor. The scholarship house was one of three houses in which the members had significantly lower scores on factor VIII on the  $AI_2$ .

When t-statistics significant at the .10 level are included, it



seems to make some trends more clear, and emphasize some differences between the houses. Including t-tests significant at the .10 level, when a house shows lower scores on factor VIII, it shows higher scores on factor I, if it does not change significantly on factor VIII, it does not change significantly on factor I. The exception to this is sorority 2. This house was the only one to show higher scores on factor VIII, but it also showed higher scores on factor I.

The inclusion of t-tests significant at the .10 level allows four of the seven houses to reflect significantly higher scores on factor I. It also allows sorority 4 to show significant shifts on four of the eight factors.

It appears that there may be subtle changes occurring in the personality needs of the girls in this sample, and that these changes are somehow correlated with their living unit. It is possible that the trends were too slight, or that the measurements were too gross to pick up such changes when the girls in the total sample showed greater heterogeneity on  $AI_2$  than on  $AI_1$ .

#### Observations of Outside Judges

Three persons familiar with the living units in this study were asked to rate each unit on each of the eight personality factors. Table 6 gives the Spearman rank order correlations of the judges with each other, and of each judge with the observed mean of the house on each factor. In addition, the Kendall Coefficient of Concordance:  $W$  is given to show the degree association among the three judges in their rankings of the houses on each of the eight factors.

Table 6

Rank Order Correlations of Outside Judges with  
Each Other and with the Observed Means  
of Houses on the LSCI

Factor	Judge 1 with 2	Judge 1 with 3	Judge 2 with 3	W	Judge 1 with X	Judge 2 with X	Judge 3 with X
I	.46	.45	.44	.63*	.36	.64	.29
II	.38	.07	.59	.56*	.39	.71*	.53
III	.14	.82*	.46	.65*	.57	.11	.34
IV	.50	.61	.04	.59*	.68	.32	.91**
V	.43	.57	.43	.65*	.54	.79*	.43
VI	.21	.21	.44	.59*	.21	.46	.50
VII	.04	.59	.61	.56*	.34	.82*	.71*
VIII	.46	.11	.67	.59*	.07	.04	.50

\* sig.  $p < .05$

\*\* sig.  $p < .01$

It will be noted that all of the correlations are positive. The probability of this occurring by chance is  $1/248$ . Of the six significant correlations, one is between judges, the other five are between the judges and the observed means. It would seem that the judges were able to predict fairly well the press of the houses as defined by the responses of the house members on the LSCI. All eight of the coefficients of concordance were significant beyond the .05 level of confidence. Apparently, the factors used on the LSCI were factors the judges could agree on to a significant extent, as well as use to predict the responses of the house residents.

## DISCUSSION

Deficiencies and Limitations

As has been pointed out, very little research has been done concerning the personality characteristics of college living groups. Therefore, this has been an exploratory study. Any interpretation of the findings must first recognize that there are certain deficiencies and limitations in the design of the study. First, only students in self-chosen living groups were included in the sample. The primary question did not concern the total university population, but those students in living groups. Second, only females were used in the sample. Undoubtedly sex differences would be found if fraternities as well as sororities had been studied. Third, only a fraction of the female, self-chosen living groups were studied. It was necessary to use only those sororities who were willing to participate in such an undertaking. Simply this willingness versus those who were too busy to participate may reflect some major differences in personality characteristics. Fourth, the LCCI was not a standardized, validated test, but was modified from Sterns' (1963) CCI. It was necessary to do this because no test for the press of living groups existed. Therefore the factor scores on the LCCI are operationally defined as the press of living groups. Nevertheless, the agreement between the judges shown in Table 6 would indicate that the judges were able to understand and use the descriptions of the LCCI factors.

Similarities Between Two Studies

The present study was designed, and the data collected in 1964.

At about the same time, Scott (1965) was analyzing data to answer the same question this study attempted to answer: Do college students change in personality characteristics when they are subjected to peer pressure in living groups? The design of the studies is quite different, as are the methods, procedures and measures used. Scott used values as a measure of personality; this study used needs, combined into personality factors. The findings of the two studies are strikingly similar, though. (a) Both studies found original differences in the personality characteristics of students before they entered their living units. A review of the literature had not produced information that would lead to such a prediction. Scott (1965) used a control group of non-pludging freshmen, both male and female, and reports that the pledges differ from them as well as among houses. (b) Both studies found the residents on retest to be more like one another than like residents of other houses. Scott found his pledges remained more like the actives in their houses than like his non-pludging controls. (c) More heterogeneity was found in the personality characteristics of the students on retest than on the original tests. These findings could have been predicted from the findings of other researchers noting a general trend toward more liberal thinking in students from their freshman to their senior years. (d) No patterns of change were found. Apparently the original differences plus the increased variability on the personality characteristics obscured any patterns of change that might exist. For values at least, Scott reports a doubt any general effects due to living units exist. (e) Both studies report that some houses seem to be different than other houses in the change,

or lack of change, manifested by their residents. This finding may explain why no general effects due to living units were found. Both studies report houses in which the residents appear to grow less alike and at least one house in which residents appear to grow more alike.

#### Suggested Living Unit Effect and Implications

Finally this study comes back to its intended focus, that of the relationship between living units and the changes in personality characteristics of their residents. No patterns of change unique to a unit were found. Rather, the effects suggested in this research were that: (a) girls of certain types are attracted to or are selected to join certain houses; (b) the girls remain more similar to others in their own house than they are to residents in other houses; (c) nevertheless, in general, the girls tend to become more different from one another after living in their houses for at least a year than they were when they entered the university.

One might surmise, on the basis of the data found in this study, that the actives in a specific house are in agreement, whether this is recognized or not, about the kind of girl they wish to pledge, since they tend to pledge girls of similar personality characteristics. In addition, it would seem that the pledges have in common some ideas of the type of house they wish to pledge. The fact that girls similar to one another chose the house they did, as well as their unique perceptions of their houses seem to suggest that there is agreement among them about the type of house they are living in. These must remain assumptions, because no data is available about those girls who did

not accept an invitation to pledge the house studied, or whether the house the girls finally chose was their first choice. If the actives chose, for whatever reason, girls with similar personality characteristics, it is possible that in some houses there is little pressure for changes in personality characteristics. Rather, it may be that members of the group, already similar to one another, reinforce needs already present, and do not reinforce certain other personality needs that are not strong in a majority of the residents.

The data indicated certain trends that were too tentative to indicate any clear out living unit effects, but that were not discouraging to the idea that living unit effects may exist. These trends would seem to invite further investigation.

Several of the houses appeared to change in the same direction on some of the factors, for instance, factors I and VIII. It seems possible that pressures outside the houses, such as general expectations from the culture or the university, or effects of maturation, might be playing a part in the development, for at least some of the girls, of more needs for social leadership or recognition and less needs for self-depreciation. If this should be the case, it may be that some houses put more emphasis than others do on their residents meeting the expectations of the culture.

In some houses the girls changed on more factors than they did in others. Sororities 2 and 3 showed their greatest change on factors I and VIII, while other houses, such as sororities 1, 5 and 6 did not appear to change on these factors as much as they did on other factors.

The differences in the way the girls perceived the press of their



living unit were great enough to separate the girls into their houses. This would indicate that the groups are at least attempting to influence their members. They could be attempting to influence them in a number of ways: to conform to perceived expectations of the culture or the community, or to remain more or less as they started, or to become individuals and grow and mature in their own way.

If more is to be learned about the relationships between peer group influence and change in individuals, it seems that more must first be learned about specific influences attempted by the peer groups. It would then be easier to identify units that are successful versus units whose members do not respond. If relationships between peer group influence and change in the individual can be identified, their application can probably be generalized to other aspects of the university environment. At least, it might help to explain the differences between students who feel their university experience is helping them to grow and mature as they expected and those who disappointedly report that they see no change in themselves.

## SUMMARY

This was a study of changes in personality characteristics of the residents of six sororities and one scholarship house. The purpose was twofold: (1) to discover if girls who entered certain living units could be discriminated from one another on the basis of personality characteristics; (2) to discover whether or not they grew more like other members of their house during their residency.

Personality tests administered to all freshmen were readministered to a selected sample of girls in these seven living units. Tests reflecting the perceptions residents have of their living unit were administered to these same girls. It was found that the personality characteristics of the girls discriminated them into their living units, both before and after they became residents of their house. Also, the perceptions the residents had of their living unit discriminated the houses from one another. No discriminating patterns of change were found. If changes on separate personality factors were considered, the residents showed some tendency to differ among individual living units.

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## REFERENCES

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D., and Sanford, N. The authoritarian personality. New York: Harper Bros., 1950.
- Brown, D. Personality, college environments, and academic productivity. In R. N. Sanford (Ed.) The American College. New York: Wiley, 1962. Pp. 536-561.
- Bushnell, John H. Student culture at Vassar. In N. Sanford (Ed.), The American College. New York: Wiley, 1962. Pp. 489-514.
- Eddy, E. E. The college influence on student character. Washington, D.C.: American Council on Education, 1959.
- Freedman, M. The passage through college. In N. Sanford (Ed.), Personality development through the college years. Soc. Issues, 1956, 12, 13-28.
- Jacob, P. E. Changing values in college. New York: Harper, 1957.
- Katz, D., Allport, F. H. Students' attitudes. Syracuse, N. Y. The Craftman Press, 1931.
- Levin, K., Lippitt, R., and White, R. K. Patterns of aggressive behavior in experimentally created "social climates." J. Soc. Psychol., 1939, 10, 271-299.
- McFee, A. The relation of selected factors to students' perception of a college environment. J. Educ. Psychol., 1961, 52, 25-29.
- Murray, H. S. Explorations in personality. New York: Oxford University Press, 1938.
- Newcomb, T. M., Murphy, Lois B., and Murphy, G. Experimental social psychology, 1937.
- Newcomb, T. M. Personality and social change. New York: Dryden, 1943.
- Newcomb, T. M. The acquaintance process. New York: Holt-Dryden, 1951.
- Newcomb, T. M. Exploiting student resources. In Sprague, H. T. (Ed.) Research on college students, institute lectures considering recent research on college students' motivation, values and attitudes and campus cultures. Boulder, Colorado: The Western Interstate Commission for Higher Education and Berkeley, California: The Center for Higher Education, 1960.
- Newcomb, T. M. Student peer-group influence. In R. N. Sanford (Ed.), The American College. New York: Wiley, 1962, Pp. 690-730.

- Overall, J. E. Formulating the multivariate hypothesis: Multivariate methods for psychological research. In transactions of the Sixth Research Conference: Chemo-therapy studies in psychiatry and broad research approaches to mental illness. Veterans Administration: Washington, 25, D. C., 1961.
- Overall, J. Personal communication, 1964.
- Rao, C. R., Advanced statistical methods in biometric research. New York: Wiley and Sons, 1952.
- Sanford, N., (Ed.) Personality development during the college years. J. Soc. Issues, 1956, 12, 1-71.
- Sanford, R. N. Developmental status of the entering freshman. In R. N. Sanford (Ed.) The American College. New York: Wiley, 1962, Pp. 253-289.
- Scott, W. A. Values and organizations. Chicago: Rand McNally and Company, 1965.
- Siegel, Alberta E., Siegel, S. Reference groups, membership groups and outside change. J. Abnorm. Soc. Psychol., 1957, 55, 360-364.
- Stern, G. C., Stein, M. I. and Bloom, B. S. Methods in personality assessment; human behavior in complex social situations. Glencoe, Ill. Free Press, 1956.
- Stern, G. C. Student values and their relationship to the college environment. In Sprague, E. T. (Ed.) Research on college students' motivations, values and attitudes and campus cultures. Boulder, Colorado: The Western Interstate Commission for Higher Education and Berkeley, California: The Center for Higher Education, 1960.
- Stern, G. C. The measurement of psychological characteristics of students and learning environments. In Messick, S., Ross, J. (Ed.) Measurement in personality and cognition. New York, J. Wiley, 1962, Pp. 27-68.
- Stern, G. C. Environments for learning. In R. N. Sanford (Ed.) The American College. New York: Wiley, 1962a. Pp. 690-730.
- Stern, G. C. Scoring instructions and college norms, Activities Index, College Characteristics Index. Syracuse, N. Y.: Psychological Research Center, 1963.
- Stone, L. A. A factor analysis of the Stern Activities Index. Paper read at Western Psychological Association meeting, Portland, Oregon, April, 1964.
- Webster, H., Freedman, M., and Heist, P. Personality changes in college students. In R. N. Sanford (Ed.) The American College. New York: Wiley, 1962. Pp. 811-846.

APPENDICES



## APPENDIX I

## Interpretation of Activity Index Factors

Factor I. This factor reflects aggressiveness in both physical activities and in interpersonal relationships. There is a need to achieve personal power and socio-political recognition. Many of the items emphasize political action, directing or controlling other people and acceptance of roles involving considerable group attention.

Factor II. This factor reflects a strong need for the organization of details, a high degree of planning, a need for structure and the maintenance of ritual and routine.

Factor III. This factor is the reverse vector of items indicating an acceptance of one's heterosexual needs and items indicating a certain vanity, need to make an excellent personal appearance, to be considered fashionable and socially sophisticated.

Factor IV. This factor reflects a high degree of energy, a need for some thrills and risk taking versus staying out of potentially physically dangerous sports for fear of getting hurt, plus a need to take responsibility for one's self. A flexible attitude toward change is reflected in this factor.

Factor V. These items reflect a need for interdependence with others, the need to depend on those stronger than one's self and to offer nurturance to those weaker. An acceptance of one's need for warmth and emotional supportiveness is reflected in this factor.

Factor VI. This factor is based on items reflecting a need for intellectual gratification and an interest in the natural sciences.

Factor VII. This factor reflects a disdain for superstition, a need for objectivity.

Factor VIII. This factor suggests a high level of control based on social conformity and other directedness. A need for self-depreciation and acceptance of criticism is reflected rather than a need for self-confidence and resistance to suggestion.

## APPENDIX II

## Interpretation of Living Groups Characteristics Index

## Factor 1

Encourages residents to take the initiative and make efforts to control certain situations both within and outside the living unit. Offers opportunities for the development of formal social skills, leadership potential, and self assurance. Encourages participation in discussions, debates, projects, student drama and musical activities, and other forms of highly visible activities. Introduces resident to ideas likely to serve as models of intellectual and professional achievement.

## Factor 2

Exhibits a high degree of organization and structure in its operations. Expects orderliness and planfulness from its members.

## Factor 3 (This factor scored 20-Sum of Factor III)

Encourages residents to devote considerable attention to making a good personal appearance. Stresses conformity to fashion and smooth social skills. Plans and participates in frequent heterosexual activities. Plays up the girls' need to be desired by the opposite sex.

## Factor 4

All members take part in decision making. The group is open to change and innovation. Each member's efforts tend to make an impact on the living environment. Provides an atmosphere charged with energy and striving to achieve. The living unit does not encourage the members to concern themselves too much with bodily health, or be too cautious

or safety minded.

Factor 5

The living unit engages in mutually supportive group activities of a warm, friendly character, more or less typifying adolescent togetherness. Devotes some activities to the welfare of fellow students and to less fortunate members of the community.

Factor 6

Sets high academic standards for residents, and rewards scholastic achievement. Encourages interest in science. Provides a climate of intellectual stimulation.

Factor 7

Attempts to preserve the residents' freedom and maximize personal responsibility. Treats its members as adults.

Factor 8

Uses various forms of coercion to force conformity of the individual to group norms. Insists on submissiveness from its members. Values the resident who is a good team member.

## APPENDIX III

Bao's F approximation is  $F = \frac{2r}{ms + 2r - \left(\frac{1-y}{Y}\right)\left(\frac{ms+2r}{2r}\right)}$

where  $S = \sqrt{(p^2 q^2 - 4)/(p^2 + q^2 - 5)}$

where:  $m = (p+1)/2$

$n = (pq-2)/4$

$r = pq/2$

$y = \frac{1}{S}$

and:  $q = \text{groups} - 1$

$p = \text{number of variables}$

$n = N-1$

$\lambda = \frac{Y}{H} \left[ \frac{1}{1+1} \right]$

THE RELATIONSHIP OF LIVING UNITS  
TO PERSONALITY CHARACTERISTICS  
OF RESIDENTS

by

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This was a study of changes in personality characteristics of the residents of six sororities and one scholarship house. The purpose was twofold: (1) to discover if girls who entered certain living units could be discriminated from one another on the basis of personality characteristics, (2) to discover whether or not they grew more like other members of their house during their residency.

Personality tests administered to all freshmen were readministered to the girls in these seven living units. Tests reflecting the perceptions residents have of their living unit were administered to these same girls. It was found that the personality characteristics of the girls discriminated them into their living units, both before and after they became residents of their house. Also, the perceptions the residents had of their living unit discriminated the houses from one another. No discriminating patterns of change were found. If changes on separate personality factors were considered, the residents showed some tendency to differ among individual living units.