RELATIONSHIPS BETWEEN SELF-ACTUALIZATION AND
SOCIO-METRIC STATUS FOR ADOLESCENTS

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CHAPTER I

INTRODUCTION

In the last two decades, there has been a growing interest in the normal processes of mental health (1, 3, 6, 13, 18, 27, 34, 45). Too much has been taken for granted in the development of the concept of psychological health according to Blatt (1). As a result, he points out the need to be more explicit about the limits of such a concept. Although there has been extensive research and theory about distorted and aberrant people, only recently have there been efforts to investigate "the psychologically healthy." All too frequently normal or healthy people have been defined as non-hospitalized, non-clinical, or vaguely as the "average man."

The nondescript statistical concept of mental health as the average person, or the negative definition of normality as lack of symptomatology, is far from satisfactory, particularly if we are to understand the dynamic, structural, and developmental dimensions of psychological maturity and mental health (1, p. 146).

This desire to see more clearly the dimensions of mental health has led to the present study. The major purpose of the study is to provide a tentative description of the relationships existing between self-actualization and sociometric status in adolescent students. An effort is made to integrate findings with the existing knowledge about mental
health. But why do so? Hanley raises the question: "What might be done, here and now, to help children to actualize more of their native potentialities" (36, p. 33). His question raises other questions. What are the native potentialities to which he refers? What are the factors that provide the individual with the motivation to self-actualize? Is there a self-actualization potential present, for example, in the tenth grade school population? What type of life encounter is most conducive in bringing about self-actualization? Can sociometric assessments help to describe the conditions which promote self-actualization? What are the self-actualization characteristics of adolescents of differing degrees of peer acceptance? Does a tightly knit or loosely knit group seem to be associated with fully functioning individuals? Although these questions must be raised, they all cannot be adequately answered. This investigation was intended to study limited aspects of the questions posed above. The hypotheses to be posited will be based on the theoretical background and related research which follow.

Theoretical Background

Literature relating to psychological health reveals that the concept of optimum psychological health remains unclear. Bourrler (33) and Scott (32) attempt to define the concept by reviewing the definitions of psychological health and conclude that the concept is a statement of values which
can not be sufficiently formulated into a unified definition.

In an effort to bring together a unified body of knowledge, Shostrom (50), Maslow (34), Rogers (47), Bonney (3) and others have proposed to measure a large number of positively valued characteristics as facets of psychological health. Maslow (34) presents a description of the psychologically healthy person. His subjects were chosen by a nominal process from a 5,000 member college student body. The criterion for selection was positive evidence of self-actualization which

... may be loosely described as the full use and exploitation of talents, capacities, potentialities, etc. Such people seem to be fulfilling themselves and to be doing the best that they are capable of doing, reminding us of Nietzsche's exhortation, "Become what thou art!" (34, pp. 200-201).

Maslow used the technique of iteration, building from folk assumptions to select criteria for self-actualization. With the established criteria in hand, individuals were nominated and examined. As a result of these examinations of nominated people, Maslow began to delete illogical inconsistencies from his criteria until he could systematically classify these persons as possessing self-actualizing qualities to a high or low degree. Because of the difficulty in finding such subjects, Maslow conducted case studies of historical figures to find men who met the established criteria. He admitted his difficulty in making a holistic analysis as required by his definition. Of all the subjects compared,
Maslow found the following common characteristics:

1. Superior perception of reality.
2. Increased acceptance of self, of others, and of nature.
3. Increased spontaneity.
4. Increased in problem-centering.
5. Increased detachment and desire for privacy.
6. Increased autonomy, and resistance to enculturation.
7. Greater freshness of appreciation, and richness of emotional reactions.
8. Higher frequency of peak experiences.
9. Increased identification with the human species.
10. Changed (the clinician would say, improved) interpersonal relations.
11. More democratic character structure.
12. Greatly increased creativeness.

Each of the above characteristics is more thoroughly elaborated in Maslow's study. For example, on the resistance to enculturation he writes:

... in a certain profound and meaningful sense they resist enculturation and maintain a certain inner detachment from the culture in which they are immersed ... on the whole the relationship of these healthy people with their much less healthy culture is a complex one (34, pp. 224-225).

His subjects fall within the apparent limits of conventionality, yet they are not conventional. When behaving conventionally is apt to be profitable, they yield to the demands of convention; however, when yielding is too annoying or too expensive or becomes superficial, then being conventional is abandoned. These individuals exhibit no active impatient or chronic discontent with the culture and no undue preoccupation with changing it; however, they often show acute bursts of indignation against injustice. As a whole, they are an accepting group whose everyday efforts to improve the culture
are derived from within the culture rather than reforming it from without. They possess an unusual ability to be objective toward society. They select it, essay it, taste it, then make their own decisions. They may be called autonomous as ruled by laws of their own character rather than by the rules of society. They are not merely Americans, but to a greater degree than others, members at large of the human species (34).

Self-actualizers can be defined as people who are no longer motivated by the needs, safety, belongingness, love, status, and self-respect because these needs have already been satisfied... [they]... have no deficiencies to make up and must now be looked upon as freed for growth, maturation, development, in a word for the fulfillment and actualization of their highest individual and species nature (34, p. 256).

Concerning these characteristics of the self-actualizer, Maslow stresses that there is a resolution of dichotomies. "In healthy people polarities disappeared, and many oppositions thought to be intrinsic merged and coalesced with each other to form unities" (34, p. 233). Regarding the detachment and individuality of self-actualizers:

... the fact is that self-actualizing people are simultaneously the most individualistic and the most altruistic and social and loving of all human beings.

... These people possess... a healthy selfishness, a great self-respect, a disinclination to make sacrifices without good reason (34, p. 257).

Criticism arises concerning the molar nature of self-actualization as previously defined. Wylie (54) notes that compared to other research variables this concept’s productivity is limited. She says:
... it appears that more molecular inferred variables may have greater research utility. That is, such characteristics as self-actualization, self-differentiation, and self-consistency have not led to enlightened research. By contrast, such constructs as self-acceptance or self-esteem, especially when referring to specific attributes, have yielded more manageable and fruitful research procedures (54, p. 519).

With these broadly defined characteristics in mind, Shostrom (50) designed and published an inventory to measure a wide range of characteristics which he considered to be important to self-actualization. Hamlin and Nemo (21) also discuss the formulation of a scale to measure self-actualization, molar as the concept may be.

Upon further research, Maslow redefined self-actualization, making it inclusive of peak experiences and thereby more researchable because such states or episodes can, in theory, come at any time in the life of a person. Defining the concept in such manner is helpful because this "makes self-actualization a matter of degree and of frequency rather than an all-or-none affair, and thereby makes it more amenable to available research procedures" (55, p. 92). Some people are openly recognized as having much more potential for psychological growth than others.

Similarly, Rogers groups the characteristics of the optimally healthy under the heading of the fully functioning person living in "the here and now." He describes them with adjectives such as:

... enriching, exciting, rewarding, challenging, meaningful. This process of the good life is not, I am convinced, a life for the faint-hearted. It
involves the courage to be, it means launching oneself fully into the stream of life (47, p. 136).

These individuals live fully in a wider life range than "average" people do, because they encounter life as trustworthy and confident citizens.

Rogers contends that the congruent individual develops the most healthy interpersonal relationships. Furthermore, for a test of his position he formulated a law of interpersonal relationships which said:

... The more that Y experiences the communication of X as a congruence of experience, awareness, and communication; the more the ensuing relationship will involve: a tendency toward more mutually accurate understanding of the communications; improved psychological adjustment and functioning of both parties; mutual satisfaction in the relationship.

Conversely the greater the communicated incongruence of experience and awareness, the more the ensuing relationship will involve: further communication with the same quality; disintegration of accurate understanding, less adequate psychological adjustment and functioning in both parties; and mutual dissatisfaction in the relationship (47, pp. 544-545).

The congruent individual to whom Rogers refers is "one unified person all the way through, whether we tap his experience at the visceral level, the level of his awareness, or the level of communication" (47, p. 369).

The above law calls for some methodology for measuring interpersonal relationships. Through a pioneering effort in 1934, Moreno presented the sociometric approach. He says, "Sociometry is the mathematical study of psychological properties of populations, the experimental technique of and the results obtained by application of quantitative methods" (36,
p. 452). Moreno defines the sociometric scale as consisting of an individual choosing his associates from any group of which he is or might become a member" (35, p. 13). Brofenbrenner gives a considerably refined definition of sociometry: "Sociometry is a method for discovering, describing, and evaluating social status, structure, and development though measuring the extent of acceptance or rejection between individuals in groups" (10, p. 6).

Moreno and Jennings (37) see sociometry as a method of measuring social configurations, because the group as a whole is considered. They note that the sociometric situation has many characteristics of the Gestalt: different portions of the structure are interdependent upon other portions; a change in the structural pattern of a group may alter the status of the individual.

Referring to the nature of the individual as observed sociometrically, Jennings says:

He may approach those who respond to him or whom he wishes would respond to him; he may keep away from those whom he feels he cannot interest or who repel him. This reaching out of the individual to other individuals may be said to be a projection of the self, a seeking for fulfillment of a need of the individual for other persons to whom he responds, drawing him to them and causing him to want to include them in his life situation (28, p. 6-7).

In an early sociometric study related to personality patterns, Northway (41) says, "With children perhaps the most unfortunate thing we do is to insist that to be successful they must drive toward winning friends and influencing
people . . . that increased social acceptability and optimal personality development are directly related seems unwarranted" (41, p. 17). As a result of these children's compensation for their lack of social assimilation, potential psychotics and misfits may be in the making.

Northway and Widgor (43), who studied the relationship of Rorschach patterns and sociometric status in school children, relate that individuals scoring low sociometrically usually are found to lack spontaneity, to lack sensitivity to the environment, and to possess a distorted interpretation of reality. However, scoring high sociometrically does not relate directly to the best adjustment psychologically.

Northway, Frankel, and Potashin state:

Our American culture places a premium on sociability and all the qualities associated with the extravert. This is because we are a nation of salesmen and sociability pays. If however, we removed the premium value of sociability and emphasized the environment value, we would no longer attempt to make all children leaders, a goal few of them can reach, but would help each child to gain that level of sociability which best satisfies his unique needs. This is, we would formulate our requirements on the basis of the individual's ability to meet them (42, p. 64).

Similarly, Riesman, Glazer, and Denny (46) discuss the detriment of the socialization process for the child as that child develops a social radar for life in his daily reaction to the unresolved conflicts between inner-directedness and other-directedness in our society. They recognized the value of sociometric assessments in understanding these problems (46, pp. 67-71).
Peck (45) characterizes normal persons as those who possess neither outstandingly healthy nor outstandingly unhealthy features.

In an effort to arrive at a description of the normal personality, Bonney (3) utilizes peer nominations to produce a high normal group of subjects and a low normal group of subjects. He administered the Edwards Personal Preference Schedule to students along with a series of interviews to attain their life history records. Individuals in the high normal group were found to be interpersonally attractive and honest in communication with others. Possessing a strong motivation to maintain and to actualize themselves, these individuals had a capacity to be asserting against other’s efforts to dominate or to reflect them. Although some of his subjects at times had exhibited problem behavior in earlier life (e.g., one person had been a near alcoholic), it was apparent that peer nominations could help to select the optimally healthy people.

In a like manner Foreman (18) makes an effort to provide some empirical correlates of psychological health. His purpose is to differentiate between the performance of assumed normal and optimally healthy subjects on the basis of the dimensions of personality that hold positive value within our society. He identified his subjects by a process of instructors’ and student peers’ nominations from a population of 10,000 students. Twenty-nine optimally healthy and
twenty-nine normal individuals were compared. Methods were
developed by Foreman to measure positively valued characteristics. The following findings were revealed. Subjects
nominated as optimally healthy behave in a manner very dif-
ferent from that of subjects presumed to be of normal psy-
chological health. They were found to be more actively
involved in their immediate environment (participating in
more university activities, both social and academic, and
assuming more positions of leadership within these activi-
ties), and more open in admission of personal problems and
limitations and in spontaneous and diverse expression of
both their positive and negative feelings. The zestful sub-
jects demonstrated their higher level of psychological health
through the manner in which they related to others in small
discussion groups.

Excluding Maslow’s descriptions, the preceding studies
are generally concerned with homogenous college populations.
In efforts to arrive at a description of mental health,
other studies have been made on more representative samples
(2, 22, 45).

Herzberg, Mausner, and Snyderman (25) contributed to
the description of mental health as they studied motivation
to work. They tested the concept that man has two sets of
needs: his need as an animal to avoid pain and his need as
a human to grow psychologically. Testing an industrial pop-
ulation composed of 200 engineers and accountants, they
found distinct descriptions of "job satisfiers and job dis-
satisfiers" (25). These workers showed that strong deter-
minters of job satisfaction were achievement, recognition,
work itself, responsibility and advancement—the last three
being of greater importance for lasting changes of attitudes.
Herzburg named these factors "motivator factors." The major
dissatisfiers were company policy and administration, super-
vision, salary, interpersonal relations, and working condi-
tions. These dissatisfiers were named the "hygiene factors"
since they described the environment and had little effect
on positive job attitudes.

In a later study Herzburg and Maolin formulated a theo-
retical position (24) wherein mental health and mental ill-
ness were placed on two distinct continua supporting much
the same position as Maslow (32, 33). Herzburg illustrated
this position through his motivation-hygiene theory which he
diagramed as follows:

Animal—Adam—Avoidance of Pain from Environment
                          ____________________________
Human—Abraham—Seeking Growth from Tasks (22, p. 76)
                       ____________________________

Herzburg's basic theme is that of tying worker attitudes to
mental health with the motivation-hygiene theory. He says,

... from job attitudes to mental attitudes we can
think of two types of adjustment for mental equilibrium.
First, an adjustment to the environment, which is main-
ly an avoidance adjustment; second an adjustment to
oneself, which is dependent on the successful striving
for psychological growth, self-actualization, self-
realization or, most simply, being psychologically more-
than one has been in the past (22, p. 78).
To substantiate this position, twelve replications of the initial 1959 study including three cross-cultural samples of employees working in Finnish, Hungarian, and Russian industries are presented. With individual differences per study considered, the theoretical position remained substantially the same.

Hamlin and Wemo (21) studied self-actualization in improved schizophrenics in order to test Herzburg's theory. In the study, 23 improved and 23 non-improved subjects with a mean age of 40 were tested. The improved schizophrenics were found to have higher self-actualization scores and reflected an orientation toward achievement, responsibility, creativity, and enjoyment of productive efforts. This same group of improved schizophrenics obtained lower hygiene scores or were less preoccupied with surrounding conditions over which the subjects had limited control. These findings were substantiated at the .001 level of significance using a t test. The name of the scale used for measuring self-actualization in this study was not given.

Bondy (2) discusses some of the problems of Nazi internment camps of World War II. He attempts to show that one can not become himself without satisfying his needs in a social context. He says the relative priority and the interaction of physical and social needs showed up clearly in a Nazi concentration camp. Accordingly, in one camp where the food and housing conditions were not as bad as in
others, comradeship developed. There, where the individuals were members of a small closely knit group of prisoners that shared things equally, individuals survived better than individuals who were isolated. Bondy's information illustrates Maslow's hierarchy of needs. The division between deficiency motivation and growth motivation may be seen on this basis (33).

Bradburn and Caplovitz (9) investigated community differences on dimensions of happiness and behavior related to mental health. They found that happiness and worry are incompatible but are often associated as a reflection of involvement and affectivity. People of low socio-economic status and older people were both less happy and less involved. The data showed that there were community differences, due largely, however, to the direct impact of economic conditions on the life situation of individuals. When these communities were compared with the effects of unemployment or low income on happiness, the contextual effects were small and tended to be limited to the lower socio-economic groups who were most vulnerable to changes in economic conditions.

Although differences of opinion exist, the prevailing positions (3, 6, 15, 22, 34, 43, 45, 43, 50) give common support to the following characteristics of psychological health: (a) active involvement with the environment; (b) social orientation; (c) admission of personal problems;
(d) spontaneity; (e) flexibility; (f) expression of affect;
(g) self-other orientation; (h) openness to experience; (i) close interpersonal relations; (j) autonomy; and (k) anticipation of outcomes, i.e., optimism. The preceding characteristics are drawn together by Foreman (18, p. 5).

For the present investigation a recognized measure of self-actualization is needed. Such a scale has been developed and published by Shostrom (50). Below is a discussion of this scale.

Measurement of Self-Actualization

The Personal Orientation Inventory (hereafter referred to as the POI) has been presented by Shostrom (50) as a measure of self-actualization. It has been developed to provide an objective delineation of the level of an individual's mental health and to provide a basis for therapy that suggests a positive direction for growth. Its conceptual framework is based around comparative value and behavior judgements. Normative data have been provided for 412 high school students and 2,677 adults in a variety of different situations (45).

Review of Related Studies

In its research stage the validity of the POI was established (19, 29, 31, 40, 48, 51, 53). Shostrom (44) tested its effectiveness of discrimination by administering the POI to subjects nominated as self-actualized, normal,
and non-self-actualized. The Inventory significantly discriminated between clinically judged self-actualized and non-self-actualized groups on 11 of the 12 scales (10 at the .01 level).

Concurrent validation studies were made (19, 23, 51, 53). Knapp compared scores on the POI and the Eysenck Personality Inventory from 94 subjects. All obtained differences were at or beyond the .05 level of significance. He said, "... self-actualization is seen to be positively and significantly related to the lack of neurotic symptoms and tendencies" (23, p. 170). A study designed to reveal the sensitivity of the POI in clinical settings and establish concurrent validity with the Minnesota Multiphasic Personality Inventory was reported by Shostrom and Knapp (51).

The inventories were administered to two groups of outpatients in therapy. One was a group of 37 beginning patients in advanced stages of therapeutic progress. Whereas all 12 POI scales differentiated between the criterion groups at the .01 confidence level or better, only four of the KPFI scales made the same differentiation at the .01 level and three others at the .05 level. Correlations between the two inventories' scales were consistently negative, indicating that these scales may not be measuring exactly the same aspect of mental health.

Fox administered the POI to a group of 100 hospitalized psychiatric patients in a clinical setting and compared
their scores with Shostrom's 1964 groups. All scales significantly differentiated (beyond the .001 confidence level) the hospitalized sample from the nominated groups. Fox discovered that these patients even performed significantly below the non-self-actualized group (19).

Using the POI in an industrial setting, Marquilies (31) found significant mean differences between employees of departments where the department head was significantly more self-actualizing and employees of departments having a less self-actualizing department head. Further investigation revealed that these differences were associated with the organizational climate within the department. Marquilies seemed to suggest that the organization of work had significant effects on the organizational culture, and this culture seems to be associated with the degree to which the growth tendencies, both individual and organizational, were realized.

In an exploration of the relationship of self-actualization and teacher success, Murray (40) found a significant difference in POI scores between home economics teachers receiving high student ratings and those receiving low ratings. Ratings for 26 public school home economics teachers were based on responses of 2,333 students. The more favorably rated teachers, who were considered more successful, were more self-actualized. Differences in teacher effectiveness between those relatively more self-actualized were in a consistent direction when analyzed by grade. This was
significantly substantiated for grades 7, 8, 9, and 10 but not for grades 11 and 12.

The effects of group guidance upon college adjustment were reported by Pearson (44) using the POI. He hypothesized: where topics originated with group members and informal discussions were centered on personal feelings and needs of students that arose in small groups, a greater increase in POI scores would be shown than in groups in which a leader and group members collaborated in discussing attitudes and opinions; or in regular classes with leader planned topics and lectures; or where students were exempted from class for the semester. Students exposed to a permissive group-directed form of guidance permitting interaction between themselves demonstrated a more effective adjustment to college than students exposed to other methods. He discovered the most significant increase on the hypothesized group. These differences were expressed on the Time Competence and Inner Direction scales and eight of the POI subscales.

Moxey (39) investigated the relationship of seating choice of college students to academic achievement and personality factors. He tested the hypothesis that students choosing to sit near the front of the room will have higher average scores in both academic achievement and self-concept than those choosing seats near the back in classes in his study. Using POI scores for three scales—self-actualizing
values, self-regard, and self-acceptance— he found no significant difference between those who sat in the front of the class and those who sat in the back of the class.

Boozer (8) reported significant differentiations among sociometric status levels and seven POI scales when he studied 44 college students. His hypothesis stated that middle or average sociometric standing evidences the greater degree of mental health. When he used the deviation from chance method (10) to derive the sociometric status levels, three scales (Time Ratio, Inner Direction, and Self- Actualizing Value) significantly differentiated between the high and low level groups; and five scales (Other Direction, Inner Direction, Support Ratio, Self-Actualizing Value, and Nature of Man Constructive) significantly differentiated between the average and low level groups. When he used the division into fourths method (7), two scales (Acceptance of Aggression and Capacity for Intimate Contact) significantly differentiated between the average and high sociometric levels; and the Nature of Man Constructive scale significantly differentiated between the average and low sociometric levels.

Vance (55) utilized the POI and the Mental Health Analysis to describe the relationship of self-actualization and mental health. She administered the inventories to 218 entering college freshmen at North Texas State University. In her final analysis, she says, "The theory of self-actualization
as reflected in the POI is closely related only to a few aspects of mental health as reflected in the categories of the NHA" (53, p. 97).

Zaccaria and Weir (55) tested the hypothesis that the POI could differentiate between male alcoholics and female alcoholics, male alcoholics and their non-alcoholic wives, and alcoholics and relatively self-actualized individuals, alcoholics and normal individuals, and alcoholics and non-self-actualized adults. These comparisons were made on 38 male alcoholics, 7 female alcoholics, and 25 non-alcoholic wives of male alcoholics and subjects nominated as self-actualizers, normal adults, and non-self-actualizing adults in Shostrom's 1964 normative group. Significant differences were found between alcoholics and self-actualized individuals on the 12 positive POI scales. Concerning the interpersonal milieu where alcoholism exists, they said:

The lack of significant differences between alcoholics and their spouses appears to substantiate the contention that an alcoholic problem for one family member also influences the dynamics and adjustment of the spouse (and other family members) (55, p. 156).

On the basis of the preceding studies, the validity of the POI is assumed to adequately differentiate between a variety of criteria. However, a question still remains as to whether a potential to self-actualize exists in the high school student.

Drews, a teacher for gifted students, read Maslow, Rogers, Fromm, May, and others in the early 1950's. She was
influenced by these writers, to the extent that she began to
do research with their ideas using new evaluation instru-
ments that measured positive attitudes rather than just the
negative or abnormal attitudes. With this new way of look-
ing at her problem (14, pp. xiii, xiv), she was lead to the
discovery that a potential to self-actualize existed in an
adolescent population. She interviewed Maslow personally
to better orient her approach (14).

Drews suggests that forces in our society encourage
self-actualization in adolescent boys, but to a much lesser
extent in girls. She attempts to provide a way to encourage
these characteristics in girls by counseling and a dynamic
new educational program. She insists that there is a poten-
tial to self-actualize in the high school student, and that
this potential may be stimulated and set into motion (13).

Drews (16) investigated student abilities, grouping
patterns, and classroom interaction especially concerning
the effect of homogeneous and heterogeneous ability grouping
in ninth grade English classes. Then, she initiated an in-
vestigation of the creative intellectual style in gifted
adolescents and the motivation to learn as these affect at-
titudes, interests, and values. Under conditions of the
preceding study (14), she tested the effectiveness of audio-
visuals in changing aspirations of intellectually superior
students (12). An effort was made to understand how the
creative intellectual, who is original, perceptive, intuitive,
and flexible in thought, develops and to report his views on education, culture (technological, aesthetic, human), and self-fulfillment (15). The creative intellectual style was tested in Drew's studies by the following standardized instruments: Omnisus Personality Inventory, Allport-Vernon-Lindsey Study of Values, ACE Critical Thinking Test, Form G and the Rokeach Dogmatism Scale and Rokeach Rigidity Scale. Other informal instruments developed earlier by Drews were used: Student Interest Survey Scales, the Reasons for Occupational Choice, the Student Profile Check, the Ability Self-Concept Rating, and the Acceptance of Woman Scale, the Self-Actualization of Woman and the Humanitarian-Altruism Scale. These extensive studies testing approximately 2,000 adolescent students were supported by the Media Branch, Title VII of the Office of Education and Welfare. Therefore, a completely new schooling program was developed and studied in order to produce attitude changes in the direction leading toward a greater motivation to learn, openness to psychological growth, and general social concern.

Drews says the well-rounded self-actualizing human being is one who "is characterized by a security within himself which enables him to approach life with zest and enthusiasm, and to make full and creative use of his unique capacities for others" (16, p. 223). Of the relationship between self-actualization and sociometric status, she indicates that where able girls are placed in groups or found already
grouped, they associate with other self-actualizers, yet where there is an activity-less group, individual self-actualizers are able at will to break away from conformity with it. She notes however, that considerable prejudice is expressed against persons "who behave in self-actualizing ways. This prejudice mainly was exhibited by boys who also expressed strong feelings against other values stereotypically associated with women" (17, p. 6).

In a doctoral dissertation by Guinouard (20) personality traits and mental health habits of sociometrically popular and unpopular sixth and eighth grade students were investigated. This relationship was tested on 112 sixth grade students and 93 eighth grade students in Pullman, Washington public schools. A personality questionnaire, the Mental Health Analysis and a sociometric inventory were administered. He (20) found popular children at both grade levels to have more desirable mental health characteristics and personality traits.

This investigation presents the need for a sociometric assessment. The 1947 "how I Feel Toward Others" scale (5) was devised by M. E. Bonney and students of the Department of Psychology at North Texas State University to meet such a need. The validity of this scale was first tested in an exploratory study by Cox. Scores on the scale were compared with judged anecdotal records of fifth grade school children. An \( r = .26 \pm .14 \) was reported (11). Bonney (4, p. 101)
reported the correlations between successive group ranks, which varied from .62 to .94. These findings represented time intervals which varied from one day to four months. The validity of the instrument is based on the assumption that feelings carry their own validity for the particular persons concerned. This validation process assumes that the subject is giving honest or sincere responses. Bonney adds that the validity of the "How I Feel Toward Others" scale was enhanced because students submitted the items which composed the scale (4).

Bonney and Pessenden (7, p. 9) say, concerning the validity of sociometric scores, that in total groups the relationships between personality assessment and sociometric scores are not marked; however, if those who are high in chosen status are contrasted with those who are low, quite consistently the findings show that frequently chosen subjects are reliably superior to less frequently chosen ones in desirable types of behavior adjustment. Retest reliability coefficients range from $r = .40$ to $r = .90$ (9). Bonney reported similar findings (4). The reliability of the scale was established by the constancy of scores on two successive administrations of the scale over various time intervals.

Considering the above literature relative to possible relationships between sociometric status and self-actualization, the most relevant studies were grouped as follows: Maslow (34), Bonney (3, 6), Foreman (18), Shostrom (48),
Drews (16), and others (8, 31, 40, 47) use a nominal and/or sociometric process in describing the self-actualizing and optimally healthy person. These investigators revealed that the optimally healthy usually possessed higher social standing. Other investigators, namely Northway and Widgor (43), and Boozer (8) revealed that the middle sociometric group possessed few psychological stresses. Shostrom (43) and Rogers (47) pointed out that low standing individuals possessed negative characteristics or were incongruent. Data reported by Drews (16), Pearson (44), Jennings (23), and Bonney (6) have shown that some highly chosen individuals have numerous sources of psychological stress. Herzburg (22) suggested that interpersonal relations, as they affected worker job satisfaction, were negatively related to mental health. The above is a summary of background literature on which the hypotheses were based.

It was the purpose of the present investigation to display the tentative relationships between self-actualization and sociometric status of adolescent school students. In light of the theoretical and related literature presented above, the following hypotheses were posited:

**Hypothesis I:** Students who are high sociometrically will evidence higher POI means than the middle or low groups on the following POI scales:

a. Time Competent—These people are primarily self-actualized and appear to live more fully in the here and now.
Such people make positive use of their time by tying together their past, present, and future.

b. Time Ratio—Indicative of the degree of imperfection in self-actualized people. This ratio may be viewed as an expression of use, contrasted with misuse of time.

c. Inner Direction—The inner-directed man goes through life apparently independent of, but in obedience of outside authority (convention). He is guided by internal motivations rather than external influences.

d. Support Ratio—The self-actualizing person is only to a degree self-supportive; some of the time he is other-oriented.

e. Self-Actualizing Value—The individual holds and lives by values of self-actualizing people; a low score means he rejects these values.

f. Nature of Man, Constructive—These people can resolve the goodness-evil, masculine-feminine, selfishness-unselfishness, and spirituality-sensuality dichotomies in the nature of man.

g. Acceptance of Aggression—These people have ability to accept anger or aggression within one's self as natural.

Hypothesis II: Students who are low or middle sociometrically will evidence higher PQI means than the high group on the major negative PQI scales:

a. Time Incompetent—Indicative of a person experiencing difficulty in his personal effectiveness as a result
of misuse of time. This individual is excessively past or future oriented.

b. Other Direction--Approval by others becomes this person's highest goal. All his power is invested in an actual or imaginary, approving group.

Hypothesis III: There will be a low positive correlation between sociometric status and the following positive (49) POI variables: Time Competence, Time Ratio, Inner Direction, Self-Actualizing Value, Existentiality, Feeling Reactivity, Spontaneity, Self-Acceptance, Nature of Man, Synergy, and Acceptance of Aggression.

Hypothesis IV: There will be a low negative correlation between sociometric status and the following negative (49) POI variables: Time Incompetent and Other Direction.
CHAPTER BIBLIOGRAPHY


5. __________, "How I Feel Toward Others," unpublished sociometric scale, Department of Education and Psychology, North Texas State University, Denton, Texas, 1947.


43. and Blossom Wigler, "Rorschach Patterns Related to the Sociometric Status of School Children," Sociometry, X (May, 1947), 136-199.


CHAPTER XI

METHOD

Subjects

One hundred and forty-nine students enrolled in four Texas public schools were used as subjects. These students were enrolled in high school during May and June of 1967. There were 56 Denton students, 31 West Columbia students, 25 Orchard students, and 37 Rosenberg students. Completed data were obtained on 118 of the subjects. There were insufficient sociometric data for the Orchard group and no self-actualization measure on seven of the West Columbia subjects. The mean age of the 118 subjects was 15.3 years with a range of 14 to 19. There were 56 females and 62 males. No eligibility requirements were placed on the students other than grade level. All were assumed to be above a mental age of 14.

Statistical Design

A simple analysis of variance technique was utilized to test the preliminary hypotheses that significant differences existed among the POI mean scores for each of the three sociometric levels (6, 7). These sociometric levels were derived by ranking the individual sociometric indexes of the 118 subjects from high to low and by dividing the resultant
distributions into approximate thirds (8). The first and second hypotheses were then tested by applying Fisher's t test to the POI means for sociometric levels.

Hypotheses III and IV required Pearson product moment coefficients of correlation (r) to test the relationship between self-actualization and sociometric status. Appropriate t test were applied to test the significance of these relationships. The 5 per cent level of confidence was set as critical.

Materials

Measure of Self-Actualization

The Personal Orientation Inventory, by Everett E. Shostrom, was used to measure self-actualization (10). The POI has been developed to provide a positive diagnostic approach as a basis for therapy that suggests a positive direction for growth. This objectively scored self-administering inventory contains 150 paired opposite statements. A sample of an item is as follows: A I am self-sufficient. B I am not self-sufficient. The student marked either A or B on a machine scored answer sheet. From these items were derived two ratio scores, Time Incompetence—Time Competence (Ti/Tc) and Other Directed—Inner Directed (O/I); and 10 subscales: Self-Actualized Value (SAV), Existentiality (Ex), Feeling Reactivity (Fr), Spontaneity (S), Self Regard (Sr), Self-Acceptance (Sa), Nature of Man (Nc), Synergy (Sy), Acceptance
As to the validity of the POI, Shontrom states that most importantly the test should be able to discriminate between individuals who have been observed in their life behavior to have attained a relatively high level of self-actualization and those individuals who have not evidenced such a development. Significant discriminations are reported between clinically judged self-actualized and non-self-actualized groups on 11 of the 12 POI scales (11, p. 25). The test is applicable to adults and adolescents down to about age 13. The manual cautions against interpreting results for individuals with mental ages of less than 14.

An outstanding characteristic of the POI is that it minimizes the subject's choosing desirable items and rejecting undesirable items by offering him a pair of statements. He is forced to choose the statement which best describes himself. "The particular continuum or end-poles of the dichotomy in question are made explicitly clear" (11, p. 25). Perls (9, p. 17) insists that opposites are dictated not by word but by their context; therefore, the POI does not assume that the reader knows the "opposite" of the statement in question.

A low intercorrelation has been reported between the scales. The Time Competence and Inner-Directed scales are the only scales that do not have overlapping items.

Test-retest reliability coefficients of .71 and .34 were obtained for the major scales of Time Competence and
Inner-Direction respectively, and coefficients for the sub-scales range from .55 to .85. These coefficients were obtained for the FQI scales from a sample of 48 undergraduate college students (11, p. 31).

Measure of Sociometric Status

The sociometric assessment used is an adaption of the 1947 "How I Feel Toward Others" scale devised by M. E. Bonney and students of the Department of Psychology at North Texas State University (1). The scale uses the following criteria by which choices were made: 1. My best friends; 2. My other friends; 3. Don’t know; 4. Not my friends; 5. Do not want as friends. These consist of psyche-group or friendship criteria. The scale is directed toward uncovering psyche-group processes. Jennings defines psyche-groups as those having a structure based on a criterion which is strictly private in nature; or as "association in the time individuals have at their disposal for leisure" (4, p. 3).

In order to get at a more inclusive Gestalt of the group, the HIFTO asks for both positive and negative choices. Since its development, support has been given to the use of both criteria (positive and negative choices) (5, p. 9; 2, p. 103). Concerning the method of scoring, weighted scores are used to represent the choices and rejections received by each individual. They are derived by assigning a weighted score of 2 to each first choice (best friend);
1 to each second choice (other friend); 0 to each third choice (student I don't know); -1 to each fourth choice (student I know but who is not my friend) and; -2 to each fifth choice (student I do not want to have as a friend).

The weighted scores received above are comparable only to other members in one group. However, the hypotheses required that the sociometric score value of each individual be comparable with score values received in other groups as well. Therefore, the weighted scores received by each individual from other members of his own group were converted to individual sociometric indices. This was done by entering each weighted score into the following formula: weighted score/ [(number in group -1) X 2]. The need for a method to make sociometric score values comparable with individual score values on other scales is discussed by Bronfenbrenner (3, pp. 69-73).

The validity of a sociometric assessment is generally assumed through the fact that such data are samples of actual behavior studied. Since the data are in such form, the validity of any sociometric technique depends upon the task to be accomplished and how effectively one uses the data available concerning the task. The reliability of the HiFTO was established by the constancy of scores on two successive administrations of the scale over various time intervals (2, p. 101). The rho correlations between successive group ranks varied from .62 to .24.
Procedure

The "How I Feel Toward Others" scale and the Personal Orientation Inventory were each administered to the subjects by their homeroom teacher. Prior to the testing, the investigator read through the instructions for each test with each teacher. He answered any questions which arose concerning the instruments and their administration.

The "How I Feel Toward Others" scale was given prior to the POI. Each student was given a copy of the scale which contained descriptive statements of each of five categories. The teacher read the scale aloud to the students while they read it silently. A copy of the HIFTO is provided in the appendix of the present report. Each student was given a class list which included the name of every student in the class. Every student indicated his feeling of friendship toward every other student in his class by placing a number from one to five by the name of every student on his list (excluding himself); these numbers corresponded in meaning to the five major headings on the scale.

After the instructions were read and all questions concerning the HIFTO were answered, the choices were assigned by the subjects. This required approximately 20 minutes for each class. After everyone terminated the HIFTO, a short rest period was allowed. Then the Personal Orientation Inventory was administered.

The POI test booklets with answer sheets inside were passed out. The directions were read aloud by the teacher.
This inventory consists of pairs of numbered statements. Read each statement and decide which of the two paired statements most consistently applies to you.

You are to mark your answers on the answer sheet you have. Look at the example of the answer sheet shown at the right. If the first statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken between the lines in the column headed "a". (See Example Item 1 at right.) If the second statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken between the lines in the column headed "b". (See Example Item 2 at right.) If neither statement applies to you, or if they refer to something you don't know about, make no answer on the answer sheet. Remember to give your own opinion of yourself and do not leave any blank spaces if you can avoid it.

In marking your answers on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks in this booklet.

Remember, try to make some answer to every statement.

Before you begin the inventory, be sure you put your name, your sex, your age, and the other information called for in the space provided on the answer sheet.

Now open the booklet and start with Question 1 (10, p.1).

After all questions were answered, the assessment commenced. The inventory required about 50 to 60 minutes to administer. During the administration, no difficulties were encountered. When the students completed both instruments, they were thanked for their cooperation. If any questions arose after the testing was completed, they were answered as
fully as possible by the teachers and/or the investigator. Because the collection of the data involved subjects in six different schools, testing took place over a 45-day period.

In the following chapter, the results are presented in the order required by each hypothesis.
CHAPTER BIBLIOGRAPHY


Chapter III

RESULTS

Hypotheses I and II presented in Chapter I were tested by subjecting each POI score value to a simple analysis of variance scheme (1, 2). The single independent variable was sociometric status divided into three levels—high, middle, and low.

The magnitude and direction of the relationship between sociometric status and the 16 POI variables were predicted in Hypotheses III and IV. The Pearson Product Moment Coefficient of Correlation was the statistic employed to test Hypotheses III and IV (2).

Presentation of the statistical results bearing on the hypotheses appears below. The results for Hypotheses I and II are presented first, and those for Hypotheses III and IV follow.

The statistical analyses of the results were organized under these headings:

1. Differences between POI scores for the three sociometric levels.
2. Correlations between scores on the POI and sociometric status.
3. Incidental results.
Difference Between POI Scores for the Three Sociometric Levels

The sociometric levels were constituted in the following way (3). The sociometric indexes received for the total sample of 118 subjects were placed in rank order from highest to lowest. The indexes ranged from a value of .653 to -.333. Next the distribution was divided into approximate thirds. The upper third (high group, N=39) scores ranged from .653 to .316. The middle sociometric group (middle group) was composed of 40 subjects whose scores ranged from .307 to .116. Lastly, the lower third (low group, N=39) scores ranged from .111 to -.333.

The means and standard deviations of the 16 Personal Orientation Inventory variables for each of the three sociometric levels are presented in Table I. The data presented in Table I reveal trends in favor of higher high group means than middle or low group means on the following POI scales: Time Competent (Tc); Time Ratio (Ti/Tc); Inner-Direction (I); Self-Actualizing Value (Sav); Self-Acceptance (Sa); Nature of Man Constructive (Nc); Synergy (Sy); and Acceptance of Aggression (A). On the Support Ratio (I/O), Existentiality (Ex), and Feeling Reactivity (Fr) scales, the high group mean was higher than the low group, but both the high and low groups were lower than the middle group. To the extent that the middle group had higher means than the high group on the last three scales considered, hypothesis I was in error.
The means of the low sociometric group exceeded both the means of the high and middle sociometric groups on the following POI variables: Time Incompetence (Ti); Other Direction (O); Capacity for Intimate Contact (C); Spontaneity (S); and Self-Regard (Sr).

Further statistical treatment provided significance of the differences. A simple randomized analysis of variance was utilized to test the significance of the difference among the three sociometric level means for each of the 16 variables. Table II contains the summary analysis of variance information for the six POI variables yielding
significant $F$ ratios. The summary data for the ten remaining non-significant analyses of variance are included in Table VI in the appendix.

**Table II**

**LEVEL OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE HIGH, MIDDLE, AND LOW SOCIONOMIC STATUS GROUPS ON THE POI DETERMINED BY SIMPLE ANALYSIS OF VARIANCE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum Sq.</th>
<th>DF</th>
<th>Mean Sq.</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Incompetence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>60.87</td>
<td>2</td>
<td>30.43</td>
<td>2.90</td>
<td>0.1</td>
</tr>
<tr>
<td>Within</td>
<td>1206.21</td>
<td>115</td>
<td>10.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1267.08</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>77.83</td>
<td>2</td>
<td>38.91</td>
<td>4.02</td>
<td>0.05</td>
</tr>
<tr>
<td>Within</td>
<td>1112.79</td>
<td>115</td>
<td>9.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1190.61</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>10.53</td>
<td>2</td>
<td>5.26</td>
<td>2.48</td>
<td>0.1</td>
</tr>
<tr>
<td>Within</td>
<td>243.39</td>
<td>115</td>
<td>2.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>253.92</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Actualizing Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>65.14</td>
<td>2</td>
<td>32.57</td>
<td>3.38</td>
<td>0.05</td>
</tr>
<tr>
<td>Within</td>
<td>1105.05</td>
<td>115</td>
<td>9.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1170.20</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of Man, Constructive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>45.90</td>
<td>2</td>
<td>22.95</td>
<td>4.37</td>
<td>0.05</td>
</tr>
<tr>
<td>Within</td>
<td>602.75</td>
<td>115</td>
<td>5.24</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>648.65</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synergy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>14.37</td>
<td>2</td>
<td>7.13</td>
<td>3.27</td>
<td>0.05</td>
</tr>
<tr>
<td>Within</td>
<td>252.64</td>
<td>115</td>
<td>2.19</td>
<td></td>
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<tr>
<td>Total</td>
<td>267.01</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inspection of Table II reveals that significant differences between the means existed among the high, middle, and low sociometric groups on the POI. These differences were present for the Time Competence (Tc); Self-Actualizing Value (SAV); Nature of Man Constructive (No); and Synergy (Sy) scales with .05 level of confidence F tests. Scales approaching the confidence level but significant only at the 0.10 level F test were Time Incompetence (Ti) and Time Ratio (Ti/Tc). The remaining 10 POI scales did not achieve high enough F levels to be considered.

After significant F tests, the remaining logical analytical procedure was to test the significance of the differences among the three sociometric level means using the t test. Those t tests which were significant are presented in Table III.

**TABLE III**

LEVEL OF SIGNIFICANCE OF THE DIFFERENCES AMONG THE THREE SOCIOMETRIC LEVEL MEANS

<table>
<thead>
<tr>
<th>POI Scales</th>
<th>High-Middle</th>
<th>High-Low</th>
<th>Middle-Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>P</td>
<td>t</td>
</tr>
<tr>
<td>Ti</td>
<td>-1.67</td>
<td>.10</td>
<td>-2.34</td>
</tr>
<tr>
<td>Tc</td>
<td>2.19</td>
<td>.05*</td>
<td>2.86</td>
</tr>
<tr>
<td>Ti/Tc</td>
<td>1.75</td>
<td>.10</td>
<td>2.07</td>
</tr>
<tr>
<td>SAV</td>
<td>2.60</td>
<td>.02*</td>
<td>1.35</td>
</tr>
<tr>
<td>No</td>
<td>2.82</td>
<td>.01*</td>
<td>2.17</td>
</tr>
<tr>
<td>Sy</td>
<td>2.55</td>
<td>.02*</td>
<td>1.30</td>
</tr>
</tbody>
</table>

*P=.05
Inspection of Table III reveals that four scales significantly differentiated between the high and middle sociometric status groups. These scales, Time Competence (Tc); Self-Actualizing Value (SAV); Nature of Man Constructive (Nc); and Synergy (Sy) were in favor of Hypothesis I. When the high and middle sociometric status groups were contrasted the Time Incompetent (Ti), the Time Competent (Tc), and the Time Ratio (Ti/Tc), and the Nature of Man Constructive scales significantly differentiated between the groups. The latter three scales named were in support of Hypothesis I. There was no appreciable differentiation between the middle and low sociometric status groups.

The only scale to make significant differentiations in support of Hypothesis II was Time Incompetence. This scale differentiated between the high and low sociometric status groups at the .05 confidence level. The _t_ test between the high and middle sociometric status group (_t_ = -1.67, _P_ = 0.10) only approached significance.

Note that when the high and low sociometric status groups were contrasted, the Time Incompetence (Ti) scale and the Time Competence (Tc) scale significantly differentiated in opposite directions. Time Competence, a positive scale, had significantly higher high group means than the low group, whereas the Time Incompetence, a negative scale, had significantly higher low group means than the
high group. These results are in support of both Hypotheses I and II.

In summary the results pertaining to Hypotheses I and II were obtained by simple analysis of variance. The sociometric status levels were determined by the division into thirds method. From Table I, differentiated trends between the means were enumerated. Of these trends Table II revealed that there were six POI variables which significantly differentiated among the means for the sociometric status groups. Location of these differences was accomplished by computing tests between the means. The t tests reaching significance were provided in Table III and enumerated.

Correlations Between Scores on the POI and Sociometric Status

The results of the correlations between the scores on the 16 POI scales and sociometric status are presented in Table IV. The means and standard deviations are included for future investigators who may wish to use the Personal Orientation Inventory with tenth grade high school subjects.

Inspection of Table IV reveals that significant correlations in favor of Hypothesis III were obtained on the Time Competence, Time Ratio, and Nature of Man Constructive scales. Non-significant trends in favor of the hypothesis were found on the Inner Direction, Support Ratio, Self-Actualizing Value, Existentiality, Self-Acceptance, Synergy,
### Table IV

**Means, Standard Deviations, and Correlations Among the Predictor Variables and the Criterion Variable (N=118)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>( T_i )</th>
<th>( T_c )</th>
<th>( T_i/T_c )</th>
<th>( O )</th>
<th>( I )</th>
<th>( I/O )</th>
<th>SAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexonomic Status F</td>
<td>-.190*</td>
<td>.223*</td>
<td>.174*</td>
<td>-.074</td>
<td>.091</td>
<td>.012</td>
<td>.059</td>
</tr>
<tr>
<td>Mean</td>
<td>8.44</td>
<td>14.29</td>
<td>2.1</td>
<td>51.96</td>
<td>72.13</td>
<td>1.4</td>
<td>17.71</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.2</td>
<td>3.1</td>
<td>1.4</td>
<td>9.3</td>
<td>8.6</td>
<td>.45</td>
<td>3.1</td>
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</table>

*Significant at the .05 level.

### Table V

**Level of Significance of the Differences Among the School Classes on the POI**

<table>
<thead>
<tr>
<th>POI Scales</th>
<th>( T_i )</th>
<th>( T_c )</th>
<th>( T_i/T_c )</th>
<th>( O )</th>
<th>( I )</th>
<th>( I/O )</th>
<th>SAV</th>
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<tbody>
<tr>
<td>F Level Test</td>
<td>3.90</td>
<td>2.93</td>
<td>2.38</td>
<td>4.51</td>
<td>3.74</td>
<td>4.43</td>
<td>2.02</td>
</tr>
<tr>
<td>Probability</td>
<td>.01</td>
<td>.05</td>
<td>.05</td>
<td>.001</td>
<td>.01</td>
<td>.001</td>
<td>.10</td>
</tr>
</tbody>
</table>

Degrees of freedom between equals 5
Degrees of freedom within equals 137
### TABLE IV--Continued

<table>
<thead>
<tr>
<th>Ex</th>
<th>Fr</th>
<th>S</th>
<th>Sr</th>
<th>Sa</th>
<th>Nc</th>
<th>Sy</th>
<th>A</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>.046</td>
<td>.042</td>
<td>-.033</td>
<td>-.102</td>
<td>.103</td>
<td>.197*</td>
<td>.060</td>
<td>.030</td>
<td>-.030</td>
</tr>
<tr>
<td>16.72</td>
<td>13.41</td>
<td>10.03</td>
<td>10.32</td>
<td>12.8</td>
<td>10.41</td>
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<td>4.0</td>
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<td>2.8</td>
<td>2.3</td>
<td>1.5</td>
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### TABLE V--Continued

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<th>Nc</th>
<th>Sy</th>
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</table>
and Acceptance of Aggression scales. The Spontaneity scale was in opposition to Hypothesis III but non-significantly.

The same table reveals that only one significant correlation was found in favor of Hypothesis IV. The Time Incompetence had an $r = -.199, P = .05$. Table IV also provides the POI means and standard deviations derived from the 118 subject sample.

In summary, Hypotheses III and IV were tested by subjecting the POI scores and sociometric status to Pearson product moment correlation. These correlations were presented in Table IV. The scales achieving significant $t$ tests were enumerated when in favor of either hypothesis. The Time Competence, Time Ratio, and Nature of Man Constructive scales were in support of Hypothesis III. The Time Incompetence scale was negatively related and in support of Hypothesis IV.

Incidental Results

Differences among six school classes, who served as subjects and took the POI, were discovered. Because no hypothesis was made relative to these variables, the incidental results are presented but not examined fully as a major part of this investigation. The analyses derived were $F$ tests determined by simple analysis of variance among six school classes ($N = 143$) who took the POI. The incidental results are presented in Table V.
Inspection of Table V reveals that nine of the 16 POI variables achieved better than .05 level, F test, differences among the means. These differences among the means were present on the Time Incompetence, Time Competence, Time Support, Other Direction, Inner Direction, Support Ratio, Self Acceptance, Acceptance of Aggression, and Capacity for Intimate Contact scales of the POI. Other appreciable differences at the 0.10 level F test were present among the Self-Actualizing Value and Nature of Men Constructive scale means. Elaboration of these results is beyond the scope of this investigation.

The statistical analysis of the results were organized and presented to compare and to contrast the relationship between self-actualization and sociometric status. Incidental results were provided to reveal the differences between the groups exhibited on the POI. The following chapter provides a discussion of these results.
CHAPTER: BIBLIOGRAPHY


CHAPTER IV
DISCUSSION

Little research has been done by any investigator to compare and to contrast the relationship between self-actualization and sociometric status. No research has been found which does both. Many studies have investigated the relationship between sociometric status and personality variables, but no studies have used the "How I Feel Toward Others" scale and the Personal Orientation Inventory. The present study investigated the differences between sociometric levels and self-actualization as well as the relationship between these two variables with the above instruments as a test of the hypotheses presented.

Hypothesis I predicted that students who were high sociometrically would evidence higher POI means than middle or low groups on seven scales. When statistical tests of significance were used to contrast the high and low sociometric groups, the Time Competent, Self-Actualizing Value, Nature of Man Constructive, and Synergy scales were significant in the predicted direction; however, Hypothesis I did not consider the Synergy scale. When the high and middle sociometric groups were contrasted, the Time Competence, Time Ratio, and Nature of Man Constructive significantly
differentiated in the predicted direction. No appreciable differences were found between the means of the middle and low sociometric status groups. As measured, those individuals in the high sociometric group possessed more positive characteristics: they made competent use of time, held positive values, saw men as essentially good, and saw opposites of life as meaningfully related. These findings were in support of Hypothesis I and similar to those reported by Drews (4) and Boozer (2). Maslow (11), Shostrom (16), and others (1, 6, 10, 13) have equally revealed that self-actualization (healthier) tendencies in subjects could be differentiated on the basis of a nominal process.

Hypothesis II, which specified negative variables: Time Incompetence and Other Direction as the scales of the POI which would be differentiated by the three sociometric groups, received only partial support. The only scale to significantly differentiate between the sociometric status levels was Time Incompetence. Individuals in the low group more predominantly revealed misuse of time than those in high groups. According to Shostrom the Time Incompetence scale measured negative characteristics (17). The higher low sociometric group means on this scale were in agreement with Shostrom.

Recall that significantly higher high group means were present on the Time Competence scale and that significantly higher low group means were present on the Time Incompetence
scale. Shostrom designated these as major and opposing scales of the POI (17). These findings supported Hypothesis I and II and were in keeping with other studies (2, 7, 10, 13, 14) which helped to validate the POI.

The next step was to see how and in what way, if any, different POI variables were related to sociometric status. This was accomplished by testing Hypothesis III, which specified that a low positive coefficient of correlation (r) existed between predictor and criterion variables, and by testing Hypothesis IV, which specified that a low negative coefficient of correlation (r) existed between other predictor and criterion variables. Four POI variables were significantly correlated with sociometric status for the total 118 subject group. Three of these scales: Time Competence, Time Ratio, and Nature of Man Constructive, significantly supported Hypothesis III. The Time Incompetence scale yielded a low significant negative correlation in favor of Hypothesis IV. These results were in keeping with findings reported by Shostrom (16, 17). Also, they agreed with the position that a low correlation exists in a greater proportion of the population (1, 4, 11, 12). The low correlation is similar to the conclusion made by Jennings (9) that status was not related to personality but to the interpersonal contributions of the individual to the group.

The present study was not able to support or discredit Herzburg's position (3), which specified that interpersonal
relationships were not related to mental health factors such as self-actualization. Neither was the investigation able to support Drew's contention (5, p. 6), which specified that considerable prejudice may be expressed against some individuals' behaving in self-actualizing ways. Nor was it considered to be a sufficient indicator or test of Rogers' tentative law of interpersonal relations (15, pp. 344-345).

The incidental results reported in Chapter III revealed differences among the six classes of students who took the POI. These differences did not pertain to any hypothesis put forth in Chapter I but arose when the means for each of the six subject groups were contrasted. When the data were subjected to an analysis of variance schema, F tests for nine of the 16 POI variables achieved better than .05 level differences among the means. Two other scales were significantly differentiated among the groups at the 0.10 level. The ability of the POI to differentiate among a variety of groups or subjects has been substantiated by other studies (2, 10, 13, 14, 16, 17, 18). This incidental finding was considered to be indicative of the fact that the POI is sensitive enough to discriminate among high school age populations; however, within the limits of this investigation this indication was not verifiable.

In summary, an effort has been made to discuss the results pertinent to the hypotheses set forth in Chapter I and to tie this discussion to other findings in related studies.
The results discussed are in general agreement with the position that upper and lower sociometric status levels can be used to differentiate between the means of personality variables. The results discussed are also in agreement with the position which states that low correlations are to be expected between personality variables and sociometric status.

Recommendations

The following recommendations are made to future investigators:

1. The meaning of membership in the middle as well as high and low sociometric groups needs to be more accurately spelled out.

2. The normative group of the POI needs to be expanded to include a representative sample of high school students to determine the effectiveness of the Personal Orientation Inventory as a counseling tool.

3. Other variables should be observed at the same time to determine the existence of interaction.

4. On the basis of the incidental results provided in Chapter III, it is recommended that the correlations between self-actualization and sociometric status be examined on a group by group basis.

The following chapter summarizes the present investigation. It presents the problem, the hypotheses, and how they were tested as well as the results.
CHAPTER BIBLIOGRAPHY


CHAPTER V

SUMMARY

The study was undertaken to compare and contrast the relationship between self-actualization and sociometric status. The Personal Orientation Inventory (POI) (2) was used to measure self-actualization. An adaption of the How I Feel Toward Others (HIFT0) scale (1) was used to assess sociometric status. The following hypotheses were tested.

Hypothesis I: Students who are high sociometrically will evidence higher POI means than the middle or low groups on the following POI scales: Time competent; Time Ratio; Inner Direction; Support Ratio; Self-Actualizing Value; Nature of Man Constructive; and Acceptance of Aggression.

Hypothesis II: Students who are lower middle sociometrically will evidence higher POI means than the high group on the following POI scales: Time Incompetence and Other Direction.

Hypothesis III: There will be a low positive correlation between sociometric status and the following positive POI variables: Time Competence; Time Ratio; Inner Direction; Self-Actualizing Value; Existentiality; Feeling Reactivity; Spontaneity; Self-Acceptance; Nature of Man Constructive; Synergy; and Acceptance of Aggression.
Hypothesis IV: There will be a low negative correlation between sociometric status and the following negative POI variables: Time Incompetence and Other Direction.

The subjects, one hundred eighteen male and female students, with a mean age of 15.3 years ranging from fourteen to nineteen years, were obtained from four Texas public schools.

The sociometric test consisted of psycho-group criteria. It was an adaption of the "How I Feel Toward Others" scale devised by K. E. Bonney (1). The scale is composed of five categories: 1. best friends; 2. other friends; 3. students I do not know; 4. not my friends; and 5. students I do not like. Choices received were weighted and totaled, and converted to individual sociometric indices. The HIPTO was administered first and took approximately twenty minutes to complete.

The Personal Orientation Inventory (POI) (2) consists of 150 two-choice comparative value and behavior judgements, designed to measure twelve characteristics of self-actualization. This test was administered in six classrooms by a homeroom teacher supervised by the investigator. The nature of the test was not revealed to the subjects. All the students who began the test finished it. The test required approximately 65 minutes to administer to each class.
Hypothesis I and II were tested by subjecting the obtained scores to an analysis of variance scheme for three sociometric levels. Hypothesis III and IV were tested by subjecting the obtained scores to Pearson product moment correlation. This statistical treatment was carried out by the North Texas State University Computer Center. The principal findings were as follows:

1. Hypothesis I was partially supported. Five obtained mean differences between high and middle or low sociometric groups were sustained by t tests at the .05 level or better.

2. Hypothesis II was partially supported. Differences between the low and middle or high sociometric groups were correctly predicted for the Time Incompetence POI scale. This finding was substantiated at a .05 level t test when the high and low sociometric groups were contrasted.

3. Hypothesis III was partially supported. There were three significant positive r's, ranging between .223 and .174.

4. Hypothesis IV was partially supported. There was a significant negative r of -.199 between POI scale Time Incompetence and sociometric status.

The study demonstrates that mean differences on the POI (self-actualization) can be predicted by sociometric status when the division into thirds method is used. This study also demonstrates that an apparent relationship exists
between sociometric status and self-actualization. Recommendations for future investigators have been offered.

APPENDIX
How I Feel Toward Others*

The teacher and the students should read this entire scale together.

To the students:

You have taken tests in arithmetic, reading, and other subjects so that your teacher could know better how to help you in your studies. Now you are asked to tell how you feel toward other students in your class. This is not a test like the others you have taken. There are no right or wrong answers. All you need to do is to tell how you feel toward other students in your class. By completing this assessment you will help the teacher to know which students you can best get along with.

No student will be allowed to see another student's paper.

Directions: On another sheet of paper you have the names of all the students in your class. As soon as we finish reading the directions, you will be asked to draw a circle around one of the numbers beside each name, including your own name. The numbers which you will use are the numbers of the paragraphs listed below.

Do not circle any numbers yet. Please leave your pencils down until your teacher tells you to begin.

Number 1 is for: My Best Friends—How can we tell our best friends from just ordinary friends? Below you will find listed some things which are generally true of our best friends. Circle a Number 1 next to the names of these students who are best friends.

A. You associate with your best friends a lot and enjoy being with them.
B. You treat them nice, help them whenever you can, and share your things with them.
C. You go places with them and talk with them a lot.
D. You go to their homes and they come to your home quite often.

Number 2 is for: My Other Friends—Besides our best friends all of us have other friends whom we like fairly well. Circle a Number 2 next to the names of those students you like fairly well.

*Adapted by Patricia and Kenneth Koym, Denton, Texas, 1966.
A. You associate with them occasionally, but you do not always enjoy being with them.
B. You are nice to them most of the time, but seldom share your things with them.
C. You occasionally go places with them and talk with them, but not very often.
D. You seldom go to their homes and they seldom come to your home.

Number 3 is for: Students I Don't Know—There may be some students on your list whom you don't know well enough to tell much about them or to know whether you like them or not. Circle a Number 3 next to the names of the students that you do not know well enough to rate.

Number 4 is for: Students Whom I Know, But Are Not My Friends. All of us know some persons quite well but we do not consider them to be our friends. Circle a Number 4 by the names of the students you do not consider as your friends.

A. You seldom desire to be with them.
B. You do not get along very well with them when you are around them.
C. You do not talk to them or go places with them unless it is necessary to be polite.
D. You do not appreciate some of the things they do, and the way they act at times.

Number 5 is for: Students I Do Not Want To Have As Friends—as long as they are like they are now. Nearly all of us find there are a few persons we cannot get along with. These people may be all right in some ways, and may be regarded as good friends by others, but not by us.

A. You avoid associations with them, and you never choose them as partners for a game.
B. Sometimes you fuss, quarrel, and fight with them when you are around them.
C. You never go places with them and you never talk with them unless you have to.
D. You dislike very much some of the things they do, and the way they act at times.

Now let us go over the main headings.
What is number 1 for? (Student response)
What is number 2 for? (Student response)
What is number 3 for? (Student response)
What is number 4 for? (Student response)
What is number 5 for? (Student response)
You do not have to use all these numbers. You may use any of these as many times as you wish. All you need to do is to show how you feel about each person on your list by drawing a circle around one of the numbers to the right of his name.

Be sure to draw a circle around one number beside each name. Do not leave out anyone.

Has everyone found his own name? If your name is not on the list tell the teacher so we can have all the students add your name to their list. As soon as you have found your name or have written it in, write a 6 beside your name.

If you have any questions, please ask them now.

When you have finished marking your list, turn your paper face down on your desk and leave it there until the teacher takes it up.

Go ahead now and place the other numbers (1-2-3-4-5) to the right of any names added to your list.
TABLE VI

LEVEL OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE HIGH, MIDDLE, AND LOW SOCIOMETRIC STATUS GROUPS ON THE POI DETERMINED BY SIMPLE ANALYSIS OF VARIANCE

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<th>DF</th>
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### TABLE VII

LEVEL OF SIGNIFICANCE OF THE DIFFERENCES AMONG THE THREE SOCIONETRIC LEVEL MEANS

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