

AN ANALYSIS OF PERSONALITY AND DEMOGRAPHIC  
FACTORS CONCERNING STUDENTS INVOLVED IN  
DISCIPLINARY PROBLEMS

Thesis for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
JAMES E. BEALER

1967

THESIS



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FACTORS CONCERNING STUDENTS INVOLVED IN  
DISCIPLINARY PROBLEMS**

**presented by**

**James Edward Bealer**

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By

James E. Bealer

AN ABSTRACT OF A THESIS

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## ABSTRACT

### AN ANALYSIS OF PERSONALITY AND DEMOGRAPHIC FACTORS CONCERNING STUDENTS INVOLVED IN DISCIPLINARY PROBLEMS

by James E. Bealer

The purpose of this study is to contribute to the basic understanding of the factors concerning college students who become involved in disciplinary situations. The intent of the study is to contribute by discriminating between miscreant and non-miscreant students with measures of personality, demographic data, academic majors, curriculum, and their tenure at the university.

The population included all students who started at Central Michigan University in the fall semester of 1960. The experimental group consisted of ninety-two male and thirty-six female students who were involved in a disciplinary situation during the four year period from 1960 to 1964. The control group, an equal number of students, matched for sex, were not involved in a disciplinary situation during the same period of time. The disciplinary group was classified by an independent panel of judges into five disciplinary categories.

Data were gathered on each individual concerning his sex, general curriculum, academic major, scores on the Omnibus Personality Inventory, and certain other biographical information.

The data were analyzed with the multiple discriminant analysis technique and the first two latent roots or

discriminant functions for both males and females were significant at the .05 level of confidence.

Variables making the largest contribution to the discrimination were: personal educational aspirations and peer-parental relationships on the first discriminant function, and rank in class and impulse expression on the second discriminant function for males; and involvement in extracurricular activities and rank in class on the first discriminant function, and rank in class and religious attendance on the second discriminant function for females. If an individual's scores on the variables were low, it was quite likely that he would be involved in miscreant behavior. If his scores were high, it was less likely that he would be involved in miscreant behavior. This was consistent for both sexes.

The significant discriminant functions were illustrated graphically in discriminant space for both males and females. For the males, the non-disciplinary and the misdemeanor and felony groups were well separated from the other groups. For the females, the misdemeanor and felony group was well separated from the other groups.

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## CHAPTER 1

### THE PROBLEM

The problem of this investigation is to determine what significant differences exist between students who are involved in disciplinary situations and students who are not involved in disciplinary situations by using the objective measures of personality scales, demographic factors, curriculum, academic majors, and their tenure at the university.

#### Importance of the Study

Since 1901, when Thomas A. Clark was appointed Dean of Men<sup>1</sup> at the University of Illinois, student personnel services have been functioning as a unit of the university structure. Clark's primary duties were to relieve the president of unpleasant duties which included bringing about the readjustment of students who had become involved in difficulties. This function has operated on a pragmatic basis from that day forward. Frequently, even today, problems were handled as they arose and dealt with according to the needs of the moment; the protection of the school, the community, and assistance to the student if time provided. However, time to assist the miscreant student was low on the priority list and frequently was not accomplished. When time was available, the student personnel administrator

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<sup>1</sup>Clark is credited by most as being the first Dean of Men ever appointed. Many writers support his appointment as being the point of origin of the Dean's function in student personnel services as we know them today.

had few if any tools to work with to help this student. By fortune or by accident people began migrating to this area from other disciplines such as psychology and the social sciences. With them came the ideas and philosophies which have been incorporated into the student personnel services.

Much has been written in the literature over the years about student personnel services, particularly in the area of student discipline. Williamson (59), Mueller (34), and Lloyd-Jones (31), have added much to the development of this philosophy but seldom in their writing is empirical evidence available to support the philosophy. In reviewing the literature of discipline in 1940, Bailey (1) suggested that an improvement in the methods of dealing with the disciplinary problem was dependent upon a frank admission of its existence and a scientific study of it. In reviewing the literature in 1950, Bailey (2) again recommended a need for empirical research in discipline. He further suggested that surveys of the disciplinary acts themselves are not nearly as important as a search for the reasons which initiate the behavior. In 1960, Woodruff (62) reviewed the literature on discipline and concluded that a limited amount of research has been done on the topic. He suggested that discipline involves many concepts and will be difficult to research until many fragments crystallize and can be researched by themselves.

From the foregoing paragraphs it can be concluded

that research in the area of discipline is lacking. It is the hope of this writer that this investigation can possibly aid in the crystalization of the concept of discipline in some way and add emperical evidence to the apparent void which has existed.

### Statement of Purpose

It is the primary purpose of this investigation to determine if there are relationships which exist between personality factors as measured by the Omnibus Personality Inventory and disciplinary situations which develop among college students at a four-year teacher training institution. The specific scales of the personality inventory are: Thinking Introversion, Theoretical Orientation, Estheticism, Complexity, Originality, Developmental Status, Impulse Expression, Schizoid Functioning, Social Introversion, Religious Liberalism, Social Maturity, Liberalism, and Non-Authoritarianism. Also under consideration will be the relationships which exist between these personality factors and the type of disciplinary situation in which the student is involved. Another consideration will be to determine if any relationship exists between the type of program (e.g., Liberal Arts vs. Teacher Training) the students are undertaking and disciplinary situations in which they become involved. Other questions raised are whether or not there is a relationship between the undergraduate major of the student and his involvement in disciplinary situation in which he has become involved.

Demographic factors such as: size of community, father's occupation, size of family, and geographical distance from the university shall be investigated to determine if they have significant relationships to disciplinary situations in which students become involved. One additional consideration will be undertaken to determine if there is any relationship between the student's tenure at the university and the type of disciplinary problem in which he is involved.

The investigator hopes through this study to be able to identify factors that will aid in the identification of potential miscreants. This information could afford the university an opportunity to aid potential offenders in a re-education process. This process might then reduce the number of discipline problems which occur as well as develop a counseling-learning situation for those students.

#### Theoretical Considerations

Historically, colleges throughout the country have had their concerns over the behavior of the students placed in their charge. One typical example being, Thomas Jefferson (59-153)<sup>2</sup>, who as president of the University of Virginia, was concerned with the prevention of disciplinary problems through the rigid control of the behavior of students. Even though this authoritarian approach had

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<sup>2</sup>When the same article or book is cited more than once, the parentheses will include the reference and the specific page cited.

limited success, evidence of this philosophy may still be detected in universities today.

Certainly, the shift in philosophy from the "development of the intellect" to the "development of the total individual" was instrumental in fostering some of the trends which student personnel administrators are faced with today. The strict constructionist philosophy of control of behavior by rules and rigid enforcement has given way to a philosophy of rehabilitation emphasizing the control of behavior by a search for the cause of misbehavior. This is the point we have reached today.

The rehabilitation theory has two major components of concern for this study. First, it may enable us to identify the potential offender, and second, to effect his re-education. Williamson (59-157) has offered a theory of rehabilitation based on disciplinary counseling. This process had merits and produces some success, difficult as it may be to measure. However, it is the position of this writer that an even earlier point of departure is necessary for maximum success. That is, to identify and counsel with the student before he becomes involved in a situation which may require disciplinary action. Williamson points out that one of the problems of his technique is that, "many counselors in this process of disciplinary counseling use a subjugation of the individual to the dictates of the group rather than an educative, corrective, and growth producing behavior for the individual." It is his hope that all counselors involved with disciplinary

counseling will pursue the latter framework.

Williamson further indicates that there are some misbehaving students who are psychopathically or neurotically disorganized and need to be referred for psychiatric treatment. This writer maintains that if an instrument such as the Omnibus Personality Inventory can be successful in the early identification of potential disciplinary offenders, their rehabilitation and re-education can be undertaken prior to their becoming involved in a disciplinary situation.

It is hoped that such an instrument, if adequate for identification, would be used primarily for this stated purpose. It is not the writer's contention that it be used as a screening device for admission to colleges and universities. Without doubt, occasions would arise when such a device might indicate that a particular student should seek psychological assistance before entering the university environment. The sound use of this information by counselors could become more of an asset to the future growth and development of the individual than a handicap.

In the development of personality theory, White (55) indicates that one of the primary factors of personality development is the adjustment process. He defines this as, "a process or struggle of the person to come to terms with his environment". In this adjustment process he cites four problems that exist with the freshman at college: (a) that he is out of contact with familiar

habitation objects, (b) that he has suffered a major loss of prestige, (c) that this new college environment has caused him many new frustrations, therefore it is easy for him to feel resentment toward this new and seemingly hostile environment, and (d) that when faced with difficult conditions, the student may regress to forms of behavior that were satisfying and acceptable in his former environment.

It is not the purpose of this study to develop new theories of personality but to use existing theories in the identification of potential disciplinary offenders. Without doubt, the many students that face college each year come from backgrounds which may have many different values than those subscribed to by the university community. In addition, with the financial resources available today to capable students, colleges are faced with an increase of students who come from a class system which previously had not enjoyed the privilege of attendance. Undoubtedly, these students may have a decidedly different set of values from those currently subscribed to by the university as a whole.

In this focus then, it is one of the functions of this study to see whether psychological tests can determine a student's readiness to adjust to and handle the work required of him in the university community. The additional focus deals with the student who doesn't adjust to this environment. White defends this position when he indicates



that, "an educational handicap is itself the result of emotional maladjustment". He further states that, "not waiting for difficulties to arise but trying to anticipate them and prevent them from arising, can avert many of the psychological mishaps that might later take months and years to correct".

It is not the intent of this study to undertake either an examination of the value systems of the college or a complete restructuring of the values of the individuals involved. It may be worth noting that after World War II a similar type of situation existed when veterans returned to college. In essence, some of the situations which today are construed as problems may be part of the overall change in the values currently held by many colleges. This point can be further supported by the different treatment given to the same problem situation by different universities. Truitt's (52) study of the methods of handling disciplinary situations by ten universities supports this contention. His study indicated that the same disciplinary situation was frequently handled quite differently by the ten schools. The range of disciplinary action for a specific problem might vary considerably from one university to another.

#### Definition of Terms

For purposes of this study it will be necessary to define the disciplinary situation. Foley (19) has developed a definition for discipline which will be used in this study. Accordingly, discipline means, "any action taken

against a student because of alleged conduct, activities, or other behavior which is an infraction of written or unwritten policies and rules of the university". The writer accepts this definition for the study with one addition; specifically that the disciplinary situation must have been of such a circumstance to have been recorded in the office of the Dean of Students.

#### Limitations of the Study

This study will be concerned only with those students who were referred to the office of the Dean of Students for disciplinary reasons and for whom a record was made of the situation. Those students who were involved in disciplinary situations which were either handled elsewhere or not reported to the office of the Dean of Students were not included in the study. This must be realized in interpreting the results of this investigation.

Only freshmen who began their college careers in the fall of 1960 will be considered in this investigation. Transfer students, foreign students, and freshmen who were not involved in the testing program that fall will also be eliminated from the study causing another limitation.

Since the investigation concerns only students attending Central Michigan University, any conclusions drawn from the study must be limited to that population.

The system of classifying the disciplinary offenders creates another limitation. The investigator developed the particular classification system for purposes of analysis

of the data. The ratings of the judges who were used to classifying the disciplinary offenders into the various categories also constitutes another limitation. This will be discussed further in Chapter III.

Further limitations which are inherent in research are the instruments used for the study. Instruments to measure personality factors or to gather demographic information are approximations and must be weighed accordingly. Obviously, any conclusions must be tempered within this framework.

#### Statement of Hypothesis

From the statement of the problem, its purpose, theoretical considerations, and the limitations, as set forth in the preceding paragraphs, the general hypothesis of the study is as follows:

It is possible to differentiate between students who are involved in various disciplinary situations and students who are not involved in disciplinary situations by using the objective measures of personality scales, demographic data, academic majors, curriculum, and their tenure at the university.

#### Overview

A review of the literature and several related studies will be undertaken in Chapter II. In Chapter III the design of the study will be examined with regard to the sampling, instrumentation, statistical hypotheses, experimental design, and analysis techniques. In Chapter IV the data will be presented and analyzed.

## CHAPTER II

### REVIEW OF THE LITERATURE

Each year presidents, teachers, and student personnel administrators are faced with that enigma of university life: the miscreant student. Each year they respond with renewed vigor to resolve this perennial problem. But can it be resolved? Rather than a resolution of that enigma, a different approach might be to attempt to determine what causes the delinquent behavior rather than to treat the problem after it has arisen. Woodruff (62-381), in his review of the topic of discipline, suggested that, "discipline refers fundamentally to the principle that each organism learns in some degree to control itself so as to conform to the forces around it with which it has experiences". By this definition, he has inferred that the environment and forces acting upon the individual may be the causative factors in miscreant behavior rather than the individual himself. If this premise be true, then young people not in attendance at colleges should be free from changes which may bring about the miscreant behavior. However, Boyer and Michael (6) reviewing educational research concerning the outcomes of college attendance, found evidence which indicated that young adults who had not attended college go through changes similar to those of the college students. They maintained that the college experience may simply act as a catalyst to speed changes that would occur ordinarily as the individual matures.

The following paragraphs contain a review of the pertinent literature and related studies concerning miscreant behavior among college students. This review considers

- (a) the approaches and views held toward misbehavior
- (b) the causes and origin of miscreant behavior
- (c) the characteristics of miscreant students
- (d) the location of the delinquent action
- (e) the values and attitudes held toward misbehavior
- (f) the personality factors of miscreant students
- (g) the philosophy held toward discipline

#### Approaches and Views Toward Misbehavior

Any proper review of the question of discipline must begin with the questions, "How have we looked at the discipline problem--both in the past and in the present?" "Are our present views toward it today any different than those held forty years ago?"

Hawkes (23), in 1923, suggested that discipline should concern itself with the moral education of the individual rather than his punishment. He stated that the only real discipline is self discipline. In further discussing the college student he indicated that, "college youth are as crude socially, and as immature morally, as they are underdeveloped intellectually. Colleges have a responsibility to help him develop in all areas, social, moral, and intellectual (i.e., to aid him to overcome his weakness)". It was his contention that this was a condition, not a theory, that confronts student personnel workers and it must be recognized and dealt with. Hawkes asserted that there must be a re-education of the disciplinary offenders. To accomplish this, he indicated that the stimulus and the opportunity had to come

from external sources but the change itself would occur on the inside of the offender. Later Hawkes (22) indicated that, "instead of looking at the crime that has been committed, one must consider the individual who has offended".

Approximately twenty years later, Foley (18), discussing discipline, stated that, "we have an obligation to emphasize the development of the student as a person rather than his intellectual training alone". He also held that one must differentiate between delinquent behavior and the delinquent individual. He believed that problems which are "disciplinary" are problems of adjustment. In this same era, Williamson (60) and Foley suggested that five approaches to discipline were being undertaken. These were as follows: (a) strict and impersonal enforcement of rules and regulations, (b) indulgent laxity (i.e., boys will be boys), (c) punitive approach, (d) preventative group work, and (e) individual counseling method as the most favorable for real changes in the disciplinary offender. Both writers believed that misbehavior should be regarded as symptomatic, requiring social and psychological investigation to determine the motivations of the student as well as the necessary relearning steps to be taken.

Writing about the changing approaches to discipline covering a sixty year period, Fley (16) suggested that no changes had occurred either in the philosophy or methodology of working with discipline. She stated that, "personnel workers and deans in their speeches and writing have consistently looked to the reason behind individual and group

behavior and have tended to look to the educational or rehabilitative purpose of discipline rather than its solely punitive aspects". She concluded that they strongly urged individual treatment of the misbehaving student and that many personnel workers have continued to do so ever since.

Fley, however, agreed that certain changes had taken place. For example, the terminology used in the 1920's differed from today's. At that time, student personnel workers spoke of character education and citizenship training. Gradually language changed to terms like personality adjustment and mental hygiene, and today to changing values of the student and society. Also, in the early days counselors talked to students and saved students. Today the terms are commonly counseling students and helping students to conform to standards. Fley established that the greatest change of all was the view that deans held toward the disciplinary function. At first, deans were shocked by student misbehavior. Then, they opposed the role of disciplinarian and, later ignored the role. Gradually, however, the role as disciplinary counselor evolved, until today that function is accepted as a part of counseling known as rehabilitation, or counseling, or re-education.

Cunningham (13), however, recognized a shift in the philosophic view towards discipline. The change was a shift from uniform control-demands on everyone to toleration of variations in behavior by individuals, to toleration of variations of an individual faced with multifarious situations.

Little has been written about the student and how he views the disciplinary situation. A recent study by Murphy and Hanna (36) considers this questions with little success. The student, they found, was more concerned about the disciplinary action taken for a given disciplinary situation rather than the approach or method used in working with the problem. The authors concluded that misbehavior was viewed by students as more offensive if it was directed at individuals or groups rather than institutionally directed. This conclusion raised a question about students' attitudes toward discipline, a topic which will be discussed later.

#### Causes and Origin of Miscreant Behavior

The question of the causes of miscreant behavior and its originations has been raised previously. A further consideration is the multiple sources from which such behavior originates (i.e., external or internal). Bailey (1-296), in 1941, felt that the origin of disciplinary situation evolved from three areas: (a) educational activities, (b) non-instructional activities, and (c) contact with the general community. He said that certain types of problems were directly related to each area. Silverman (47) expanded upon this idea by suggesting that six factors contributed to anti-social or unsocial conduct of students. He felt that these factors included (a) dissatisfaction in the work process, (b) emotional unrest in interpersonal relations, (c) disturbances in group climate, (d) mistakes in organization and group leadership, (e) emotional strain and sudden change, and (f) the composition of the group. Silverman's Thesis



supported the position that the source of discipline is both internal to and external from the individual.

Williamson and Foley (60-48) presented the hypothesis that, "misbehavior, as well as behavior, is produced by conditions and causes, some of which are found in students' homes and others of which arise in societal and cultural processes and institutions". They indicated that some forms of misbehavior might be caused by conditions within the high school, the college, or the university.

Another causative factor has been found to be the shift from one environment to another by students. Williamson (58) and others (Williamson, Jorvee, and Lagarstedt [61] ) wrote that much behavior takes the form of transitional readjustment as students move from relatively simple hometown life to the independent self-adjusting freedom of a university. Tisdale and Brown (51) suggested that the high rate of disciplinary problems among freshmen might be a function of their adjusting to a new environment. Holmes and Delaborne (25) supported his view. "The misbehaving college student", they wrote, "may have brought with him problems from his past. He is reacting to these in combination with those pressures imposed by his environmental present".

In discussing adjustment as the cause of discipline among students, Hawkes (22-242) held that it was caused by, (a) a weakness of the individual, (b) a lack of moral knowledge or training, or (c) habitual offenses by the individual. Woodruff (62-381) viewed the cause from a different

direction. He stated that a lack of inner discipline in a child is often said to find both its existence and its particular form in characteristics of the adjustment and behavior of parents.

Mueller (33) suggested that students' difficulties arose from their immaturity rather than from personality or adjustment problems. She wrote that students inherit the strengths and weaknesses of the current morality, but assimilate the weaknesses more readily than the strengths because the immaturity of youth makes him more vulnerable to the weakness. She asserted that these immature students, as members of campus groups, are especially susceptible to the current methods of repudiating the standards which they find inconvenient or unappetizing, and thus become involved in disciplinary situations. She further indicated that they have a strong preoccupation with "other direction". She implied that peer acceptance of peer standards was foremost among students, even at the expense of becoming involved in a disciplinary situation.

All authors generally agreed that a new environment played a significant role in whether or not a student became involved in a disciplinary situation. Such factors as a student's unfamiliarity with the institution's mores and regulations, a new college location, a number of new rules or rules which seem repressive, and with differing personal morals, must make rapid adjustments or become involved in disciplinary situations. Wrenn (64) summarized this point

when he stated that a direct relationship exists between the number and type of regulations on the campus and the number of cases called disciplinary cases.

### Characteristics of Miscreant Students

What are the characteristics of a miscreant student? Is he different from the average college student? Does he have identifiable peculiarities? These were the questions asked by Tisdale and Brown (51-364) in their study of the problem. They concluded that the miscreant student had definable characteristics. He is likely a freshman and a fraternity or sorority member. He is apt to live in a fraternity or sorority house and to be enrolled in the college of engineering or sciences and humanities. He is most likely to have attended a large high school, to rank in the lower half of his graduating class, to be a "repeater" discipline case, and to leave college other than by graduation. The authors held that the likelihood of later difficulties for a student would be indicated by a recidivism problem which had not been resolved.

Williamson, Jorvee, and Lagarstedt (61-608) indicated, on the other hand, that students charged with misbehavior were not markedly typical of students in general. They suggested that the miscreant student's ability was no different from that of other students in the same class. However, Bazik and Meyering (4), in their study, found that the scholastic records of miscreant students were lower than other students'. Even though the differences were

not significant, they contended that the results suggested different levels of achievement since both groups were equal in ability. Another finding indicated that there were more physical education and fewer elementary education majors in the miscreant group than were proportionate for the number of students enrolled in these fields. Jackson and Clark (27), in a study of thefts among college students, also found significant differences in achievement levels between miscreant and other students. Their study denoted a significant difference in the size of the hometown of students involved in thefts. Specifically most students involved in thefts came from large communities.

While many of these writers have divergent positions on the characteristics discussed, they were all agreed that males were involved in disciplinary situations more frequently than females. Most revealed a concern for this disproportionate male incidence in the disciplinary group and suggested that its existence might be caused by several factors. Females, for example, were more receptive to certain types of restricting rules and regulations and were kept under closer supervision, with less opportunity to become involved in misconduct. It was extremely difficult, also, to detect certain types of atypical behavior among females. Cummins (12), in his study, found significant evidence that miscreant females have a more emergent value system than other females. He suggested that one variable affecting differences between male and female miscreant behavior could be that of value orientation.

Evidence suggests that certain characteristics differentiate the miscreant and non-miscreant students. But, to date, these differences have not been clearly defined.

#### Location of Delinquent Action

Although delinquent behavior frequently occurs in the college community, there is uncertainty as to when or where it occurs. Is it distributed over the students' four years at the university--or is there a specific time when it occurs? Does it occur at a given location on the campus--or is it distributed throughout the various facilities both on and off the campus?

Woodruff (62-381) wrote that discipline was confined to thoughtless and irresponsible acts of young people who are not maladjusted but are just uneducated and unsocialized. However, he failed to differentiate between the various classes of students and their tenure at the university as causative factors in miscreant behavior. Nevertheless, Jackson and Clark's (27-557) study found that students in their first two years of college became involved in theft more frequently than upperclass students. Bazik and Meyering (4-173) supported this contention and suggested that the miscreant students were younger and more homogeneous than others. In their study, they found more freshmen and sophomores in the miscreant group than upperclassmen. They also indicated that there was no relationship between miscreant students and the type of housing in which they resided. Holmes and Delaborne (25-188)

disagreed. They contended that the type of housing a student live in was a causative factor in miscreant behavior. They suggested that the residence hall philosophies and practices of the 1950's were still with us today; and while these policies were static, the students were not. They concluded that the residence hall in which a student lived might be a contributing cause for miscreant behavior.

Tisdale and Brown (51-364) also contended that the delinquent rate among college students was highest for the freshmen. They suggested, however, that among housing units, the fraternity and sorority residences were factors contributing to delinquent behavior. They further stated that, "fraternity and sorority involvements do not support their protestations of individual character building". Thompson and Papalia (50) and Bacig (3) also supported the belief that the fraternities were a frequent cause for delinquent behavior. They observed that "fraternities may be regarded as peripheral or even detrimental to objectives of higher education".

Williamson, Jorvee, and Lagarstedt (61-614) found that the freshmen had a greater representation proportionately in miscreant situations than their representation in the total population. The involvement of seniors, graduate students, and professional students in miscreant situations was considerably less than expected. They suggested that non-pathological misbehavior occurs in the early part of college, particularly, in the freshman year. Their study

further indicated that students living in dormitories ranked low in their involvement in situations requiring disciplinary action. Students living at home or in off-campus rooming houses, however, were involved in these situations more frequently, with the off-campus rooming houses having the highest frequency of occurrence.

Several of these authors contended that one of the reasons why upperclassmen were not involved in as much miscreant behavior was the result of their being established members of the university community. In support of their premise, they indicated that either unruly freshmen adjust in later years or do not remain in college to become upperclassmen.

#### Values and Attitudes Toward Discipline

When approaching the values and attitudes held toward discipline, one may raise a number of questions. How do the students see the disciplinary situation--what are their values and attitudes toward it? Are they different from the values and attitudes held by teachers and administrators? Do all students hold some similar cultural and moral attitudes and values? Do these values and attitudes change during the college years? Does the college experience have an influence on students' values and attitudes? Are there forces acting upon students to cause difficulties in formulating their values and attitudes?

Bidwell (5) suggested that students in college develop through one of two value systems: traditional or

emergent. The system they choose is related to both their academic and extracurricular choices. He stated that:

The student who subscribed to the traditional value system is characterized both in the academic and extracurricular spheres by controlled, competitive, diligent striving and successful achievement of instrumental goals. The student is further typified by a sequence of very visible turning points which moved him toward specific professional goals and toward role differentiation permitting the responsible exercise of authority to control and modify the college environment. He characterized the emergent value student as having less visible turning points, which moved him toward diversified, rather than professionalized, or pre-occupational, academic experiences. In the extra-curricular sphere, this student took the form of a complex of expressive activities, without any visible sequential movement toward role differentiation or accession to authority.

Regarding value systems, Bidwell concluded that personal value commitments move the student with ever-increasing selectivity toward predicted behavior in both the academic and extra-curricular spheres.

In his study of the changes in critical thinking, attitudes, and values over a four year period, Lehmann (29) found that both males and females changed significantly in these areas from their freshman to their senior year. His results indicated that students: (a) showed increased ability in critical thinking, (b) were less stereotypic, (c) were less traditional and more emergent, and (d) were less dogmatic, rigid, and authoritarian. He also found that the females tended to change their attitudes and values more than did the males. In concluding his study, he indicated that



the evidence suggests that students may have undergone their greatest changes by the end of their sophomore years. Floyd (17) also supported this point by writing: "The greatest changes in students tended to occur early in their college years and they become more rational and non-stereotypic in their attitudes and values".

In 1958, Miller (32) studied the religious attitudes and values of students to determine if the college had any influence upon them. Her study supplemented a 1937 investigation covering the same topic. The results of both studies led her to conclude that colleges have little influence in changing students's religious values and attitudes. Since it was thought that miscreant behavior frequently occurred as a result of different moral values, Klinger and Veroff (28) suggested that a study of the topic might clarify some of the misconceptions that existed. Their study of cross-cultural dimensions in moral values of students from totally different cultures established that a core of common moral values existed. These values common to all cultures were (a) impulse control (i.e., primarily sexual control), (b) conformity to institutional rules and obedience to authority, (c) social loyalty and obligation to society, (d) positive affiliative values, and (e) social restraint. Their conclusions suggested that, contrary to popular belief, there may be a set of common moral codes across cultures.

Hodinko (24) developed a questionnaire to sample

students opinions and attitudes regarding certain types of disciplinary situations and the subsequent action which should be undertaken. In the questionnaire he cited seventeen behavior situations and asked the students to determine what action should be undertaken in each case. The results were significant and indicated that students believed involvement in theft for material gain or cheating involving collusion should be dealt with most severely. Also of significance was the result that students gave little support to policies against the use of alcoholic beverages. Several ancillary results suggested that (a) fraternity men expressed much milder censure of all categories than did non-fraternity men, and (b) sorority women were the most punitive in their views, even more so than non-sorority women.

Comparing attitudes toward women's residence hall regulations, as held by students in various roles, White (54) found (a) that members of student judiciaries held more favorable attitudes toward the hall's social structure and were more inclined to uphold rules than non-judiciary members, (b) that rule breakers and rule conformists had similar attitudes toward rules, (c) that rule breakers were more likely to perceive judiciary members as punitive and unfair than were rule conformists, and (d) that students were not likely to report infractions unless charged with that responsibility. She concluded that while all respondents tended to accept the rules per se, they considered

their personal behavior codes more important than residence hall rules.

In studying the attitudes of administrators in general toward disciplinary problems, Sillers and Feder (46) found that (a) attitudes toward the seriousness of offenses and methods of dealing with them had no bearing on their field of study, age, experience, or institutional position, (b) information and knowledge about the student offender seemed to have little bearing on how the seriousness of an offense was perceived, (c) philosophies expressed by all types of administrators agreed with those expressed by student personnel leaders, and (d) no clear cut institutional attitudes toward the seriousness of offenses appeared. In summarizing their study, they concluded that, "some evidence suggests administrators are in the middle of a philosophical transition from 'due process' to one of a 'helping relationship' in which development and maturation of the individual are central concerns.

Gottlieb and Hodgkins (20) viewed students' values and attitudes from a different position. They contended that the development of values and attitudes was a function of subcultures within the college students themselves, and classified students as academic, vocational, collegiate and non-conformists. They suggested that students tend to disassociate themselves from college community orientations different from their own and to seek reinforcement for their own goals and values from peers, parents, and others. They

also suggested that these student subcultures grow out of the incompatibility of student and institutional goals. Whyte (56) lent support to this premise in his writing about the alienated students. He maintained that the alienated student tended to have personal goals more divergent from perceived goals of the university than students who reflected less alienation. He also suggested that they were less certain about their major field or vocational commitment and usually were from middle class backgrounds.

Woodruff (62-381) contended that values and attitudes toward discipline were a function of the forces which were in constant interaction with man at all times. He suggested that these forces were (a) non-personal objects which make up the universe, (b) the culture and its institutions within which the person participates and (c) the other persons with whom the individual has interaction. He indicated that the non-personal objects gave the individual little difficulty but that movement into several different cultures became a complex task since these groups shifted from time to time. He reasoned further that the development of desirable attitudes and values toward discipline as well as self-control was more difficult to attain, particularly when interacting with other persons. He concluded that in this complex, the individual cannot hold his own attitudes and values at the expense of others.

In an attempt to determine if various groups held different attitudes toward discipline and how it should be dealt with, Murphy and Hanna (36-75) compared students,

student court members, residence hall counselors, and faculty members. Their results suggested that all four groups held highly similar attitudes toward dealing with misconduct. Hubbell (26) conducted a study to determine if the interpretation of disciplinary situations and the anticipation of the action to be taken were different for students, parents, student personnel workers, and faculty members. He found that all groups differed significantly from each other in estimating the university action. Students thought that the university would be the most severe. Student personnel workers thought the university would be the most lenient. Faculty and parents responses were found between them. He also found that parents recommended the most severe action, and student personnel workers were the most lenient group. Faculty and student sentiment ranged between them. He concluded that attitudes among the four groups toward the treatment of discipline varied significantly. The student personnel workers were most lenient in both estimates of disciplinary action and their own choice of disciplinary action. The students estimated that the university had been the strictest, and parents chose the strictest disciplinary action.

However, Prusok (41), in his study of attitudes toward discipline, found that student personnel workers held a stricter behavior code than did either parents or students. The study also revealed that the students held the least punitive behavior code of the three. Further inspection of his results suggested that some individual

differences in direction existed for severity in strict behavior groups for certain specific behavior acts. He also found that female students held less punitive attitudes than did their parents or male students. In light of his study, he raised the question as to whether we should have behavior codes that are more strict than either parents or students want. He was also concerned as to why the female students were the least punitive. In answering the question, Prusok (42) stated that, "the institution casts the student in an artificial role". He concluded that the student probably perceives his role according to the behavioral expectations of his peer group and that the role expectations of students and student personnel workers are not entirely in accord.

#### Personality Factors of Miscreant Students

In working with discipline, student personnel workers are aware not only of the offense that has been committed but also of the superficial information about the individual involved. However, they may be limited in their knowledge about the make-up of his personality. Does he have personality factors which are peculiar to him--do they predispose him to involvement in disciplinary situations? Can student personnel workers identify these personality factors to aid in the rehabilitation of the individual for the future? Are there personality factors which can be used to identify a potential disciplinary offender (either male or female) before he becomes involved in a disciplinary situation? Can these personality

factors be re-directed toward positive goals for the welfare of the individual?

In discussing the interrelationship of personality factors and discipline, Bailey (2) contended that deviate behavior which comes to the attention of administrators was a matter for investigation to determine not only the facts themselves but the reason behind the behavior. The interests of the individual were paramount unless continuation would be harmful to other students. Williamson and Foley (60-22) expanded upon this point and indicated that, "deviate behavior is a normal part of behavior--but a part to be changed through education". Foley (18-572) asserted that most misconduct resulted from inadequate development (gaps in learning), neurotic development, or lack of information or understanding. Within this same framework, Tisdale and Brown (51-365) suggested that miscreant students may be driven by personality dynamics to seek out punishment. They also argued that students involved in misconduct had a greater tendency to act out difficulties rather than to verbalize them.

In an early attempt to predict behavior patterns, Warnken and Siess (53) used cumulative records to determine if relationships might exist between behavior and previous anecdotal records of students which had been kept by teachers and administrators. They concluded that the cumulative records from six to thirty years previous were related to adult psychiatric diagnosis and young adult-measured

interest patterns.

In reviewing the disciplinary referrals they handled over a ten year period, Woods and Halleck (63) estimated that approximately fifty per cent of the cases examined had a significant emotional disturbance. In those cases, they recommended some form of psychotherapy. In classifying the personality problems they handled, they indicated that, while certain problems were prevalent in both sexes, certain problems were more excessive in males. Their classification of female problems was (a) homosexuality, (b) compulsive stealing, (c) rule breaking and fighting, and (d) peculiar behavior. They classified the male problems as (a) homosexuality, (b) window peeping, (c) exhibiting genitals, (d) theft, (e) disorderly conduct--fighting or other aggressive behavior, (f) excessive and disturbing drinking, (g) obscene propositions to women, (h) showing obscene pictures to children, and (i) destruction of property. In summarizing their review, they suggested that most cases were referred because of a problem that had been detected--either overt or suspected latent behavior; and they reasoned that the females were out of proportion to the total population and the number of problems (They were a considerably smaller group.). They concluded that considerably less than ten per cent of the cases they had seen were dangerous to the college community.

In a study to determine the success or failure of emotionally disturbed students, Drasgow and Race (15) compared normal, neurotic, and psychotic students as



pre-determined by a variety of tests including the Minnesota Multiphasic Personality Inventory. They were compared on their academic success as well as their involvement in extra-curricular activities. The results of their study indicated that (a) significantly fewer psychotic students graduated from college, although approximately one third of the psychotics did graduate, (b) neurotics had the highest average of college grades, and (c) mildly disturbed students overachieve noticeably more than the normal students. From their data, they observed that although there were no psychotic students in the top academic group, approximately one-fifth of them were neurotics. In the extra-curricular group, approximately fifty per cent fell in the neurotic class. Their conclusions suggested that (1) the neurotic group is most outstanding, if not the most successful. Mildly disturbed students, neurotics, do achieve more than normal students. (2) Achievement of the severely maladjusted (psychotic) student is less than that of the normal or neurotic student. (3) The majority of each superior group (i.e., academic and social) is not disturbed. In summarizing their study, they stated: "The neurotic is often able to use some of his anxiety for motivation toward a goal. The psychotic cannot do this".

In recent years, a number of studies has been conducted using the Minnesota Multiphasic Personality Inventory<sup>3</sup>

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<sup>3</sup>From this point, the letters "MMPI" will be substituted for the words "Minnesota Multiphasic Personality Inventory."

to identify personality factors that might have value in predicting disciplinary behavior. Jackson and Clark (27-562) found significant differences between students involved in theft and those not involved, in their personal adjustment as measured by the MMPI. They concluded that stealing serves to identify individuals in greater or lesser stages of maladjustment.

In attempting to predict Juvenile Delinquency with the MMPI, Hathaway, and Monachesi (21) found that (a) the MMPI seems to provide useful categories into which a substantial number of delinquent adolescents will fall, (b) MMPI scales 4 and 9 (4=psychopathic deviate and 9=hypomania behavior) had an excitatory role in the actuarial numbers predicting the development of asocial behavior and (c) those who show no high deviation and who are thus indicated to be normal are very unlikely to be found delinquent. In their conclusions, they wrote: "To some extent personality characteristics that predispose the individual to delinquency are normal in young people" and that "delinquent boys and girls are more generally unstable than the normal population".

Clark (7) attempted to predict discipline in the residence halls with the scales of the MMPI. A comparison was made between the MMPI scores of students in troubled sections of the hall and those students in sections of the hall that were judged as the least troublesome by the residence hall counselors. He found that (a) scales 4 and 9

did predict disciplinary behavior while scale 8 was less successful, (b) that the scales were significant in differentiating the least troubled sections of the hall, and (c) scales 1, 3, 6, and 7 did not differentiate between the two groups. He concluded that individuals with high scores of scale 4, combined with a low score on scales 2, or 5 may be predictive of individual problem behavior.

In studying the MMPI patterns of college males who were disciplinary referrals, LeMay and Murphy (30) found that (a) Alcohol Misconduct and Disorderly Conduct groups had significantly higher mean scores on scales 4 and 9 than did students not referred, and (b) that students involved in theft or burglary has a significantly higher "L" scale.

Osborne, Sanders, and Young (38) also used the MMPI scales to compare deviate women from the normal college freshman women. Since most of the previous studies were concerned with males or total populations, their major concern was whether the instrument could be an effective predictor for deviate or unsocial behavior among women. They found that (a) disciplinary problem girls differed significantly from the non-offenders on the MMPI scales, (b) scales, 6, 7, 8, and 9 were significant and positively associated with the probability of delinquency, (c) the neuroticism scales (1, 2, 3) were consistent for both groups, and (d) nonoffenders are significantly more masculine in their interest patterns than problem girls. They

concluded that neuroticism does not appear to be a characteristic of college disciplinary offenders and the use of the MMPI for recognizing potential behavior problems among college freshman women would seem to be justified.

### Philosophy of Discipline

The underlying theme of this chapter is centered around the philosophical considerations of discipline. However, here certain specific elements of the topic, like the Philosophy of Discipline, the Administration of Discipline, and the Counseling and Preventative aspects of Discipline, are to be considered.

In his review of the literature pertaining to discipline, Woodruff (62-381) suggested that the idea of internal control as a significant element in discipline had persisted for a long time. For it to be successful, he stressed, "it has to be discipline that works when no one is looking". Costar (11), in reviewing the literature, indicated that the trend toward re-education and rehabilitation as a basis for working with discipline had been firmly established since early in the 1920's. Certainly, Fley (16-105), in reviewing the literature, brought out the point that most persons dealing with disciplinary behavior looked to the reason behind individual and group behavior and supported the educational and rehabilitative purposes rather than solely punitive aspects. Sillers and Feder (46-140) also supported this premise.

Writing about the philosophy of discipline, Williamson (57) indicated that discipline as punishment is no

corrective of misbehavior unless it is a part or a consequence of a counseling relationship. He stated that discipline should become a type of re-education designed to aid the individual to so understand his emotions and feelings and to so redirect them into new behavior channels that he no longer wants to or is forced to misbehave as an unsuccessful attempt to rid himself of external authority. Mueller (34-73), Coleman (9), Peiffer and Walker (40), and Clark, Hagie, and Landrus (8) supported this premise that discipline was not a negative treatment but rather that it was a positive process of learning and development. It was their suggestion, generally, that this process was best achieved through responsible participation in real-life situations.

In exploring the philosophy of discipline, Wrenn (64-633) wrote, "If we are to put ourselves in line with the most humane and intelligent thinking, we must shift in all of our concepts of discipline from the punitive to the learning emphasis". In a subsequent article, Wrenn (65) expanded upon this point. "If misbehavior is recognized as an outgrowth of the mores of a particular campus at a particular time, and the 'misbehavior' of a particular student caused by a particular pattern of background and current behavior dynamics, then a new concept of discipline is born."

In 1965, DeSena (14) suggested that three philosophies of discipline existed on the college campuses today. They are the educational philosophy of pure intellectualism,

the legislative and punitive philosophy, and the educational philosophy of personalism. In the first philosophy, the subject matter is the only major concern for those working with students. In the second philosophy, the interests of the institution are first and paramount while the interests of the students are minimal. In the third philosophy, the university assumes the total educational responsibility (i.e., social, moral, ethical) of the student. Discipline, he contended was part of the educational pattern. He indicated that the student personnel workers maintained the philosophy that disciplinary measures should always attempt to help the student develop into a well adjusted individual able to maintain his individuality and at the same time adapt to the needs of the group.

Discipline obviously results as a conflict between the values and attitudes which exist at the institution and those of the students. In administering discipline, the question arises as to who should develop the policies concerning discipline, the student or the university? In addition, a concern exists over who should be charged with the administration of discipline per se? As early as 1932, Reeves (44) raised these questions. He stated: "There is a need for immediate and careful consideration of the modification of disciplinary rules and procedures so as to bring students and college administrators to a mutual understanding regarding the need for and the enforcement of rules". In this same era, Hawkes (22-242) suggested that one disciplinary officer would be able to deal with the problem

students best because he could be uniform in his treatment of them, and he could best determine what action should be taken since their total record would be in one place and accessible to him. Mueller (33-415) indicated that, today, standards must be set in an era when we are rapidly shifting from absolute to relative standards. She further indicated that we need both a basis for these standards and an agreement over whether they should be qualitative or quantitative. She asserted that much concern existed whether we developed the standards for the "good of all" or on a sound basis.

In light of his study, Hubbell (26-264) suggested that the differences in attitudes of parents, students, student personnel administrators, and faculty members should be reckoned with by those responsible for the handling of disciplinary or misconduct cases. Prusok (42-18) noted a need for more student involvement in disciplinary processes and policy formulation in this area. He indicated that this could lead to behavior codes which are more acceptable to contemporary student populations. Prusok (41-254) also recommended that 1. Students should be involved in the policy making and judicial stages of disciplinary programs. 2. Civil offenses should be handled by civil authorities with no further action by the university. 3. Disciplinary programs should be constantly reviewed by student-faculty committees to keep in tune with the mores of contemporary society. Hodinko (24-225) supported this point when he

indicated that student personnel workers need 'true representation' of the student body in the campus-wide formulation of social or disciplinary policies. He further suggested that judicial bodies should be composed of students from all classes and social groups. Murphy and Hanna (36-74) summarized the various positions best when they indicated that, "The determination of courses of action for student offenders must involve a broad criteria. The rehabilitative and academic potential of the student along with his self and social perceptions must be taken into account". They concluded that the divergence of attitudes demonstrated by their study should serve as justification for multiple involvement in the total disciplinary process.

In developing a theory for campus discipline, Mueller (35) detailed the following steps. First, the counselor must learn the hierarchy of values and standards in the student population. She believed that students accept a position on a code of values and will give sanction to them and will, for the most part, adhere to them. Second, the self-realization of the counselor is a prerequisite for self-realization of the counselee. Third, the counselor must have a wider and deeper knowledge of our field and the forces acting upon students. She suggested that we frequently do not understand what is involved in learning. Fourth, we must realize that learning and its success depend largely on the intellectual power of the individual and his ability to bring it to bear on the tasks at hand. She suggested



that counseling might be successful if the counselor was aware of the students' personal code, his emotional involvement, and his intelligence. Fifth, discipline results from a personality in conflict with his environment. Within this framework, she believed that disciplinary counseling could be a useful and frequent learning experience for the adolescent.

When exploring the function of disciplinary counseling, Hawkes (22-242) contended that it depended upon the spirit in which the discipline was performed. He was strong in his belief that penalties can alert one to his sense of social responsibility. While Williamson and Foley (60-21) supported his general premise, they maintained that the main purpose of disciplinary counseling was to alleviate the cause of misbehavior so that it would no longer be necessary for the student to offend society. They suggested that the purpose was to cure and not to punish. Foley (18-582), however, argued that the student personnel philosophy did not imply that all students must be kept in college. He supported this point when he stated that "it is not always possible or feasible to rehabilitate a student on the campus."

Three principles for disciplinary counseling were suggested by Wrenn (64; 628-633) to reinforce the effect of the counseling aspect of discipline. He suggested that (a) the counselor should not have disciplinary authority over the individual whom he was attempting to help; (b) all student disciplinary cases should be screened through the

counseling process before the cases appeared before a disciplinary committee; and (c) although discipline must be handled in terms of the effect upon the individual, at the same time, the group must be protected. He admitted that it was both an administrative and a counseling problem. Within this framework, Williamson (57; 76-79) suggested that a fusion of discipline and counseling was possible if (a) counseling is a function of rehabilitation for the individual to find substitute channels for his repressed feelings of aggression and disappointment, (b) the prevention of further misbehavior was a function of self control learned by the student and self-discipline learned through the counseling situation, and (c) counseling was used as an aid to the student's perception and acceptance of external authority.

Within the framework of discipline, prevention is frequently mentioned as a possible and preferable solution. Williamson (58;71-81) suggested six dimensions for preventing disciplinary behavior among college students. 1. Early identification and treatment of the psychopathic deviate personality. 2. For avoidance of minor-non-pathological misbehavior, provide adequate recreational facilities and utilize them in systematic and energy recreating and morale supporting ways. 3. A periodic re-examination of rules and regulations and elimination of outmoded ones are desirable. Student involvement in the development would reduce some of this oppression. 4. The university must create an atmosphere of friendliness, concern for the

individual, and "warm up" the institution so that it is not perceived as threatening but rather as warm and affectionate. 5. Consultation with responsible student leaders on all matters affecting students will drain off some of the chaos and confusion and lead to an atmosphere of cooperation. 6. Needed also are effective instructional programs introducing students to and persuading them to accept new ground rules and also reviewing and revising these ground rules periodically. With the sound use of these dimensions he felt that many of the discipline problems could be reduced or even eliminated.

Williamson seemed best to summarize the overall philosophy toward the student and his role in the university community when he stated:

An educational institution is not justified in taking for granted that students will readily learn and even more readily accept and be guided by a new set of ground rules merely because the institution states in the official bulletin that these are the ground rules at dear old Siwash. We must learn to apply instructional and pedagogical methods effectively to this aspect of the student's college life as well as to his learning new study methods, new methods of preparing for examinations, new methods of reading more materials, and the like.

#### Related Studies Concerning Discipline

A considerable body of writing about discipline has been printed. However, a paucity of research exists. At Michigan State University, three substantive studies of discipline have been undertaken since 1958 and will be reviewed in the succeeding paragraphs. In addition, a study

of attitudes toward discipline conducted at New York University shall be reviewed with particular emphasis directed toward some of the ancillary observations noted by the investigator.

Costar (11), at Michigan State University, studied the academic adjustment of males reported for disciplinary action during their four years at the university. One problem was to establish the characteristics of the miscreant student at the time of his matriculation. He dealt with male students, both freshmen and transfers, who attended the university during the four year period from the fall quarter of 1953 through the spring quarter of 1958.

The problem was well defined, and the hypothesis developed within the framework of the study and counseling theories. Chi-square and 't' tests were used to analyze the data and were appropriate for this type of study. A .05 level of significance was used and was equally appropriate for the investigation. The population and the methods of sampling were adequately defined, and the control and experimental groups selected in a manner which would provide for easy replication. The criterion measures were highly reliable and the statistical assumptions were met. The conclusions of the study were consistent with the findings and were limited to that population.

Because of the limitations of his study, Costar was unable to state much about the characteristics of the miscreant group. However, his findings imply that the miscreant group is a less stable part of the college

population. This study may substantiate Costar's findings.

In his study of the affective and cognitive characteristics of student disciplinary offenders, Cummins (12), at Michigan State University, defined the problem and established verifiable hypotheses. The theoretical considerations were, in part, an outgrowth of the instruments used in the study. The study was concerned with the entire freshman class entering Michigan State University in the fall quarter of 1958.

The population and the methodology used were adequately defined, and the control and experimental groups selected in a manner which would provide for easy replication. The criterion measures were adequately defined and highly reliable, and met the necessary statistical assumptions for the study. The conclusions of the study were consistent with the findings and were limited to that population.

Cummins found little relationship between the instruments he used to measure disciplinary offenders and the affective and cognitive characteristics. Regarding the cognitive factors, he stated that scholastic aptitude does not appear to be a major factor in student misbehavior. For the affective characteristics, he reasoned that any existent differences might be due to an inability of the instruments used to measure the differences. However, it is possible that if Cummins had used a less subjective method of classification of his experimental group, his study may have revealed some significant findings. Cummins supported this

point when he indicated that the best reliability estimates of his classification system yielded correlations of .4, .5, and .6 respectively, using three top student personnel administrators' evaluations of the seriousness of different disciplinary situations. It is possible that considerably higher correlations may be obtained in this investigation with the use of a classification system which does not rank-order the seriousness of each disciplinary offense.

In a study of metropolitan male college students involved in disciplinary situations, Parker (39), from Michigan State University, established a relationship between disciplinary offenders and their reading-socio-economic backgrounds. His study dealt with male students who attended Michigan State University as freshmen in the fall quarter of 1958, and whose home was a standard "metropolitan statistical area".

The problem was clearly defined, and the hypothesis developed from both theoretical considerations and within the framework of the problem. The multiple discriminant analysis technique was used in analysing the data, and a .05 level of significance was established for the analysis. Both were appropriate for this type of study. Only results which reached the .07 level of significance were considered for further interpretation. The population studied was clearly specified and the methodology used in choosing the experimental and control groups was adequately defined.

No replication of the study was undertaken. The criterion measures were well defined and highly reliable, and met two of the three statistical assumptions necessary for the study. No method was found to meet the third assumption of the study. The conclusions of the study were consistent with the findings and were limited to that population.

Parker, who avoided the rank-ordering system of classifying the seriousness of disciplinary offenses used by Cummins, found some significant relationships between miscreant students and their reading-socio-economic backgrounds. This investigator feels that if this same pitfall is avoided, personality factors may be found that will have a significant relationship in identifying potential disciplinary offenders. Parker recommended that a classification for multiple offenses be incorporated in future studies of this nature. That particular recommendation will be adopted in this investigation.

Soldwedel (48), at New York University, studied the attitudes toward discipline in college to determine how students reacted toward discipline, and to develop appropriate recommendations for the administration of discipline, based on the knowledge of the offenders' attitudes. Her study included eighty-one students who were involved in disciplinary offenses during one semester.

It seemed that the problem was not clearly defined, although the hypotheses were developed within the framework of the problem. The data were analyzed with the Chi-square

technique and 't' tests which were appropriate for the study. The population was adequately defined and levels of confidence were established for the study. She neglected to establish a control group for the study. This would seem to be a grave defect. Replication of the study would be difficult since taped interviews were used and then judged by the experimenter and one other judge. The two judges were in 100 per cent agreement on the subsequent classification of the disciplinary offenders as either; accepting, ambivalent, or rejecting of disciplinary action. The criterion measures were defined and met the statistical assumptions of the study. No conclusions were drawn, and the recommendations were not necessarily a function of the study.

On the other hand, several of Soldwedel's observations are of interest for this investigation. She noted that more Health and Physical Education majors were involved in discipline than were represented in curricula distributions. She also established that twenty-five per cent of the disciplinary cases were students who resided in two specific counties with the State. These observations suggest a further expansion of this question might be of value. In addition to specific majors, an exploration between disciplinary offenders and their general curriculum will be undertaken to see if significant relationships exist. A review of other demographic data shall also be a part of this investigation to determine if Soldwedel's



observations are further substantiated.

### Summary

This chapter has explored attitudes towards and practices of discipline, both historically and presently. Although several authors suggested that some changes had occurred, the predominant theme was that little change had taken place over the years. Generally, authors believed misbehavior was dealt with on the basis of individual treatment for each offender. There was agreement that the terminology used in discipline had changed.

Internal and external sources were suggested as causative factors of misbehavior. Most authors supported this position, citing the home, social and cultural forces and, the university as contributing factors. Authorities contended that the environment and background, personal adjustment, and the new environment might be causes. Most authors, however, claimed that the new environment was a major cause of misbehavior. One author reasoned that student immaturity rather than personality or environmental conditions was significant.

The analysis of differentiating characteristics between miscreant and non-miscreant students showed some traits, but, authors reached no unity about the factors. Most agreed that both types of students were equal in ability but that the achievement of the miscreant student was less. More males than females were involved in misbehavior but no reason was posited for this difference.

Authorities contended that misbehavior occurred most frequently during the students' freshman and sophomore years at the university. Residence halls, fraternity and sorority houses and off-campus rooming houses were cited as the locations where most misbehavior occurred, but disagreement existed as to which had the highest incidence of disciplinary problems.

Student values and attitudes were considered as a dimension of the overall disciplinary problem. Whether a student held to traditional or emergent values had a relationship to the problem. Authorities believe that most students' values and attitudes changed in the first two years in college. Females experienced the greatest change. There was general agreement that college had little influence on the religious values of students, but a core of common moral standards, it was admitted, existed among all student cultures. Student values supported severe disciplinary action for students involved in theft for material gain or cheating which involved collusion, but failed to endorse university alcoholic beverage policies. Personal behavior codes were more important to students than university rules. Investigation revealed also conflicting attitudes among students, parents, faculty members, and student personnel workers toward disciplinary problems.

Personality factors were related closely to the involvement of students in disciplinary situations. Although most students involved in all phases of

university life were considered emotionally sound, neurotic and psychotic students contributed to misbehavior. Prediction of miscreant behavior among the emotionally disturbed groups was suggested and supported by the psychopathic deviate, hypomania, and 'L' scales of the Minnesota Multiphasic Personality Inventory. This instrument, it was proved, had scales which were significant predictors for females involved in disciplinary problems.

While several different philosophies toward misbehavior were described, the most common belief focused on the desirability of rehabilitating and re-educating the offender. Most felt that a shift from punishment to learning was necessary since punishment, by itself, was not an effective tool for the prevention of further disciplinary problems. Any effective program necessitated multiple involvement in the disciplinary process. Students should be involved in both determination of policy and the actual administration of discipline. Principles of counseling were discussed and a method for the fusion of disciplinary action and counseling was recommended. Authorities believed that the primary function of counseling in the disciplinary situation was to alleviate the cause of misbehavior, and six methods to prevent disciplinary behavior from occurring were presented as a possible solution to the problem.

Several pertinent studies concerning discipline were reviewed because they seemed to give direction to this study. As a result of these studies, the investigator

proposes to avoid subjective methods of classifying disciplinary offenders, to incorporate a classification for multiple offenses, to use the multiple discriminant analysis technique, and to expand the study to include academic majors and certain demographic data.

## CHAPTER III

### DESIGN

#### Population and Sample

For this study, all students who started as freshmen at Central Michigan University in the fall of 1960 were used. Students not included in the testing program that fall and students with inadequate or unusable data were excluded. The final population consisted of 1,269 students.

The experimental sample consisted of 128 students. These students were involved in a disciplinary situation which became a matter of record in the office of the Dean of Students during the four year period from 1960 to 1964. The sample consisted of ninety-two males and thirty-six females. This sample was referred to as the "disciplinary" group.

A control group of equal size was randomly selected from the students who started in 1960 and who graduated in June of 1964. Their records were free of disciplinary action during that span of time. Sex differences were matched in the sampling. This sample was referred to as the "non-disciplinary" group.

#### Classification of Disciplinary Situations

All students in the experimental group were classified into five categories according to their disciplinary

offenses. These classifications were:

1. Violation of university regulations or standards of conduct.
2. Involvement in a misdemeanor as determined by law related to the use of alcoholic beverages.
3. Involvement in other misdemeanors or felonies as determined by law.
4. Involvement in two different disciplinary violations at the same time.
5. Involvement in two disciplinary violations at different periods of time during their tenure at the university.

This classification system avoided several of the problems of previous investigators in comparable studies. First, it avoided the limited size of a given category, and, second, it incorporated an area which previously had not been studied; the multiple offense category.

An independent panel of three judges who were teachers was randomly selected from the faculty at Central Michigan University to classify the miscreant students into the five disciplinary categories. The reliability between the classification of the judges were determined by using the analysis of variance technique and the inter-judge reliability was found to be .46, .88, and .93.

The results of the judge's classifications are reported in Table 3.1.

#### Collection of the Data

The data concerning the miscreant students and the disciplinary situation in which they were involved were gathered from the restricted files in the office of the Dean of Students. The data was coded and placed on a 5 x 7 card

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TABLE 3.1 Classification of the Miscreant Students into the Disciplinary Categories

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<u>Disciplinary Categories</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
I	41	15	56
II	8	4	12
III	10	2	12
IV	13	12	25
V	<u>20</u>	<u>3</u>	<u>23</u>
Total	92	36	128

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for the judges to interpret and classify into the five disciplinary categories.

Data related to the sex, general curriculum, academic majors, semester of discipline, and tenure at the university for both the miscreant and non-miscreant students were gathered from the permanent records in the office of the Registrar. This information covered the years 1960 - 1961, 1961 - 1962, 1962 - 1963, and 1963 - 1964.

In addition, certain test data and biographical information gathered by the Teacher Education Project<sup>4</sup> was used in the study.

#### Instrumentation

The two instruments used in this study were the

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<sup>4</sup>A special project started in the fall of 1960. A number of tests were administered to Central Michigan University students to determine their achievement, attitude, personality, and cultural and economic backgrounds. The project was supported by a grant from the Ford Foundation.

Biographical Data Sheet and the Omnibus Personality Inventory.

Biographical Data Sheet<sup>5</sup>

The demographic data were gathered by use of a biographical data sheet which was an outgrowth of the Teacher Education Project. The data sheet consisted of a sixty item questionnaire concerning students' religious activities, geographic location from the university, size of community, father's occupation, size of graduating class, rank in graduating class, college plans, who influenced their coming to college, their need for financial assistance, their family relations, and a variety of other information. The data gathered by this method were the students' own perceptions or estimates of the question involved and were weighted accordingly in interpreting the results.

Several facts emerged from a study of the findings of the Teacher Education Project. 1. Practically all of the students lived fewer than 200 miles from the university. 2. Over sixty-seven per cent of the students came from communities of 25,000 or less in population. 3. Approximately fifty-four and one half per cent of the students came from "white collar" homes. 4. Little if any relationship existed between academic achievement and the, size of high school class, distance from the university, and size

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<sup>5</sup>See Appendix A



of home community. 5. There was a significant relationship between high school class ranking and academic achievement. Finally, parents were the major influencing factor on fifty-eight per cent of the students to continue on in higher education.

For this study, the investigator used the data concerning the size of community, father's occupation, size of family, and the geographical distance from the university. These items were used as variables since the literature and previous research suggested that relationships might exist between them and the involvement of students in disciplinary situations.

The investigator's and other student personnel workers' experience in dealing with disciplinary situations suggested that marital status of parents, father's educational level, mother's educational level, rank in class, size of class, involvement in extracurricular activities, personal educational aspirations, religious preference, religious attendance, peer-parental relationships, and the home living conditions may be items that have a relationship to miscreant behavior and will be incorporated as variables in the study.

#### Omnibus Personality Inventory<sup>6</sup>

The Omnibus Personality Inventory was developed at the Center for the Study of Higher Education, University of California, under the leadership of T. R. McConnell, chairman of the Center. It is being used and revised

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<sup>6</sup>See Appendix B

continuously in basic research studies. The major criteria for selection of scales were appropriateness for describing high aptitude students and the essential stability of traits associated with important or central aspects of behavior.

Form "C" of the Omnibus Personality Inventory (the current instrument) consists of 575 items which were derived from many sources. Major contributions to the scales came from the Minnesota T-S-E Introversion-Extroversion Inventory, The Vassar College Attitude Inventory, The Minnesota Multiphasic Personality Inventory, and The California Psychological Inventory. Numerous other sources were used for items as well as sixty new items which were developed by the staff of the Center for the Study of Higher Education.

The scales are listed below, along with the letter symbols and the number of items (in parentheses) and are followed by brief definitions. In most cases, a high score by an individual is indicative of a description of the personality characteristic, while a low score would be the logical opposite.

Thinking Introversion (TI) (60 items) High scorers indicate reflective thought, particularly of an abstract nature. Interest in a variety of areas such as literature, art, and philosophy. Low scores indicate a preference for overt action and tend to evaluate ideas on practical, immediate application.

Schizoid Functioning (SF) (107 items) High scorers indicate attitudes and behavior of socially alienated

persons. These are feelings of isolation, loneliness, and rejection. Other people may be avoided and feelings of hostility and aggression may be present. High scorers may also indicate confusion, day dreaming, disorientation and fear of loss of control.

Social Maturity (SM) (144 items) High scorers are flexible, tolerant and realistic in their thinking. They are not dependent upon authority, rules or rituals for managing social relationships. High scorers are frequently interested in intellectual and esthetic matters and are not authoritarian.

Social Introversion (SI) (54 items) High scorers withdrew from social contacts and responsibilities. They display little interest in people or in being with them. Low scorers seek social contacts and show satisfaction in such contacts.

Complexity (CO) (67 items) High scorers are tolerant of uncertainties and are fond of novel and new situations and ideas. High scorers prefer to deal with complexity rather than simplicity and enjoy diversity. Low scorers tend to be compliant and conservative, accepting authority and tradition.

Originality (OR) (91 items) High scorers are independent in making judgements, indicate freedom of expression and rejection of suppression. High scorers show novelty of construction and insight and verbal fluency. A preference shown for complexity and non-authoritarianism.

Estheticism (ES) (51 items) High scorers indicate

diverse interest in artistic matters and activities. These interests include literature and dramatics as well as painting, sculpture, and music.

Theoretical Orientation (TO) (88 items) High scorers indicate interest in science and scientific activities. High Scorers are logical, rational, and critical in a scientific approach to problems.

Non-authoritarianism (NA) (20 items) High scorers tend to be free from authoritarian thinking and are democratic in their beliefs. Low scorers are conventional, rigid, prejudiced and may be emotionally suppressed.

Impulse Expression (IE) (124 items) High scorers value sensation, have an active imagination. Their thinking is often dominated by feelings and fantasies. There is a tendency to express impulses and gain satisfaction in conscious or overt action.

Religious Liberalism (RL) (55 items) High scorers are skeptical of religious beliefs and practices and tend to reject most of them, especially those that are orthodox or fundamentalistic.

Liberalism (LI) (80 items) High scorers are independent of authority and show a rejection of conservatism. They oppose infringements on the rights of others. They are non-judgemental, realistic, and intellectually liberal.

Developmental Status (DS) (72 item) This scale differentiates between older and younger college students. High scorers express more rebelliousness toward authority,

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especially family, school or state. They are freer to express impulses and less authoritarian than low scorers.

The validity of the Omnibus Personality Inventory to measure personality factors among the general college population has been established. Correlations with other measures and average scores for relatively well-defined groups provide the core of validation data. Correlations of the Omnibus Personality Inventory scales with other inventories are listed in the Omnibus Personality Inventory Research Manual (36;45-50).

The validity of the Omnibus Personality Inventory to identify potential disciplinary offenders has not been established. If the findings of this investigation are positive, use of the instrument for this purpose may be justifiable.

The reliability of the original instrument was established by the test-retest method. Data concerning the reliability coefficients of the scales and the inter-correlations of the various scales are listed in the Omnibus Personality Inventory Research Manual (36;11-23). The reliability coefficients for the scales of the present form of the instrument (Form C) ranged between .82 and .93.

The analysis of variance technique was used to determine the reliability coefficients for the scales to identify potential disciplinary offenders.<sup>7</sup>

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<sup>7</sup>See Appendix C

### Statistical Hypothesis

For purposes of analysis, the hypothesis is stated in the null form. Since the "disciplinary" group consisted of male and female students, a separate analysis was made for each sex. The same hypothesis was tested for each analysis.

#### Null Hypothesis

There is no difference between students involved in various disciplinary classifications and students who are not involved in disciplinary situations with measures of personality, demographic data, academic majors, general curriculum and their tenure at the university.

#### Alternate Hypothesis

It is possible to differentiate between students involved in various disciplinary classifications and students who are not involved in disciplinary situation with measures of personality, demographic data, academic majors, general curriculum and their tenure at the university.

### Analysis

For this type of study it is important that the statistical technique which is used can; identify the direction in which groups differ, measure the distance between groups, predict the group to which an unclassified individual belongs, give maximum treatment to any interaction which may exist, and determine if the findings are significant. Takasuoka and Tiedemann (47) suggested that the best statistical technique for this purpose was the multiple discriminant analysis. Saupe (43) supported their suggestion when he indicated that "the multiple discriminant analysis will be increasingly used in the multi-group, multi-variate

research in the understanding of complex educational phenomena". Considering the needs of the study and the ability of this technique to meet them, it was decided to use the multiple discriminant analysis.

### Multiple Discriminant Analysis

The multiple discriminant analysis technique, according to Cooley and Lohnes (10;61-117), is designed to determine linear combinations which maximize the discrimination among groups. By utilizing all independent variables in a single analysis, the technique has the ability to detect differences that may well be missed when using other more common techniques. Further, it has the advantage of providing a parsimonious solution to the discrimination problem.

The linear combinations which maximize the difference among groups and minimize the differences within groups are derived from the determinantal equation:

$$| A - \lambda W | \quad V = 0$$

Where:

A is the among group dispersion

W is the within group dispersion

$\lambda$  is the latent root of the system

V is the latent vector or discriminant coefficient

The analysis procedure is initiated by computing the among (A) and within (W) groups sums of squares and cross-products matrices, which are used in the formula and solved for  $\lambda$  and V. This procedure also results in inter-correlations, means, standard deviations, variances, and



covariances for all variables in each of the six groups and for the total group. A special program for the computer was used to compute the within and among groups dispersion and to provide the solution to the determinantal equation.

The elements of among group dispersion are defined by the following formula:

$$A_{ij} = \sum_{k=1}^6 N_g (\bar{X}_{ik} - \bar{X}_i) (\bar{X}_{jk} - \bar{X}_j)$$

Where:  $A_{ij}$  is the element in the  $i$ th row and the  $j$ th column of the matrix  $A$

$\bar{X}_{ik}$  is the mean score on test  $i$  in group  $k$

$\bar{X}_{jk}$  is the mean score on test  $j$  in group  $k$

$\bar{X}_i$  is the grand mean score on test  $i$

$\bar{X}_j$  is the grand mean score on test  $j$

$N_g$  is the number of persons in group  $g$

$K$  is the subscript denoting groups

The elements of within group dispersion are defined by the following formula:

$$W_{ij} = \sum_{k=1}^6 \left\{ \sum_{n=1}^{N_g} (X_{ikn} - \bar{X}_{ik}) (X_{jkn} - \bar{X}_{jk}) \right\}$$

Where:

$W_{ij}$  is the element in the  $i$ th row and the  $j$ th column of the matrix  $W$

$\bar{X}_{ik}$  is the mean score on test  $i$  in group  $k$

$\bar{X}_{jk}$  is the mean score on test  $j$  in group  $k$

$X_{ikn}$  is the score on test  $i$  for the  $n$ th person

$X_{jkn}$  is the score on test  $j$  for the  $n$ th person in group  $k$

$N_g$  is the number of persons in group  $g$

$k$  is the subscript denoting groups

$n$  is the subscript denoting individuals

The elements of the among and within group dispersions were inserted into the program, solution of determinantal equation,  $|A - \lambda W| = 0$ , for the Michigan State University Computer and solved. In general, there are more than one solution-- $V$  and the associated  $\lambda$ -- to the determinantal equation. The first solution of the determinantal equation maximizes the discriminant criterion ( $\lambda$ ) which is the ratio "among groups" variance to "within groups" variance if weighted by the first linear combination ( $V$ ). The second linear combination maximizes ratio of the residual among groups variance to residual within groups variance after the effects of the first combination has been removed. Subsequent linear combinations are residual ratios after the effects of the previous combinations have been removed and these combinations continue to be produced until the residual is reduced to a negligible amount. In this model, the number of meaningful linear combinations is limited to one less than the number of groups, providing the number of related variables is greater than the number of groups.

### Assumptions

The basic assumption of the multiple discriminant analysis technique is that there is a random sampling from multivariate normal populations with equal covariances. This assumption is basic to the testing of the hypothesis

that the population value of a given  $\lambda$  is equal to zero. If any one  $\lambda$  or if the sum of them is significant, real group differences may be assumed according to Saupe (43-3). The writer was unable to find a method by which this assumption could be tested.

### Summary

The population included all students who started as freshmen in the fall semester of 1960. The experimental group consisted of ninety-two male and thirty-six female students who were involved in a disciplinary situation during the four year period from 1960 to 1964. The control group, an equal number of students, matched for sex, were not involved in a disciplinary situation during the same period of time.

The disciplinary group was classified by an independent panel of judges for their: violation of university regulations or standards of conduct, involvement in a misdemeanor as determined by law related to the use of alcoholic beverages, involvement in other misdemeanors or felonies as determined by law, involvement in two different disciplinary violations at the same time, and involvement in two disciplinary violations at different periods of time during their tenure at the university.

The major portion of data for the study was gathered from the offices of the Registrar and the Dean of Students. Some additional data were gathered by the Teacher Education Project.

The instruments used in the study were a Biographical Data Sheet and the Omnibus Personality Inventory. The Omnibus Personality Inventory was a relatively new instrument designed to measure personality factors and was explained in detail.

The statistical method used for the study was the multiple discriminant analysis technique. The statistical computations were accomplished by the use of the Michigan State University computer.

## CHAPTER IV

### ANALYSIS OF DATA

Each individual's scores on the twenty-nine variables from both the Omnibus Personality Inventory and the biographical data sheet were computed and coded on IBM cards. A second IBM card was prepared for each individual and was coded for their sex, general curriculum, academic majors, semester of discipline, and tenure at the university. The second card also included the judges classification of the individual into one of the five "disciplinary" groups or the "non-disciplinary" group. The two IBM cards on each individual were then merged into one master data card. The master data card on each individual was then fed into the computer and was tested with the multiple discriminant analysis technique. The technique computed the among and within groups sums of squares, cross-products matrices, intercorrelations, means, standard deviations, variances, and covariances for all variables in each of the six groups and for the total group. To aid in understanding the basic relationships between the variables, the means and standard deviations were listed in Appendix D.

#### Solution of the Discriminant Function

The solution of the determinantal equation  $|A - \lambda W| = 0$ , where  $\lambda$  is the latent root or discriminant function, was required to test the null hypothesis:

There is no difference between students involved in various disciplinary classifications and students who are not involved in disciplinary situation with measures of personality, demographic data, academic majors, general curriculum, and their tenure at the university.

Rao (43) presented a method of testing the statistical significance of latent roots among several groups when multivariate data were used. The formula for testing the significance of the discriminant functions was as follows:

$$\text{Chi-square} = [N-1/2 (p + k)] \log_e (1 + \lambda)$$

Where:

N = the total sample of individuals in the study

p = the total number of variables

k = the total number of groups

$\lambda$  = the discriminant function or latent root

The distribution of the degrees of freedom among the various roots were  $p(k-1)$  ( $= (p + k - 2)$  for  $\lambda_1$ ,  $(p + k - 4)$  for  $\lambda_2$ , + ... (Each term being 2 less than the previous one.)

The solutions to the above equations can be referred to a common table of Chi-square with the appropriate degrees of freedom.

The latent roots, Chi-square values, degrees of freedom, significance levels, and percentage of trace of the deviations are reported in descending order in Table 4.1 for both males and females.

It should be noted that in Table 4.1 the first two latent roots reached the .05 level of significance for both males and females. In addition they also accounted for



sixty percent of the trace of the deviation.

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TABLE 4.1 Latent Roots, Chi-square Values, Degrees of Freedom, Statistical Significance Levels, Percentage of Trace in Descending Order of Latent Roots for Males and Females.

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Latent Root	Chi-Square	Degrees of Freedom	Significance Level	Percentage of Trace
<b>Males</b>				
.5600	74.711	33	.0001*	39.1
.3126	45.708	31	.0401*	21.9
.2855	42.199	29	.0515	20.0
.1550	24.218	27	.60	10.8
.1174	18.660	25	.85	8.2
<b>Females</b>				
1.5681	55.648	33	.0068*	33.2
1.3741	51.014	31	.0110*	29.1
.8372	35.888	29	.18	17.7
.6125	28.191	27	.40	13.0
.3286	16.764	25	.85	6.96

\* = indicates that the function was significant at the .05 level.

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In the analysis, the mean vectors or functional weights<sup>8</sup> were computed for each variable. The variables with the largest functional weights were the largest contributors to group separations for that latent root.

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<sup>8</sup>The functional weights for the significant latent roots are listed in Appendix E.



The variables with the largest functional weights for males were personal educational aspirations and peer-parental relationships on the first latent root, and rank in class and impulse expression on the second latent root.

The variables with the largest functional weights for females were rank in class and involvement in extra-curricular activities on the first latent root, and religious attendance and rank in class on the second latent root.

In interpreting the variables with the largest functional weights, the following results were found. If an individual's scores on the variables were low, it was quite likely that he would be involved in miscreant behavior. If his scores on the variables were high, it was less likely that he would be involved in miscreant behavior. These results were consistent for both males and females. A description of all of the variables is listed in the appendix.<sup>9</sup>

In the analysis the center points or centroids were computed for each group. This was accomplished by taking each individual's scores on all of the variables and combining them into a single discriminant score. The discriminant scores for the individuals in each group were then transposed into group centroids for each latent root or discriminant function. The group centroids for the two significant discriminant functions for both males and females are listed in Table 4.2.

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<sup>9</sup>See Appendix F.



Table 4.2 Group Centroids of the Significant Discriminant Functions for Males and Females.

Group	Discriminant Functions - Males		Discriminant Functions - Females	
	I	II	I	II
1	-2.7524	-2.6366	3.3951	1.1043
2	-2.4174	-2.1019	3.1269	.4948
3	-2.7519	- .5994	-.1695	.7503
4	-2.7548	-2.3966	3.1672	2.5640
5	-2.7844	-2.2404	2.8221	3.5840
6	-1.2768	-2.2547	2.7350	2.1642

#### Interpretation of the Discriminant Functions

For purposes of interpretation, the significant discriminant functions were described in discriminant or two dimensional space. This was accomplished by plotting the group centroids in discriminant space for each of the significant discriminant functions. The group centroids for the first discriminant function are plotted on the X axis and the group centroids for the second discriminant function are plotted on the Y axis. Graphic representation of the significant discriminant functions for males and females are listed in Figures 4.1 and 4.2.

In Figure 4.1 it should be noted that on the first discriminant function for males there were two group points of separation. The non-disciplinary group ( $X_6$ ) was well separated from the disciplinary groups. On the second



discriminant function there were two group points of separation with the misdemeanor and felony group ( $X_3$ ) being well separated from the other groups. In discriminant space there were three points of concentration for the six groups with the non-disciplinary group ( $X_6$ ) and the misdemeanor and felony group ( $X_3$ ) being well separated from the other groups.

In Figure 4.2 it should be noted that on the first discriminant function for females there were two group points of separation. The misdemeanor and felony group ( $Y_3$ ) was well separated from the other groups. On the second discriminant function there were three group points of separation with violation of university regulations ( $Y_1$ ), alcoholic beverages ( $Y_2$ ), and misdemeanors and felonies ( $Y_3$ ) in one group, the non-disciplinary ( $Y_6$ ) and multiple offenses at the same time ( $Y_4$ ) in a second group, and multiple offenses at different times ( $Y_5$ ) in a third group. In discriminant space there were four points of concentration for the six groups with the misdemeanor and felony group ( $Y_3$ ) being well separated from the other groups. Violation of university regulations ( $Y_1$ ) and alcoholic beverages ( $Y_2$ ) formed the second group, multiple offenses at the same time ( $Y_4$ ) and the non-disciplinary ( $Y_6$ ) formed the third group, and multiple offenses at different times ( $Y_5$ ) formed the fourth group.

#### Observations

It was noted that the general curriculum, academic

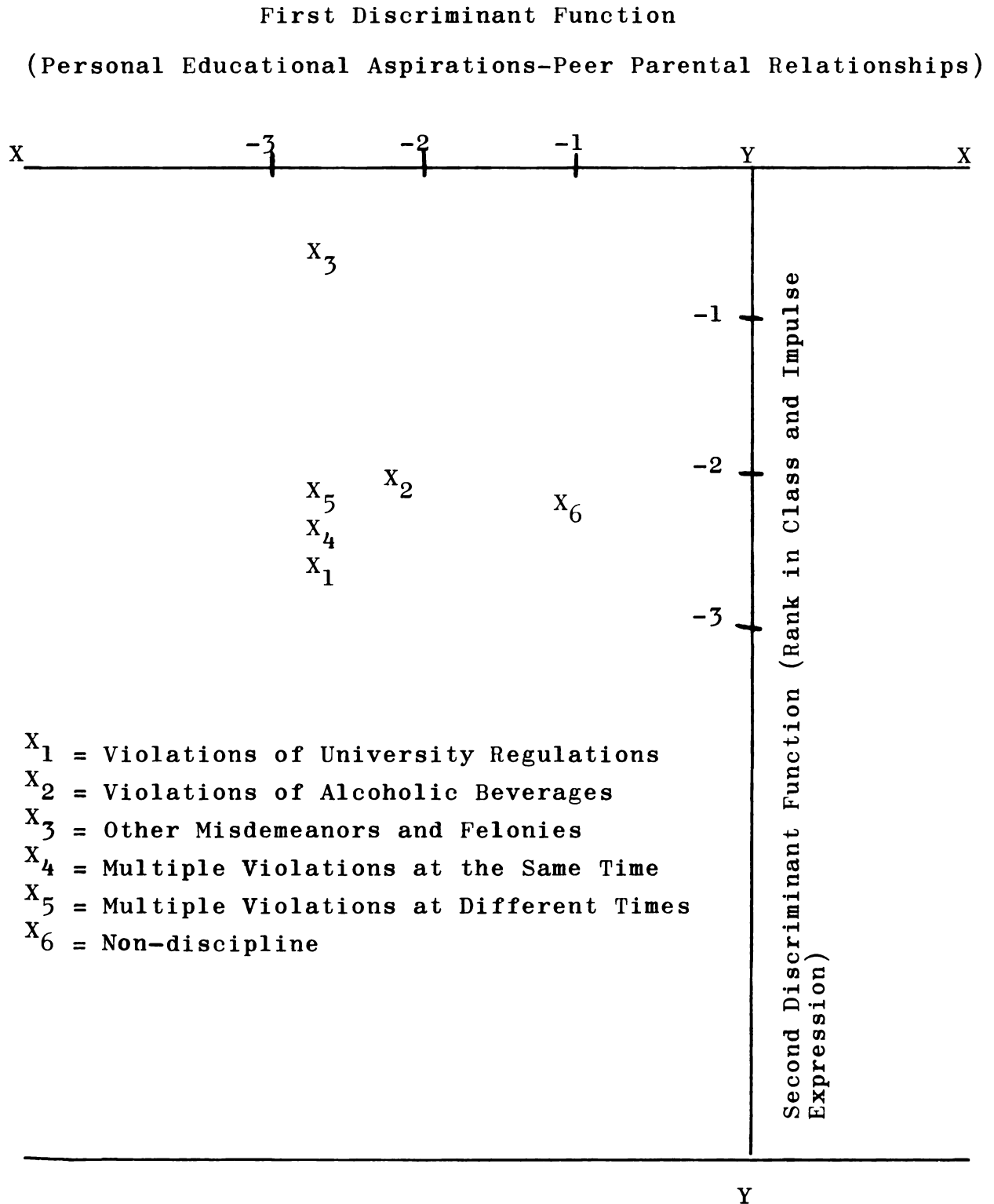


Figure 4.1 Graphic Representation of the Male Group Centroids in Discriminant Space for the First Two Discriminant Functions.

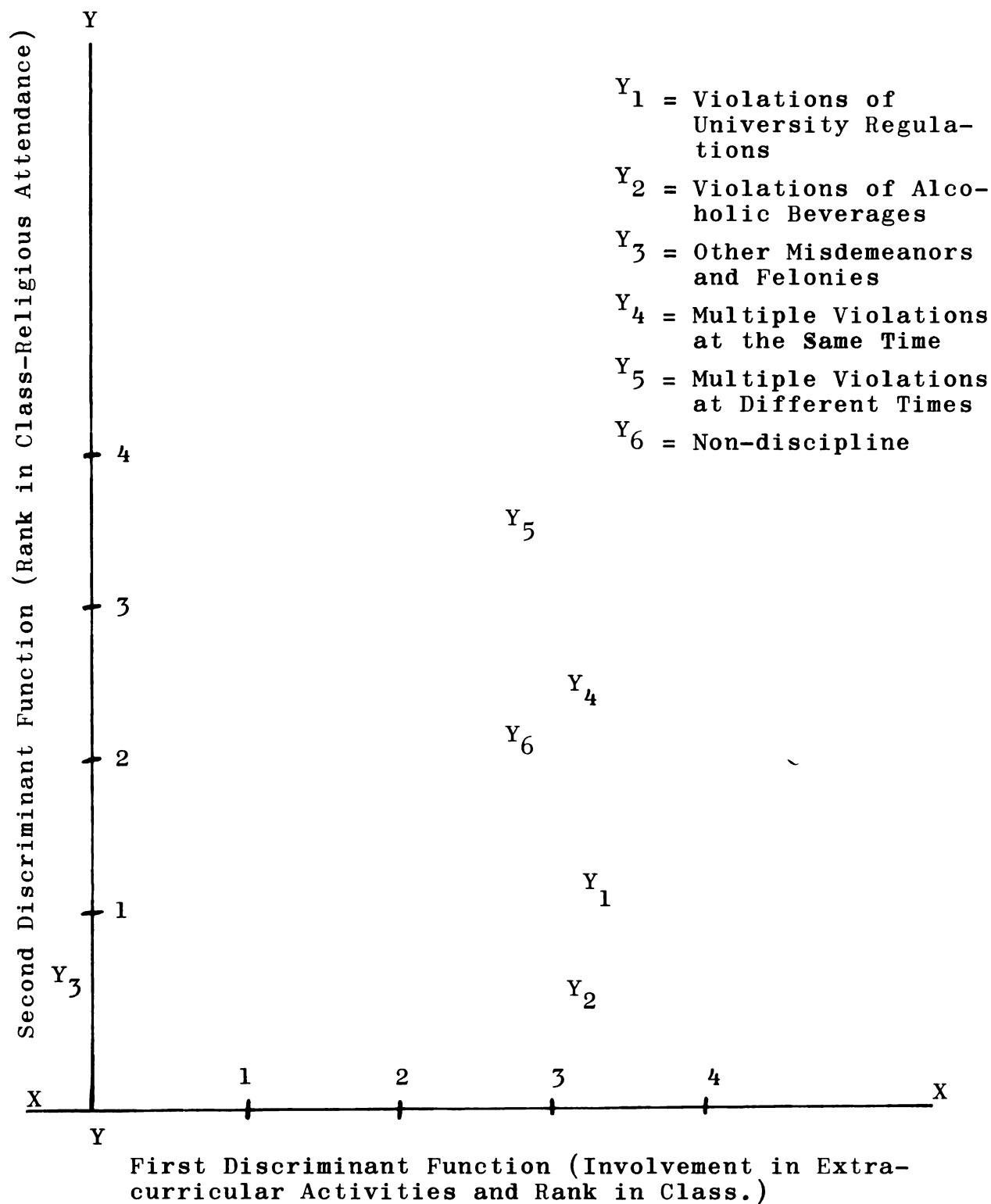


Figure 4.2 Graphic Representation of the Female Group Centroids in Discriminant Space for the First Two Discriminant Functions.

majors, and the semester that the disciplinary act occurred produced the following results.

For the students who were involved in disciplinary situations, 46% were on an education curriculum, 19% were undecided, and the remaining 35% were scattered over the four other curriculums. This was proportionate to the general curriculum distribution for all students at the university at the time of the study.

The miscreant students were represented in 21 different academic majors with physical education, commerce, and social science having the largest representation. This observation did not support Soldwedel's (48) contention that physical education majors were involved in miscreant behavior out of proportion to their curricular distribution.

While miscreant behavior occurred during each of the eight semesters, the second semester was the largest and accounted for 38% of the total. Overall, the first two years of college accounted for approximately 84% of the miscreant behavior. In addition, the total number of students involved in miscreant behavior accounted for less than 3% of the total student body enrollment for the period of the study. These observations were expected and supported previous research cited in the review of the literature.

### Summary

The null hypothesis was tested by using the chi-square technique to test the significance of the latent roots or discriminant functions. It was found that the first two



discriminant functions were significant at the .05 level of confidence for both the males and females. It was also found that the first two discriminant functions accounted for over 60% of the trace of the deviation for both males and females.

The variables that made the largest contribution to the discrimination for males were personal educational aspirations and peer-parental relationships on the first discriminant function, and rank in class and impulse expression on the second discriminant function.

The variables that made the largest contribution to the discrimination for females were involvement in extra-curricular activities and rank in class on the first discriminant function, and rank in class, and religious attendance on the second discriminant function.

If an individual's scores on the contributing variables were low, it was quite likely that he would be involved in miscreant behavior. If his scores were high, it was less likely that he would be involved in miscreant behavior. This was consistent for both males and females.

The significant discriminant functions were illustrated graphically in discriminant space for both males and females. For the males, there were three points of concentration for the six groups with the non-disciplinary group and the misdemeanor and felony group being well separated from the other groups. For the females, there were four points of concentration for the six groups with the misdemeanor

and felony group being well separated from the other groups. Violation of university regulations and alcoholic beverages formed the second group, multiple offenses at the same time and non-disciplinary formed the third group, and multiple offenses at different times formed the fourth group.

Several additional observations indicated that, 46% of the miscreant students were on an education curriculum, 21 different academic majors were represented in the miscreant group, 38% of the miscreant behavior occurred during the second semester, the first two years of college accounted for approximately 84% of the miscreant behavior, and students involved in miscreant behavior accounted for less than 3% of the total student body enrollment.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The summary will be divided into three parts as follows: purpose, methodology, and results.

#### Purpose

The purpose of this study was to contribute to the basic understanding of the factors concerning college students who became involved in disciplinary situations. It was intended to make this contribution by determining whether or not it was possible to discriminate between miscreant and non-miscreant students with measures of personality, demographic data, academic majors, curriculum, and their tenure at the university. It was further intended to determine if these factors or the sex of the student had any bearing on the type of disciplinary situation in which he became involved.

If possible, this information could then afford the university an opportunity to aid the potential miscreant student in re-education process before he became involved in a disciplinary situation.

#### Methodology

The population included all students who started as freshmen in the fall of 1960. The experimental group consisted of ninety-two male and thirty-six female students who were involved in a disciplinary situation during the four

year period from 1960 to 1964. The control group, an equal number of students, matched for sex, were not involved in a disciplinary situation during the same period of time.

The disciplinary group was classified by an independent panel of judges for their: violation of university regulations or standards of conduct, involvement in a misdemeanor as determined by law related to the use of alcoholic beverages, involvement in other misdemeanors or felonies as determined by law, involvement in two different disciplinary violations at the same time, and involvement in two disciplinary violations at different periods of time during their tenure at the university.

Data were gathered on each individual concerning his sex, general curriculum, academic major, semester of discipline, tenure at the university, scores on the Omnibus Personality Inventory, and certain other biographical information.

The data were analyzed by the multiple discriminant analysis technique which has the ability to detect differences that may well be missed by using other more common techniques.

### Results

Statistical tests of the latent roots by the chi-square technique indicated that the first two latent roots for males and females were significant at the .05 level of confidence.

The variables that made the largest contributions

to the discrimination were: personal educational aspirations and peer-parental relationships on the first discriminant function, and rank in class and impulse expression on the second discriminant function for males: and involvement in extracurricular activities and rank in class on the first discriminant function, and rank in class and religious attendance on the second discriminant function for females. If an individual's scores on the variables were low, it was quite likely that he would be involved in miscreant behavior. If his scores were high, it was less likely that he would be involved in miscreant behavior. This was consistent for both males and females.

The significant discriminant functions were illustrated graphically in discriminant space for both males and females. For the males, the non-disciplinary group and the misdemeanor and felony group were well separated from the other groups. For the females, the misdemeanor and felony group was well separated from the other groups.

### Conclusions

Tempered by the limitations of the study and in keeping with the results, it was concluded that there tend to be certain variables which differentiate between males who became involved in disciplinary situations and those who do not. The specific variables which aided in the differentiation were personal educational aspirations, peer-parental relationships, rank in class, and impulse expression. It was also concluded that the variables which were tested

do not differentiate between females who became involved in disciplinary situations and those who do not.

Graphic representation in discriminant or two dimensional space led to the conclusion that it may well be possible to differentiate between the misdemeanor and felony group and the other groups for both males and females.

It was further noted that the variable rank in class existed as a contributing variable for both males and females. This led to the implied conclusion that it may be possible that the variable rank in class may differentiate equally well between the misdemeanor and felony group and the other groups for both males and females.

### Recommendations

It is recommended that future research in this area:

1. Sample a wider range of academic institutions.
2. Sample larger numbers in each group
3. Expand upon the variables that made the largest contributions to the discrimination in this study.
4. Explore other methods of classifying the disciplinary offenders.
5. Explore additional personality instruments for their potential to identify disciplinary offenders.

In addition it is recommended that a method be devised to determine if the non-disciplinary group was truly "free" of miscreant behavior.

It is further recommended that a study be undertaken to determine if differences might exist for those

**s t u d e n t s** who were involved in disciplinary situations  
**w h i c h** were either not reported to the office of the Dean  
**o f   S t u d e n t s** or were not discovered.

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## APPENDIX



## APPENDIX A



# ATTITUDE INVENTORY

OPI—Form C

This is not an ability or achievement test, but a questionnaire for reporting your own opinions and feelings. It is a result of extensive studies of college students and other groups.

At the top of the special answer sheet write your name, college, class, date of birth, age and sex. Read each of the numbered statements in this booklet and decide whether it is *true as applied to you* or *false as applied to you*. Mark your answers on your answer sheet *using only the special pencil provided*.

Look at the example of the answer sheet shown here. If a statement is TRUE or MOSTLY TRUE for you, blacken between the dotted lines in the column headed T (as in 1 at the right). If a statement is FALSE or NOT USUALLY TRUE for you, blacken between the lines under F (see 2 at the right). Make your marks heavy and black. *Erase completely* any answer you wish to change.

	T	F
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Do not leave any blank spaces if you can avoid it.* Be sure that the number of each statement agrees with its number on the answer sheet. **WORK RAPIDLY.**

DO NOT MAKE ANY MARKS ON THIS BOOKLET

---

1. I would like to learn more about the history of human thought.
2. Once I have made up my mind I seldom change it.
3. Society puts too much restraint on the individual.
4. The trouble with many people is that they don't take things seriously enough.
5. I set a high standard for myself, and I feel others should do the same.
6. Nothing in life is worth the sacrifice of losing contact with your family.
7. A person who works hard has a right to be successful in his field.
8. I like to know some important people because it makes me feel important.
9. I prefer to engage in activities from which I can see definite results rather than those from which no tangible or objective results are apparent.
10. I analyze what I like or dislike about a movie or play which I have seen.
11. I enjoy reading essays on serious or philosophical subjects.
12. When moving pictures glorify criminals, they undermine the morals of children.
13. If several people find themselves in trouble, the best thing for them to do is to agree upon a story and stick to it.
14. I think I am no more strict about right and wrong than most people.
15. I like to discuss the values of life, such as what makes an act good or evil.
16. I am certainly lacking in self-confidence.
17. I pray several times a week.
18. I give more attention to the action of the story than to the characterizations or to the form and style of the literature I read.
19. I am more realistic than idealistic, that is, more occupied with things as they are than with things as they should be.
20. I have often either broken rules (school, club, etc.) or inwardly rebelled against them.
21. Politically I am probably something of a radical.
22. Human passions cause most of the evil in the world.
23. God hears our prayers.
24. It is best to avoid friendships with persons whose ideas make them unpopular.
25. It means a great deal to me to be different.
26. I find that a well-ordered mode of life with regular hours is not congenial to my temperament.
27. I prefer people who are never profane.
28. An urge to jump from high places is probably the result of unhappy personal experiences rather than anything inborn.
29. Books and movies ought to give a more realistic picture of life even if they show that evil sometimes triumphs over good.
30. I enjoy listening to poetry.
31. Communism is the most hateful thing in the world today.
32. I like to go alone to visit new and strange places.
33. I question statements and ideas expressed by my teachers.
34. Once in a while I feel hatred toward members of my family whom I usually love.
35. I like dramatics.
36. I dislike following a set schedule.
37. If it weren't for the rebellious ideas of youth there would be less progress in the world.
38. Colored lights sometimes arouse feelings of excitement in me.
39. I dislike assignments requiring original research work.
40. At times I have very much wanted to leave home.

41. I disagree with statements and ideas expressed by my classmates.
42. Our way of doing things in this nation would be best for the world.
43. My parents and family find more fault with me than they should.
44. I like to read serious, philosophical poetry.
45. I would be uncomfortable in anything other than fairly conventional dress.
46. Our thinking would be a lot better if we would just forget about words like "probably," "approximately," and "perhaps."
47. The best way to handle people is to tell them what they want to hear.
48. I like to write my reactions to and criticisms of a given philosophy or point of view.
49. For most questions there is just one right answer, once a person is able to get all the facts.
50. There must be something wrong with a person who is lacking in religious feeling.
51. There is something noble about poverty and suffering.
52. I worry quite a bit over possible misfortunes.
53. I sometimes keep on at a thing until others lose their patience with me.
54. I have always had goals and ambitions that were impractical or that seemed incapable of being realized.
55. The thought of being in an automobile accident does not frighten me.
56. Lawbreakers are almost always caught and punished.
57. I seldom think about sex.
58. I find that I have difficulty in dealing with most people.
59. I like to fool around with new ideas, even if they turn out later to have been a total waste of time.
60. I enjoy solving problems of the type found in geometry, philosophy, or logic.
61. I am inclined to take things hard.
62. I have never felt better in my life than I do now.
63. Human nature being what it is, there will always be war and conflict.
64. Every person should have complete faith in a supernatural power whose decisions he obeys without question.
65. I believe we are made better by the trials and hardships of life.
66. People who seem unsure and uncertain about things make me feel uncomfortable.
67. When someone talks against certain groups or nationalities, I always speak up against such talk even though it makes me unpopular.
68. When I work on a committee I like to take charge of things.
69. Life is a strain for me much of the time.
70. I like modern art.
71. Organized religion, while sincere and constructive in its aims, is really an obstacle to human progress.
72. I have always hated regulations.
73. I have used alcohol excessively.
74. It is safe to assume that all people have a vicious streak which will come out under certain circumstances.
75. I have the wanderlust and am happiest when I am roaming or travelling about.
76. Nowadays more and more people are prying into matters that should remain personal and private.
77. Most of our social problems could be solved if we could somehow get rid of the immoral, crooked, and feeble-minded people.
78. At times I have a strong urge to do something harmful or shocking.
79. Every wage earner should be required to save a certain part of his income each month so that he will be able to support himself and his family in later years.
80. It is better never to expect much; in that way you are rarely disappointed.
81. As a youngster in school I used to give the teachers lots of trouble.
82. A wise person thinks of life as a game; he is both in and out of the game and watching and wondering at it.

83. I brood a great deal.
84. Unquestioning obedience is not a virtue.
85. Trends toward abstractionism and the distortion of reality have corrupted much art of recent years.
86. I would enjoy fame (not mere notoriety).
87. When I go to a strange city I visit museums.
88. We cannot know for sure whether or not there is a God.
89. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going."
90. I do not always tell the truth.
91. I get excited very easily.
92. It is all right to get around the law if you don't actually break it.
93. Man's quest for a purpose or mission is largely a search for a plot or pattern to his life story—a story that is basically without meaning.
94. At times I feel like swearing.
95. The surest way to a peaceful world is to improve people's morals.
96. One of my aims in life is to accomplish something that would make my mother proud of me.
97. I enjoy spending leisure time in writing poetry, plays, stories, or essays.
98. I like to hear risqué stories.
99. Often I can't understand why I have been so cross and grouchy.
100. I much prefer friends who are pleasant to have around rather than those who are always involved in some difficult problem.
101. Usually I prefer known ways of doing things rather than trying out new ways.
102. I like to listen to primitive music.
103. It is a good rule to accept nothing as certain or proved.
104. People often disappoint me.
105. When I get bored I like to stir up some excitement.
106. I have been disappointed in love.
107. I go to church or temple almost every week.
108. It is a pretty callous person who does not feel love and gratitude toward his parents.
109. I am not unusually self-conscious.
110. I like men of whom I am a bit afraid.
111. I leave the radio tuned to a symphony concert rather than to a program of popular music.
112. People pretend to care more about one another than they really do.
113. I analyze the motives of others and compare their reactions with my own.
114. I like to flirt.
115. People ought to pay more attention to new ideas, even if they seem to go against the American way of life.
116. Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped or worse.
117. Many of my friends would probably be considered unconventional by other people.
118. Some of my family have habits that bother and annoy me very much.
119. I like to do work which requires little study or thought after it is once learned.
120. Most nights I go to sleep without thoughts or ideas bothering me.
121. The prophets of the Old Testament predicted the events that are happening today.
122. I cannot keep my mind on one thing.
123. I never attend a sexy show if I can avoid it.
124. I show individuality and originality in my school work.
125. My conversations with friends usually deal with such subjects as mutual acquaintances and social activities.
126. The best theory is the one that has the best practical applications.
127. One of the most important things children should learn is when to disobey authorities.

128. I study and analyze my own motives and reactions.
129. I sometimes feel that I am about to go to pieces.
130. I have had periods when I felt so full of pep that sleep did not seem necessary for days at a time.
131. I dislike being assigned to write a short story, play, essay or song.
132. At times I feel like picking a fist fight with someone.
133. I enjoy looking at paintings, sculpture, and architecture.
134. I would like to be an actor on the stage or in the movies.
135. I must admit that I have at times been worried beyond reason over something that really did not matter.
136. I have often had to take orders from someone who did not know as much as I did.
137. I prefer popular music to classical music.
138. If I were confronted with the necessity of betraying either my country or my best friend, I would prefer to betray my country.
139. I certainly feel useless at times.
140. Most people don't realize how much our lives are controlled by plots hatched in secret places.
141. Women are happiest when they can be maternal.
142. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
143. I don't like things to be uncertain and unpredictable.
144. Sometimes without any reason or even when things are going wrong, I feel excitedly happy, "on top of the world."
145. I have been quite independent and free from family rule.
146. The only meaning to existence is the one which man gives himself.
147. I feel anxiety about something or someone almost all the time.
148. I have been afraid of things or people that I knew could not hurt me.
149. I shrink from facing a crisis or difficulty.
150. Facts appeal to me more than ideas.
151. I easily become impatient with people.
152. I often feel as though I had done something wrong or wicked.
153. I dream frequently.
154. If I were a university professor and had the necessary ability, I would prefer to teach chemistry and physics rather than poetry.
155. I dominate many of my acquaintances of about my own age.
156. The artist and professor are probably more important to society than the businessman and the manufacturer.
157. I would rather remain free from commitments to others than risk serious disappointment or failure later.
158. I am more sensitive than most people.
159. It is a good thing to know people in the right places so one can get traffic tags and such things taken care of.
160. I believe in a life hereafter.
161. I like to go to parties and other affairs where there is lots of loud fun.
162. No man of character would ask his fiancée to have sexual intercourse with him before marriage.
163. It is essential for learning or effective work that our teachers and leaders outline in detail what is to be done and how to do it.
164. Teachers often expect too much work from students.
165. As a youngster I acquired a strong interest in intellectual and aesthetic matters.
166. I tend to make friends with men who are rather sensitive and artistic.
167. I often get the feeling that I am not really part of the group I associate with and that I could separate from it with little discomfort or hardship.
168. Parents are much too easy on their children nowadays.
169. In most ways the poor man is better off than the rich man.

170. I have frequently found myself, when alone, pondering such abstract problems as free will, evil, etc.
171. I have felt so much dissatisfaction with my religious beliefs that I have considered renouncing them completely.
172. I enjoy betting on horse races.
173. I enjoy discarding the old and accepting the new.
174. I enjoy hearing a great singer in an opera.
175. I would like to be a journalist.
176. I would be ashamed not to use my privilege of voting.
177. I have spent a lot of time listening to serious music.
178. I like to work late at night.
179. I have been inspired to a way of life based on duty which I have carefully followed.
180. I am in favor of strict enforcement of all laws, no matter what the consequences.
181. I am easily embarrassed.
182. I enjoy reading Shakespeare's plays.
183. I am happy most of the time.
184. A strong person doesn't show his emotions and feelings.
185. Much of my life I've dreamed about having enough time to paint or sculpture.
186. During one period when I was a youngster I engaged in petty thievery.
187. I have had periods in which I carried on activities without knowing later what I had been doing.
188. I like to read criticisms of articles or books I have previously read.
189. I always see to it that my work is carefully planned and organized.
190. I am embarrassed by dirty stories.
191. I would like to enter a profession which requires much original thinking.
192. It doesn't bother me when things are uncertain and unpredictable.
193. I have periods of such great restlessness that I cannot sit for long in a chair.
194. It is not the duty of a citizen to support his country right or wrong.
195. I often act on the spur of the moment without stopping to think.
196. It is annoying to listen to a lecturer who seems unable to make up his mind about what he really believes.
197. Persons who look as though they could be brutal are repelling to me.
198. The findings of science may some day show that many of our most cherished beliefs are wrong.
199. Most honest people admit to themselves that they have sometimes hated their parents.
200. I have several times had a change of heart about my life work.
201. A large number of people are guilty of bad sexual conduct.
202. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
203. I like to discuss philosophical problems.
204. I like men who antagonize me somewhat.
205. More than anything else, it is good hard work that makes life worthwhile.
206. Kindness and generosity are the most important qualities for a wife to have.
207. It is very important for my feeling of security that people about me like me personally.
208. I would like to collect prints of paintings which I personally enjoy.
209. In spite of what you read about the wild sex life of people in important places, the real story is about the same as for any group of people.
210. A person who doesn't vote is not a good citizen.
211. I believe women ought to have as much sexual freedom as men.
212. I would like to hunt lions in Africa.
213. My way of doing things is apt to be misunderstood by others.
214. I have had strange and peculiar thoughts.



215. I often do whatever makes me feel cheerful here and now, even at the cost of some distant goal.
216. Straightforward reasoning appeals to me more than metaphors and the search for analogies.
217. I like to have a place for everything and everything in its place.
218. A strong person will be able to make up his mind even on the most difficult questions.
219. Moral codes are relevant only when they fit the specific situations; if the situations differ, they are merely abstract irrelevancies.
220. In illegitimate pregnancies abortion is in many cases the most reasonable alternative.
221. My home life was always happy.
222. I am fascinated by the way sunlight changes the appearance of objects and scenes.
223. I always tried to make the best school grades that I could.
224. It makes me nervous to have to wait.
225. Some of my friends think that my ideas are impractical, if not a bit wild.
226. Something exciting will almost always pull me out of it when I am feeling low.
227. Once a week or oftener I become very excited.
228. I think I feel more intensely than most people do.
229. I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.
230. Sometimes I find myself "studying" advertisements in order to discover something interesting in them.
231. A person does not need to worry about other people if only he looks after himself.
232. A person should adapt his ideas and his behavior to the group he happens to be with at the time.
233. I have never done anything dangerous for the thrill of it.
234. The unfinished and the imperfect often have greater appeal for me than the completed and the polished.
235. I have sometimes wanted to run away from home.
236. I have very few quarrels with members of my family.
237. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.
238. Never tell anyone the real reason you did something unless it is useful to do so.
239. In the final analysis, parents generally turn out to be right about things.
240. I have never indulged in any unusual sex practices.
241. Perfect balance is the essence of all good composition.
242. I would disapprove of anyone's drinking to the point of intoxication at a party.
243. My daily life is full of things that keep me interested.
244. I must admit I find it hard to work under strict rules and regulations.
245. I like to read about artistic or literary achievements.
246. I have at one time or another in my life tried my hand at writing poetry.
247. I have never done any heavy drinking.
248. I have often met people who were supposed to be experts who were no better than I.
249. I have often gone against my parents' wishes.
250. I should like to belong to several clubs or lodges.
251. I am interested in the historical changes and developments in American jazz.
252. I am usually calm and not easily upset.
253. I find it hard to keep my mind on a task or job.
254. I frequently find myself worrying about something.
255. In school I was sometimes sent to the principal for cutting up.
256. Most people inwardly dislike putting themselves out to help other people.
257. Generally speaking men won't work hard unless they're forced to do so.

258. Most any time I would rather sit and day-dream than do anything else.
259. I like to talk about sex.
260. I tend to ignore the feelings of others when accomplishing some end that is very important to me.
261. I believe there is a God.
262. Husbands, rather than wives, should have the final voice in family matters.
263. Army life is a good influence on most young men.
264. I like short, factual questions in an examination better than questions which require the organization and interpretation of a large body of material.
265. At times I think I am no good at all.
266. Sometimes I feel like smashing things.
267. It does not bother me particularly to see animals suffer.
268. I like worldliness in people.
269. When in a group of people I have trouble thinking of the right things to talk about.
270. The most important qualities of a husband are determination and ambition.
271. No normal, decent person would ever think of hurting a close friend or relative.
272. Courses in literature and poetry have been as satisfying to me as most other subjects.
273. I am a high-strung person.
274. I enjoy playing cards for money.
275. I do not like to see people carelessly dressed.
276. I don't like to undertake any project unless I have a pretty good idea how it will turn out.
277. I do not blame a person for taking advantage of someone who leaves himself open to it.
278. I dislike women who disregard the usual social or moral conventions.
279. I work under a great deal of tension.
280. At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.
281. It is highly unlikely that astrology will ever be able to explain anything.
282. I believe I am no more nervous than most persons.
283. I have had very peculiar and strange experiences.
284. In religious matters I believe I would have to be called a skeptic or an agnostic.
285. I would rather be a brilliant but unstable worker than a steady and dependable one.
286. I have had more than my share of things to worry about.
287. I dream frequently about things that are best kept to myself.
288. Only a fool would try to change our American way of life.
289. Children do not lose respect for their parents if they are allowed to talk back to them.
290. People would be happier if sex experience before marriage were taken for granted in both men and women.
291. Divorce is often justified.
292. Families owe it to the city to keep their sidewalks cleared in the winter and their lawns mowed in the summer.
293. Disobedience to the government is sometimes justified.
294. I am very careful about my manner of dress.
295. When a man is with a woman he is usually thinking about things related to her sex.
296. I often feel as if things were not real.
297. I think nearly anyone would tell a lie to keep out of trouble.
298. I think I would like to drive a racing car.
299. I think I take primarily an aesthetic view of experience.
300. No weakness or difficulty can hold us back if we have enough will power.
301. When travelling I am more interested in seeing the scenic or historical spots than in making new acquaintances.
302. I enjoy thinking of new examples to illustrate general rules and principles.

303. I am uninterested in discussions of the ideal society or Utopia.
304. I like to serve as a member of a committee in carrying out some activity or project.
305. I discuss the causes and possible solutions of social, political, economic, or international problems.
306. Novelty has a great appeal to me.
307. I prefer to stay at home rather than attend social affairs.
308. I prefer a long, rather involved problem to several shorter ones.
309. I have one or more dates each week.
310. There are few things more satisfying than splurging—on books, clothes, furniture, etc.
311. When a person has a problem or worry it is best for him not to think about it.
312. I crave excitement.
313. I seldom if ever lose my temper.
314. I am never happier than when alone.
315. I am cordial to strangers.
316. I am bored by people of my own age level.
317. I seldom chat with clerks when they are waiting on me.
318. It's a wonderful feeling to sit surrounded by your possessions.
319. I like to take the lead at social gatherings.
320. I react to new ideas which I hear or read about by analyzing them to see if they fit in with my own point of view.
321. I prefer to carry out an activity or job rather than to do the planning for it.
322. I am more interested in the application of principles and theories than in the critical consideration of them.
323. I have no desire to be with others and to know their interests and experiences.
324. I dislike test questions in which the information being tested is in a form different from that in which it was learned.
325. I do not like to act as host or hostess at parties.
326. I am unable to explain the reasons for my opinions and reactions.
327. I would rather have a few intense friendships than a great many friendly but casual relationships.
328. I work better when I am not being observed by others.
329. I usually enjoy parties.
330. I read articles or books that deal with new theories and points of view within my field of interest.
331. I often feel that the people I meet are not interested in me.
332. I would enjoy studying the causes of an important national or international event and writing a paper on these causes.
333. I have difficulty in imagining the reaction of a person of another period, race, or country, to a given situation or environment.
334. I am active on the committees of school organizations.
335. I like to solve puzzles.
336. My free time is usually filled up by social demands.
337. I tend to make decisions on the spur of the moment.
338. Conscience is another name for fear.
339. I have the feeling of being detached and alone when I am in a group of people.
340. I enjoy the actual laboratory work more than the study of the textbook for a course.
341. I hesitate to ask the assistance of others.
342. I enjoy writing a critical discussion of a book or article.
343. I enjoy being in a crowd just to be with people.
344. I like work requiring considerable physical activity.
345. I am embarrassed when I arrive too early or too late at a social affair.
346. I do not like to appear on programs or to give oral reports in class.

347. I am bored by discussions of what life will be like one hundred years from now.
348. I would enjoy writing a paper explaining a theory and presenting the arguments for and against it.
349. I am slow to accept new acquaintances as friends.
350. In most conversations I tend to bounce from topic to topic.
351. I like to converse and get acquainted with my teachers outside of class.
352. I like to work crossword puzzles.
353. I get stage fright when I have to appear before a group.
354. I prefer to have a principle or theory explained to me rather than attempting to understand it on my own.
355. I never worry about being different from other people.
356. I do not enjoy eating meals by myself.
357. I like assignments which require me to draw my own conclusions from some data or body of facts.
358. Good rules of etiquette are very important.
359. Only the desire to achieve great things will bring a man's mind into full activity.
360. I do not enjoy starting in at a new school or moving to a new community.
361. I envy the man who can walk up to anybody and tell him off.
362. A man doesn't really get to have much wisdom until he's well along in years.
363. I much enjoy thinking about some problem which is a challenge to the experts.
364. I hesitate to ask the cooperation of others in carrying out activities such as the arrangements for a party.
365. I am interested in conversations about people whether or not I am acquainted with them.
366. I do not avoid large gatherings of people.
367. One should not give free rein to the passions, but rather control and weigh them before expressing them.
368. I wouldn't like to live in the same place all my life.
369. I would prefer to hear a series of lectures on the comparative merits of forms of government rather than the comparative development of the great religious faiths.
370. I prefer to work with others rather than alone.
371. I expect that ultimately mathematics will prove more important for mankind than theology.
372. At an exposition I like to go where I can see scientific apparatus rather than new manufactured products.
373. All groups can live in harmony in this country without changing the system in any way.
374. I prefer the practical man any time to the man of ideas.
375. I find it difficult to carry on a light conversation with strangers.
376. I am tantalized by a question or problem until I can think through to an answer satisfactory to myself.
377. I could really shock people if I said all the things I think of.
378. Nothing about communism is any good.
379. I like to imagine what is inside objects.
380. I am ill at ease with members of the opposite sex.
381. I work better when people praise me.
382. Uncontrolled impulsiveness is not part of my make-up.
383. I am a better listener than a conversationalist.
384. I want to know that something will really work before I am willing to take a chance on it.
385. I take an active part in group or class discussions.
386. I prefer movies which are biographical or historical to movies of the musical comedy type.
387. The thinking which I do is largely limited to that which I must do in the course of my work.

388. I enjoy listening to debates and discussions on social, economic, or political problems.
389. I generally attend the meetings of school or college organizations.
390. I occasionally express appreciation personally to a lecturer, soloist, or other performer at a school or community program.
391. I prefer to eat in a small rather than a large restaurant or cafeteria.
392. I am more interested in learning facts than in relating them to my ideas and previous experiences.
393. The best philosophy is to eat, drink, and be merry, for tomorrow we die.
394. I do not introduce myself to strangers at a social gathering.
395. I become so enthusiastic that my enthusiasm spreads to those around me.
396. I avoid becoming engaged in conversation with my barber or beauty parlor operator.
397. I would enjoy writing a paper on the possible long-term effects or outcomes of a significant research discovery.
398. When I work I prefer to be alone rather than to have others around me.
399. I do not express my opinions freely.
400. I think about the values and meanings of a college education.
401. Movement, travel, change, excitement—that's the life for me!
402. I prefer to visit with one person rather than with a group of people.
403. I enjoy a thought-provoking lecture.
404. I shy away from serving as the chairman of a committee.
405. I am aroused by a speaker's description of unfortunate conditions in a locality or country.
406. I hesitate to borrow money or personal belongings from others.
407. Little things upset me.
408. I dislike having others deliberate and hesitate before acting.
409. I question the accuracy of statements made in my textbooks or reference books.
410. In a group of people, new acquaintances or strangers pay little attention to me.
411. I find it difficult to give up ideas and opinions which I hold.
412. Here today, gone tomorrow—that's my motto!
413. I prefer social functions to which only a small group of intimate friends are invited.
414. In matters of religion it really does not matter what one believes.
415. Assuming that I had sufficient leisure time, I would prefer to use it to develop a favorite skill rather than to do volunteer social work or public service work.
416. I really enjoy dances.
417. My feelings about others fluctuate a good deal.
418. It takes a lot of argument to convince most people of the truth.
419. I would rather not have responsibility for other people.
420. I hardly ever tell people what I think of them when they do something I dislike.
421. After a class period I think about the ideas presented there.
422. Each person should interpret the Bible for himself.
423. The main object of scientific research should be the discovery of truth rather than its practical applications.
424. There is nothing wrong with the idea of intermarriage between different races.
425. Science has its place, but there are many important things that can never possibly be understood by the human mind.
426. I prefer to work outdoors rather than indoors.
427. If I encounter a person whom I have met previously, I begin a conversation with him.
428. My mood is easily influenced by the people around me.
429. I enjoy teas and receptions.

430. You can change human nature.
431. I talk with strangers when I travel.
432. I enjoy watching football, basketball, or baseball games.
433. I enjoy chatting and playing with children.
434. I don't care much for scientific or mathematical articles.
435. I generally prefer being with people who are not religious.
436. These days I find it hard not to give up hope of amounting to something.
437. Nothing about fascism is any good.
438. In a group I usually take the responsibility for getting people introduced.
439. I believe I can influence my congressman if I want to.
440. It's better to stick by what you have than to be trying new things you don't really know about.
441. I dislike mathematics.
442. I sometimes wake up to find myself thinking about some impractical or irrelevant problem.
443. I would be willing to give money myself in order to right a wrong even though I was not mixed up in it in the first place.
444. If you start trying to change things very much you usually make them worse.
445. Religion should be primarily a social force or institution.
446. I like to read about science.
447. Institutionalized religion is not necessary for the maintenance of a relationship with God.
448. I will probably belong to more than one political party in my lifetime.
449. It doesn't matter to me what church a man belongs to, or whether or not he belongs to a church at all.
450. Political authority really comes not from us, but from some higher power.
451. I would like to wear expensive clothes.
452. No one is very much the same person two days in succession.
453. The beauty of thinking is more important to me than any other characteristic of it.
454. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
455. I must admit I have no great desire to learn new things.
456. Although I seldom admit it, my secret ambition is to become a great person.
457. I have little or no idea what I will be like a few years from now.
458. Subjective and objective views of reality are basically indistinguishable.
459. I have at times had to be rough with people who were rude or annoying.
460. There are certain people I dislike so much that I am inwardly pleased when they are catching it for something they have done.
461. Sometimes an unimportant thought will run through my mind and bother me for days.
462. I read at least ten books a year.
463. I commonly wonder what hidden reason another person may have for doing something nice for me.
464. I wish I could be as happy as others seem to be.
465. Sometimes I can think of nothing but the rhythm or pulsation of certain music.
466. I frequently have serious doubts about my religious beliefs.
467. Some ideas which come to me are accompanied by such a strong feeling of urgency that, regardless of their usefulness, I can think of little else.
468. Science and religion are not only compatible, they are indistinguishable.
469. What is lost in life seems more vivid than what is gained.
470. I often find myself listening without hearing.
471. I prefer to be able to come and go as I like.

472. Usually after arising I walk around for a while more asleep than awake.
473. There have been times when I could not control my movements or speech but knew what was going on around me.
474. To accomplish something it is essential to concentrate on one thing, even to the extent of being narrow.
475. In a discussion I sometimes interrupt others too much in my eagerness to put across my own point of view.
476. I would enjoy showing foreigners around my town or state.
477. The past and the future are meaningless; there is no choice but to live in the present.
478. I want to be an important person in the community.
479. I would consider it more important for my child to secure training in athletics than in religion.
480. The "facts" of nature depend entirely upon the rules of observation.
481. I practically never blush.
482. I have a very poor sense of time.
483. I feel there is a barrier between me and other persons.
484. When prices are high you can't blame a person for getting all he can while the getting is good.
485. I have had experiences which I am sure were examples of telepathy.
486. I like to look for faulty reasoning in an argument.
487. I do not understand myself.
488. Broadmindedness is more important than perseverance.
489. I have difficulty in starting to do things.
490. I am strongly attracted to older members of the opposite sex.
491. I am curious about people but I don't feel close to them.
492. It puzzles me why some people will so avidly read and discuss science fiction.

493. I would like the job of a foreign correspondent for a newspaper.
494. I often count things that are not important.
495. I don't mind giving my opinion about a subject in class even if I haven't read any of the assignments.
496. I like to be with a crowd who play jokes on one another.
497. I would describe myself as a pretty "strong" personality.
498. I read a great deal even when it is not required in my work.
499. I am apt to hide my feelings in some things, to the point that people may hurt me without their knowing it.
500. Many of my dreams are about sex.
501. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
502. Every person ought to be a booster for his own home town.
503. I often forget immediately what people say to me.
504. Criticism or scolding hurts me terribly.
505. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
506. It is not hard for me to ask help from my friends even though I cannot return the favor.
507. We should respect the work of our forefathers and not think that we know better than they did.
508. There was a time when I wished that I had been born a member of the opposite sex.
509. My church, faith, or denomination has the only true approach to God.
510. I have strong likes and dislikes for certain colors.
511. I would rather read about the lives and works of men such as Alexander, Julius Caesar, and Charlemagne than about Aristotle, Socrates, and Kant.

512. Diversity of experience is highly desirable, even at the cost of personal confusion and inconsistency.
513. I usually prefer to sit on the same side of buses, theaters, etc.
514. I must admit that I enjoy playing practical jokes on people.
515. I take advice easily from most persons.
516. When science contradicts religion it is because of scientific hypotheses that have not and cannot be tested.
517. My mood depends mostly on how I am doing in my work.
518. I sometimes feel that I am several persons rather than just one.
519. I am so touchy on some subjects that I can't talk about them.
520. It is hard for me to communicate my innermost thoughts.
521. People ought to be satisfied with what they have.
522. I don't blame anyone for trying to grab all he can get in this world.
523. I seldom talk to myself.
524. I believe in the worth of humanity but not in God.
525. It is difficult for me to take people seriously.
526. I am quite a fast reader.
527. I wish I were not bothered by thoughts about sex.
528. My people treat me more like a child than an adult.
529. In my case social activities seem to be more important than intellectual matters.
530. I have met problems so full of possibilities that I could not make up my mind about them.
531. It is hard for me to work intently on a scholarly problem for more than an hour or two at a stretch.
532. If something grows up over a long time, there will be much wisdom in it.
533. I have more trouble concentrating than others seem to have.
534. I am not much afraid of snakes.
535. I am apt to pass up something I want to do when others feel that it isn't worth doing.
536. When I sit down to study it is hard to keep my mind on the material.
537. I am often inclined to go out of my way to win a point with someone who has opposed me.
538. Things seem simpler as you learn more about them.
539. I have read little or none of the Bible.
540. Once I get an idea I have to try to do something with it before I can go on to other things.
541. I sometimes change my political opinions.
542. I usually feel that I am drifting along in life with no particular role to play.
543. I have a natural talent for influencing people.
544. Our modern industrial and scientific developments are signs of a greater degree of civilization than that attained by any previous society, for example by the Greeks.
545. If I concentrate I can remember very clearly the details of unimportant experiences long past.
546. There usually seems to be some kind of barrier between me and the opposite sex.
547. How well a person gets along with others is eventually more important to him than any of his intellectual accomplishments.
548. No one seems to understand me.
549. I believe it is a responsibility of intelligent leadership to maintain the established order of things.
550. I seem to make friends about as quickly as others do.
551. I tend to work steadily rather than by fits and starts.
552. I would rather economize on almost anything except clothes.
553. Science should have as much to say about moral values as religion does.
554. I frequently find it necessary to stand up for what I think is right.



555. Often I think that life is absurd.
556. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.
557. Sometimes I enjoy hurting persons I love.
558. One needs to be wary of those persons who claim not to believe in God.
559. Very often I find that I dislike members of the opposite sex.
560. Maybe some minority groups do get rough treatment, but it's no business of mine.
561. I am more religious than most people.
562. I must admit I am a pretty fair talker.
563. I frequently ask people for advice.
564. When it comes to differences of opinion in religion we should be careful not to compromise with those who believe differently than we do.
565. I would like the work of a director or an administrator.
566. Often I wonder who I really am or what I should really be like.

567. If given the chance I could do some things that would be of great benefit to the world.
568. A person who lets himself get tricked has no one but himself to blame.
569. At times I have fits of laughing or crying that I cannot control.
570. I don't think much of most of the men I know.
571. There is too much emphasis in school on the intellectual and theoretical topics, not enough on practical matters.
572. Even when I am with people I feel lonely much of the time.
573. The idea of doing research does not appeal to me.
574. Almost nothing a person says about himself reveals very much about what he is really like.
575. I am generally known as a responsible person.

CHECK TO MAKE SURE  
YOUR LAST ANSWER IS  
AT NUMBER 575 ON THE  
ANSWER SHEET

## APPENDIX B

## Biographical Data Sheet

**Please fill in your NAME and STUDENT NUMBER on the answer sheet provided. Put the number of your answer in the space provided on the answer sheet. For example, if you are female you would write 2 in the space on the answer sheet.**

1. Sex: 1. Male 2. Female
2. Age at last birthday: 1. Under 18 2. 18 3. 19  
4. 20-25 5. 26-30 6. Over 30
3. Are you: 1. Single 2. Married 3. Separated 4. Divorced 5. Widowed
4. Are you: 1. Dating 2. Going steady 3. Engaged 4. None of these
5. Religious preference: 1. Catholic 2. Protestant 3. Jewish  
4. Other 5. None
6. Do you attend church? 1. Yes 2. No
7. How often do you attend church? 1. Daily 2. Twice or more a week  
3. Once a week 4. Two or three times a month 5. Once a month  
6. One to five times a year 7. Do not attend church
8. In how many church activities, other than regular services, do you participate?  
1. Numerous 2. Several 3. A few 4. None
9. How many brothers and sisters do you have? 1. None 2. One 3. Two  
4. Three 5. Four 6. Five 7. Six 8. More than six
10. Your birth order was: 1. First child 2. Second child 3. Third child  
4. Fourth child 5. Fifth child 6. Sixth child 7. Other
11. While you were in high school, did you make your home with: 1. Both parents  
2. Mother only 3. Mother and stepfather 4. Other relatives  
5. Father only 6. Father and stepmother 7. None of these
12. How many miles do you live from Mt. Pleasant? 1. Live in Mt. Pleasant  
2. 1-9 3. 10-24 4. 25-49 5. 50-99  
6. 100-149 7. 150-199 8. 200-299 9. 300 or more
13. Before coming to college, in what kind of a community did you live most of your life?  
1. Farm 2. Village, 250-2,500 population  
3. Town, 2,500-25,000 population 4. City, 25,000-100,000 population  
5. City over 100,000 population

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. Finally, the fifth step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals to determine the effectiveness of the intervention.

10-11-61

[illegible]

the *Journal of the American Medical Association* (JAMA) and the *New England Journal of Medicine* (NEJM) are the most widely read and cited medical journals in the United States. Both journals have a long history of publishing research on the treatment of various medical conditions, including cancer. In the case of cancer, the journals have published numerous studies on the effectiveness of various treatments, including chemotherapy, radiation therapy, and surgery. The results of these studies have been used to guide clinical practice and to inform the development of new treatments. The journals have also published studies on the side effects of cancer treatments, which have helped to improve the quality of care for cancer patients. The journals have played a significant role in the advancement of cancer research and the improvement of cancer care.

1. The first step is to identify the problem. This involves understanding the current situation and the goals that need to be achieved.

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

[illegible]

10. The Commission has been informed that the Government of the Republic of Armenia has agreed to accept the findings of the Commission's investigation and to take the necessary measures to ensure that the rights of the victims are protected and that the perpetrators are held accountable.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

DATE: 11/11/1964

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

14. In how many communities have you lived? 1. One 2. Two  
3. Three 4. Four 5. Five 6. More than five
15. How many elementary schools have you attended? 1. One 2. Two  
3. Three 4. Four 5. Five 6. More than five
16. How many junior high schools have you attended? 1. None  
2. One 3. Two 4. Three 5. More than three
17. How many high schools have you attended? 1. One  
2. Two 3. Three 4. Four 5. More than four
18. Are your parents: (Check one or more) 1. Living together  
2. Separated 3. Divorced 4. Divorced, not remarried  
5. Both remarried 6. Both deceased 7. Father deceased  
8. Mother deceased 9. Father remarried 10. Mother remarried
19. Nativity of parents:  
1. Mother native-born and father foreign-born 3. Both foreign-born  
2. Father native-born and mother foreign-born 4. Both native-born
20. About how far did your father go in school?  
1. Attended grade school (grades 1-8) but did not finish  
2. Completed grade school through grade 8  
3. Attended high school (grades 9-12) but did not graduate  
4. Graduated from high school  
5. Attended college but did not obtain a four-year degree  
6. Graduated from college (4-years)  
7. Attended graduate school or professional school but did not obtain a graduate or professional degree  
8. Obtained a graduate or professional degree
21. About how far did your mother go in school?  
1. Attended grade school (grades 1-8) but did not finish  
2. Completed grade school through grade 8  
3. Attended high school (grades 9-12) but did not graduate  
4. Graduated from high school  
5. Attended college but did not obtain a four-year degree  
6. Graduated from college (4-years)  
7. Attended graduate school or professional school but did not obtain a graduate or professional degree  
8. Obtained a graduate or professional degree
22. What is your father's occupation? 1. Agricultural 2. Skilled  
3. Professional or semi-professional 4. Unskilled 5. Proprietor  
6. Clerical or sales
23. Does your father, in addition to a regular job, have a secondary or part-time job?  
1. Yes 2. No
24. Was your mother employed outside the home: (Check one or more)  
1. Before you attended school 2. When you were in grade school  
3. When you were in high school 4. Is working now  
5. None of these



25. What is the primary source of your parents' income?
1. Pension, retirement, or social security
  2. Profits
  3. Wages or salary
  4. Other
26. To which of the following does your family subscribe?
1. Newspapers
  2. Magazines
  3. Book clubs
  4. Record clubs
  5. Artist series
  6. None of these
27. What type of high school did you attend for most of your high school years?
1. Public
  2. Parochial
  3. Private
28. What was the size of your high school graduating class?
1. Under 25
  2. 25-99
  3. 100-199
  4. 200-399
  5. 400-999
  6. Over 1000
29. In which third of your high school graduating class did you stand in respect to grades?
1. Upper third
  2. Middle third
  3. Lower third
30. In regards to participation in extra curricular activities in high school were you:
1. Very active
  2. Moderately active
  3. Inactive
31. How many school-related offices did you hold in high school?
1. None
  2. 1-3
  3. 4-7
  4. More than 7
32. During your last two years of high school, how many hours per week, during the school year, did you spend on routine family responsibilities?
1. None
  2. 1-4
  3. 5-7
  4. 8-10
  5. Over 10
33. Did you own a car during high school?
1. Yes
  2. No
34. Was a car readily available for your use during high school?
1. Yes
  2. No
35. Have you worked with or taken care of children and youths:
1. Extensively
  2. Considerably
  3. Fairly often
  4. Very little
  5. Not at all
36. Do you have a public library card?
1. Yes
  2. No
37. How many movies do you usually see per month?
1. None
  2. 1-2
  3. 3-5
  4. 6-10
  5. Over 10
38. How many hours per week do you usually spend watching TV?
1. None
  2. 1-2
  3. 3-5
  4. 6-10
  5. Over 10
39. Outside of school work, how many hours per week do you usually read?
1. None
  2. 1-2
  3. 3-5
  4. 6-10
  5. Over 10
40. Which of the following explains your reasons for coming to college? (Check one or more)
1. To get a broad education
  2. To prepare for a vocation
  3. For the prestige of a college education
  4. To be with old friends
  5. To help get a job
  6. To please parents and/or friends
  7. It was "the thing to do"
  8. Foregone conclusion. I never questioned why.
  9. Will enable me to make more money
  10. For the social enjoyment of "college life"
  11. It is a family tradition
  12. None of these

41. Do you have in the teaching profession a: (Check one or more)  
1. Relative                      2. Friend                      3. Acquaintance                      4. None of these
42. Are any of the following members of your family in the teaching profession? (Check one or more)  
1. Parent                      2. Brother or sister                      3. Uncle or aunt  
4. Other relative                      5. None of these
43. Do you plan to get a teaching certificate?                      1. Yes                      2. No
44. Do you plan to teach in:  
3. Senior high school                      1. Elementary school                      2. Junior high school  
4. Undecided                      5. Do not plan to teach
45. Who influenced you most in coming to college?  
2. Other relative                      3. Friend                      1. Parent  
5. Clergy                      6. Other                      4. Teacher
46. Did your father:  
3. Seem indifferent to                      1. Oppose                      2. Discourage  
4. Encourage                      5. Demand  
your going to college
47. Did your mother:  
3. Seem indifferent to                      1. Oppose                      2. Discourage  
4. Encourage                      5. Demand  
your going to college
48. As you see your situation at the present time, how much education would you like to have?  
1. One year of college                      4. Four years of college (Bachelor's Degree)  
2. Two years of college                      5. Five years of college (Bachelor's Degree)  
3. Three years of college                      6. Graduate or professional school
49. As you see your situation at the present time, how much education do you expect to have?  
1. One year of college                      4. Four years of college (Bachelor's Degree)  
2. Two years of college                      5. Five years of college (Bachelor's Degree)  
3. Three years of college                      6. Graduate or professional school
50. Where do you live now, while at Central Michigan University?  
1. Dormitory                      2. Fraternity or sorority house  
3. Off-campus apartment                      4. Off-campus rooming house  
5. With your family
51. What and/or who are your sources of support while at Central Michigan University? (Check one or more)  
1. Parents                      5. Loan  
2. Husband or wife                      6. G. I. Bill  
3. Summer job                      7. Academic Scholarship  
4. Job during academic year                      8. Athletic Scholarship
52. What, or who, is your principal source of support while at Central Michigan University? (Check only one)  
1. Parents                      5. Loan  
2. Husband or wife                      6. G. I. Bill  
3. Summer job                      7. Academic Scholarship  
4. Job during academic year                      8. Athletic Scholarship



53. Do you have now, or plan to get a job during the academic year? 1. Yes 2. No
54. During the academic year, do you plan to work mostly:  
1. Saturdays 2. Weekdays 3. Evenings 4. Do not plan to work
55. Do you know about the Ford Foundation Teacher Education Project? 1. Yes 2. No
56. Are you involved in the Ford Foundation Teacher Education Project? 1. Yes 2. No
57. Are you involved in: 1. 4-year plan 2. 5-year plan 3. Not involved
58. Do you consider your overall relationship with your parents and family to be:  
1. Excellent 2. Good 3. Fair 4. Poor
59. If you have a personal problem, do you prefer to discuss it with: (Check only one)  
1. Parents 2. Husband or wife 3. Friend  
4. Teacher 5. Minister 6. Doctor  
7. None of these
60. Which of the following describe your general make up: (Check one or more)  
1. Friendly 6. Cheerful 11. Sociable  
2. Happy 7. Optimistic 12. Egotistic  
3. Pessimistic 8. Depressed 13. Patient  
4. Self-centered 9. Cooperative 14. Docile  
5. Anxious 10. Stubborn 15. Industrious

## APPENDIX C

F Statistic, Approximate Significance of F, and Correlation Coefficients Between the Miscreant and Non-Miscreant Students on the Personality Scales.

<u>Scale</u>	<u>"F" Statistic</u>	<u>Approximate Significance Probability of "F"</u>	<u>Correlation Coefficient</u>
Thinking Introversion	.6468	.427	.0503
Schizoid Functioning	10.0350	.002	.1946
Social Maturity	6.7914	.009	.1611
Social Introversion	4.9075	.026	.1374
Complexity	16.8761	.0005	.2491
Originality	3.0502	.078	.1087
Estheticism	4.7137	.029	.1347
Theoretical Orientation	5.1349	.023	.1405
Non-authoritarianism	2.1262	.142	.0909
Impulse Expression	26.2699	.0005	.3056
Religious Liberalism	1.1913	.276	.0682
Liberalism	5.5710	.018	.1462
Developmental Status	28.7131	.0005	.3181

## APPENDIX D

Means of the Variables for the Male Groups

<u>Variable</u>	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>
1	1.97	1.62	2.50	2.53	2.20	2.02
2	3.70	3.25	3.00	3.76	4.20	3.84
3	3.17	2.87	2.50	3.07	3.20	3.00
4	1.24	1.00	1.20	1.53	1.50	1.34
5	5.14	6.12	5.50	5.92	5.90	5.23
6	3.19	3.62	3.40	3.23	3.60	2.96
7	1.46	1.75	2.20	1.00	2.10	1.78
8	4.14	4.37	3.80	3.69	4.40	3.79
9	4.46	4.12	3.70	4.23	4.00	4.08
10	3.00	3.12	2.50	3.38	2.90	3.16
11	3.29	2.87	2.80	3.23	3.60	3.13
12	1.43	1.50	2.00	1.61	1.40	1.34
13	1.70	1.62	1.30	1.23	1.40	1.51
14	4.14	4.87	4.00	4.92	4.90	4.68
15	4.29	4.00	3.60	4.76	4.70	4.23
16	1.46	1.50	1.40	1.61	1.45	1.53
17	29.46	31.00	33.20	31.84	33.15	30.62
18	56.31	52.50	49.20	50.61	49.75	45.50
19	68.53	64.75	75.10	78.07	82.60	69.14
20	20.65	20.37	15.70	20.84	19.05	21.65
21	29.75	26.37	30.30	32.07	34.40	27.20
22	42.00	39.37	44.60	47.76	49.80	42.82
23	20.85	19.50	22.10	23.92	23.25	20.41
24	43.80	43.00	46.10	47.76	50.55	42.92
25	9.90	9.00	9.80	10.92	10.95	9.65
26	6.14	5.75	5.20	6.07	6.25	4.81
27	463.27	363.50	625.80	474.77	551.05	439.27
28	38.82	37.12	44.20	44.00	47.95	39.54
29	33.56	32.50	34.40	37.15	38.85	29.03

Standard Deviations of the Variables for the Male Groups

Variable	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>
1	6.24	1.36	4.74	4.38	4.38	8.48
2	9.51	3.08	5.65	4.50	5.93	12.24
3	9.78	2.97	3.24	3.86	4.81	14.96
4	6.60	0.00	1.26	5.76	4.79	10.50
5	11.53	6.84	6.36	3.30	5.07	15.68
6	9.71	3.44	3.22	5.12	5.72	13.14
7	10.20	5.61	7.58	1.41	10.76	19.73
8	11.45	3.98	5.44	6.38	8.17	17.80
9	10.77	2.97	3.17	5.50	5.83	15.91
10	10.39	3.29	4.74	6.25	6.46	14.37
11	8.27	3.29	2.36	5.12	5.17	11.24
12	4.70	1.41	2.00	1.75	2.19	4.73
13	4.29	1.36	1.44	1.51	2.60	5.16
14	7.61	2.62	2.82	3.59	4.44	8.93
15	7.10	2.82	4.73	3.50	4.26	10.40
16	4.71	1.41	2.09	3.61	2.63	6.37
17	63.50	23.62	23.90	28.70	45.56	84.21
18	107.23	30.03	55.92	39.88	70.52	164.98
19	117.07	44.15	61.73	62.24	82.10	151.27
20	48.75	18.46	17.09	29.21	44.48	91.05
21	51.14	14.41	15.03	30.08	34.07	69.57
22	66.88	27.60	32.34	39.82	54.19	102.50
23	53.76	17.26	16.99	31.22	38.57	77.20
24	64.70	30.10	28.44	29.50	54.39	100.31
25	14.26	5.09	6.75	9.10	13.30	25.06
26	10.82	3.93	4.85	4.78	6.61	16.18
27	1831.10	736.05	816.83	922.50	1115.70	2735.70
28	59.26	28.33	26.63	32.68	47.14	84.57
29	53.36	19.69	24.46	33.93	31.21	83.12

Means of the Variables for the Female Groups

<u>Variable</u>	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>
1	2.06	2.00	1.50	1.75	1.66	1.81
2	3.20	2.50	3.00	3.00	3.33	3.15
3	2.73	3.75	3.00	2.83	2.33	3.50
4	1.20	1.00	1.00	1.08	1.00	1.26
5	6.20	6.25	5.00	5.91	6.00	5.13
6	3.13	4.00	3.00	3.50	3.33	2.84
7	1.80	3.00	1.00	1.75	1.00	2.13
8	4.06	6.00	2.00	4.75	4.66	3.78
9	4.60	6.50	6.00	3.83	5.33	4.71
10	3.33	3.75	1.50	3.41	5.00	3.00
11	3.46	4.50	5.00	3.66	4.33	3.21
12	1.46	1.50	2.00	1.33	1.00	1.21
13	1.73	1.50	1.00	1.50	1.00	1.50
14	3.93	5.00	4.00	4.33	4.66	4.23
15	3.86	4.50	4.50	4.00	4.66	4.00
16	1.53	1.75	1.50	1.25	1.33	1.21
17	33.73	28.25	32.00	37.41	34.66	32.34
18	52.80	38.25	26.00	43.58	60.66	43.34
19	77.00	74.25	47.00	70.41	82.66	64.31
20	19.00	11.75	13.50	14.58	14.33	19.82
21	30.20	26.50	22.50	29.25	36.00	25.34
22	46.93	45.00	34.50	45.25	49.33	41.57
23	28.53	23.75	21.50	26.66	27.33	22.52
24	42.13	33.75	37.50	42.66	43.00	38.34
25	10.13	8.75	5.00	9.91	11.33	9.39
26	5.13	4.50	3.00	4.00	6.66	3.97
27	544.33	391.00	511.00	475.00	496.67	490.32
28	41.53	38.00	32.50	41.50	50.66	37.63
29	32.06	28.50	19.00	23.91	33.33	23.31

Standard Deviations of the Variables for the Female Groups

<u>Variable</u>	<u>Group I</u>	<u>Group II</u>	<u>Group III</u>	<u>Group IV</u>	<u>Group V</u>	<u>Group VI</u>
1	4.11	0.00	0.70	1.50	0.81	3.70
2	2.52	1.00	0.00	2.00	0.81	7.14
3	4.99	3.57	0.00	5.80	2.16	11.46
4	2.09	0.00	0.00	0.95	0.00	4.62
5	3.52	0.86	0.00	2.98	0.00	8.26
6	3.11	1.41	2.82	4.12	0.81	9.33
7	7.89	6.92	0.00	6.18	0.00	15.24
8	6.55	2.44	0.00	6.50	1.63	11.23
9	6.75	1.73	2.82	3.10	3.26	10.66
10	4.83	2.59	0.70	4.99	2.44	10.77
11	4.21	1.00	0.00	3.55	0.81	7.50
12	1.93	1.00	0.00	1.63	0.00	2.88
13	2.22	1.73	0.00	2.23	0.00	3.08
14	2.22	2.00	0.00	3.82	1.63	6.99
15	1.93	1.73	0.70	4.00	1.63	5.65
16	2.78	0.86	0.70	2.06	0.81	3.21
17	36.12	17.62	7.07	24.43	9.41	49.76
18	69.51	7.66	16.97	47.27	10.98	89.64
19	62.41	31.82	1.41	64.33	1.63	86.40
20	37.97	5.54	0.70	19.67	8.28	48.19
21	30.14	16.40	4.94	25.34	9.79	37.66
22	47.16	27.45	10.60	25.50	4.32	69.01
23	34.49	16.69	3.53	16.14	2.94	47.34
24	52.74	17.90	2.12	30.11	7.48	65.34
25	11.73	5.72	2.82	8.53	2.94	14.18
26	6.30	3.00	2.82	4.24	2.94	7.93
27	1209.50	673.66	565.69	1122.30	575.54	1887.20
28	44.06	12.88	4.94	28.19	10.70	55.03
29	36.94	13.30	4.24	27.03	8.64	39.50



## APPENDIX E

Functional Weights for Each Variable on the First and  
Second Discriminant Functions for Males and Females.

<u>Variable</u>	<u>Functional Weights Male</u>		<u>Functional Weights Female</u>	
	<u>I</u>	<u>II</u>	<u>I</u>	<u>II</u>
1	-.0113	.2642	.0946	-.1431
2	.3358	-.0829	.0982	.4500*
3	-.1448	-.0262	.0590	.0022
4	.0252	-.0614	-.1218	-.1083
5	-.0488	-.0253	.1865	-.1587
6	-.2328	.1671	-.0116	-.0545
7	.0117	.1421	.1184	-.0181
8	-.0454	.0181	.2214	.1047
9	-.0686	-.1053	-.1041	-.1431
10	.1274	-.0922	.0836	.1922
11	.1701	-.1775	-.2900	.1280
12	-.2400	.6837*	-.3478*	-.5491*
13	-.0201	-.3215	.7220*	.1362
14	.4697*	.0340	.0668	-.0355
15	-.3408	-.2552	-.1292	.0676
16	.4357*	.0417	-.3019	-.3952
17	.0458	.0276	.0203	.0839
18	.0048	.0095	.0255	.0033
19	.0463	.0172	.0487	-.0198
20	.0438	-.0244	-.0309	-.0091
21	.0238	.0156	-.0185	.0422
22	-.0354	-.0861	-.0147	-.0222
23	-.0416	-.0141	-.0083	-.0770
24	-.0790	-.0169	-.0009	-.0404
25	-.1065	-.0704	-.0199	.1444
26	-.3601	-.3986*	-.0439	.3265
27	-.0008	-.0008	.0002	.0009
28	.0672	.0726	-.0503	.0983
29	-.1019	.0253	.0038	-.1226

\* = high scores indicated that the variable gave the largest contribution to the separation of the groups for that discriminant function.

## APPENDIX F

### Description of the Variables

1. Religious Preference (Q5)\*
2. Religious Attendance (Q7)
3. Size of Family (Siblings) (Q9)
4. Home Living Conditions (Q11)
5. Distance from University (Q12)
6. Size of Community (Q13)
7. Marital Status of Parents (Q18)
8. Father's Educational Level (Q20)
9. Mother's Educational Level (Q21)
10. Father's Occupation (Q22)
11. Size of Class (Q28)
12. Rank in Class (Q29)
13. Involvement in Extra Curriculum Activities (Q30)
14. Personal Educational Aspirations (Q48)
15. Personal Educational Aspirations (Q49)
16. Peer-parental Relationships (Q58)
17. Thinking Introversion
18. Schitzoid Functioning
19. Social Maturity
20. Social Introversion
21. Complexity
22. Originality
23. Estheticism
24. Theoretical Orientation
25. Non-Authoritarianism
26. Impulse Expression
27. Religious Liberalism
28. Liberalism
29. Developmental Status

\* The "Q" Number following the variable indicates the specific question on the biographical data sheet from which the variable was selected.

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