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# OPEN AND CLOSED MINDEDNESS, VALUES, AND OTHER PERSONALITY CHARACTERISTICS OF MALE COLLEGE STUDENTS WHO SERVED ON OR APPEARED BEFORE JUDICIARY BOARDS

Ъу

Gordon H. Henry

Bachelor of Science, Minot State College 1962 Master of Science, University of North Dakota 1966

A Dissertation

Submitted to the Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Education

Grand Forks, North Dakota

January 1970 1970 H396

This dissertation submitted by Gordon H. Henry in partial ful-fillment of the requirements for the Degree of Doctor of Education from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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Dean of the Graduate School

#### Permission

	OPEN AND CLOSED MINDEDNESS, VALUES, AND OTHER PERSONALITY									
	CHARACTERISTICS OF MALE COLLEGE STUDENTS WHO SERVED ON OR									
Title	APPEARED BEFORE JUDICIARY BOARDS	_								
DepartmentCounseling and Guidance										
Degree	Doctor of Education									

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Date

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#### ABSTRACT

#### **Problem**

The purpose of this study was to determine the direction of change in selected attitudinal characteristics of male students who were either members of a judiciary board (Group 1, N=51), or appeared before a judiciary board (Group 2, N=11), or had no contact with a judiciary board (Group 3, N=110) while living in the residence halls at the University of North Dakota.

#### Procedure

The main sources of data for this study were the Allport-Vernon-Lindzey Study of Values, the Rokeach Dogmatism Scale E, and the Adjective Check List. These instruments were administered to the research population early in the first semester and late in the second semester of the 1968-69 academic year. Specially constructed questionnaires for the student groups and the head residents provided additional data.

The statistical techniques employed in this study included analysis of variance, analysis of covariance, and Dunn's "c" test.

The .05 level was employed as the critical level for determining the significance of the obtained differences.

#### Findings

- 1. There was a significant difference among the three groups between initial testing and retesting for the open and closed mindedness variable, with Group 2 scoring higher (becoming more closed minded) than Group 1 and Group 3.
- 2. There was a significant difference among the three groups between initial testing and retesting for the number of unfavorable adjectives checked variable. A significant difference was found between Group 1 and Group 3, with the former scoring higher.
- 3. There was a significant difference found on the variable, self-control, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the latter scoring higher.
- 4. There was a significant difference found on the variable, heterosexuality, among the retest means for the three groups, with Group 2 scoring higher than Group 1 and Group 3.
- 5. There was a significant difference among the three groups between initial testing and retesting for the heterosexuality variable.

  A significant difference was found between Group 2 and Group 3, with the former scoring higher.
- 6. There was a significant difference found on the variable, exhibition, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the former scoring higher.
- 7. There was a significant difference found on the variable, change, among the retest means for the three groups. A significant

difference was found between Group 2 and Group 3, with the former scoring higher.

- 8. There was a significant difference found on the variable, deference, among the retest means for the three groups, with Group 1 and Group 3 scoring higher than Group 2.
- 9. There was a significant difference found on the variable, counseling readiness, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the latter scoring higher.

#### Conclusions

- 1. There were no significant differences or changes in the values of students who served on a judiciary board, appeared before a judiciary board, or had no contact with a judiciary board.
- Students who appeared before a judiciary board became more closed minded, more authoritarian, and less receptive to new ideas.
- 3. Students who appeared before a judiciary board lacked self-control, were outgoing, self-centered and narcissistic. In addition, they were opportunistic and manipulative, placed high priority on change and disorder, and were authoritarian, as well as ambitious.
- 4. Judiciary board members were increasingly perceived by their peers as being cynical, rebellious, and punitive.

#### CHAPTER I

#### INTRODUCTION

#### Background

Research concerning the personality characteristics of college students has increased markedly during the past decade. This is especially true in the area of attitudes and values. Much of this interest has been initiated by institutions of higher learning to ascertain whether they have been fulfilling their educational objectives. In a discussion of what the objectives of a college education should be, Lehmann and Dressel (1962, p. 2) stated:

Implied in the objectives of a college education . . . are the development of skill in critical thinking and problem solving and the development of such attitudes and values as may be acquired by an understanding of the physical universe, of the methods of science, of social organization and the process of social control, and by a study of man himself.

More recently, Sanford (1966) has stated that the objectives of a college education should be directed toward the development of social responsibility devoted to ideals rather than to a social group.

In general, changes in academic skills, knowledge, attitudes, values, interests, ideals, or beliefs may be expected as legitimate outcomes of college attendance. While in college, students are expected to develop into critical thinkers, to be less stereotyped in their beliefs, and to be receptive to new ideas. It is hoped that

personal values are reexamined in the light of a new openness to ideas, and that those values found to be in conflict with such openness will be modified.

Research has endeavored to determine if changes occurred in student values and attitudes during the college years (Jacob, 1957; Hassenger, 1967; Huntley, 1965; Seligman, 1969). In particular, research has focused on changes which might occur as a result of exposure to different curricula, different types of teaching methods and styles of teaching, and different types of institutions (Jacob, 1957; Benne, 1967; Rivet, 1967; Hein, 1968; Williamson, 1967). Some investigators have failed to provide evidence in support of change in college student values and attitudes during the college experience. For example, Jacob (1957) concluded that neither courses, curriculum, or instructors had a marked impact on student attitudes, values, and behavior. However, research by Benne (1967), Hassenger (1967), and Robb (1966) has suggested that when all of the variables in the student's environment were taken into account, significant changes did occur. Such research has indicated that student values and attitudes undergo a change during college years, with the amount of change varying according to age, sex, institution attended, and personality structure of the students.

From the studies cited, it would seem reasonable to conclude that changes in attitudes, values, and personality structure are a result of the milieu which surrounds college students. This study attempted to examine one aspect of the non-classroom environment to ascertain its effect upon the attitudes, values, and personality structure of students at the University of North Dakota.

During the past three years, the disciplinary procedures used in the male residence halls at the University of North Dakota have changed. In lieu of the traditional administrative philosophy, a philosophy which is student oriented and student administered has been enunciated and implemented. In the fall of 1966, a disciplinary system of judgment by peers was initiated within the men's residence halls. The investigator served as head resident in one of the men's halls at the time of this research. Tentative observations made by the investigator during this period included the following:

- 1. After the initiation of discipline by peer justice, the number of serious disciplinary cases within the halls decreased.
- 2. Students who expressed a desire to serve on a judiciary board seemed to exhibit similar personality characteristics.
- 3. Students involved in the judiciary process faced situations of extreme duress, often resulting in an apparent overt change in attitudes and personality characteristics.
- 4. Student attitudes toward authority and discipline seemed to change as a result of being exposed to and/or participating as a member in the judiciary process.

Evidently, the establishing of judiciary systems in the men's residence halls has created a unique sub-culture within the halls. In this environment, changes in attitudes, values, and personality seem to be taking place as a possible result of the interaction among peers involved in the process of discipline. Research on this aspect of college life appeared to have merit and it was hoped that the findings would enable university administrators and students alike to realize

the potential of the judiciary system in fostering student autonomy and personal growth.

#### Statement of the Problem

The purpose of this study was to determine the direction of change in selected attitudinal characteristics of male students who were either members of a judiciary board, or appeared before a judiciary board, or had no contact with a judiciary board while living in the residence halls at the University of North Dakota during the 1968-69 academic year. Areas which were of specific interest included:

(1) values, (2) open and closed mindedness, and (3) other personality characteristics as measured by the Adjective Check List.

#### Research Questions

This study has endeavored to answer the following questions:

- 1. Is there a difference in the initial measurement of values and in the retesting of values among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board?
- 2. Is there a difference in the initial measurement of open and closed mindedness and in the retesting of open and closed mindedness among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board?

3. Is there a difference in the initial measurement of personality characteristics and in the retesting of personality characteristics among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board?

#### Delimitations

The following comprise delimitations of the problem under investigation:

- 1. This study was concerned with three groups of students who lived in the men's residence halls at the University of North Dakota during the 1968-69 academic year. These groups were: (1) those students who participated as regular members of a judiciary board, (2) those students who committed an offense and appeared before a judiciary board during the period of this study, and (3) those students who had no formal contact with a judiciary board.
- Only those students who carried twelve or more hours for two semesters and lived in a residence hall were included in this study.
- Students from countries other than the United States and Canada were excluded from the study.
- 4. This study excluded from the research population members of the residence hall counseling staff.

#### Limitations

- The findings of this study were limited by the reliability and validity of the instrument used to measure values, namely, the Allport-Vernon-Lindzey <u>Study of</u> Values.
- 2. The findings of this study were limited by the reliability and validity of the instrument used to measure open and closed mindedness, namely, the <u>Rokeach Dog-</u> matism Scale E.
- 3. The findings of this study were limited by the reliability and validity of the instrument used to measure
  the personality variables, namely, the Adjective Check
  List.
- 4. Since Group 3 consisted of volunteers, these subjects constituted a motivated sample. It is possible that the subjects were not representative of the population from which they were drawn.
- 5. The findings were limited by differences in the operational procedures adopted by the judiciary boards of the residence halls included in the investigation.

#### Significance of the Study

Out-of-class activities play a significant role in the development of the university student. It is becoming increasingly evident that much of the influence of a university is not a direct result of the academic experiences provided. In particular, the residence hall is a good example of a non-classroom environment which exerts a developmental influence on the student during his college years. Life in a residence hall offers the student more than a place to hang his coat and sleep. Residence halls, in some schools, are being developed as living-learning centers where students spend up to eighteen hours each day. Each hall becomes a sub-culture where students with heterogenous backgrounds and ideas are constantly interacting. Within such environments, the opportunities for behavioral changes increase.

One specific arena for change seems to be provided to students who are exposed to and/or are participating members of the disciplinary process within the halls. Justice by peers has created a micro-culture within the halls with indications that this process may give an impetus to a behavioral change in those students involved in the process.

Since the student of today is demanding more autonomy and a greater voice in his own destiny, it seemed urgent that an attempt be made to understand the dynamics involved regarding change in attitudes, values, and personality as a result of the freedom and autonomy found in the process of self-discipline within the residence halls. Through such understanding, the opportunities for the personnel administrator, the residence hall staff, and the student to create an environment for maximum growth would be enhanced.

#### Definition of Terms

<u>Dogmatism</u>. Dogmatism pertains to the inflexible, rigid, closed-belief system of an individual. It is employed in this study synony-mously with open and closed mindedness. Rokeach (1960, pp. 4-5) defined dogmatism as:

. . . a closed way of thinking which could be associated with any ideology regardless of content, an authoritarian outlook on life, an intolerance toward those with opposing beliefs, and a sufferance of those with similar beliefs.

Authoritarianism. Authoritarianism was defined by Christie (1954, p. 140) as:

. . . the state of being punitive and condescending toward inferiors, unreceptive to scientific investigation, non-sensitive to interpersonal relationships, and prone to attribute one's own ideology to others.

Judiciary Board. A judiciary board consisted of a panel of students who were delegated the authority to hear discipline cases within the men's residence halls. Those discipline cases which fell within the jurisdiction of the judiciary board included any problems which arose that presented a conflict between a student's behavior and one or more of the following: (1) the expectations of his peers in a group living situation, (2) residence hall regulations, and (3) the University Code of Conduct. After a case had been heard, the judiciary board made recommendations to the head resident of the housing unit concerning the disciplinary action to be taken.

Regular Judiciary Board Member. As employed in this study a regular judiciary board member was an individual who participated in a minimum of two judiciary board cases during the 1968-69 academic year.

Chapter I has provided an introduction to the investigation.

Chapter II reviews the professional literature related to the problem under investigation.

#### CHAPTER II

#### REVIEW OF RELATED LITERATURE

During the last two decades psychologists, sociologists, anthropologists, and educators have studied extensively the effects of the college environment upon student values, attitudes, and personality. The related research to be presented in this chapter will be concerned primarily with reviewing those studies that bear upon: (1) student values; (2) open and closed mindedness; and (3) personality characteristics of college students.

#### Research on Student Values

The Harvard Report summarized the ends of higher education as the development of the ability "to think effectively, to communicate thought, to make relevant judgments, and to discriminate among values" (Stoltenberg, 1963, p. 25). The Harvard Report viewed student values as not peripheral to the educational process but rather as being at the very heart of education.

Patterson (1959, p. 55), after reviewing definitions offered by a psychiatrist, a social psychologist, and a sociologist concluded that "it appears that a simple, generally acceptable definition of values is difficult if not impossible to formulate." It was noted that values affect our perceptions, and therefore our wants and desires. Moreover,

it was stressed that values represented preferences which were in large part socially or culturally determined.

Maddi (1966) defined values as beliefs or convictions that the individual considered important, not only for himself, but for others as well. Williams (1951, p. 388) defined values as "... modes of organizing conduct--meaningful, affectively invested principles that guide human action."

The development of values has its roots in the quality of the relationship between the individual and his parents during the formative years. Studies by Rose (1956), Wittenborn (1956), Koch (1956), Morris (1958), Hollinshead (1952), Dukes (1955), and Rhodes (1960) have suggested that the intimacy of family life was related to the development of value systems.

It is evident from the chaos and disorder on many of the college campuses that the central value systems of society are being questioned in the search for new truths and methods of gaining insight. Gideonse (1967, p. 28), commenting on this phenomenon, stated:

The integration of medievil society - such as it was - was essentially that of faith in common values. The disintegration of modern culture is not primarily the fruit of intellectual error but rather the inevitable result of an outlook that regards values as the concern of individuals, and, if anything, as an obstacle to academic achievement. Our basic problem is not that of improved means to unimproved ends, but rather that means are ever more available to ends ever more muddled and evanescent.

Oetting (1968) suggested that student rebellions should be encouraged since they were a healthy part of the educational process in which students learned to reassess their beliefs and those of others and to question existing value systems.

The student of today is in the process of molding a new value system for himself and society. He wants to be taken seriously and he is in constant search for commitments which to him seem worthy. It was postulated by Singer (1967), Derber and Flocks (1967), Sanford (1966, 1967), and Green (1968) that present college students have stronger social values than did any preceeding generation. Contemporary students accorded human well-being the highest value and felt that the goal of college education should not be primarily the development of the individual but the improvement of society (Sanford, 1967). This was succinctly summarized by Guy (1966, p. 45) as follows:

The process of secularization and universalization have liberated students from the paternalistic attitudes of the past and moved them toward new concerns for social change and the betterment of man.

Although a common value structure was identified among students in a given culture, variations have existed within and among different cultural groups (Morris, 1958; Hollinshead, 1952; Wayland and Brunner, 1958). Miller (1958) found that college students from rural areas tended to identify themselves as members of the working class more often than did students from urban areas.

Derber and Flocks (1967) found some significant differences in the value systems of student activists and student non-activists. They reported that student activists were more concerned with beauty and spontaneity, understanding and meaning, authenticity and interpersonal intimacy, and the needs of the oppressed. Student non-activists were more concerned with moralism and self-control, materialism and status, and with their future careers.

Numerous studies have shown significant differences in values among Protestant, Roman Catholic, and Jewish students. Spoerl (1952), using the Study of Values, concluded that Jewish students scored significantly lower than did Protestants and Roman Catholics with respect to religious values. Jewish students scored significantly higher than did Protestant or Catholic students with respect to aesthetic values. In addition, Jewish students scored significantly higher than did Catholic students with respect to social values. Woodruff (1945) indicated that religious experiences had an important effect upon student value patterns and that different denominations appeared to produce diverse effects. He also found variations within members of the same denomination. He questioned whether differences in values were exclusively the results of religious differences or whether there was an interaction between socio-economic and religious factors (Dukes, 1955).

In a summary of the research on student values, Seligman (1969) reported that three-fifths of the students in selected universities held strong economic, religious, and political values. The other two-fifths of the students reported strong social and aesthetic value systems, and indicated a definite lack of concern about making money.

There has been considerable research concerning whether value systems, attitudes, or personality characteristics changed as a result of college attendance. Jacob (1957, p. 11), in a summary of one of the most extensive studies of student attitudes and values, concluded:

This study has discovered no specific curricular pattern of general education, no model syllabus for a basic social science course, no pedigree or instructor and no wizardy of

instructional method which should be patented for its impact on the values of the students . . . the impetus to change does not come primarily from the formal educational process.

Studies completed by Hassenger (1967), Huntley (1965), and Seligman (1969) supported the conclusion that the formal educational process by itself was not enough to provide the impetus for change in student values. It would appear that any change which occurred in the value system was a result of the interaction between the total educational environment and the personality characteristics of the student. Brown (1967) and Huntley (1965) hypothesized that students underwent a major reorientation of values as a natural consequence of growth and development during the college years. Regarding the effect of college attendance upon values, Jacob (1957, p. 4) stated:

The main overall effect of higher education upon student values is to bring about general acceptance of a body of standards and attitudes characteristic of college-bred men and women in the American community. There is more homogeneity and greater consistency of values among students at the end of their four years than when they began.

Benne (1967) felt that Jacob's (1957) major conclusion was probably correct, viz., that few colleges have a great effect upon the values of the students passing through them. Exceptions occurred, however, when faculty members were actively concerned with values and when there existed a community of inquiry and responsibility. Community membership had a potent effect upon the values of its members. When this "community" did not exist, values usually were not affected. In support of this view Hassenger (1967) and Robb (1966) stated that students must be challenged with new and creative situations. Desired behavioral changes were fostered only by the manipulation of the student environment.

Lehmann and Payne (1963) were unable to identify the factors out of the total college experience which accounted for changes in student attitudes and values. While not denying that significant changes in attitudes and values occurred during college, they stated that college instructors and courses had no impact upon student behavior. Conversely, their findings suggested that the college experience reinforced rather than modified prevailing values.

A general lack of well-defined values among teaching and administrative staff in college and universities and among the general populace was reported by Crane (1962). He noted that the lack of change in student values may be attributed to contacts with university personnel who exhibited few clearly defined values themselves.

Benne suggested that peer group experiences outside of the classroom were significant in giving impetus to value and attitude changes. Benne stated (1967, p. 98):

Peer group experiences . . . help members to work more effectively with others and to develop the basic attitudes and values that aid the growth of an autonomous and rational individual. The peer group . . . can strengthen a value system that supports creative individuality, the practice of liberty, and genuine equality.

Research on student leaders has lent support to the above hypotheses. Rivet (1967) claimed that student maturity developed rapidly when students were allowed to recognize their responsibility to the school and to the education process. He stated that student personnel administrators must have the conviction that students who may not appear capable of self-government will grow into the task when they are allowed to participate in non-class activities.

According to Hein (1968), student participation in the educational

process, both in and out of the classroom, was a positive factor in personal, institutional, and community growth. Williamson (1967) supported these conclusions by indicating that an important aspect of total educational development was student responsibility for the forumulation and implementation of those university policies which affected them.

In viewing changes in values associated with college attendance, Lehmann, Sinha, and Hartnett (1966) indicated that the most dramatic changes took place during the freshman and sophomore years. It was suggested that college acted as a catalyst to speed up value changes that would ordinarily have occurred as the individual matured.

A study by Rossi (1964) suggested that the major change in the values of college students occurred during the initial six to eight weeks following college entrance. Kelsey (1964) administered the Study of Values to 1,625 students enrolled in the first through fourth years at the University of British Columbia. Increases in mean scores were recorded on the theoretical, political, religious, and social values. Decreases were recorded on the economic and aesthetic values. Using the same instrument in a four year study of 284 students, Huntley (1965) found major changes in several areas of values. Between the freshman and senior year, a majority of students demonstrated a significant increase in the esthetic values and a significant decrease in the economic and religious values.

In a related study, Gordon (1967) concluded that strong political values were modified and esthetic values were increased as a result of college attendance. It was also indicated that Catholic freshman students had higher religious values than did other freshmen,

and that change in religious values over four years was significantly less for Catholic students than for Protestant students. A decline in religious and intellectual values over four years of college was also reported by Johnson (1966). According to Johnson, departure from the freshman value system was greatest during the sophomore year. From then on there was a tendency for the values to regress back to the mean.

Reporting on a study of Vassar women, Freedman (1960) concluded that between the time a student entered as a freshman and left college four years later he displayed greater religious liberalism and demonstrated greater acceptance of intellectual values. Nelson (1938) studied freshman, sophomores, juniors, and seniors at eighteen institutions and reported that freshmen were more favorably disposed towards religion, more likely to indicate their belief in God, and more likely to attend church than were the students in the other classes. Arsenian (1943) studied males at Springfield College and found similar results, but he added that the extent of change varied for students in different majors.

In an attempt to measure the extent and direction of value change during the college experience, Schubert (1967) administered the AVL to 714 freshman and seniors at two large state universities and two small church-related colleges in the Southwest. The major conclusions were: (1) students enrolled in different schools may differ in value patterns; (2) the college experience had very little impact on student values; (3) values of women were more prone to

change during college than were the values of men; and (4) seniors were slightly more heterogeneous than were freshmen in their value patterns.

A somewhat novel approach toward the study of whether values changed due to college attendance can be credited to Sherman (1968). He investigated student perceptions of value change as well as student appraisal of environmental factors that may have affected their values. Senior respondents did not perceive any significant change in their values as having occurred between their freshman and senior years, with the exception of the theoretical trait. For the latter trait, seniors perceived an increase. The respondents also suggested that the non-college related environmental factors exerted a more positive affect on their values than did college related environmental factors.

#### Research on Open and Closed Mindedness

Rokeach (1954) defined dogmatism (open and closed mindedness) as:

. . . (a) a relatively closed cognitive system of beliefs and disbeliefs about reality, (b) organized around a central set of beliefs about absolute authority which, in turn, (c) provides a framework for patterns of intolerance and qualified tolerance toward others.

In an attempt to distinguish between dogmatic and rigid thinking, Rokeach, McGovney, and Denny (1955) defined rigidity as resistance to change of single beliefs; dogmatism was defined as resistance to a system of beliefs. They suggested that it was difficult for a highly dogmatic person to synthesise materials and to incorporate them into his own belief system. A recent study by Kleck and Wheaton (1967) indicated

that closed minded subjects found it difficult to recall information which was inconsistent with their own belief systems. However, the closed-minded person had a greater tendency to evaluate consistent information more positively than did the less closed-minded individual. Hunt and Miller (1968) reported that closed-minded persons had a low tolerance for information which was inconsistent with their own belief systems.

Numerous research studies have indicated that personality characteristics are closely related to attitudes of open and closed mindedness and authoritarianism. In a study of college students, Beerbower (1966) reported a high correlation between open and closed mindedness and feelings of anxiety, social introversion, low ego strength, and high dependency. Norman (1966), reporting on the relationship between open and closed mindedness and psychoneurosis in women, supported the above results and added depression to the list of those personality characteristics indicative of closed mindedness. He also stated that closed mindedness was strongly related to level of adjustment.

Vaachiano, Strauss, and Schiffman (1968) studied the relationship between dogmatism and personality traits as measured by the Edwards Personal Preference Schedule. Highly closed-minded individuals were found to: (1) have an intolerance for understanding of the feelings and motives of others, (2) lack self-esteem, (3) be anxious, and lack self-confidence, (4) be dissatisfied with own behavior, and (5) be cautious and compromising concerning new ideas. A strong positive correlation was obtained between closed mindedness and the EPPS need for succorance and an inverse correlation was obtained between

closed mindedness and the need for change and intraception. Also, a high correlation was found between closed mindedness and the conformity, restraint, and conservative scales of the <u>Sixteen Personality</u>

Factor scales. They concluded that there was a strong correlation between high scores on the dogmatism scale and general personality maladjustment.

Taking somewhat of an opposite view of the above results were Rokeach and Kemp (1960). They proposed that a closed cognitive system, as seen in a dogmatic person, might actually represent a defense against anxiety. In testing various ideological groups, it was found that those groups classified as being to the left of center, for example, communists, exhibited high scores on the dogmatism scale but low scores on the anxiety scale. It was reasoned that the ideological beliefs held by these groups were therapeutic insofar as they reduced manifest anxiety.

Johnston (1967) conducted a study designed to ascertain whether the <u>Dogmatism Scale</u> could be used to predict scores of elementary teachers on selected personality tests. When compared with the openminded group, the closed-minded group were significantly more secure on the <u>Security-Insecurity Inventory</u>, scored significantly lower on three of the eight sub-scales of the <u>Tennessee Self Concept Scale</u>, and scored significantly lower on the <u>Minnesota Teacher Attitude</u>

<u>Inventory</u>. It was concluded that the research findings provided support for Rokeach's formulation of open and closed mindedness as a-basic dimension of personality.

Of interest to educators has been the interest shown by researchers in locating a relationship, if any, between open and closed mindedness, authoritarianism, personality, and scholastic performance or learning. Psychologists have long pointed out that what one learned was largely conditioned by the prejudices, biases, preconceived notions and convictions of the learner (Allport, 1955; Rokeach, 1960).

Ehrlich (1961) found that closed mindedness was inversely related to the degree of learning which occurred in a classroom situation. His data suggested that open-minded subjects entered the classroom with an initial higher level of learning, learned more as a result of classroom experiences, and retained information for a longer period of time than did the closed-minded students.

Contrary to the above findings by Ehrlich, Costin (1968) did not find a greater resistance among closed-minded subjects to the learning of the general principles of behavior. However, he indicated that closed-minded individuals demonstrated a greater resistance to changing false beliefs about human behavior. This was consistent with the research results previously cited (Kleck & Wheaton, 1967; Hunt & Miller, 1968; Rokeach, 1960).

In a study of problem solving in small groups by Conway (1967), it was found that open-minded persons were significantly superior to closed-minded persons in communication skills, problem-solving time, acceptance and rejection of problems, and grasp of the overall situation. In fact, open-minded students were superior in group performance on all the variables measured.

Neel (1959) studied senior medical students who had been given the California F Scale and found that there was a significant relationship between authoritarianism and the learning of different types of materials. Authoritarian subjects had difficulty in assimilating materials presented in the humanities courses. The few studies relating open and closed mindedness to academic performance indicated that openminded students tended to perform higher in the humanities and in the social sciences than did closed-minded students (Dressel and Mayhew, 1954). Egner and Obelsky (1957) reported that even though open-minded students did better in humanities and social science courses, they did not do as well as closed-minded students in mathematics and natural science courses. Hartnett (1962) found that for females, rigidity and closed mindedness was related to grades in communication skills, natural science, social science, and humanities, but for males, neither rigidity nor closed mindedness was related to scholastic performance. One study (Kelly, 1958) found that students who were rigid, conforming, and authoritarian usually received higher grades from their instructors. Clark (1968) reported that students who scored high in authoritarianism were more field dependent and were less intelligent than those students who scored low in authoritarianism.

Lyle and Levitt (1955) reported that there was a positive relationship between authoritarianism and parental discipline, as authoritarianism was related to parental punitiveness. Rokeach and Kemp (1960) indicated that persons who differed in degree of open and closed belief systems were different in their attitudes toward their parents and the parent-child relationship. Open-minded individuals expressed more

ambivalence towards their parents, were more influenced by persons outside of the family, and had fewer anxiety symptoms than did closedminded individuals.

Rhodes (1960) studied the relationship between authoritarianism and religious preference of high school seniors. The association between authoritarianism and fundamentalism was found to be influenced by socio-economic status and rural residence. The difference between fundamentalist and non-fundamentalist subjects tended to decrease as socio-economic status and urban influences became similar for the two groups. In respect to authoritarianism, Rhodes indicated greater variations among Protestants than between Protestants and Roman Catholics.

of interest to student personnel workers are research studies which attempt to determine factors which differentiate potential student discipline offenders from non-offenders. Cummins (1966) administered the Rokeach Dogmatism Scale E to students at Michigan State University who had been referred to the Dean of Student's Office for disciplinary action. A group of students who had no record of disciplinary offenses also took the test. Results indicated that potential disciplinary students were neither more nor less open-minded than were their nondisciplinary counterparts. He concluded that the Dogmatism Scale E did not differentiate between disciplinary offenders and non-offenders. Further research by Cummins and Lindblade (1967) revealed somewhat different results. They suggested that students who had been disciplined scored higher on the Rokeach Dogmatism Scale E.

more open-minded than men offenders and scored lower on the <u>Differential</u>

<u>Values Inventory</u>, indicating less adherence to traditional values.

The college experience appears to have a liberalizing effect upon the attitudes of students. Several studies (Lehmann, Sinha, and Hartnett, 1966; Korn, 1967) indicated that seniors were more open-minded and tolerant than were freshmen. King (1967) described the more tolerant attitude of seniors as a loosening of impulse control, with a decreasing need for adherence to outside authorities. In a study designed to identify changes in intolerance and authoritarianism of sorority and non-sorority women enrolled in college for two years, Plant (1966) found that both groups indicated equivalant declines in authoritarianism and ethnocentrism. However, sorority women declined more in dogmatism than did the non-sorority women. A decline in autocratic beliefs and an increase in democratic beliefs were reported in a study completed by Hadley and Dunlap (1968). Their population consisted of graduate nursing students tested over three years. All differences were found to be statistically significant. Levin (1967) and Freedman (1965) reported that seniors had a lower authoritarian score than did the freshmen and that they were more critical in their attitudes towards authority than were freshmen.

In a review of the research on the effects of college attendance on student personality, Singer (1967) concluded that authoritarianism, closed mindedness, and ethnocentrism declined during the college years. However, he stated that many researchers made the error of attributing these changes to the college experience when, in fact, they might be attributed to normal development. Plant's study (1958) suggested that insofar as changes in ethnocentrism, open and closed mindedness, and

authoritarianism were concerned, those students who attended college for four years did not differ markedly from those who attended college for two years, or those who did not attend college. Lehmann, et alii (1966) stated that maturation and social environment may have had more impact on personality and attitude change than did academic experiences.

In four independent longitudinal studies, the Rokeach <u>Dogmatism</u>

<u>Scale E</u> was administered to students who sought admission to or who entered a Roman Catholic university (Foster, Stanek, and Krassowski, 1961), six California junior colleges (Telford and Plant, 1963), a state college (Plant, 1962), and a large state university (Lehmann, 1963; Lehmann and Dressel, 1962). The Dogmatism Scale was readministered both two and four years later, and in all cases the retest means were significantly lower than were the precollege means. Both males and females became more open-minded and more receptive to new ideas after two or more years of college.

In an attempt to evaluate the impact of a specific curriculum on nonintellectual changes among college students, Plant (1964) administered measures of dogmatism, ethnocentrism, and authoritarianism to freshmen who had been invited to participate in a special humanities program at San Jose State College. After two years, mean changes on the three scales were reported, both for students who had completed the program and for students who had left the program and had entered the general education program. Both groups of students changed significantly toward decreased dogmatism, ethnocentrism, and authoritarianism, with the humanities group decreasing the most.

Kemp (1957) conducted a six-year study aimed at determining value change in students as a function of open-closed belief systems. In a discussion of the findings he stated that both closed-minded and open-minded students changed their attitudes during the period, but in different ways. Students classified as being closed-minded became significantly less concerned with social values; the open-minded students became significantly less concerned with economic values and more concerned with theoretical values. On religious values, findings indicated that adherence to religious values became more opportunistic in the closed-minded group. The religious values of the open-minded students decreased somewhat, but were less superficial. It was suggested that changes in values were not necessarily dependent upon open or closed mindedness. Tentative support for this position was given by Vacchiano, Schiffman, and Crowell (1966) who found that attitude shifts as a function of training were significantly related to authoritarianism but not to open or closed belief systems.

The relationship of authoritarianism and attitude change in students was researched by Hardy (1957). The findings indicated that persons who were authoritarian in nature changed their attitudes less frequently than did persons who were non-authoritarian. Complimenting these results were those from a study by Levin (1967) who concluded that attitude changes occurred most often in those students who were initially higher in their intellectual and esthetic dispositions.

## Research on Other Personality Characteristics

The personality of the college student has been the focus of a number of investigations. Various studies have attempted to identify

personality characteristics that might be related to underachieving behavior in college. Snider and Linton (1964) found that the <u>California Psychological Inventory</u> (CPI) differentiated between pairs of achievers and underachievers who were matched on the basis of ability and other pertinent data. Using the CPI, Holland (1959) found that achievers were generally more introverted, responsible, mature, and conforming to recognized societal standards than were underachievers.

Norfleet (1968) investigated the relationship between personality and academic achievement of gifted university women. The results suggested that the achievers were more poised, mature, tolerant, and responsible than were the underachievers. His study concluded that achieving women were more highly socialized than underachieving women.

Barger and Hall (1964) studied the relationship of personality patterns to achievement, and dropping out of college. The results of their study indicated that personality characteristics were useful in predicting achievement and retention in college.

In an attempt to identify the personality factors related to dropping out of college, Heilbrun (1962) conducted a longitudinal study of 2,136 female freshman students at the State University of Iowa. He found that six of the Adjective Check List scales (ACL) were significantly related to dropping out of college among females, and that an index combining these six scales enhanced the prediction which could be made from a measure of scholastic ability. The most significant relationships occurred on the heterosexuality and changes scales where dropouts scored higher, and on the achievement, order, and endurance scales where they scored lower.

In a study of counselee staying power, Heilbrun and Sullivan (1962) administered the ACL to 183 students who reported to the Counseling Service of the University of Iowa over a four year period. One of the purposes of the study was to develop a counseling readiness scale which would help to identify clients who remained in counseling long enough for some benefits to accrue and the clients who left counseling prematurely. Those students who stayed with counseling saw themselves as inhibited, weak, quiet, sensitive, shy, and timid. Those who terminated counseling early saw themselves as affectionate, capable, determined, jolly, wholesome, trusting, and patient. It was suggested that those clients who displayed the poorest identification with their own sex were those who were having the most serious adjustment problems and were least apt, therefore, to end counseling prematurely.

A study was designed by MacKinnon (1963) in which the ACL was used to identify personality characteristics which might differentiate between creative and less creative architects. He found that the more creative architects scored higher than less creative architects on the lability, exhibition, autonomy, aggression, and change scales, and that they scored lower on the defensiveness, self-control, endurance, order, intraception, nurturance, abasement, and deference scales.

Applezweig (1960) asked 360 entering students at Connecticut College for Women to complete the ACL twice, first as self-report and then as the average college freshman woman. At the end of the semester, students with superior grades and inferior grades (probationers) were identified. For the superior students, comparison of the self-reports with those for the average freshman woman indicated that superior students

tended to describe themselves with such adjectives as practical, thorough, logical and understanding, and that the average college freshman was characterized as inventive, witty, poised, efficient, and warm. On the other hand, the probationers tended to describe themselves with such adjectives as frank, loyal, tolerant, and affectionate, and the average freshman was characterized as industrious, capable, energetic, and alert. It would seem that the probationers saw themselves as being more aggressive, outgoing, and altruistic. On the other hand, the superior students saw themselves as being better adjusted, better at making friends, dominant, and as achieving.

Heilbrun (1960) used the ACL in an attempt to identify personality differences between adjusted and maladjusted college students. The scores on the ACL need scales were compared with the pooled judgments of experienced psychologists as to what the personality correlates of adjustment for each student should be. For male subjects, 10 of the 15 differences on the need scale were in the direction specified by the judges, whereas for the female subjects five scales showed a significant difference in the appropriate direction. Typically, maladjusted students scored high on the scales of succorance, abasement, and aggression. Conversely, they scored lower on the scales of achievement, order, affiliation, dominance, nurturance, and endurance.

A few research studies have been reported in which an attempt was made to identify the personality characteristics of student disciplinary offenders who lived in residence halls. Clark (1964) used the Minnesota Multiphasic Personality Inventory (MMPI) to predict the

occurrence of problem behavior in men's residence halls at the University of Florida. Problem areas in the residence halls contained a larger number of students with high MMPI scores on the scales of psychopathic deviate, schizophrenic, and hypomania. The non-troubled sections of the residence halls included a larger number of students with high scores on the scales of social introversion, depression, and masculinity-femininity. It was concluded that the psychopathic deviate scale was the best scale for predicting individual problem behavior.

Elton and Rose (1966) determined that an intellectual-personality dimension significantly separated reprimanded from non-reprimanded students who lived in the resident halls. Reprimanded students had less ability, were less conforming, and were less able to adapt their impulse controls to the demands of the environment.

The personality characteristics of good judges of others was investigated by Vingoe and Antonoff (1968). In a study of 66 freshman women living in a residence hall at Colorado State University, they found that good judges of others had significantly higher scores on the CPI variables of well-being, self-control, and tolerance. The study suggested that good judges were less neurotic and less extroverted. The investigators concluded that the ability to judge others on certain personality characteristics was an asset in those situations where evaluation and selection were important tasks.

Research on the attitudes and personality characteristics of campus leaders has yielded varying results. One study (Golden and Rosen, 1966) concluded that the less authoritarian student had a greater desire to participate in college affairs. In an attempt to

identify the personality traits of college student leaders, Flaherty (1967) administered the CPI to a number of student leaders throughout the country. Results indicated that leaders scored significantly higher than non-leaders on the CPI scales of dominance, capacity for status, sociability, social presence, self-acceptance, and sense of well-being. A study by Winborn (1966) indicated that student leaders within resident halls tended to be enthusiastic, insecure, and conservative. Johnson and Frandsen (1962) compared the personality profiles of 50 student leaders and 50 non-leaders at Utah State University. They concluded that in comparison to nonleaders, student leaders were achievement-oriented, well-adjusted, confident, dominant, extroverted, responsible, and ingratiating.

In a study of the decision making abilities of college student leaders, Gibby, Gibby, and Hogan (1967) indicated that those student leaders with a high degree of ego strength and a high dominance score were capable of making better decisions than those leaders who scored low in these areas. However, other research on the personality characteristics of student leaders has been less conclusive. For example, Geier (1967) concluded that there was no one single leadership type of personality. Instead, leadership ability was determined as being a functional relationship existing between the leader, the fellow members of the group, and the degree of goal attainment reached by the group.

There has been and continues to be interest in the personality changes which occur during the college years. Freedman (1965) stated that personality changes occurred during college with freshmen becoming

more flexible, independent and unconventional as they progressed through four years of college. It was stressed, however, that the most significant changes occurred during the first two years of the college experience. According to Chickering (1967), students demonstrated marked increases in social maturity and autonomy between the first and fourth semesters; indicative was the increased ability for self-discipline and for handling a variety of responsibilities. He also found that abasement and deference scores declined during the period.

In a well-known study, King (1967) found that the basic personality structure of college students did not change as a result of college attendance. However, some trends in personality development were noted. These included: (1) students expressed and wanted more affection as seniors; (2) students shifted from idealism to realism in their thinking as they neared graduation; and (3) senior students were more conservative in economic matters and were more liberal in social areas.

Sanford (1956), in a four year study at Vassar College, reported that there were marked personality differences between students as freshmen and seniors. In a related study, Izard (1962) followed 328 students through four years at Vanderbilt University. His findings indicated a consistent across groups decrease on the Edwards Personal Preference Schedule traits of deference and abasement, and an increase in the traits of autonomy, aggression, and heterosexuality. Further, he suggested that the observed mean changes indicated personality development in the direction of social and emotional maturity.

Stewart (1964) found that students as seniors scored lower in authoritarianism and higher in developmental status and reflective

thinking than they did as freshmen. Moreover, Bendig and Hountras (1959) reported that graduate students in education were less authoritarian than were undergraduate students in education. Wessell and Flaherty (1964) administered the CPI at the beginning and at the end of the freshman year to 156 female college students. The traits found to be significantly higher after one year in college were: capacity for status, social presence, self-acceptance, and achievement via independence. The traits found to be significantly lower included: sense of well-being, socialization, communality, and femininity.

An intensive study at Sarah Lawrence College was conducted by Murphy and Raushenbush (1960). They traced the progress of 46 girls from the freshman year to the senior year. Data obtained from faculty interviews, as well as from various psychological tests, led the investigators to conclude that the students developed a strong sense of social responsibility, gained confidence in personal relationships, and developed clearer self-roles during the four years of college.

Several studies of the personality characteristics of college students have sought to determine changes in self-concept during college attendance. Skager and Braskamp (1966), in a two year longitudinal study of freshmen, found that changes in self-esteem occurred and were significantly related to success in extra-curricular activities, such as social activities and campus leadership experiences. Eagly (1967) found that students high in self-esteem changed in a more favorable direction when given favorable information about themselves than did students low in self-esteem. Also, students with high self-esteem changed less in an unfavorable direction when given unfavorable information

about themselves than did students who were low in self-esteem. All changes were dependent upon student involvement in campus activities. The more involved the students were, the more rapidly they changed in a favorable direction when given favorable information about themselves, and the more they resisted change in an unfavorable direction when given unfavorable information about themselves.

Singer (1967), in his review of personality research, concluded that as a student advanced from freshman to senior status there seemed to be a stabilization of ego identity. Corresponding increases occurred in organizational ability, autonomy, and other-centeredness. Hall and Brockmeier (1967), however, found no difference in student self-satisfaction or self-esteem between the freshman and senior years. He reasoned that the college failed in fostering the development of the personal and social competence of its students.

Pallone (1966) studied the self-ideal, self-congruence of freshmen at the start of the first semester and again at the end of the second semester. His findings indicated that students in the sciences and commerce had the highest self-ideal, self-congruence over the total year. Liberal arts students started with the lowest congruence but ended with the highest congruence. It was suggested that science and commerce students were more settled in their view of self, while liberal arts students were more fluid and responsive to stimulation towards change.

#### Summary

The results of both longitudinal and cross-sectional studies of college students have demonstrated that changes in values and other personality characteristics occurred between the freshman and senior years. There is little evidence in the literature, however, that any one factor accounted for the observed changes in attitudes and values. Changes in personality and values may be a function of increased maturity, the direct result of college experiences, or a combination of these factors (Jacob, 1957; Mayhew, 1958; Wagman, 1955).

It may be concluded that only those attitudes and values which help to achieve desired ends (Morris, 1958) and which are sanctioned by society (Patterson, 1959) are adopted by the individual. In addition, the degree and extent to which student attitudes and values are modifiable is dependent upon the nature of the experience (Williams, 1951), the type of contact (Stoltenberg, 1963), and societal approval (Sanford, 1967; Patterson, 1959). Also, values were subject to modification when faculty members expressed concern, and when there existed on campus a community of inquiry and responsibility (Jacob, 1957; Benne, 1967). Since there is a continued interaction among these variables, it has been difficult to determine the effects of any one experience upon the development of individual values and attitudes.

Chapter II has reviewed the professional literature relevant to this investigation. In Chapter III attention will be given to the methods and procedures employed in the investigation.

#### CHAPTER III

#### DESIGN OF STUDY

# Research Population

The research population, selected from the student population in the men's residence halls at the University of North Dakota during the 1968-69 academic year, was comprised of three groups, as follows:

(1) students who served as regular members of a judiciary board within the residence halls; (2) students who violated the conduct standards of the residence halls and were asked to appear before a judiciary board during the interim of the investigation; and (3) a 10 per cent random sample of residence hall students who had no previous contact with a judiciary board.

Criteria for inclusion in the research population were that the students be (1) full-time undergraduates living in the men's residence halls, and (2) of American or Canadian nationality. Members of the residence hall counseling staff were excluded from the study.

Group 1 consisted of students who were members of the judiciary board that were contacted at a meeting early in the first semester of the 1968-69 academic year. The members of each board agreed to cooperate with the investigator. Meetings were arranged for the purpose of gathering the initial measurement data. Eighty-three of the 88

judiciary board members (94 per cent) participated in this phase of the study. Retesting occurred late in the second semester. A total of 78 students participated in the retesting phase of the investigation. Twenty-one students who sat on less than two judiciary board cases during the year were dropped from this study. Another six members were dropped for having appeared before a judiciary board during the time of this investigation. Thus, a sample size of 51 students comprised the final judiciary board population.

Group 2 consisted of 11 students who committed an offense and were asked to appear before a judiciary board during the period of this investigation. Group 2 included six students who were dropped from the judiciary board sample and five students who were dropped from the sample of students who had no previous experience with a judiciary board.

Group 3 consisted of students who had no previous experience with judiciary boards and were selected in a random manner from the men's residence halls with the help of a table of random numbers (Bloomers and Lindquist, 1960). Ten per cent of the students who met the criteria (N=183) were contacted by letter requesting their participation in this investigation (Appendix A). A self-addressed post card listing times of testing was enclosed with the letter (Appendix B). A reminder was also sent to each student who had consented to take part in the investigation (Appendix C). After a period of one week, a follow-up letter (Appendix D) and self-addressed post card (Appendix E) were sent to those students who had not complied. Approximately 67 per cent of the students who had no previous

experience with judiciary boards complied with these requests, resulting in a sample of 123 students who took part in the initial testing. Late in the second semester, these students were contacted by letter (Appendix F) and self-address post card (Appendix G). These efforts were followed by reminder cards and telephone calls.

Between the initial testing and retesting, some students dropped out of school. In addition, other students either moved out of the residence halls or in some other way violated the criteria for inclusion in the research population. For these reasons, the number of students in Group 3 who participated in the retesting numbered 110.

### Sources of Data

The sources of the data used in this study were the following:

- Identification by the head residents of those students who appeared before a judiciary board during the 1968-69 academic year (Appendix H).
- Administration of The Adjective Check List early in the first semester and late in the second semester of the 1968-69 academic year.
- Administration of the Allport-Vernon-Lindzey Study of Values early in the first semester and late in the second semester of the 1968-69 academic year.
- 4. Administration of the Rokeach Dogmatism Scale E early in the first semester and late in the second semester of the 1968-69 academic year (Appendix I).

- 5. Administration of a specially constructed Data Questionnaire to the head residents late during the second semester of the 1968-69 academic year.
- 6. Administration of a specially constructed Data Questionnaire to members of the research population late during the second semester of the 1968-69 academic year.

### Instruments

The instruments used in this study were the Study of Values (AVL), the Dogmatism Scale E, the Adjective Check List (ACL), a Data Questionnaire for head residents, and a Data Questionnaire for members of the research population.

The Study of Values by Allport, Vernon, and Lindzey (1960) is a forty-five item test which measures values based upon Spranger's (1928) theory of the six types of men: theoretical, economic, aesthetic, social, political, and religious. These six types of persons may be defined behaviorally as follows:

The <u>theoretical man</u> sees his highest values in the discovery of truth. He seeks only to observe and to reason. His interests are empirical, critical, and rational. The chief aim in life is to order and systematize knowledge.

The <u>economic man</u> is interested in what is useful. He demands practicality above all else in his daily affairs.

The <u>aesthetic man</u> sees his highest value in form and harmony.

He seeks to enjoy life for its own sake, judging each single experience from the standpoint of grace, symmetry, or fitness.

The <u>social man</u> sees his highest value as love of people. He prizes others as ends and is himself kind, sympathetic, and unselfish. For such a person, love is the only suitable form of human relationship.

The political man is interested primarily in power and desires above all else personal power, influence, and renown.

The <u>religious man</u> sees his highest values in unity as he seeks to comprehend and relate himself to the embracing totality of the cosmos. (Appendix J gives a more detailed description of the AVL scales).

The Study of Values employs a forced-choice technique, so the final scores reflect the relative intensity of each value and not the absolute strength. Thus, a high score on one value must be compensated for by a low score on another value. Correction figures are applied in an attempt to equalize the popularity of the six values. A final score is obtained for each of the values.

The <u>Study of Values Manual</u> (Allport, Vernon, Lindzey, 1960) provided ample evidence concerning the reliability of the instrument. Using a student sample of 100, split-half reliabilities for the different values ranged from .84 to .90, with a mean coefficient of .90. When subjected to an internal consistency test on a college population of 780 subjects from six different schools, positive correlations for each item with the total score for each value were obtained. All findings were significant at the .01 level of confidence. Test-retest studies presented in the <u>Manual</u> yielded reliability coefficients for the various values ranging from .77 to .93. Furthermore, Korn and

Hilton (1964, pp. 609-622) listed test-retest reliability coefficients obtained from seven administrations over a seven month period as ranging from .74 for the political value to .91 for the aesthetic value. A mean coefficient of .82 for the six values was obtained. Scale intercorrelations were reported as ranging from -.48 to .27.

The Study of Values has been assessed to have concurrent validity as determined by examination of the scores of groups of subjects whose characteristics were known. Predictive validity has been established with correlations between scores and a subsequent criterion performance ranging from .23 to .89.

The Dogmatism Scale (Form E) by Rokeach (1960) was designed to measure individual differences in open and closed belief systems and general authoritarianism. The scale consists of sixty statements, forty of which are scored. Subjects are asked to indicate their agreement or disagreement along a six-point continuum. There is no opportunity afforded to record a neutral position. The score obtained is a measure of open and closed mindedness and general authoritarianism. High scoring individuals are considered dogmatic, authoritative, and unreceptive to new ideas. Scores can range from zero to 280.

The reliability of the Dogmatism Scale has been assessed in many studies. Rokeach (1960, p. 90) listed reliability coefficients for eleven studies which involved different types of schools and student populations. Split-half reliability coefficients ranged from .68 to .91. Test-retest reliability coefficients ranged from .68 to .84. Ehrlich (1961, pp. 148-149) reported a split-half reliability of .75 and a test-retest reliability coefficient of .73 over a six month period.

Rokeach (1960) indicated that the Dogmatism Scale has construct validity. Pettigrew (1958) substantiated this claim by reporting a correlation of .82 between scores on the Dogmatism Scale and scores on the California F Scale. Other investigators (Vacchiano et alii 1966) have indicated a significant relationship between the Dogmatism Scale and the California F Scale. Korn and Giddon (1964, p. 873) found that scores on the Dogmatism Scale had negative correlations ranging from -.33 to -.36 with the personality characteristics of flexibility, tolerance and well-being. They also indicated, that, with sex and type of aptitude held constant, dogmatism correlated negatively with intellectual aptitude. Concurrent validity was established through examination of the scores of subjects whose personality characteristics were previously known.

The Adjective Check List by Gough and Heilbrun (1965) is a list of 300 adjectives from which the subject is asked to select those words which are self-descriptive. It is composed of 24 scales. Fifteen of these scales are the Heilbrun need scales which include: Achievement, Dominance, Endurance, Order, Intraception, Nurturance, Affiliation, Heterosexuality, Exhibition, Autonomy, Aggression, Change, Succorance, Abasement, and Deference. The other scales include: Number of Adjectives Checked, Defensiveness, Favorable Adjectives, Unfavorable Adjectives, Self-Confidence, Self-Control, Lability, Personal Adjustment, and Counseling Readiness. (Appendix K provides a detailed description of the ACL scales).

In the development of the need scales, Heilbrun (1959) had graduate students select Gough adjectives which they felt would indicate

or contraindicate each of the fifteen variables representing dispositions in Murray's need-press system. Raw scores for the scales are the algebraic sums of indicative and contraindicative adjectives checked as self-descriptive. The raw scores are then converted to T-scores with the total number of Gough adjectives checked taken into account. The rationale and description of the scales are presented in detail in the Manual (Gough and Heilbrun, 1965).

Reliability studies on the ACL have been extensive. A sample of 100 men was tested six months apart with a resultant test-retest reliability coefficient for the total list of words ranging from a low of .01 to a high of .86 with a mean coefficient of .54. While the mean reliability figure is not high, research evidence indicates that the reliability of the total list of words is satisfactory. For subjects regarded as being healthy, significantly higher test-retest reliability coefficients were obtained. Test-retest reliability coefficients for the 24 scales over a six month period ranged from .33 to .75, with a mean coefficient of around .60. Scale intercorrelations were reported as ranging from -.11 to .21. The ACL was assessed to have intergroup reliability as determined by ten psychologists (Gough and Heilbrun, 1965).

Extensive validity data for the ACL are available. The ACL

Manual has summarized much of the available research. It was concluded
that the ACL had sufficient validity for the purposes of this study.

The Data Questionnaire for head residents employed in the present study consisted of seven items (Appendix L). Included were items that requested the name of the residence hall, the number of students serving on the judiciary board, the number of times the judiciary board met during the year, the specific students who served on the judiciary board, and the names of the students who appeared before the judiciary board during the time of the study.

Fourteen items comprised the Data Questionnaire for the students in the research population (Appendix M). Students who had not served on a judiciary board during the time of the present study were instructed to answer only the first eight items. Included in this questionnaire were items concerning the name of the residence hall, past or present membership on a judiciary board, number of appearances before a judiciary board, and specific offenses which prompted judiciary board action. Members of the research population who had served as members of a judiciary board during the period of the present study were asked to complete all fourteen items, including number of judiciary board cases participated in during the period of the investigation.

# Statistical Procedures

Since all of the data obtained in this investigation were of the interval form, parametric statistics were used. The .05 level of confidence was used in the evaluation of the results obtained.

The statistical procedures included in this study consisted of the analysis of variance, the analysis of covariance, and the Dunn's "c" test. The analysis of variance technique was employed to ascertain the significance of differences, if any, among the means for the retested groups. The analysis of covariance technique was employed to ascertain changes in the means, if any, between the initial testing

and retesting period. This test provided compensation for the effects of the uncontrolled variables acting upon the research groups. The Dunn's "c" test for unequal groups (Dunn, 1961) was employed to ascertain where the significant differences indicated by the significant F-ratios were located.

Chapter III has presented a description of the research population, the sources of data, the instruments employed, and the statistical techniques utilized. Chapter IV presents the results of the analysis of the data.

#### CHAPTER IV

#### ANALYSIS OF THE DATA

The findings will be presented in the order of the research questions presented in Chapter I. The research questions will be stated in null form to facilitate analysis of the data. Analysis of variance was employed for the retest scores, and analysis of covariance for differences among scores between initial testing and retesting.

Null Hypothesis No. 1. There are no significant differences in the initial measurement of values and in the retesting of values among students who served as members of a judiciary board (Group 1), students who appeared before a judiciary board (Group 2), and students who had no formal contact with a judiciary board (Group 3).

As indicated in Table 1, differences in the initial test means for the Study of Values traits among the three groups were minimal, with the exception of the aesthetic and political traits. For the aesthetic trait Group 1 had a mean which was approximately five points higher than the mean for Group 2. Group 2 had a mean which was approximately four points higher than the mean for Group 3 and three points higher than the mean for experimental Group 1 on the political trait.

Retest means for the <u>Study of Values</u> variables among the three groups indicated that changes were minimal, with the exception of the

theoretical and religious traits for Group 2. Between initial testing and retesting the mean for the theoretical trait increased by approximately two points. The mean for the religious trait decreased by approximately five points.

TABLE 1

MEANS AND STANDARD DEVIATIONS FOR STUDY OF VALUES TRAITS FOR GROUPS 1, 2, AND 3

	Initial	Testing	Rete	sting
Variable	М	S.D.	М	S.D.
Group 1 (N=51)				
1. Theoretical	41.93	7.68	41.24	8.12
2. Economic	42.35	8.50	43.29	7.36
3. Aesthetic	36.29	8.80	36.18	9.86
4. Social	36.63	7.78	38.51	7.64
<ol><li>Political</li></ol>	44.65	5.89	43.45	5.74
6. Religious	38.16	9.16	37.33	9.02
Group 2 (N=11)				
1. Theoretical	42.09	6.64	44.36	5.82
2. Economic	42.64	10.78	44.36	9.72
<ol><li>Aesthetic</li></ol>	31.27	6.86	32.36	7.81
4. Social	37.09	9.57	38.36	5.37
<ol><li>Political</li></ol>	47.73	4.10	45.82	4.47
<ol><li>Religious</li></ol>	39.18	10.66	34.73	12.53
Group 3 (N=110)				
1. Theoretical	41.40	7.20	41.56	7.24
2. Economic	43.16	8.85	44.11	8.58
3. Aesthetic	34.04	7.71	34.58	7.62
4. Social	38.47	8.43	38.33	7.48
<ol><li>Political</li></ol>	43.63	7.17	43.79	6.44
6. Religious	39.29	8.78	37.64	8.82

Table 2 presents the analysis of variance for the variable, theoretical. The retest scores for this trait did not discriminate significantly among the groups.

TABLE 2

ANALYSIS OF VARIANCE FOR THE THEORETICAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	90.75	45.38	.82(NS)
Within	169	9367.00	55.43	
Total	171	9457.75		

Analysis of covariance for the variable, theoretical, is reported in Table 3. The null hypothesis was retained. Theoretical scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 3

ANALYSIS OF COVARIANCE FOR THE THEORETICAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	82.84	41.42	1.57(NS)
Within	168	4446.50	26.47	
Total	170	4529.34		

The data pertaining to the variable, economic, are reported in Table 4. Analysis of variance of the retest scores for this trait did not discriminate among the three groups.

TABLE 4

ANALYSIS OF VARIANCE FOR THE ECONOMIC TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	25.75	12.88	.19(NS)
Within	169	11674.00	69.08	
Total	171	11699.75		

Table 5 presents the analysis of covariance findings for the economic variable. The difference among the groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 5

ANALYSIS OF COVARIANCE FOR THE ECONOMIC TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	6.71	3.36	.14(NS)
Within	168	4066.92	24.21	
Total	170	4073.63		

Analysis of variance of the retest means for the <u>aesthetic</u> trait is presented in Table 6. The difference among the groups was not significant at the .05 level.

TABLE 6

ANALYSIS OF VARIANCE FOR THE AESTHETIC TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	164.93	82.47	1.18(NS)
Within	169	11798.88	69.82	
Total	171	11963.81		

Table 7 reports the analysis of covariance for the <u>aesthetic</u> trait. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 7

ANALYSIS OF COVARIANCE FOR THE AESTHETIC TRAIT ON THE STUDY OF VALUES

Source of Variation		Degrees of Freedom	Sum o Squar		Mean Square	F Ratio
Treatments	윽	2	1.	84	.92	.03(NS)
Within		168	4725.	91	28.13	
Total		170	4727.	75		

Table 8 presents the analysis of variance for the variable, social. The difference among the retest means for the groups was not significant at the .05 level.

TABLE 8

ANALYSIS OF VARIANCE FOR THE SOCIAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	Ratio
Treatments	2	1.06	.53	.01(NS)
Within	169	9299.69	55.03	
Total	171	9300.75		

Analysis of covariance for the <u>social</u> trait is reported in Table 9. <u>Social</u> scores did not indicate a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 9

ANALYSIS OF COVARIANCE FOR THE SOCIAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	59.99	29.99	1.00(NS)
Within	168	5048.26	30.05	
Total	170	5108.25		

Table 10 presents the analysis of variance for the variable, political. The retest scores for this trait did not discriminate significantly among the three groups.

TABLE 10

ANALYSIS OF VARIANCE FOR THE POLITICAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	50.81	25.41	.67(NS)
Within	169	6370.69	37.70	
Total	171	6421.50		

Table 11 presents the analysis of covariance findings for the political trait. The difference among the groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 11

ANALYSIS OF COVARIANCE FOR THE POLITICAL TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	33.74	16.87	.83(NS)
Within	168	3421.73	20.37	
Total	170	3455.47		

Analysis of variance of the retest means for the <u>religious</u> trait is presented in Table 12. The difference among the groups was not significant at the .05 level.

TABLE 12

ANALYSIS OF VARIANCE FOR THE RELIGIOUS TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	84.56	42.28	.51(NS)
Within	169	14121.19	83.56	
Total	170	14205.75		

Analysis of covariance for the <u>religious</u> trait is reported in Table 13. <u>Religious</u> scores did not indicate a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 13

ANALYSIS OF COVARIANCE FOR THE RELIGIOUS TRAIT ON THE STUDY OF VALUES

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	104.90	52.45	1.53(NS)
Within	168	5760.71	34.29	
Total	170	5865.61		

<u>Null Hypothesis No. 2.</u> There are no significant differences in the initial measurement of open and closed mindedness and in the retesting of open and closed mindedness among students who served as members of a judiciary board (Group 1), students who appeared before a judiciary board (Group 2), and students who had no formal contact with a judiciary board (Group 3).

The means and standard deviations for the <u>Dogmatism Scale E</u> scores are reported in Table 14. Differences in the means for the initial testing was minimal between Groups 1 and 3. However, Group 2 had a mean six to eight points lower than the means for the other two groups. Comparison of the means derived from the initial testing and retesting indicated that the means for Groups 1 and 3 decreased by four to five points. The mean for Group 2 increased by approximately 14 points.

TABLE 14

MEANS AND STANDARD DEVIATIONS FOR THE OPEN AND CLOSED MINDEDNESS VARIABLE ON THE DOGMATISM SCALE E FOR GROUPS 1, 2, AND 3

	Initial	Initial Testing		Retesting		
Groups	M	S.D.	M	S.D.		
Group 1 (N=51)	151.88	24.80	147.88	22.48		
Group 2 (N=11)	145.27	31.21	159.36	23.72		
Group 3 (N=110)	153.53	21.35	148.83	21.65		

The analysis of variance pertaining to the <u>open and closed</u>
<u>mindedness</u> variable is reported in Table 15. The difference among the
means for the three groups was not significant at the .05 level. The
null hypothesis was retained.

ANALYSIS OF VARIANCE FOR THE OPEN AND CLOSED MINDEDNESS VARIABLE
ON THE DOGMATISM SCALE E

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	1238.00	619.00	1.28(NS)
Within	169	81986.00	485.12	
Total	171	83224.00		

Table 16 reports the analysis of covariance for the <u>open and</u> <u>closed mindedness</u> variable. A significant difference among the three groups between initial testing and retesting was found. The F-ratio of 4.59 was significant at the .05 level. The null hypothesis, therefore, was rejected.

TABLE 16

ANALYSIS OF COVARIANCE FOR THE OPEN AND CLOSED MINDEDNESS VARIABLE
ON THE DOGMATISM SCALE E

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	2523.74	1261.87	4.59*
Within	168	46172.26	274.83	
Total	170	48696.00		

<sup>\*</sup>Significant at the .05 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. Table 17 reports the results of this test.

The results of the comparisons reported in Table 17 indicated that the significant F-ratio obtained in Table 16 was due to the difference obtained among open and closed mindedness scores in the comparisons of Groups 1 and 2 and Groups 2 and 3.

TABLE 17

COMPARISON OF ADJUSTED MEANS FOR THE ROKEACH DOGMATISM SCALE E VARIABLE, OPEN AND CLOSED MINDEDNESS, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value	
Groups 1-2	148.28-163.93	15.63	2.84**	
Groups 1-3	148.28-148.19	.09	.03	
Groups 2-3	163.93-148.19	15.74	3.00***	

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=168.

<u>Null Hypothesis No. 3.</u> There are no significant differences in the initial measurement of personality characteristics and in the retesting of personality characteristics among students who served as members of a judiciary board (Group 1), students who appeared before a judiciary board (Group 2), and students who had no formal contact with a judiciary board (Group 3).

Tables 18, 19, and 20 report the means and standard deviations for the Adjective Check List variables for the three groups. Differences

<sup>\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.43.)

<sup>\*\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.99.)

in the initial test means for the Adjective Check List traits among the three groups were numerous and varied, with the variables self-confidence, lability, dominance, affiliation, heterosexuality, exhibition, autonomy, aggression, and change being five to eleven points higher for Group 2 than for Groups 1 and 3. Groups 1 and 3 had means two to nine points higher than the means for Group 2 on the variables self-control, endurance, order, succorance, abasement, deference, and counseling readiness. For the number of favorable adjectives checked trait Group 3 had a mean which was approximately four points higher than the means for Groups 1 and 2.

Table 18 includes the means and standard deviations for the Adjective Check List variables for Group 1. Differences among the means between initial testing and retesting were minimal, with the exception of the traits of number of unfavorable adjectives checked, self-confidence, intraception, and exhibition which had means approximately two points higher on the retest. The variable abasement had a mean which was approximately two points lower on the retest.

TABLE 18

MEANS AND STANDARD DEVIATIONS FOR ADJECTIVE CHECK LIST VARIABLES FOR GROUP 1

		Initial	Testing	Retesting	
Var	iable	M	S.D.	М	S.D.
1	Total Number of Adjectives			Annah Arvana andar araba	
т.	Checked (No Ckd)	48.37	8.94	49.14	12.14
2.	Defensiveness (Df)	50.73		52.26	9.42
	Number of Favorable Adjectives	30.73	0.01	32.20	3.42
٠.	Checked (Fav)	48.57	8.41	50.31	9.32
4.	Number of Unfavorable Adjectives	.0.0,	0.12	30.31	,,,,
	Checked (Unfav)	49.35	6.41	51.92	9.59
5.	Self-Confidence (S-Cfd)	46.02	7.67	48.41	9.10
	Self-Control (S-Cn)	48.39	9.57	49.16	9.67
	Lability (Lab)	47.73	9.89	47.86	
	Personal Adjustment (Per Adj)	47.92	8.00	49.35	9.16
	Achievement (Ach)	51.65	7.93	51.29	9.80
10.	Dominance (Dom)	50.53	8.58	51.29	9.29
11.	Endurance (End)	53.14	8.19	51.65	9.46
12.	Order (Ord)	53.12	8.38	53.29	8.99
13.	Intraception (Int)	51.63	7.86	53.61	
14.	Nurturance (Nur)	51.33	9.30	50.88	9.83
15.	Affiliation (Aff)	49.82	8.55	51.41	9.47
	Heterosexuality (Het)	50.69	10.86	50.88	10.79
17.	Exhibition (Exh)	49.04	9.03	51.59	10.77
	Autonomy (Aut)	48.53	7.23	50.65	9.14
19.	Aggression (Agg)	48.29	8.94	48.96	
	Change (Cha)	49.41	8.88	50.26	9.20
	Succorance (Suc)	48.12	7.30	48.10	8.72
	Abasement (Aba)	50.45	7.63	48.12	9.35
	Deference (Def)	50.88		49.49	9.36
24.	Counseling Readiness (Crs)	50.88	8.62	49.71	10.57

The means and standard deviations for the Adjective Check List variables for Group 2 are reported in Table 19. Changes among the means between initial testing and retesting were varied, with the traits number of favorable adjectives checked, dominance, endurance, order, intraception, affiliation, aggression, and abasement decreasing by approximately two to three points. The means of the Adjective Check List

traits <a href="https://example.com/html/>heterosexuality">heterosexuality</a>, <a href="https://example.com/html/>example.com/heterosexuality">heterosexuality</a>, <a href="https://example.com/heterosexuality">heterosexuality</a>, <a hr

TABLE 19

MEANS AND STANDARD DEVIATIONS FOR ADJECTIVE CHECK LIST VARIABLES FOR GROUP 2

		Initial	Testing	Rete	sting
Var	iable	M	S.D.	М	S.D.
1.	Total Number of Adjectives				
	Checked (No Ckd)	49.55	10.82	49.27	11.36
2.	Defensiveness (Df)	49.73	7.55	49.82	7.01
3.	Number of Favorable Adjectives				
	Checked (Fav)	49.27	7.03	47.27	9.63
4.	Number of Unfavorable Adjectives				
	Checked (Unfav)	51.27	10.85	52.27	11.30
5.	Self-Confidence (S-Cfd)	50.73	9.26	50.09	4.95
6.	Self-Control (S-Cn)	40.45	6.92	41.55	7.23
7.	Lability (Lab)	54.64	6.49	53.09	6.04
8.	Personal Adjustment (Per Adj)	46.73	8.72	45.00	8.23
9.	Achievement (Ach)	48.55	7.31	48.09	6.55
10.	Dominance (Dom)	53.64	7.26	51.82	4.45
11.	Endurance (End)	48.73	5.99	46.00	8.22
12.	Order (Ord)	47.00	5.59	44.91	6.61
13.	Intraception (Int)	51.18	7.32	48.91	8.61
14.	Nurturance (Nur)	48.82	7.51	47.18	9.05
15.	Affiliation (Aff)	52.27	8.50	48.55	11.48
16.	Heterosexuality (Het)	57.82	11.72	61.18	10.14
17.	Exhibition (Exh)		6.35	56.91	6.86
18.	Autonomy (Aut)	55.36	7.59	54.91	9.30
19.	Aggression (Agg)	54.27	6.94	52.73	7.32
20.	Change (Cha)	55.18	10.53	57.00	8.60
21.	Succorance (Suc)	45.73	8.98	47.46	5.42
22.	Abasement (Aba)	45.82	7.69	43.73	7.32
23.	Deference (Def)	41.36	8.82	41.27	7.10
24.	Counseling Readiness (Crs)	44.36	4.97	43.64	6.05

Included in Table 20 are the means and standard deviations for the <u>Adjective Check List</u> variables for Group 3. Several changes among the means between initial testing and retesting are evident. The <u>Adjective Check List means for the variables succorance and abasement</u> decreased by approximately two points. The means for the traits <u>num-ber of favorable adjectives checked</u>, <u>self-control</u>, <u>personal adjustment</u>, <u>achievement</u>, <u>dominance</u>, <u>intraception</u>, and <u>affiliation</u> increased by approximately two points.

TABLE 20

MEANS AND STANDARD DEVIATIONS FOR ADJECTIVE CHECK LIST VARIABLES
FOR GROUP 3

		Initial	Testing	Rete	sting
Var	iable	М	S.D.	М	S.D.
1.	Total Number of Adjectives				
	Checked (No Ckd)	48.41	9.05	47.63	8.63
2.	Defensiveness (Df)	50.38	9.39	51.27	9.46
	Number of Favorable Adjectives		•		
	Checked (Fav)	44.95	10.50	47.56	10.14
4.	Number of Unfavorable Adjectives				
	Checked (Unfav)	52.06	8.92	50.93	8.97
5.	Self-Confidence (S-Sfd)	44.30	9.10	45.76	9.64
6.	Self-Control (S-Cn)	47.48	9.55	49.25	9.82
7.	Lability (Lab)	48.74	10.42	48.52	11.51
8.	Personal Adjustment (Per Adj)	46.08	9.47	48.24	10.17
9.	Achievement (Ach)	48.26	9.22	50.02	9.98
10.	Dominance (Dom)	47.54	9.47	49.31	9.97
11.	Endurance (End)	50.46	9.92	51.74	10.68
12.	Order (Ord)	50.14	9.61	51.85	11.48
13.	Intraception (Int)	48.66	10.65	51.90	12.08
14.	Nurturance (Nur)	50.28	9.92	51.35	10.50
15.	Affiliation (Aff)	47.76	10.77	49.56	10.70
16.	Heterosexuality (Het)	48.37	11.43	48.15	11.52
17.	Exhibition (Exh)	47.60	9.88	47.63	10.15
18.	Autonomy (Aut)	48.31	8.88	49.12	9.07
19.	Aggression (Agg)	48.71	9.46	47.75	9.85
20.	Change (Cha)	47.54	11.33	47.10	11.55
21.	Succorance (Suc)	49.78	9.01	47.25	9.61
22.	Abasement (Aba)	51.07	8.45	48.97	8.79
23.	Deference (Def)	50.49	9.69	50.07	9.67
24.	Counseling Readiness (Crs)	53.32	10.83	52.71	10.38

Table 21 presents the analysis of variance for the variable, total number of adjectives checked. The retest scores for this trait did not discriminate significantly among the three groups.

TABLE 21

ANALYSIS OF VARIANCE FOR THE TOTAL NUMBER OF ADJECTIVES CHECKED
VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	93.38	46.69	.48(NS)
Within	169	16276.18	96.31	
Total	171	16369.56		

Analysis of covariance for the variable, total number of adjectives checked, is reported in Table 22. The null hypothesis was retained. Total number of adjectives checked scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 22

ANALYSIS OF COVARIANCE FOR THE TOTAL NUMBER OF ADJECTIVES CHECKED VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	83.64	41.82	.73(NS)
Within	168	9582.35	57.04	
Total	170	9665.99		

Data pertaining to the variable, <u>defensiveness</u>, are presented in Table 23. Analysis of variance of the retest scores for this trait did not discriminate among the groups.

TABLE 23

ANALYSIS OF VARIANCE FOR THE DEFENSIVENESS VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
		•	-	
Treatments	2	65.69	32.84	.38(NS)
Within	169	14677.31	86.85	
Total	171	14743.00		

Table 24 presents the analysis of covariance findings for the <u>defensiveness</u> variable. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 24

ANALYSIS OF COVARIANCE FOR THE DEFENSIVENESS VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	40.97	20.49	.32(NS)
Within	168	10650.53	63.40	
Total	170	10691.50		

Analysis of variance of the retest means for the <u>number of</u>

<u>favorable adjectives checked</u> trait is presented in Table 25. The dif
ference among the group means was not significant at the .05 level.

TABLE 25

ANALYSIS OF VARIANCE FOR THE NUMBER OF FAVORABLE ADJECTIVES CHECKED VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	277.37	138.69	1.42(NS)
Within	169	16488.38	97.56	
Total	171	16765.75		

Table 26 reports the analysis of covariance for the variable, number of favorable adjectives checked. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 26

ANALYSIS OF COVARIANCE FOR THE NUMBER OF FAVORABLE ADJECTIVES CHECKED VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	109.27	54.64	.87 (NS)
Within	168	10490.53	62.44	
Total	170	10599.80		

Table 27 presents the analysis of variance for the variable, number of unfavorable adjectives checked. The difference among the retest means for the groups was not significant at the .05 level.

TABLE 27

ANALYSIS OF VARIANCE FOR THE NUMBER OF UNFAVORABLE ADJECTIVES CHECKED VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	45.25	22.63	.26(NS)
Within	169	14629.50	86.57	
Total	171	14674.75		

The analysis of covariance for the <u>number of unfavorable adjectives checked</u> trait is reported in Table 28. The null hypothesis was rejected. <u>Number of unfavorable adjectives checked</u> scores discriminated among the three groups between initial testing and retesting.

TABLE 28

ANALYSIS OF COVARIANCE FOR THE NUMBER OF UNFAVORABLE ADJECTIVES CHECKED VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	339.17	169.58	3.88*
Within	168	7349.66	43.75	
Total	170	7688.83		

<sup>\*</sup>Significant at the .05 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. Table 29 reports the results of this test.

The results of the comparisons reported in Table 29 indicated that the significant F-ratio obtained in Table 28 was due to the difference obtained among number of unfavorable adjectives checked scores in the comparison of Groups 1 and 3.

TABLE 29

COMPARISON OF ADJUSTED MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
NUMBER OF UNFAVORABLE ADJECTIVES CHECKED, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	53.37-52.22	1.15	.52
Groups 1-3	53.37-50.26	3.11	2.75**
Groups 2-3	52.22-50.26	1.96	.94

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=168.

Table 30 presents the analysis of variance for the variable, self-confidence. The retest scores for this trait did not discriminate among the three groups.

<sup>\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.43.)

TABLE 30

ANALYSIS OF VARIANCE FOR THE SELF-CONFIDENCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	371.69	185.84	2.16(NS)
Within	169	14521.81	85.93	
Total	171	14893.50		

Analysis of covariance for the variable, <u>self-confidence</u>, is presented in Table 31. The null hypothesis was retained. <u>Self-confidence</u> scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 31

ANALYSIS OF COVARIANCE FOR THE SELF-CONFIDENCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2 .	89.32	44.66	.77(NS)
Within	168	9716.60	57.84	
Total	170	9805.91		

The analysis of variance for the variable, <u>self-control</u>, is presented in Table 32. Analysis of the retest scores for this trait revealed a significant difference among the means for the three groups. The F-ratio of 3.27 was significant at the .05 level.

TABLE 32

ANALYSIS OF VARIANCE FOR THE SELF-CONTROL VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	607.32	303.66	3.27*
Within	169	15706.56	92.94	
Total	171	16313.88		

<sup>\*</sup>Significant at the .05 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. The results of the test are reported in Table 33. The results of the comparisons reported in Table 33 indicated that the significant F-ratio obtained in Table 32 was due to the difference in self-control in the comparison of Groups 2 and 3.

TABLE 33

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE, SELF-CONTROL, FOR GROUPS 1, 2, AND 3

Comparisons		Means	Mean Difference	*"c" Value	
Groups 1-2	ć.,	49.16-41.55	7.61	2.36	
Groups 1-3	,	49.16-49.25	.09	.05	
Groups 2-3		41.55-49.25	7.70	2.52**	
Groups 2-3		41.33-49.23	7.70	2	

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169.

<sup>\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.43.)

Table 34 presents the analysis of covariance for the <u>self-control</u> variable. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 34

ANALYSIS OF COVARIANCE FOR THE SELF-CONTROL VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	128.10	64.05	1.27(NS)
Within	168	8485.86	50.51	
Total	170	8613.96	*	

The analysis of variance of the retest means for the <u>lability</u> trait is presented in Table 35. The difference among the groups was not significant at the .05 level.

TABLE 35

ANALYSIS OF VARIANCE FOR THE LABILITY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	250.12	125.06	1.08(NS)
Within	169	19624.63	116.12	
Total	171	19874.75		

Table 36 reports the analysis of covariance for the variable, <a href="Lability">Lability</a>. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 36

ANALYSIS OF COVARIANCE FOR THE LABILITY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	17.36	8.68	.10(NS)
Within	168	14262.91	84.90	
Total	170	14280.27		

Table 37 presents the analysis of variance for the variable, personal adjustment. The difference among the retest means for the three groups was not significant at the .05 level.

TABLE 37

ANALYSIS OF VARIANCE FOR THE PERSONAL ADJUSTMENT VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	176.00	88.00	.92(NS)
Within	169	16151.75	95.57	
Total	171	16327.75		

Analysis of covariance for the <u>personal adjustment</u> trait is reported in Table 38. <u>Personal adjustment</u> scores did not indicate a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 38

ANALYSIS OF COVARIANCE FOR THE PERSONAL ADJUSTMENT VARIABLE
ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	135.82	67.91	1.07(NS)
Within	168	10616.19	63.19	
Total	170	10752.01		

Table 39 presents the analysis of variance for the variable, achievement. The retest scores for this trait did not discriminate among the three groups.

TABLE 39

ANALYSIS OF VARIANCE FOR THE ACHIEVEMENT VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	112.56	56.28	.59(NS)
Within	169	16093.63	95.23	
Total	171	16206.19		

Analysis of covariance for the variable, <u>achievement</u>, is reported in Table 40. The null hypothesis was retained. <u>Achievement</u> scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 40

ANALYSIS OF COVARIANCE FOR THE ACHIEVEMENT VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	69.48	34.74	.59(NS)
Within	168	10064.89	59.91	
Total	170	10134.37		

Data pertaining to the trait, <u>dominance</u>, are presented in Table
41. Analysis of variance of the retest scores for this trait did not
discriminate among the three groups.

TABLE 41

ANALYSIS OF VARIANCE FOR THE DOMINANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	173.62	86.81	.96(NS)
Within	169	15359.88	90.89	
Total	171	15533.50		

Table 42 presents the analysis of covariance findings for the dominance variable. The difference among the three groups between testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 42

ANALYSIS OF COVARIANCE FOR THE DOMINANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	35.99	18.00	.30(NS)
Within	168	10188.27	60.64	
Total	170	10224.26		

The analysis of variance of the retest means for the endurance trait is presented in Table 43. The difference among the group means was not significant at the .05 level.

TABLE 43

ANALYSIS OF VARIANCE FOR THE ENDURANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	335.56	167.78	1.61(NS)
Within	169	17567.25	103.95	
Total	171	17902.81		

Table 44 reports the analysis of covariance for the variable, endurance. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 44

ANALYSIS OF COVARIANCE FOR THE ENDURANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	298.26	149.13	2.60(NS)
Within	168	9647.48	57.43	
Total	170	9945.74	,	

Table 45 presents the analysis of variance for the variable, order. The difference among the retest means for the three groups was not significant at the .05 level.

TABLE 45

ANALYSIS OF VARIANCE FOR THE ORDER VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	636.19	318.09	2.86(NS)
Within	169	18828.00	111.41	
Total	171	19464.19		

Analysis of covariance for the <u>order</u> trait is reported in Table 46. <u>Order</u> scores did not indicate a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 46

ANALYSIS OF COVARIANCE FOR THE ORDER VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	214.59	107.29	1.63(NS)
Within	168	11034.56	65.68	
Total	170	11249.15		

Table 47 presents the analysis of variance for the variable, intraception. The retest scores for this trait did not discriminate among the three groups.

TABLE 47

ANALYSIS OF VARIANCE FOR THE INTRACEPTION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	230.00	115.00	.97(NS)
Within	169	20041.19	118.59	
Total	171	20271.19		

Analysis of covariance data for the variable, <u>intraception</u>, is reported in Table 48. The null hypothesis was retained. <u>Intraception</u> scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 48

ANALYSIS OF COVARIANCE FOR THE INTRACEPTION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	209.73	104.87	1.27(NS)
Within	168	13890.13	82.68	
Total	170	14099.86		

Data pertaining to the variable, <u>nurturance</u>, are presented in Table 49. Analysis of variance of the retest scores for this trait did not discriminate among the three groups.

TABLE 49

ANALYSIS OF VARIANCE FOR THE NURTURANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	173.56	86.78	.83(NS)
Within	169	17652.00	104.45	
Total	171	17825.56		

Table 50 presents the analysis of covariance findings for the <a href="murturance">nurturance</a> variable. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 50

ANALYSIS OF COVARIANCE FOR THE NURTURANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	131.28	65.64	.89(NS)
Within	168	12436.42	74.02	
Total	170	12567.70		

The analysis of variance of the retest means for the <u>affiliation</u> trait is presented in Table 51. The difference among the group means was not significant at the .05 level.

TABLE 51

ANALYSIS OF VARIANCE FOR THE AFFILIATION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	145.44	72.72	.67(NS)
Within	169	18286.25	108.20	
Total	171	18431.69		

Table 52 reports the analysis of covariance for the variable, affiliation. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 52

ANALYSIS OF COVARIANCE FOR THE AFFILIATION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	165.10	82.55	1.09(NS)
Within	168	12667.75	75.40	
Total	170	12832.85		

Table 53 presents the analysis of variance for the variable, <a href="https://example.com/heterosexuality">heterosexuality</a>. The difference among the retest means for the three groups was significant at the .01 level.

TABLE 53

ANALYSIS OF VARIANCE FOR THE HETEROSEXUALITY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	1785.69	892.84	7.08*
Within	169	21300.81	126.04	
Total	171	23086.50		

<sup>\*</sup>Significant at the .01 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. Table 54 reports the results of this test.

The results of the comparisons reported in Table 54 indicated that the significant F-ratio obtained in Table 53 was due to the difference among <a href="https://example.com/html/>html/

TABLE 54

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
HETEROSEXUALITY, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	50.88-61.18	10.30	2.75**
Groups 1-3	50.88-48.14	2.74	1.43
Groups 2-3	61.18-48.14	13.04	3.67***

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169.

The analysis of covariance for the <a href="heterosexuality">heterosexuality</a> scores revealed a significant difference among the three groups between initial testing and retesting. The F-ratio of 3.15 was significant at the .05 level. The null hypothesis was rejected.

<sup>\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.43.)

<sup>\*\*\*</sup>Significant at the .01 level. (Needed for significance, c=2.99.)

TABLE 55

ANALYSIS OF COVARIANCE FOR THE HETEROSEXUALITY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	379.86	189.93	3.15*
Within	168	10125.37	60.27	
Total	170	10505.23		

<sup>\*</sup>Significant at the .05 level.

Table 56 reports the results of the Dunn's "c" test which was utilized to determine which of the mean differences were significant. The results of the comparisons indicated that the significant F-ratio obtained in Table 55 was due to the difference among <a href="https://example.com/ht

TABLE 56

COMPARISON OF ADJUSTED MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
HETEROSEXUALITY, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	50.14-55.30	5.16	1.99
Groups 1-3	50.14-49.08	1.06	.80
Groups 2-3	55.30-49.08	6.22	2.53**

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=168.

<sup>\*\*</sup>Significant at the .05 level. (Needed for significance, c=2.43.)

Table 57 presents the analysis of variance for the variable, exhibition. Retest exhibition scores discriminated among the three groups. The F-ratio of 5.84 was significant at the .01 level.

TABLE 57

ANALYSIS OF VARIANCE FOR THE EXHIBITION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	1210.06	605.03	5.84*
Within	169	17511.19	103.62	
Total	171	18721.25		~

<sup>\*</sup>Significant at the .01 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. As reported in Table 58, the results of the comparisons indicated that the significant F-ratio obtained in Table 57 was due to the difference among the <u>exhibition</u> scores in the comparison of Groups 2 and 3.

TABLE 58

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE, EXHIBITION, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	51.59-56.91	5.32	1.57
Groups 1-3	51.59-47.63	3.96	2.29
Groups 2-3	56.91-47.63	9.28	2.88**

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169. \*\*Significant at the .05 level. (Needed for significance, c=2.43.)

The analysis of covariance for the variable, <u>exhibition</u>, is reported in Table 59. The null hypothesis was retained. <u>Exhibition</u> scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 59

ANALYSIS OF COVARIANCE FOR THE EXHIBITION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation		Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	e,	2	277.35	138.68	2.86(NS)
Within		168	8146.26	48.49	
Total		170	8423.61		

Data pertaining to the variable, <u>autonomy</u>, are presented in Table 60. Analysis of variance of the retest scores for this trait did not discriminate among the three groups.

TABLE 60

ANALYSIS OF VARIANCE FOR THE AUTONOMY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	371.3	185.69	2.24(NS)
Within	169	14016.19	82.94	
Total	171	14387.56		

Table 61 presents the analysis of covariance findings for the autonomy variable. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 61

ANALYSIS OF COVARIANCE FOR THE AUTONOMY VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	74.32	37.16	.68(NS)
Within	168	9226.72	54.92	
Total	170	9301.03		

The analysis of variance of the retest scores for the <u>aggression</u> trait is presented in Table 62. The difference among the group means was not significant at the .05 level.

TABLE 62

ANALYSIS OF VARIANCE FOR THE AGGRESSION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	268.88	134.44	1.46(NS)
Within	169	15593.25	92.27	
Total	171	15862.13		

Table 63 reports the analysis of covariance for the variable, aggression. The difference among the group means between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 63

ANALYSIS OF COVARIANCE FOR THE AGGRESSION VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	84.10	42.05	.76(NS)
Within	168	9320.87	55.48	
Total	170	9404.97		

Table 64 presents the analysis of variance for the variable, change. Change scores indicated a significant difference among the retest means for the three groups. The F-ratio of 5.04 was significant at the .01 level.

TABLE 64

ANALYSIS OF VARIANCE FOR THE CHANGE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	1162.44	581.22	5.04*
Within	169	19501.81	115.39	
Total	171	20664.25		

<sup>\*</sup>Significant at the .01 level.

Table 65 reports the results of the Dunn's "c" test which was utilized to determine which of the mean differences were significant. The results of the comparison indicated that the significant F-ratio obtained in Table 64 was due to the difference obtained among change scores in the comparison of Groups 2 and 3.

TABLE 65

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
CHANGE, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	50.25-57.00	6.75	1.89
Groups 1-3	50.25-47.10	3.15	1.79
Groups 2-3	57.00-47.10	9.90	2.91**

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169. \*\*Significant at the .05 level. (Needed for significance, c=2.43.)

The analysis of covariance for the <u>change</u> trait is reported in Table 66. <u>Change</u> scores did not reveal a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 66

ANALYSIS OF COVARIANCE FOR THE CHANGE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	ž <b>2</b>	374.43	187.21	2.41(NS)
Within	168	13075.46	77.83	
Total	170	13449.89		

Table 67 presents the analysis of variance for the variable, succorance. The retest scores for this trait did not discriminate among the three groups.

TABLE 67

ANALYSIS OF VARIANCE FOR THE SUCCORANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	25.19	12.59	.15(NS)
Within	169	14137.81	83.66	
Total	171	14163.00		

The analysis of covariance for the variable, <u>succorance</u>, is reported in Table 68. The null hypothesis was retained. <u>Succorance</u> scores did not indicate a significant difference among the three groups between initial testing and retesting.

TABLE 68

ANALYSIS OF COVARIANCE FOR THE SUCCORANCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	160.12	80.06	1.39(NS)
Within	168	9708.63	57.79	
Total	170	9868.75		

Data pertaining to the variable, <u>abasement</u>, are presented in Table 69. Analysis of variance of the retest scores for this trait did not discriminate among the three groups.

TABLE 69

ANALYSIS OF VARIANCE FOR THE ABASEMENT VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	280.12	140.06	1.78(NS)
Within	169	13316.63	78.80	
Total	171	13596.75		ъ.,

Table 70 presents the analysis of covariance findings for the abasement variable. The difference among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis was retained.

TABLE 70

ANALYSIS OF COVARIANCE FOR THE ABASEMENT VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	35.33	17.67	.35(NS)
Within	168	8534.43	50.80	
Total	170	8569.76		

The analysis of variance of the retest means for the <u>deference</u> trait is presented in Table 71. The groups mean difference was significant at the .05 level.

TABLE 71

ANALYSIS OF VARIANCE FOR THE DEFERENCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	775.87	387.94	4.35*
Within	169	15072.63	89.19	
Total	171	15848.50		

<sup>\*</sup>Significant at the .05 level.

Dunn's "c" test was utilized to determine which of the mean differences were significant. As reported in Table 72, the results of the comparisons indicated that the significant F-ratio obtained in Table 71 was due to the difference among <u>deference</u> scores in the comparisons of Groups 1 and 2 and Groups 2 and 3.

TABLE 72

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
DEFERENCE, FOR GROUPS 1, 2, AND 3

Comparisons Means		Mean Difference	*"c" Value	
Groups 1-2	49.49-41.27	8.22	2.61**	
Groups 1-3	49.49-50.07	.58	.36	
Groups 2-3	41.27-50.07	8.80	2.94**	

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169. \*\*Significant at the .05 level. (Needed for significance, c=2.43.)

Table 73 reports the analysis of covariance for the variable, deference. The differences among the three groups between initial testing and retesting was not significant at the .05 level. The null hypothesis, therefore, was retained.

TABLE 73

ANALYSIS OF COVARIANCE FOR THE DEFERENCE VARIABLE ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	89.59	44.80	.52(NS)
Within	168	8853.88	52.70	
Total	170	8943.47		

Table 74 presents the analysis of variance for the variable, counseling readiness. The difference among the retest means for the three groups was significant at the .01 level.

TABLE 74

ANALYSIS OF VARIANCE FOR THE COUNSELING READINESS VARIABLE
ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	993.37	496.69	4.75*
Within	169	17684.00	104.64	
Total	171	18677.38		

<sup>\*</sup>Significant at the .01 level.

Significance of mean differences were determined by the utilization of Dunn's "c" test. Table 75 reports the results of this test. The results indicated that the significant F-ratio obtained in Table 74 was due to the difference among counseling readiness scores in the comparison of Groups 2 and 3.

TABLE 75

COMPARISON OF MEANS FOR THE ADJECTIVE CHECK LIST VARIABLE,
COUNSELING READINESS, FOR GROUPS 1, 2, AND 3

Comparisons	Means	Mean Difference	*"c" Value
Groups 1-2	49.71-43.64	6.07	1.78
Groups 1-3	49.71-52.71	3.00	1.75
Groups 2-3	43.64-52.71	9.07	2.81**

<sup>\*</sup>Dunn's "c" value obtained using m=3, v=169. \*\*Significant at the .05 level. (Needed for significance, c=2.43.)

The analysis of covariance for the <u>counseling readiness</u> trait is reported in Table 76. <u>Counseling readiness</u> scores did not reveal a significant difference among the three groups between initial testing and retesting. The null hypothesis was retained.

TABLE 76

ANALYSIS OF COVARIANCE FOR THE COUNSELING READINESS VARIABLE
ON THE ADJECTIVE CHECK LIST

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Treatments	2	79.77	39.89	.84(NS)
Within	168	8012.75	47.69	
Total	170	8092.52		

Chapter IV has presented an analysis of the data. Chapter V presents a summary of the investigation, the conclusions which emerged, a discussion of the findings, and implications for further research.

## CHAPTER V

SUMMARY, DISCUSSION AND CONCLUSIONS, AND RECOMMENDATIONS

## Summary

The purpose of this study was to determine the direction of change in selected attitudinal characteristics of male students who were either members of a judiciary board, or appeared before a judiciary board, or had no contact with a judiciary board while living in the residence halls at the University of North Dakota during the 1968-69 academic year. The following three research questions were proposed and investigated in this study.

- 1. Is there a difference in the initial measurement of values and in the retesting of values among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board? Values were ascertained by the use of the Allport-Vernon-Lindzey Study of Values.
- 2. Is there a difference in the initial measurement of open and closed mindedness and in the retesting of open and closed mindedness among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board? Open and closed mindedness was determined by use of the Rokeach Dogmatism Scale E.

3. Is there a difference in the initial measurement of personality characteristics and in the retesting of personality characteristics among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no formal contact with a judiciary board? The personality traits investigated were those measured by the Adjective Check List.

The research population, selected from the student population in the men's residence halls at the University of North Dakota during the 1968-69 academic year, was comprised of three groups: Group 1, which consisted of students who served as regular members of a judiciary board (N=51); Group 2, which consisted of students who committed an offense and were asked to appear before a judiciary board during the period of this investigation (N=11); and Group 3, which consisted of a 10 per cent random sample of students who had no previous contact with a judiciary board (N=110).

The Allport-Vernon-Lindzey Study of Values, the Rokeach Dogmatism Scale E, and the Adjective Check List were administered to the
research population early in the first semester and late in the second
semester of the 1968-69 academic year. A questionnaire was administered
to the retest population to determine (1) those students who had
appeared before a judiciary board during the period of investigation,
and (2) those students who sat on at least two judiciary board cases
during the year. In addition, a questionnaire was administered to the
head residents for the purpose of cross checking the information provided by the students in the research population. Data for each subject
were recorded on IBM Fortran Coding Forms preparatory to analysis by
electronic computer.

The nature of the data derived from the administration of the Allport-Vernon-Lindzey Study of Values, the Rokeach Dogmatism Scale E, and the Adjective Check List, dictated the use of the analysis of variance to ascertain the significance of differences among the means for the retested research groups. The analysis of covariance technique was employed to ascertain changes in the means between the initial testing and retesting period. In addition, Dunn's "c" test was employed to ascertain the significance of differences between specific means when significant F-ratios were obtained. The .05 level of significance was employed as the criterion in evaluating the significance of obtained differences.

The findings which emerged from the investigation are listed below:

- 1. There were no significant differences found among the retest means for the three groups on the theoretical, economic, aesthetic, social, political, and religious variables.
- 2. There were no significant differences found among the three groups between initial testing and retesting on the theoretical, economic, aesthetic, social, political, and religious variables.
- 3. There were no significant differences found among the retest means for the three groups on the open and closed mindedness variable.
- 4. There was a significant difference among the three groups between initial testing and retesting on the open and closed mindedness variable. A significant difference was found between Group 1 and Group 2, with the latter scoring higher. There was also a significant difference between Group 2 and Group 3, with the former scoring higher.

- 5. There were no significant differences found among the retest means for the three groups on the variables total number of adjectives checked, defensiveness, and number of favorable adjectives checked.
- 6. There were no significant differences found among the three groups between initial testing and retesting on the variable total number of adjectives checked, defensiveness, and number of favorable adjectives checked.
- 7. There were no significant differences found among the retest means for the three groups on the number of unfavorable adjectives checked variable.
- 8. There was a significant difference among the three groups between initial testing and retesting on the number of unfavorable adjectives checked variable. A significant difference was found between Group 1 and Group 3, with the former scoring higher.
- 9. There were no significant differences found among the three retest means for the three groups on the self-confidence variable. There were also no significant differences found among the three groups between initial testing and retesting on the self-confidence variable.
- 10. There was a significant difference found on the variable, self-control, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the latter scoring higher. There were no significant differences found on the self-control variable among the three groups between initial testing and retesting.
- 11. There were no significant differences found on the variables of lability, personal adjustment, achievement, dominance, endurance,

order, intraception, nurturance, and affiliation among the retest means for the three groups.

- 12. There were no significant differences found on the variables of lability, personal adjustment, achievement, dominance, endurance, order, intraception, nurturance, and affiliation among the three groups between initial testing and retesting.
- 13. There was a significant difference found on the variable, heterosexuality, among the retest means for the three groups. A significant difference was found between Group 1 and Group 2, with the latter scoring higher. There was also a significant difference found between Group 2 and Group 3, with the former scoring higher.
- 14. There was a significant difference among the three groups between initial testing and retesting for the heterosexuality variable.

  A significant difference was found between Group 2 and Group 3, with the former scoring higher.
- 15. There was a significant difference found on the variable, exhibition, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the former scoring higher. There were no significant differences found on the variable, exhibition, among the three groups between initial testing and retesting.
- 16. There were no significant differences found on the variables of autonomy and aggression among the retest means for the three groups.
- 17. There were no significant differences found on the variables of autonomy and aggression among the three groups between initial testing and retesting.

- 18. There was a significant difference found on the variable, change, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the former scoring higher. There were no significant differences found on the variable, change, among the three groups between initial testing and retesting.
- 19. There were no significant differences found on the variables of succorance and abasement among the retest means for the three groups.
- 20. There were no significant differences found on the variables of succorance and abasement among the three groups between initial testing and retesting.
- 21. There was a significant difference found on the variable, deference, among the retest means for the three groups. A significant difference was found between Groups 1 and Group 2, with the former scoring higher. There was also a significant difference found between Group 2 and Group 3, with the latter scoring higher. There were no significant differences found on the variable, deference, among the three groups between initial testing and retesting.
- 22. There was a significant difference found on the variable, counseling readiness, among the retest means for the three groups. A significant difference was found between Group 2 and Group 3, with the latter scoring higher. There were no significant differences found on the variable, counseling readiness, among the three groups between initial testing and retesting.

# Discussion and Conclusions

This study has examined whether differences existed in initial testing and retesting on selected attitudinal characteristics among students who served as members of a judiciary board (Group 1), students who appeared before a judiciary board (Group 2), and students who had no formal contact with a judiciary board (Group 3). Although there were far more similarities than differences among the three groups on the retest scores and between initial testing and retesting, some definite differences were found.

Analysis of the results of the AVL scores indicated that there were no significant differences among the three groups on either the retest scores or between the initial testing and retesting scores.

This may be an indication that the research groups were too heterogeneous for any differences to be ascertained. In this connection, it should be noted that no attempt was made to control for biographical variables such as age, class, grade point average, school, religion, or socio-economic background. Lehmann et alii (1966), and Rossi (1964) indicated that the most dramatic value changes occurred during the freshman and sophomore years. Gordon (1967) found a significant relationship between religious preference and values change. In addition, studies by Morris (1958), Hollinshead (1952), Wayland and Brunner (1958), and Miller (1958) have indicated that biographical factors were related to student values and their susceptibility to change.

On the open and closed mindedness trait, the initial mean for student offenders who appeared before a judiciary board was not significantly different from the initial means for the judiciary board

members and the students who had no contact with a judiciary board. However, the reported scores indicated that student offenders were at least as open minded, if not more open minded, than were the members of the other two groups at the time of the initial testing.

The retest scores for the open and closed mindedness trait also indicated no significant differences among the means for the three There was, however, a significant difference at the .05 level among the means between initial testing and retesting. Much of this significant difference can be attributed to the substantial increase in the mean score of those students who appeared before a judiciary board. It was found that the mean increased from 145.27 to 159.36 between initial testing and retesting. This change for the students who appeared before a judiciary board was significantly different (at the .05 level) from the change which occurred in the mean of the judiciary board members (Group 1), and at the .01 level from the change which occurred in the mean for those students who had no contact with a judiciary board (Group 3). It was concluded that student offenders who appeared before a judiciary board became more closed minded, more authoritative, and less receptive to new ideas between initial testing and retesting. These conclusions coincided with those reported by Cummins and Lindblade (1967) who suggested that disciplined students were more closed minded and authoritative in their basic personality structure.

The findings of this study differed from those reported by Cummins and Lindblade (1967) in that the trait of closed mindedness was found to be less prevalent in the personality structure of student

offenders before they were disciplined. It is suggested that various factors relating to the anxieties and feelings of guilt associated with getting into trouble resulted in a significant increase in the closed mindedness of those students who appeared before a judiciary board during the period of this investigation. As reported by Vaachiano, Strauss, and Schiffman (1968), there is a relationship between the trait of closed mindedness and dissatisfaction with one's own behavior, lack of selfesteem, and anxiety. It may be concluded that the disciplinary processes and procedures as provided by the judiciary boards and the staff of the residence halls were not providing the necessary environmental conditions for the rehabilitation of students who violated the conduct standards of the residence halls or the University.

In contrast to the increase in the closed mindedness score recorded for student offenders, the retest mean scores for the judiciary board members (Group 1) and the students who had no contact with a judiciary board (Group 3) decreased by four to five points from the original means. It was concluded that these students, as postulated by Korn (1967), King (1967) and Singer (1967), became more open minded and receptive to new ideas as a result of length of attendance at the University. Also, since the retest means for these two groups did not differ significantly, it was concluded that service as a member of a judiciary board had no differential effect upon the trait of open and closed mindedness for such students.

Analysis of the results of the ACL retest scores indicated that the variables of self-control, heterosexuality, exhibition, change, deference, and counseling readiness differentiated significantly among students who served as members of a judiciary board, students who appeared before a judiciary board, and students who had no contact with a judiciary board.

Students who had no contact with a judiciary board and the students who appeared before a judiciary board differed at the .05 level of significance on the retest scores for the variable, self-control.

This may indicate that those students who had no contact with a judiciary board tended to be serious, sober individuals, students who were interested in and responsive to their obligations. In addition, they were diligent, practical, and loyal workers who sometimes placed too much emphasis on the proper means for attaining the ends of social living. Conversely, the students who appeared before a judiciary board appeared to be inadequately socialized, headstrong, irresponsible, complaining, disorderly, narcissistic, and impulsive. They were described by others as being obnoxious, autocratic, and thankless.

On the variable, heterosexuality, those students who appeared before a judiciary board differed significantly at the .05 level from students who were judiciary board members, and at the .05 level from students who never had contact with a judiciary board. The students who appeared before a judiciary board, on the basis of their higher ACL scores, seemed to be interested in life in a healthy, direct, and outgoing manner. On the other hand, students who were judiciary board members and students who had never had contact with a judiciary board were more dispirited, inhibited, shrewd, and calculating in their interpersonal relationships.

On the exhibition variable, students who appeared before a judiciary board differed from students who had no contact with a judiciary board at the .05 level. Students who appeared before a judiciary board behaved in such a way as to elicit the immediate attention of others. In addition, they were more self-centered and narcissistic; poised, self-assured, and able to meet situations with aplomb but, at the same time, quick tempered and irritable. In dealings with others, they were viewed as being opportunistic and manipulative. In contrast, students who had no contact with a judiciary board were identified as apathetic, self-doubting, and unduly inhibited. They lacked confidence in themselves and avoided encounters in which they were the center of attraction.

The students who appeared before a judiciary board differed significantly from the students who had no contact with a judiciary board (at the .05 level) on the variable, change. The former group of students placed high priority on novelty of experience and avoidance of routine. They were perceptive, alert, and spontaneous, with confidence in themselves and their actions. This group of students seemed to welcome the challenge found in disorder and complexity. Such traits often resulted in a conflict with the norms of the residence hall community.

Students who had no contact with a judiciary board were conventional in their ideas and desires, patient and obliging, and concerned about others. However, they lacked the energy to reach out and do something about their ideas and desires. It was concluded that they sought stability and continuity in their environment, and were apprehensive about ill-defined and risk-involving situations.

On the deference variable of the ACL, students who served as members of a judiciary board and students who had no contact with a judiciary board differed significantly (at the .05 level) from students who appeared before a judiciary board. Because of their higher scores on the ACL, the former two groups of students sought and sustained subordinate roles in their relationships with others. Students who served as members of a judiciary board and students who had no contact with a judiciary board were viewed as conscientious, dependable, and persevering; modest in their affairs; and yielding to any reasonable claim by others. Conversely, it can be concluded that students who appeared before a judiciary board were more energetic, independent, and spontaneous; liked attention and preferred to direct others; and expressed their will on all matters. These students were also ambitious, to the point of taking advantage and coercing others.

Students who had no contact with a judiciary board had scores on the counseling readiness scale which were significantly higher (at the .05 level) than the scores for students who appeared before a judiciary board. This indicated that students who had no contact with a judiciary board had more positive attitudes toward counseling. These students were motivated for change and improvement. Aware of their problems, they were more likely to profit from counseling, especially since they were pessimistic concerning their ability to arrive at a resolution on their own. Conversely, students who appeared before a judiciary board described themselves as having less positive attitudes toward counseling. They lacked motivation for change and improvement. Moreover, they ignored the severity of their problems and were unwilling to admit that they

needed help. Furthermore, they described themselves as self-confident, poised, and outgoing.

There were significant differences among the scores between initial testing and retesting on two of the ACL scales, namely, number of unfavorable adjectives checked and heterosexuality. For the variable, number of unfavorable adjectives checked, there was a significant difference (at the .05 level) between initial testing and retesting for the scores of judiciary board members and the scores of students who had no contact with a judiciary board. The means of the former increased from 49.35 to 51.92, while the latter mean decreased from 52.06 to 50.93. These changes indicated that from the period of initial testing to retesting, students who served as members of judiciary boards were perceived as rebellious, arrogant, careless, conceited, and cynical. They also became disbelievers and skeptics, and threatened the complacent beliefs and attitudes of the fellow students. Conversely, students who had no contact with a judiciary board were more placid, obliging, mannerly, and tactful between initial testing and retesting.

In view of these findings, it is postulated that judiciary board members set themselves "apart" and "above" their peer groups within the residence halls. This phenomenon may be an explanation for the significant increase in closed mindedness among those students who appeared before a judiciary board during the period of this investigation. Since students who served as members of a judiciary board were viewed by others as being cynical, conceited, arrogant, and rebellious, it is concluded that students who appeared before judiciary boards viewed judiciary boards as punitive. Thus, judiciary boards were not perceived by the offenders as offering

help concerning doubts about self-worth, low self-esteem, feelings of guilt, and anxieties.

On the heterosexuality variable, a significant difference (at the .05 level) was found between initial testing and retesting for students who appeared before a judiciary board and for students who had no contact with a judiciary board. The change in scores was from 57.82 to 61.18 for students who appeared before a judiciary board, and from 48.37 to 48.15 for students who had no contact with a judiciary board. The most significant change occurred in the scores for the students who appeared before a judiciary board, indicating that they became more interested in everyday living experiences.

In summary, the following were the main conclusions of this investigation:

- 1. There were no significant differences or changes in the values of students who served on a judiciary board, appeared before a judiciary board, or had no contact with a judiciary board.
- 2. Students who committed an offense and appeared before a judiciary board became more closed minded, more authoritarian, and less receptive to new ideas. In contrast, students who served as members of a judiciary board and students who had no contact with a judiciary board became more open minded during the period of this investigation.
- 3. Basic personality characteristics were identified as differentiating the three groups, especially those students who appeared before a judiciary board. Student offenders who appeared before a judiciary board lacked self-control; were very outgoing; were self-

centered, narcissistic, opportunistic, and manipulative; placed high priority on change, disorder, and complexity; liked attention, and were authoritarian as well as ambitious. Stated somewhat differently, student offenders possessed those personality characteristics which made it difficult for them to reside within a residence hall.

4. During the period of investigation, judiciary boards were increasingly perceived as being punitive bodies. Also, judiciary board members were increasingly perceived by their peers as being cynical, rebellious individuals who delighted in setting themselves up as superior to their fellow students.

# Recommendations

The following recommendations are presented in an effort to provide suggestions for the improvement of the judiciary board system at the University of North Dakota and for future research.

1. One of the surprising conclusions of this study was that student offenders who appeared before a judiciary board became significantly more closed minded in their attitudes and opinions. It has been suggested that the University, by placing the process of discipline at the student level, inadvertently overlooked its educational objectives and responsibilities towards those students who were having behavioral problems in the residence halls.

Implied in the above findings and comments is the need for uniform criteria and selection procedures in the establishment of judiciary boards within the residence halls. It is suggested that research be undertaken to determine what the criteria for selection to a judiciary board should be and, furthermore, how these criteria

would be implemented in the individual residence halls at the University of North Dakota.

Students selected to serve as judiciary board members must be involved in an extensive training program prior to the handling of any disciplinary cases. Suggested areas to be included in the training program are: (1) a review of the philosophy and purposes of discipline, (2) a review of the philosophy and purposes of judiciary boards, (3) a review of the role of judiciary boards within the residence halls and the university, (4) a review of the judiciary board procedures and processes. Included in such a proposed training program would be readings, discussions, visiting speakers, seminars, and role playing.

In addition to the initial training program, a continuous orientation program for judiciary board members should be initiated.

One purpose of such an orientation program would be a periodic review and evaluation of judiciary board objectives and responsibilities.

At the end of each year, judiciary boards should review and evaluate their philosophy, purpose, role, procedures, and individual cases. Results of such evaluations would make possible the improvement of the judiciary system.

All students who appeared before a judiciary board should be included in a follow-up program of consultation and/or counseling conducted by the residence hall staff, or the Office of Student Affairs.

Referrals and the extensiveness of follow-up procedures would be dependent upon the severity of individual situations.

2. It is suggested that this study be replicated after some or all of the prior recommendations are adopted. Hopefully, such a

study would make it possible to ascertain whether improved judiciary boards make possible the rehabilitation of those students who appeared before them. In addition, provisions should be made in such a replication for the inclusion of a larger sample of student offenders. The implications derived from the present investigation were limited by the restricted sample of student offenders.

- 3. An enlargement of the present study is suggested to ascertain if the changes found in the personality characteristics of student offenders between initial testing and retesting was unique to the population in this study or whether such changes are true of all college students who are disciplined. It might be well to study the differential effects upon the attitudes of student offenders who were disciplined by Resident Assistants, Head Residents, Personnel Deans, or the Student Relations Committee. Other variables which might be considered in such a study would include age, class, school socioeconomic background, number and severity of disciplinary offenses, and types of disciplinary action taken.
- 4. A follow-up study of students involved in this study is recommended. It would be interesting to ascertain whether the changes in attitudes of student offenders are permanent, or if the changes were only an initial reaction to "getting into trouble."
- 5. Finally, a subsequent study of one residence hall should investigate, in depth, factors associated with the disciplinary process which might be contributing to the personality and attitude changes of residence hall students.

APPENDIX A

# October 25, 1968

Mr.

Hi. Please allow me to introduce myself, I am Gordon Henry, Head Resident at Walsh Hall. This is my fourth year as Head Resident and I have enjoyed myself tremendously. My greatest enjoyment has come through working closely with you - the student - in a cooperative effort directed toward making the resident hall a better place to live while at the University.

Since becoming a head resident, I have witnessed many changes within the resident halls. Of these, probably the most satisfying has been the development of the judiciary board system. Through this system, the judiciary process has been redirected from one with administrative overtones, to one with a greater degree of student orientation and administration. This has been good, but I feel that there is still a long way to go. In many cases there is confusion as to what the individual roles should be in the development, selection, and implementation of each of the individual boards. Such confusion detracts from the purpose of the judiciary system as an instrument for individual student development.

With the above in mind, I ask for your assistance. During this school year, I will be involved in a comprehensive study of the judiciary board system at this University. Through this study, it is hoped that a better understanding of the dynamics of the judiciary board system can be gained. This understanding may then be used to improve the judiciary system as it now stands. I would like to involve you in this study and this involvement will consist of approximately 1 1/4 hours of your time in the next week and 1 1/4 hours of your time next April. I will ask you to take certain test instruments that will allow me to acquire information helpful in understanding the judiciary process.

Enclosed is a self-addressed postcard with the different testing times listed. Please indicate the time when you could take part in the study and return the card through the mail-as soon as possible. (Those students living in Walsh Hall, please slide the card under my apartment door).

Remember, this study will be of help in the development and improvement of student judiciary activities within the resident halls. Your cooperation and assistance is needed for it to be a success. Thank you.

Sincerely,

Gordon H. Henry Head Resident, Walsh Hall Phone 777-2425 APPENDIX B

Name	Hall		

Scheduled below are a number of times and places when you can assist in this study. Please mark the day and time that is most convenient for you and return this card as soon as possible. If you can't make it at any of these times, please contact me by phone so other arrangements can be made. Thank you.

Gordon Henry Phone 2425

	Sun.	Mon.	Tues.	Wed.	Sat.
PLACE	10-27	10-28	10-29	10-30	11-2
South Squires Dining Rm.	7PM		10PM	7PM	2PM
West Hall Conference Rm.		10PM	7PM	10PM	10AM
East Hall	10PM				

APPENDIX C

# JUST A REMINDER

The	e postcard	that you	returned	indicated	that it	
would be	e most con	venient fo	or you to	meet with	me on	
		, Oct.	from		in	
This is	a reminde	r of date	, place,	and time.	Please put	
it in a	conspicuo	us place.				

(If you should now find the time extremely inconvenient for you, please phone me at 2425 <u>immediately</u> to to make other arrangements.)

Sincerely,

Gordon H. Henry Head Resident, Walsh Hall APPENDIX D

October 31, 1968

Mr.

As of today, I have not heard from you concerning the judiciary study which I contacted you about last week. I hope that this does not indicate an unwillingness to cooperate with me in this study. I realize that the past two weeks have been quite busy and that during such times it is easy to forget and put off many things. This is especially true of those things which you may not understand and in which you cannot see the importance of your becoming involved. For this reason, allow me to again explain the purpose behind this study.

The University of North Dakota is unique in the extent to which it has established the judiciary system within its resident halls. The judiciary system was initiated as a means by which students living in the resident halls could have autonomy in handling their own affairs. Since the judiciary system is still in its embryonic stage, many segments of its structure are weak and need study so that improvements can be made. Thus, the purpose of this study. It is felt that by doing a comprehensive study of the judiciary system a better understanding of the dynamics of the judiciary system can be gained. This understanding can then be used to improve the system for your benefit.

You may be asking, "Why must I take part in the study since I'm not on the J-Board and I know nothing about it?" This is the very reason why you have been asked to participate in the study. Up to this time, the judiciary board members in all of the men's halls have cooperated in supplying the information asked for. This information will have no meaning unless it is analyzed with similar information gathered from those persons living in the halls who are not members of a judiciary board. This means you.

So again I say, "Your help is needed and would be appreciated." The study can not be a success without your cooperation.

Enclosed is another post card with <u>new</u> testing times indicated. Please CIRCLE the time on the card which will be the most convenient for you and return the card through the mail as soon as possible. (Those living in Walsh Hall please slide the card under my door). If you <u>cannot</u> make any of these testing times, please contact me by phone at  $24\overline{25}$  and we can make arrangements to suit your needs. Thank you.

Sincerely,

Gordon H. Henry Head Resident, Walsh Hall Phone 777-2425 APPENDIX E

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	a = n a = n				2	

Please <u>CIRCLE</u> the time that is most convenient for you and return this card <u>as soon as possible</u>. If you are not free during any of these times, please call me at 2425 so other arrangements can be made. I'm free all day and would be glad to meet in your room or in my apartment in Walsh.

Thank You. Gordon H. Henry

Sun. Wed. Mon. Thur. Sat. PLACE 11 - 311 - 411-6 11 - 711 - 9South Squires Dining Rm. 7PM 7PM 7PM **10PM 10PM** 10PM 10PM 10AM 7PM West Hall Conference Rm. 10PM 10PM 10PM 10PM East Hall Reading Room By Personal Appointment

APPENDIX F

April 29, 1969

Mr.

Hello again. Spring has arrived and so has the time for the second phase of the judiciary board study. It has been a long but busy winter. Since meeting with you in November, much progress has been made with the study. Completed thus far is the background research on judiciary boards, coding of the information which you provided in the fall, and the preliminary analyzing of the data with the help of the computer in Twamley Hall.

As stated in the fall, your cooperation is again needed at this time so that the final data so important to the study can be gathered. As before, you will be asked to take certain test instruments that will allow the acquisition of information helpful in understanding the judiciary process.

Because of the importance of your cooperation, let us again review the purpose of the study. The judiciary system at the University of North Dakota was initiated as a means by which students living in the residence halls could have autonomy in handling their own residence hall affairs. Since the judiciary system is still in its embryonic stage, many segments of its structure are weak and need study so that improvements can be attempted. It is felt that a comprehensive study of the judiciary system would help to give a better understanding of the dynamics of the system. This understanding would be used in an attempt to improve the judiciary system for your benefit.

Enclosed is a self-addressed postcard with the testing times listed. Please <u>CIRCLE</u> the time most convenient for you and return the card through the mail as soon as possible. (Those living in Walsh Hall please slide under my door). If these testing times are not convenient, please contact me by phone so arrangements can be made to meet your needs.

Remember, the information you supplied in the fall will be of no help unless you cooperate again at this time. Your cooperation in completing this study is needed and will be deeply appreciated. Thank you.

Sincerely yours,

Gordon H. Henry Head Resident Walsh Hall Phone 777-2425 APPENDIX G

Name	Hall	
-		

Please <u>CIRCLE</u> the time that is most convenient for you and return this card as soon as possible. If you are not free during any of these times, please return the card anyway, so other arrangements can be made. Thank you for your cooperation.

Gordon H. Henry

	5-4	5-5	5-6	5-7	5-8	5-10
DATE	Sun	Mon	Tue	Wed	Thur	Sat
BEK DINING ROOM	3PM 7PM	7PM 10PM	7PM 10PM	7PM 10PM	7PM 10PM	10AM 2PM
WILKERSON HALL RM 50	10PM	7PM 10PM	7PM 10PM	7PM 10PM	7PM 10PM	10AM 2PM
EAST HALL READING RM	10PM			free to		any

APPENDIX H

### FELLOW HEAD RESIDENTS:

When an offense has been committed in your hall which necessitates Judiciary Board action, would you please notify me of the offenders by returning this card with the information as asked for below. Since these students are of importance to my study, I ask your cooperation in returning this card as soon as you are able. Thank you for your cooperation.

Gordon Henry

Ha11	Da	ate	_	
Expected date	e of Judiciary	Board meeting:		
Student or St	udents involve	ed:		
		Rm	Phone	• •
-		Rm	Phone	
		Rm	Phone	

APPENDIX I

## ROKEACH DOGMATISM SCALE E

DIRECTIONS: The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Make each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

- I agree a little -1: I disagree a little
- -2: I disagree on the whole +2: I agree on the whole
- +3: I agree very much -3: I disagree very much

- ITEMS: 1. The United States and Russia have just about nothing in common. Man on his own is a helpless and miserable creature. 2. 3. Sometimes when I am not feeling well I am cross. 4. It is only natural for a person to be rather fearful of the future. In a heated discussion I generally become so absorbed in what I 5. am going to say that I forget to listen to what the others are saying. 6. No one cares what happens to you. 7. If given the chance I would do something of great benefit to the world. Of all the different philosophies which exist in this world there is probably only one which is correct. I usually find that my own way of attacking a problem is best, even though it doesn't always seem to work in the beginning.
- In times like these it is often necessary to be more on guard 10. against ideas put out by people or groups in one's own camp than by those in the opposing camp.

11.	A person who thinks primarily of his own happiness is beneath contempt.
12.	I strongly defend my own opinions as a rule.
13.	The present is all too often full of unhappiness. It is only the future that counts.
14.	Most people just don't know what's good for them.
15.	If given the chance I would make a good leader of people.
16.	The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
17.	Fundamentally, the world we live in is a pretty lonesome place
18.	I prefer to stop and think before I act even on trifling matters.
19.	There is so much to be done and so little time to do it in.
20.	It is better to be a dead hero than to be a live coward.
21.	Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
22.	In the history of mankind there have probably been just a handful of really great thinkers.
23.	A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.
24.	I have very few fears compared to my friends.
25.	A group which tolerates too much differences of opinion among its own members cannot exist for long.
26.	Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
27.	I frequently find it necessary to stand up for what I think is right.
28.	If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."
29.	Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

30.	People who express an ignorant belief should not be corrected.
31.	Most people just don't give a "damn" for others.
32.	Once I get wound up in a heated discussion I just can't stop.
33.	I think nearly anyone would tell a lie to keep out of trouble.
34.	While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.
35.	There are a number of people I have come to hate because of the things they stand for.
36.	There is usually only one best way to solve most problems.
37.	To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
38.	There are two kinds of people in this world; those who are for the truth and those who are against the truth.
39.	If several people find themselves in trouble, the best thing for them to do is to agree upon a story and stick to it.
40.	In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
41.	Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
42.	Sometimes at elections I vote for men about whom I know very little.
43.	It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
44.	I'd like it if I could find someone who would tell me how to solve my personal problems.
45.	I feel unsympathetic towards people who tend to hang on to their griefs and troubles.
46.	In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
47.	The main thing in life is for a person to want to do something important.

48.	I prefer work that requires a great deal of attention to detail
49.	A man who does not believe in some great cause has not really lived.
50.	When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
51.	I am a methodical person in whatever I do.
52.	My blood boils whenever a person stubbornly refuses to admit he's wrong.
53.	It is often desirable to reserve judgement about what's going on until one has had a chance to hear the opinions of those one respects.
54.	The only interesting part of the newspapers is the "funnies."
55.	It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
56.	In times like these, a person must be pretty selfish if he considers primarily his own happiness.
57.	It is safer to trust nobody.
58.	In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
59.	The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
60.	Life is a strain for me much of the time.

# Scoring Instructions

Beginning with item three, every third item is a distractor and is not included in the scoring. Responses to the test items range from -3 to +3.

To eliminate negative numbers, four is added to the numerical value of each response. Scores for the entire test may range from zero to 280. The higher the score, the more closed minded is the individual.

APPENDIX J

## DESCRIPTION OF THE ALLPORT-VERNON-LINDZEY STUDY OF VALUES

- 1. Theoretical. The dominant interest of the theoretical man is the discovery of truth. In the pursuit of this goal he characteristically takes a "cognitive" attitude, one that looks for similarities and differences; one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.
- 2. Economic. The economic man is characteristically interested in what is useful. Based originally upon the satisfaction of bodily needs (self-preservation), the interest in utility develops to embrace the practical affairs of the business world-the production, marketing, and consumption of goods, the elaboration of credit, and the accumulation of tangible wealth. This type is thoroughly "practical" and conforms well to the prevailing stereotype of the average American businessman.

The economic attitude frequently comes into conflict with other values. The economic man wants education to be practical, and regards unapplied knowledge as waste. Great feats of engineering and application result from the demands economic men make upon science. The value of utility likewise conflicts with the aesthetic value, except when art serves commercial ends. In his personal life the economic man is likely to confuse luxury with beauty. In his relation with people he is more likely to be interested in surpassing them in wealth than in dominating them (political attitude) or in serving them (social attitude). In some cases the economic man may be said to make his religion the worship of Mammon. In other instances, however, he may have regard for the traditional God, but inclines to consider him as the giver of good gifts, of wealth, prosperity, and other tangible blessings.

3. Aesthetic. The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life as a procession of events; each single impression is enjoyed for its own sake. He need not be a creative artist, nor need he be an effete; he is aesthetic if he finds his chief interest in the artistic episodes of life.

The aesthetic attitude is, in a sense, diametrically opposed to the theoretical; the former is concerned with the diversity, and the latter with the commonality of experience. The aesthetic man either chooses, with Keats, to consider truth as equivalent to beauty, or agrees with Mencken, that, "to make a thing charming is a million times more important than to make it true." In the economic sphere the aesthetic man sees the process of manufacturing, advertising, and trade

as a wholesale destruction of the values most important to him. In social affairs he may be said to be interested in persons but not in the welfare of persons; he tends toward individualism and self-sufficiency. Aesthetic people often like the beautiful insignia of pomp and power, but oppose political activity when it makes for the repression of individuality. In the field of religion they are likely to confuse beauty with purer religious experience.

- 4. Social. The highest value for the social type is love of people. In the Study of Values it is the altruistic or philanthropic aspect of love that is measured. The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish. He is likely to find the theoretical, economic, and aesthetic attitudes cold and inhuman. In contrast to the political type, the social man regards love as itself the only suitable form of human relationship. Spranger added that in its purest form the social interest was selfless and tended to approach the religious attitude.
- 5. Political. The political man is interested primarily in power. His activities are not necessarily within the narrow field of politics; but whatever his vocation, he betrays himself as Machtmensch. Leaders in any field generally have high power value. Since competition and struggle play a large part in all life, many philosophers have seen power as the most universal and most fundamental of motives. There are, however, certain personalities in whom the desire for a direct expression of this motive is uppermost, who wish above all else for personal power, influence, and renown.
- 6. Religious. The highest value of the religious man may be called unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality. Spranger defined the religious man as one "whose mental structure is permanently directed to the creation of the highest and absolutely satisfying value experience." Some men of this type are "immanent mystics," that is, they find their religious experience in the affirmation of life and in active participation therein. A Faust with his zest and enthusiasm sees something divine in every event. The "transcendental mystic," on the other hand, seeks to unite himself with a higher reality by withdrawing from life; he is the ascetic, and, like the holy men of India, finds the experience of unity through self-denial and meditation. In many individuals the negation and affirmation of life alternate to yield the greatest satisfaction.

APPENDIX K

## DESCRIPTION OF THE ADJECTIVE CHECK LIST

- 1. Total Number of Adjectives Checked (No. Ckd). To reflect surgency and drive, and a relative absence of repressive tendencies. HIGH SCORERS: emotional, adventurous, wholesome, conservative, enthusiastic, unintelligent, frank, and helpful; active, means well, tends to blunder. LOW SCORERS: quiet and reserved; tentative and cautious in approach to problems; at times unduly tactiturn and aloof; apt to think originally and inventively but less effective in getting things done.
- 2. Defensiveness (Df). To measure a bipolar dimension of test-taking response which is interpretable at either extreme. HIGH SCORERS: self-controlled and resolute in attitude and behavior; insistent and stubborn in seeking objectives; persistence more admirable than attractive. LOW SCORERS: anxious and apprehensive; critical of self and others; given to complaints about their circumstances; have more problems than their peers and tend to dwell on them and put them at the center of attention.
- 3. Number of Favorable Adjectives Checked (Fav). To assess favorability of self-description. HIGH SCORERS: motivated by a strong desire to do well and impress others by virtue of hard work and conventional endeavor; others see them as dependable, steady, conscientious, mannerly, and serious; may be too concerned about others, and lacking in verve and quickness of mind; sincere concern with behaving appropriately and with doing one's duty. LOW SCORERS: individualistic, clever, sharp-witted, headstrong, pleasure-seeking, and original in thought and behavior; since emotions are more accessible, they more often experience anxiety, self-doubts, and perplexities.
- 4. Number of Unfavorable Adjectives Checked (UnFav). To indicate a kind of impulsive lack of control over the hostile and unattractive aspects of one's personality. HIGH SCORERS: strike others as rebellious, arrogant, careless, conceited, and cynical; tend to be disbelievers, skeptic, threats to the complacent beliefs and attitudes of their fellows. LOW SCORERS: more placid, more obliging, more mannerly, more tactful, and probably less intelligent.
- 5. Self-Confidence (S-Cfd). To assess an individual's sense of dominance. HIGH SCORERS: assertive, affiliative, outgoing, persistent, actionists; individuals who want to get things done and are impatient with people or things standing in their way; concerning about creating a good impression and not above cutting corners to achieve their objective; seen by others as forceful, self-confident, determined, ambitious, and opportunistic. LOW SCORERS: have difficulty in mobilizing themselves and taking action, prefer inaction and contemplation; seen by others as unassuming, forgetful, mild, preoccupied, reserved, and retiring.

- 6. Self-Control (S-Cn). To assess such factors as responsibility and socialization. HIGH SCORERS: serious, sober individuals, interested in and responsive to their obligations; seen as diligent, practical, and loyal workers; element of over-control, too much emphasis on doing the right thing. LOW SCORERS: inadequately socialized; headstrong, irresponsible, complaining, disorderly, narcissistic, and impulsive; tend to be described as being obnoxious, autocratic, and thankless.
- 7. Lability (Lab). To assess spontaneity, need for change, rejection of convention, and assertive individuality. HIGH SCORERS: an inner restlessness and an inability to tolerate consistency and routine; seen favorably as spontaneous; seen unfavorably as excitable, temperamental, restless, nervous, and high-strung; impelled toward change. LOW SCORERS: phlegmatic, routinized, planful and conventional; support strict opinions on right and wrong practices; need for order and regularity; seen by others as thorough, organized, steady, and unemotional.
- 8. Personal Adjustment (Per Adj). To identify individuals with a positive attitude toward life. HIGH SCORERS: seen as dependable, peaceable, trusting, friendly, practical, loyal, and wholesome; fit in well, ask for little, treat others with courtesy, work enterprisingly toward their own goals; possess the capacity to love and work. LOW SCORERS: sees themselves at odds with others, as moody and dissatisfied; seen by others as aloof, defensive, anxious, inhibited, worrying, withdrawn, and unfriendly.
- 9. Achievement (Ach). To strive to be outstanding in pursuits of socially recognized significance. HIGH SCORERS: seen as intelligent and hard-working, but also as involved in intellectual and other endeavors; determined to do well and usually succeeds; motives are internal and goal-centered rather than competitive; in dealings with others may be unduly trusting and optimistic. LOW SCORERS: skeptical, dubious about rewards of effort and involvement; uncertain about risking their labors; tend to be withdrawn and dissatisfied with current status.
- 10. <u>Dominance</u> (Dom). To seek and sustain leadership roles in groups or to be influential and controlling in individual relationships. HIGH SCORERS: forceful, strong-willed, and persevering; confident of ability to do as they wish; direct and forthright in behavior. LOW SCORERS: unsure; indifferent to demands and challenges of interpersonal life; stay out of limelight; avoid situations calling for choice and decision-making.
- 11. Endurance (End). To persist in any task undertaken. HIGH SCORERS: self-controlled, responsible, idealistic, and concerned about truth and justice; sometimes champion unconvential ideas and unpopular causes. LOW SCORERS: erratic, impatient, intolerant of prolonged effort or attention, and apt to change in an abrupt and quixotic manner.

- 12. Order (Ord). To place special emphasis on neatness, organization, and planning in one's activities. HIGH SCORERS: sincere and dependable but at cost of individuality and spontaneity. LOW SCORERS: quick in temperament and reaction, impulsive; prefer complexity and variety; dislike delay, caution, and deliberation.
- 13. <u>Intraception</u> (Int). To engage in attempts to understand one's own behavior or the behavior of others. HIGH SCORERS: reflective, serious, capable, conscientious, and knowledgeable; excellent intellectual talents and derive pleasure from their exercise. LOW SCORERS: tend toward profligacy and intemperateness in use of intellectual talent; aggressive; quickly become bored or impatient with any situation where direct action is not possible; doers, not thinkers.
- 14. <u>Nurturance</u> (Nur). To engage in behaviors which extend material or emotional benefits to others. HIGH SCORERS: have a helpful, nurturant disposition, but sometimes too bland and self-disciplined, may be too conventional and solicitous of others. LOW SCORERS: skeptical, clever, and acute; too self-centered and too little attentive to the feelings and wishes of others.
- 15. Affiliation (Aff). To seek and sustain numerous personal friendships. HIGH SCORERS: adaptable and anxious to please, but not necessarily because of altruistic motives; ambitious and concerned with position; tend to exploit others. LOW SCORERS: individualistic, strongwilled; less trusting, pessimistic about life; restless in any situation which intensifies or prolongs contact with others.
- 16. Heterosexuality (Het). To seek the company of and derive emotional satisfactions from interactions with opposite-sexed peers. HIGH SCORERS: interested in opposite sex, life, experience, and most things around in a healthy, direct, outgoing manner; somewhat naive in the friendly ingenuousness in which they approach others. LOW SCORERS: think too much, as it were, and dampens their vitality; dispirited, inhibited, shrewd, and calculating in their interpersonal relationships.
- 17. Exhibition (Exh). To behave in such a way as to elicit the immediate attention of others. HIGH SCORERS: self-centered, narcissistic; poised, self-assured, and able to meet situations with aplomb, but at same time quick tempered and irritable; in dealings with others they are opportunistic and manipulative. LOW SCORERS: apathy, self-doubt, and undue inhibition of impulse; lack confidence in themselves; shrink from any encounter in which they will be visible or the center of attention.
- 18. Autonomy (Aut). To act independently of others or of social values and expectations. HIGH SCORERS: independent, autonomous, assertive, and self-willed; indifferent to feelings of others and heedless of their preferences when they themselves wish to act. LOW SCORERS: moderate, subdued disposition; hesitate to take the initiative, preferring to wait and follow the dictates of others.

- 19. Aggression (Agg). To engage in behaviors which attack or hurt others. HIGH SCORERS: competitive and aggressive; seek to win, to vanquish, and view others as rivals; strong, uncontrolled impulses; behavior often self-aggrandizing and disruptive. LOW SCORERS: are more of a conformist, but not lacking courage or tenacity; tend to be patiently diligent, and sincere in relationships with others.
- 20. Change (Cha). To seek novelty of experience and avoid routine. HIGH SCORERS: perceptive, alert, and spontaneous individuals who comprehend problems and situations rapidly and incisively; take pleasure in change and variety; confidence in themselves; welcome challenges found in disorder and complexity. LOW SCORERS: seeks stability and continuity in their environment; apprehensive of ill-defined and risk-involving situations; patient and obliging; concerned about others; lack verve and energy.
- 21. <u>Succorance</u> (Suc). To solicit sympathy, affection, or emotional support from others. HIGH SCORERS: trusting, guileless, naive in faith in the integrity and benevolence of others. LOW SCORERS: independent, resourceful, and self-sufficient; prudent and circumspect; quiet confidence in own worth and capability.
- 22. Abasement (Aba). To express feelings of inferiority through self-criticism, guilt or social impotence. HIGH SCORERS: submissive, self-effacing, and lack of self-acceptance; see self as weak, undeserving, and face the world with anxiety, and foreboding; self-punishing behavior. LOW SCORERS: optimistic, poised, productive, and decisive; alert and responsive to others; brisk tempo, confident manner, and effective behavior.
- 23. <u>Deference</u> (Def). To seek and sustain subordinate roles in relationships with others. HIGH SCORERS: conscientious, dependable, and persevering; self-denying out of a preference for anonymity and freedom from stress and external demands; attend modestly to their affairs, seeking little, and yielding always to any reasonable claim by another. LOW SCORERS: energetic, spontaneous, and independent; like attention, like to supervise and direct others, and to express their will; ambitious, not above taking advantage of others and coercing them if they can attain a goal in so doing.
- 24. Counseling Readiness (Crs). To help identify counseling clients who are ready for help and who seem likely to profit from it. HIGH SCORERS: predominantly worried about self and ambivalent about their status; feel left out of things, unable to enjoy life to the full, and unduly anxious; preoccupied with own problems and pessimistic about resolving them constructively. LOW SCORERS: self-confident, sure of themselves, outgoing, seek the company of others, like activity, and enjoy life in an uncomplicated way.

APPENDIX L

FELLOW HEAD RESIDENTS:

I am near the completion of the data gathering process for the judiciary board study. At this time, I would appreciate your cooperation in cross-checking the information provided by the students in my sample. Please complete the items below; being as accurate as possible.

1.	Residence Hall			
2.	Number of students serving on your judiciary board. RegularsAlternates			
3.	Which of the following <u>best</u> describes the method used by your hall in selecting the students who were to serve on your judiciary board?			
	Volunteers			
	Volunteers who were elected to the board by a student committee			
	Volunteers who were elected to the board by a hall election			
	Volunteers who were appointed to the board by a student committee			
	Volunteers who were appointed to the board by the head resident			
	General elections			
	Appointed by Head Resident			
	Appointed by a student committee Other			
4.	How many times did your judiciary board meeting during the past year?  Please list the students who served on your judiciary board during the past year. (Please differentiate between regulars and alternates)			
6.	If your board has alternates, please indicate your method of differentiating between those students who served as regulars and those who served as alternates.			

THANK YOU FOR YOUR COOPERATION IN COMPLETING THE ABOVE AND FOR YOUR HELP DURING THE PAST YEAR. THIS STUDY WOULD NOT HAVE BEEN POSSIBLE WITHOUT IT.

7. Please list those students who appeared before the judiciary board

during the past year.

APPENDIX M

Listed below are several questions which I would like you to complete. Please be accurate, as the information you provide is to be used as background material for the judiciary board study. All responses will be treated with total confidence. Thank you.

1.	Name	Age	Class	
2.	Residence Hall Room			
3.	Home Address			
		City	State	
4.	School in which you are registered			
5.	Did you serve on a judiciary board during this past year? YesNo			
6.	Did you serve on a judiciáry board before this year? YesNo If yes, how many years?			
7.	Did you appear before a judiciary board this past year? YesNo If yes, how many times?			
8.	For what offense were you asked to appear before the judiciary boa and what was its recommendation? (Please list the offense and the judiciary boards recommendation for <a href="each">each</a> time you appeared, if most than once.)  1			
	2.			
	3.			
9.		ary board, how	many cases did you sit on this	

REFERENCES

## REFERENCES

- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N.

  The authoritarian personality. New York: Harper and Brothers,

  1950.
- Allport, G. W. The nature of prejudice. Cambridge, Mass.: Addison-Wesley Co., 1955.
- Allport, G. W., Vernon, P. E., & Lindzey, G. Manual: Study of values. (3rd ed.) Boston: Houghton Mifflin Co., 1960.
- Applezweig, D. G. Self-perception in later adolescence. Paper presented at the International Congress of Psychology, Bonn, Germany, 1960. (Mimeógraphed.)
- Arsenian, S. Changes in evaluative attitude. <u>Journal of Applied</u>
  Psychology, 1943, 27, 338-349.
- Barger, B., & Hall, E. Personality patterns and achievement in college. Educational and Psychological Measurement, 1964, 24, 339-346.
- Beerbower, K. L. The correlates of dogmatism in a selected sample of college students. Paper presented at Southeastern Psychological Association, New Orleans, April, 1966.
- Bendig, A. W., & Hountras, P. T. Anxiety, authoritarianism, and student attitude toward departmental control of college instruction. Journal of Educational Psychology, 1959, 50, 1-7.
- Benne, K. D. Education for tragedy: Essays in disenchanted hope for modern man. Lexington: University of Kentucky Press, 1967.
- Bloomers, P., & Lindquist, E. F. <u>Elementary statistical methods in</u> psychology and education. Boston: Houghton Mifflin Co., 1960.
- Brown, D. R. Student stress and the institutional environment. <u>Journal</u> of Social Issues, 1967, 23, 92-107.
- Chickering, A. W. The development of autonomy. Paper presented at American Orthopsychiatric Association, Washington, March, 1967.
- Christie, R. Authoritarian re-examined. In R. Christie and M. Jahoda (Eds.), Studies in the scope and method of the authoritarian personality. Glencoe, Ill.: The Free Press, 1954. Pp. 123-196.

- Clark, D. L. Exploring behavior in men's residence halls using the MMPI. Personnel and Guidance Journal, 1964, 43, 249-251.
- Clark, S. L. Authoritarian attitudes and field dependence. <u>Psychological Reports</u>, 1968, 22, 309-310.
- Conway, J. A. Problem solving in small groups as a function of "open" and "closed" individual belief systems. Organization Behavior and Human Performance, 1967, 2, 394-405.
- Costin, F. Dogmatism and the retention of psychological misconceptions. Educational and Psychological Measurement, 1968, 28, 529-534.
- Crane, R. M. Building and keeping a faculty. Improving College and University Teaching, 1962, 10, 9.
- Cummins, E. J. Are disciplinary students different? <u>Personnel and</u> Guidance Journal, 1966, 44, 624-627.
- Cummins, E. J., & Lindblade, Z. G. Sex based differences among student disciplinary offenders. <u>Journal of Counseling Psychology</u>, 1967, 14, 81-85.
- Derber, C., & Flocks, R. An exploration of the value systems of radical student activists and their parents. Paper presented at American Sociological Association, San Francisco, August, 1967.
- Dressel, P. L., & Mayhew, L. B. General education: Explorations in evaluation. Washington, D. C.: American Council on Education, 1954.
- Dukes, W. F. Psychological studies of values. <u>Psychological Bulletin</u>, 1955, <u>52</u>, 24-50.
- Dunn, O. J. Multiple comparisons among means. <u>Journal of the American Statistical Association</u>, 1961, <u>56</u>, 52-64.
- Eagly, A. H. Involvement as a determinant of response to favorable and unfavorable information. <u>Journal of Personality and Social Psychology Monograph</u>, 1967, <u>7</u>, 1-15.
- Edwards, A. L. Experimental design in psychological research. (Rev. ed.) New York: Holt, Rinehart and Winston, 1960.
- Egner, R. E., & Obelsky, A. J. Effect of stereotyped attitudes on learning. <u>Journal of Educational Psychology</u>, 1957, <u>48</u>, 207-212.
- Ehrlich, H. J. Dogmatism and learning. Journal of Abnormal and Social Psychology, 1961, 62, 148-149.

- Elton, C. F., & Rose, H. A. Personality characteristics: Their relevance in disciplinary cases. <u>Journal of Counseling Psychology</u>, 1966, 13, 431-435.
- Ferguson, G. A. Statistical analysis in psychology and education. (2nd ed.) New York: McGraw-Hill, 1966.
- Flaherty, M. R. Personality traits of college leaders. The Journal of Educational Research, 1967, 60, 377-378.
- Foster, J., Stanek, R., & Krassowski, W. The impact of a value-oriented university on student attitudes and thinking. Final Report, Cooperative Research Project No. 729, 1961, Santa Clara, Calif: University of Santa Clara, Office of Education, U. S. Department of Health, Education and Welfare.
- Freedman, M. B. The impact of college. Washington, D. C.: U. S. Department of Health, Education, and Welfare, New Dimensions in Higher Education, No. 4, 1960.
- Freedman, M. B. Personality growth in the college years. <u>College Board</u> Review, 1965, 56, 25-32.
- Geier, J. G. A trait approach to the study of leadership in small groups. Journal of Communication, 1967, 17, 316-323.
- Gibby, R. G., Jr., Gibby, R. G., & Hogan, T. P. Relationships between dominance needs and decision-making ability. <u>Journal of Clinical Psychology</u>, 1967, 23, 450-452.
- Gideonse, H. D. (Collective writings) The higher learning in a democracy. In A. S. Preminger (Ed.), Against the running tide. New York: Twayne Publishers, 1967. Pp. 3-31.
- Golden, M. P., & Rosen, N. A. Student attitudes toward participation in university administration: An empirical study related to mangerial prerogatives. The Journal of College Student Personnel, 1966, 7, 323-330.
- Gordon, J. H. Value differences between freshman and seniors at a state university. College Student Survey, 1967, 92, 69-70.
- Gough, H. G., & Heilbrun, A. B. The adjective check list: Manual. Palo Alto, Calif.: Consulting Psychologist Press, 1965.
- Green, J. L. The new student morality. Antioch Notes, 1968, 45, 1-7.
- Guy, J. Changing student values 1966. In proceedings of the Canadian Association of University Student Personnel Services, Vancouver, October, 1966, 44-47.

- Hadley, B. J., & Dunlap, M. S. Autocratic versus democratic beliefs of graduate students in nursing. Nursing Research, 1968, 17, 19-26.
- Hall, D. W., & Brockmeier, J. D. Self esteem: How is it affected by college experience? Paper presented at American Personnel and Guidance Association, Dallas, March, 1967.
- Hardy, K. R. Determinants of conformity and attitude change. <u>Journal</u> of Abnormal Social Psychology, 1957, 54, 289-294.
- Hartnett, R. Analysis of the relationship between dogmatism, rigidity, and scholastic performance. (Personal communication) Cited by I. J. Lehmann and P. L. Dressel, Critical thinking, attitudes, and values in higher education. Final Report, Cooperative Research Project No. 590, 1962, Michigan State University, Office of Education, U. S. Department of Health, Education and Welfare.
- Hassenger, R. A rationale for changing student values. Education Record, 1967, 48, 61-67.
- Heilbrun, A. B. Relationships between the Adjective Check List, Personal Preference Schedule and desirability factors under varying defensiveness conditions. Journal of Clinical Psychology, 1958, 14, 283-287.
- Heilbrun, A. B. Validation of a need scaling technique for the Adjective Check List. <u>Journal of Consulting Psychology</u>, 1959, <u>23</u>, 347-351.
- Heilbrun, A. B. Personality differences between adjusted and maladjusted college students. <u>Journal of Applied Psychology</u>, 1960, <u>44</u>, 341-346.
- Heilbrun, A. B. Prediction of first year college dropouts using ACL need scales. Journal of Counseling Psychology, 1962, 9, 58-63.
- Heilbrun, A. B., & Sullivan, D. J. The prediction of counseling readiness. Personnel and Guidance Journal, 1962, 41, 112-117.
- Hein, E. A case for student involvement. <u>Junior College Journal</u>, 1968, 38, 42.
- Holland, J. L. The prediction of college grades from the California Psychological Inventory and the Scholastic Aptitude Test.

  Journal of Consulting Psychology, 1959, 50, 135-142.
- Hollinshead, B. S. Who should go to college? New York: Columbia University Press, 1952.

- Hunt, M. F., Jr., & Miller, G. R. Open and closed mindedness, beliefdescrepant communication behavior, and tolerance for cognitive inconsistency. <u>Journal of Personality and Social Psychology</u>, 1968, 8, 35-37.
- Huntley, C. W. Changes in study of values scores during the four years of college. Genetic Psychology Monographs, 1965, 71, 349-383.
- Izard, C. E. Personality change during the college years. <u>Journal of Consulting Psychology</u>, 1962, 26, 482.
- Jacob, P. E. Changing values in college. New York: Harper and Brothers, 1957.
- Johnson, R. T., & Frandsen, A. N. The California Psychological Inventory profile of student leaders.

  Journal, 1962, 41, 343-345.
- Johnson, S. W. Four years development of college students' values. Unpublished report, State University of New York, 1966.
- Johnston, W. W. Dogmatism as a means of predicting insecurity, selfconcept, meaning, attitude, and effectiveness of female elementary teachers. Unpublished doctoral dissertation, University of South Dakota, 1967.
- Kelly, E. G. A study of consistent discrepancies between instructor grades and term-end examination grades. <u>Journal of Educational</u> Psychology, 1958, 49, 328-334.
- Kelsey, I. B. Philosophic considerations of a shift in values. <u>Improving College</u> and University Teaching, 1964, 12, 154-158.
- Kemp, C. G. Changes in patterns of personal values in relation to openclosed belief systems. Unpublished doctoral dissertation, Michigan State University, 1957.
- King, S. H. Personality stability: Early findings of the Harvard student study. Paper presented at American Personnel and Guidance Association, Dallas, March, 1967.
- Kleck, R. E., & Wheaton, J. Dogmatism and responses to opinion-consistent and opinion-inconsistent information. <u>Journal of Personality and Social Psychology</u>, 1967, <u>5</u>, 249-252.
- Koch, H. L. Children's work attitudes and sibling characteristics. Child Development, 1956, 27, 289-310.

- Korn, H. A. Personality scale changes from the freshman to the senior year. In J. Katz (Ed.), Growth and constraint in college students - A study of the varieties of psychological development. Stanford: Institute for the Study of Human Problems, Stanford University, 1967. Pp. 122-155.
- Korn, H. A., & Giddon, N. S. Scoring methods and construct validity of the dogmatism scale. Educational and Psychological Measurement, 1964, 24, 867-874.
- Korn, J. H., & Hilton, T. L. Measured change in personal values. Educational and Psychological Measurement, 1964, 24, 609-622.
- Lehmann, I. J. Changes in critical thinking, attitudes, and values from freshman to senior years. <u>Journal of Educational Psychology</u>, 1963, 54, 305-315.
- Lehmann, I. J., & Dressel, P. L. Critical thinking, attitudes, and values in higher education. Final Report, Cooperative Research Project No. 590, 1962, Michigan State University, Office of Education, U. S. Department of Health, Education, and Welfare.
- Lehmann, I. J., & Payne, I. K. An exploration of attitude and value changes of college freshmen. The Personnel and Guidance Journal, 1963, 41, 403-408.
- Lehmann, I. J., Sinha, B. K., & Hartnett, R. T. Changes in attitudes and values associated with college attendance. <u>Journal of Educational Psychology</u>, 1966, 57, 89-98.
- Levin, M. M. Congruence and developmental changes in authoritarianism in college students. In J. Katz (Ed.), Growth and constraint in college A study of the varieties of psychological development. Stanford: Institute for the Study of Human Problems, Stanford University, 1967. Pp. 422-471.
- Lyle, W. H., Jr., & Levitt, E. E. Punitiveness, authoritarianism, and parental discipline of grade school children. <u>Journal of Abnormal and Social Psychology</u>, 1955, <u>51</u>, 42-46.
- MacKinnon, D. W. Creativity and image of the self. In R. W. White (Ed.), The study of lives. New York: Atterton Press, 1963. Pp. 250-279.
- Maddi, S. R. Fostering achievement and the cost of so doing. In Current issues in higher education, 1966. Washington, D. C.: Association for Higher Education, 1966, 106-109.
- Magoon, T. M., & Bienen, S. M. ACL adjectives associated with differential status on CPI scales. The Personnel and Guidance Journal, 1965, 44, 286-291.

- Mayhew, L. B. And in attitudes. In P. L. Dressel (Ed.), Evaluation in the basic college. New York: Harper and Brothers, 1958.
- Miller, N. Social class and value differences among American college students. Unpublished doctoral dissertation, Columbia University, 1958.
- Morris, C. <u>Varieties of human value</u>. Chicago: University of Chicago Press, 1958.
- Murphy, L. B., & Raushenbush, E. In L. B. Murphy and E. Raushenbush (Eds.), Achievement in the college years. New York: Harper and Brothers, 1960, p. 240.
- Neel, A. F. The relationship of authoritarian personality to learning: F scale scores compared to classroom performance. Journal of Education Psychology, 1959, 50, 195-199.
- Nelson, E. N. P. Radicalism conservatism in student attitudes. Psychological Monographs, 1938, No. 4.
- Norfleet, M. A. W. Personality characteristics of achieving and underachieving high ability senior women. The Personnel and Guidance Journal, 1968, 46, 976-980.
- Norman, R. P. Dogmatism and psychoneurosis in women. <u>Journal of Consulting Psychology</u>, 1966, 30, 278.
- Oetting, E. R. College students and respect for the law. <u>National</u>
  Association Student Personnel Administrators, 1968, 5, 266-268.
- Pallone, N. J. College, work, and self-ideal congruence. The Journal of College Student Personnel, 1966, 7, 285-288.
- Patterson, C. H. <u>Counseling and psychotherapy: Theory and practice</u>.

  New York: <u>Harper and Brothers</u>, 1959.
- Pettigrew, T. F. The measurement and correlates of category width as a cognitive variable. <u>Journal of Personality</u>, 1958, <u>26</u>, 532-544.
- Plant, W. T. Changes in ethnocentrism associated with a four-year college education. Journal of Educational Psychology, 1958, 49, 162-165.
- Plant, W. T. Personality changes associated with a college education. Final Report, Cooperative Research Project No. 348, 1962, San Jose, Calif.: San Jose State College, Office of Education, U. S. Department of Health, Education, and Welfare.

- Plant, W. T. Longitudinal evaluation of nonintellectual changes associated with a special two-year humanities program. <u>Psychological Reports</u>, 1964, <u>15</u>, 225-226.
- Plant, W. T. Changes in intolerance and authoritarianism for sorority and nonsorority women enrolled in college for two years. The Journal of Social Psychology, 1966, 68, 79-83.
- Rhodes, A. L. Authoritarianism and fundamentalism of rural and urban high school students. <u>Journal of Educational Sociology</u>, 1960, 34, 97-105.
- Rivet, H. L. Student discipline. <u>National Association of Student Personnel Administrators</u>, 1967, 5, 215-216.
- Robb, J. W. The changing profile of the college student. In W. A. Geier (Ed.), Today's student and his university. Nashville, Tenn.: Division of Higher Education, The Methodist Church, 1966. Pp. 11-17.
- Rokeach, M. The nature and meaning of dogmatism. <u>Psychological</u> Review, 1954, 61, 194-204.
- Rokeach, M. The open and closed mind. New York: Basic Books, 1960.
- Rokeach, M., & Kemp, C. G. Open and closed systems in relation to anxiety and childhood experience. In M. Rokeach The open and closed mind. New York: Basic Books, 1960. Pp. 347-365.
- Rokeach, M., McGovney, W. C., & Denny, M. R. A distinction between dogmatic and rigid thinking. <u>Journal of Abnormal Social Psychology</u>, 1955, <u>51</u>, 87-93.
- Rose, A. M. Reference groups of rural high school youth. Child Development, 1956, 27, 351-363.
- Rossi, P. H. Working paper. Research conference on social science methods and student residences, The University of Michigan, 1964. (Mimeographed.)
- Sanford, N. Personality development during the college years. The Personnel and Guidance Journal, 1956, 35, 74-80.
- Sanford, N. The development of social responsibility through the college experience. In E. J. McGrath (Ed.), The liberal arts college's responsibility for the individual student.

  New York: Teachers College Press, Columbia University, 1966. Pp. 22-37.
- Sanford, N. The development of social responsibility. American Journal of Orthopsychiatry, 1967, 37, 22-29.

- Schubert, J. D. The impact of selected colleges on student's values. Unpublished doctoral dissertation, University of Southern California, 1967.
- Seligman, D. A special kind of rebellion. Fortune, 1969, 79, No. 1.
- Sherman, J. R. Student perception of value change. Unpublished doctoral dissertation, Colorado State College, 1968.
- Siegel, S. Nonparametric statistics for the behavior sciences. New York: McGraw-Hill, 1956.
- Singer, S. Review and discussion of the literature on personality development during college. In J. Katz (Ed.), Growth and constraint in college students A study of the varieties of psychological development. Stanford: Institute for the Study of Human Problems, Stanford University, 1967. Pp. 606-630.
- Skager, R. W., & Braskamp, L. A. Changes in self-ratings and life goals as related to student accomplishment in college. ACT Research Reports, No. 16, American College Testing Program, November, 1966.
- Snider, J. G., & Linton, T. E. The predictive value of the California Psychological Inventory in discriminating between the personality patterns of high school achievers and underachievers. Ontario Journal of Educational Research, 1964, 6, 107-115.
- Spoerl, D. The values of the post-war college student. <u>Journal of Social Psychology</u>, 1952, 35, 217-225.
- Spranger, E. Types of men. Translated from 5th German edition of Lebensfor men by P. J. Pigors. Halle: Max Niemeyer Verlag. American agent: Stechert-Hafner, Inc., New York, 1928.
- Stewart, L. H. Change in personality test scores during college.

  Journal of Counseling Psychology, 1964, 11, 211-220.
- Stoltenberg, L. Can values be taught? <u>Junior College Journal</u>, 1963, 34, 24-28.
- Taylor, H. Freedom and authority on the campus. In N. Sanford (Ed.), College and character. New York: John Wiley and Sons, Inc., 1964. Pp. 206-221.
- Telford, C. W., & Plant, W. T. The psychological impact of the public two-year college on certain non-intellectual functions. Final Report, Cooperative Research Project No. 914, 1963, San Jose, Calif.: San Jose State College, Office of Education, U. S. Department of Health, Education, and Welfare.

- Vacchiano, R. B., Schiffman, D. C., & Crowell, A. V. Attitude change as a function of intensive training, dogmatism and authoritarianism. Psychological Reports, 1966, 19, 359-362.
- Vacchiano, R. B., Strauss, P. S., & Schiffman, D. C. Personality correlates of dogmatism. <u>Journal of Consulting and Clinical</u>
  Psychology, 1968, 32, 83-85.
- Vingoe, F. J., & Antonoff, S. R. Personality characteristics of good judges of others. <u>Journal of Counseling Psychology</u>, 1968, 15, 91-93.
- Wagman, M. Attitude change and authoritarian personality. <u>Journal</u> of Psychology, 1955, <u>40</u>, 3-24.
- Wayland, S., & Brunner, E. de S. The educational characteristics of the American people. New York: Teachers College Bureau of Publications, 1958.
- Wessell, A., & Flaherty, M. R. Changes in CPI scores after one year in college. Journal of Psychology, 1964, 57, 235-238.
- Williams, R. M. American society: A sociological interpretation.

  New York: Alfred A. Knopf, Inc., 1951.
- Williamson, E. G. Training student leaders. <u>In Current Issues in Higher Education, 1967</u>: In search of leaders. Washington, D. C.: Association for Higher Education, 1967, 186-188.
- Winborn, B. B. Some personal characteristics of campus student leaders: A comparison of social-political action leaders with four other categories of student leaders. Unpublished report, Indiana University, December, 1966.
- Wittenborn, J. R. A study of adoptive children. <u>Psychological Monograph</u>, 1956, No. 408.
- Woodruff, A. D. Personal values and religious backgrounds. <u>Journal</u> of Social Psychology, 1945, <u>22</u>, 141-147.