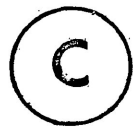The Relationship of Patterns of Creativity and

Machiavellianism to Leadership, Self-Actualization,

Authoritarianism, and Alienation

M. A. Thesis

by

(C) Shau-Shuan Boo

Submitted in partial fulfillment of the requirements

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To;
Ma and Pa

who taught me so much
and showed the Way

LAKEHEAD UNIVERSITY

FACULTY OF ARTS

The undersigned certify that they have read, and recommend to the
Faculty of Arts for acceptance, a thesis entitled, "The Relationship
of Patterns of Creativity and Machiavellianism to Leadership Self-
actualization Authoritarianism and Alienation," submitted by Shuan Boo
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<div align="right">Shuan S. Boo.</div>

TABLE OF CONTENTS

Abstract

The purpose of this study was to investigate patterns of creativity
and Machiavellianism and how they relate to leadership, self-actualization,
authoritarianism, and alienation. Creativity and Machiavellianism served
as the independent variables and the others as dependent variables. The
relationship between the two independent variables was (1) hypothesized
to be not significantly different from zero. Since subjects can score
high on both personality measures, or high on one and low on the other,
or low on both, hypotheses were derived in regard to personality patterns
of creativity and Machiavellianism. It was hypothesized that, (2) subjects
who scored high on both creativity and Machiavellianism would score sig-
nificantly higher on leadership when compared with subjects from the other
3 contingency groups, (3) subjects who scored high on creativity but low
on Machiavellianism would score significantly higher on self-actualization
when compared with subjects from the other 3 contingency groups, (4)
subjects who scored low on creativity but high on Machiavellianism would
score significantly higher on authoritarianism when compared with the other
3 contingency groups and, (5) subjects who scored low on creativity and
low on Machiavellianism would score significantly higher on alienation when
compared with subjects of the other 3 contingency groups. One hundred-and-
twenty first year students from an introductory psychology class participated
in the study. The subjects were assessed in groups of six, in two sessions,
for the administration of seven paper and pencil tests: creativity,
Machiavellianism (two forms), leadership, self-actualization, authoritarianism,
and alienation. Subjects were divided into the 4 contingency groups using

the median of the creativity and the median of the Machiavellianism score distributions as cut-off points. The results obtained showed that the relationship between creativity and Machiavellianism was not significant. Orthogonal comparisons of the group means on leadership, self-actualization, authoritarianism, and alienation failed to demonstrate any significant differences as predicted.

LIST OF TABLES

LIST OF APPENDICES

The purpose of this study was to determine the relationship between creativity and Machiavellianism and how they relate to leadership, self-actualization, authoritarianism, and alienation. Creativity and Machiavellianism were the independent variables and the latter personality constructs were the dependent variables. Studies indicate that the creative person tends to be more open to experience and has an inner psychic need to transform his/her environment. Taylor (1972) has described the creative person as "transactive", a process arising from an internal motivation to shape and redesign the environment. A creative person, in terms of this formulation, is perceived as manipulating and reformulating his/her environment (social, artistic, or scientific) into a new system in accordance with his/her internal orientation. Thus, the creative person is open to the environment, part of it, and extends his/her being into it. According to Christie (1970) a Machiavellian person is one who rationally calculates his/her own advantages and manipulates people for his/her own best interest. The Machiavellian views others as objects to be manipulated. He/she has an instrumentalist and utilitarian motivation without a moralistic perception of his/her interaction with his/her environment, especially in the area of interpersonal relationships.

Descriptions of the creative person (Maslow, 1959; Taylor, 1972) and the self-actualizer (Shostrom, 1967) suggest an overlap between these two personality traits. The essence of the self-actualizer is the ability to successfully manipulate as an effective personality, ie. implementation of objectives, flexibility, and developing various means to realize potential goals. The creative person has a personal commitment to the aesthetic and

philosophic meaning of his/her world, which requires an exceptionally strong drive to find order where no order appears (Barron, 1963). Shostrom (1967) further postulates a continuum from actualizer to manipulator, either role being the antithesis of the other. He describes the manipulator as having a style of life characterized by deception, emotional detachment, control, and cynicism. His conceptual description of the manipulator has been assessed by using Christie's (1970) paper and pencil test for measuring the level of Machiavellianism. Machiavellianism as a psychological construct conceptually reflects the opposite of Shostrom's self-actualization. DiMarco (1973) attempted to test Shostrom's assumption that self-actualization and manipulation are opposites. The results he obtained showed that the major scales of Shostrom's (1974) "Personal Orientation Inventory" (POI), Time competent and Inner directedness were not significantly correlated with Mach IV scores. However, there were significant but small positive correlations between the Mach IV and POI subscales of Feeling Reactivity, Self-acceptance, Capacity for Intimate contact and Existentiality. The results tend to support the assumption that the two psychological constructs: self-actualization and Machiavellianism share some basic personality characteristics. DiMarco (1973) suggests that they are both "flexible in their application of values, sensitive to their own needs and feelings, accepting of themselves in spite of their weaknesses, and the capacity for warm interpersonal relationships" (p. 634).

Boo's (1977) study examined the theoretical basis for a relationship between the creative personality and the Machiavellian personality. Using Taylor's (1972) "Creative Behavior Disposition Scale" (CBDS), a scale for

measuring creative 'transactualization' which he describes as an extension

of self-actualization, and Christie's (1970) Mach IV scale for measuring

Machiavellianism, the results obtained showed a correlation not significantly

different from zero. Analysis of the data revealed that subjects who scored

high on one or more of the CBDS disposition subscales did not score high on

the Mach IV and vice-versa. The subjects, therefore fell somewhat equally

into four contingency groups: (1) High Creative/High Machiavellian, (2)

High Creative/Low Machiavellian, (3) Low Creative/High Machiavellian, and

(4) Low Creative/Low Machiavellian. This pattern of analysis suggested

the feasibility of a multidimensional analysis of these two psychological

constructs. The paradigm can be viewed as a basis for exploring the patterns

of relationships to leadership, self-actualization, authoritarianism, and

alienation.

Based upon the author's previous study on the relationship between the

Creative and Machiavellian personalities and the above mentioned theoretical

basis, the present study hypothesized that, (1) the relationship between

creativity and Machiavellianism would not be significantly different from

zero and that, (2) subjects scoring high on both creativity and Machiavell-

ianism measures would score significantly higher on measures of leadership

as measured by "Leadership Opinion Questionnaire" (LOQ) when compared with

subjects of the other three contingency groups, (3) subjects scoring high

on creativity but low on Machiavellianism measures would score significantly

higher on measures of self-actualization as measured by the POI when compared

with subjects of the other three contingency groups, (4) subjects scoring

low on creativity but high on Machiavellianism would score significantly

higher on measures of authoritarianism as measured by the California F-scale

when compared with subjects of the other three contingency groups and, (5)

subjects scoring low on both creativity and Machiavellianism would score

significantly higher on alienation as measured by Maddi's Alienation Test

(MAT) when compared with subjects of the other three contingency groups.

Creative Personality. During the past two decades, various studies have

been published examining theoretical and experimental research into areas

of creativity e.g., Taylor and Getzels (1975). Theory and research are

equally important for any scientific investigation. Several studies have

however, ignored this important relationship. Roe (1963) for example,

reviews research but tends to omit discussion of relevant theories of

creativity. Osborn (1963) on the other hand, only presented theory relevant

to creativity. Golann (1963) reviewed both theory and research in relation

to the creative product, creative process, measurement of creativity and

personality. Taylor (1972) examined the theoretical basis of creativity as

it relates to self-actualization and posited the concept of 'transactualiza-

tion'. He also further developed a scale (CBDS) which measures behavioral

dispositions to creativity.

With the development of test instruments for measuring creative

abilities, (Guilford, et. al., 1958; Torrance, 1966; Taylor, 1972) studies

have been conducted to investigate creative abilities associated with

personality traits (MacKinnon, 1962; Kanner, 1976; Getzels, 1962). However,

it should be pointed out that most studies relate personality traits to

creativity as a unidimensional concept. Subsequent investigators (Windholz,

1968; Taylor, 1973) have realized the multidimensional nature of creativity

and have made attempts to find relationships between creativity and personality traits and their interaction. Taylor (1978) in his investigation of the "creative leader", i.e. those who scored high on both creativity and leadership measures, found that they were more effective intrapersonally and interpersonally than subjects only scoring high on either scale alone, or low on both. Windholz (1968) found that there was no significant interaction effect between creativity and intelligence for temperament, interest, or value traits.

Machiavellian Personality. Studies on Machiavellianism (Christie, 1970) have found differences in personality traits between High Machiavellians and Low Machiavellians. High Machiavellians were found to be more manipulatory in situations where manipulatory possibilities abound (McLaughlin, 1970; Geis, et. al., 1970; Exline, et. al., 1970). Exline, et. al. (1970) reported that High Machiavellians, when confronted with accusations of cheating looked their accuser in the eye longer. Geis, et. al., (1970) observed that High Machiavellians exceeded Low Machiavellians in devising innovative manipulation in experimental situations, where subjects were taught how to manipulate their co-subjects.

Machiavellianism as a personality construct has been subjected to correlational studies (DiMarco, 1973; Boo, 1977; Christie, 1970). Christie (1970) reported that Machiavellianism was independent of intelligence and authoritarianism. Touhey (1973), commenting on Christie's (1970) study, found an interaction effect of Machiavellianism and intellectual abilities with social mobility. The results obtained showed intergenerational mobility in occupational status by subjects who obtained the highest score

on both the intellectual and Machiavellianism measures, but least for subjects
who scored low on intellectual measures and high on the Machiavellian scale.
His interpretation suggests that greater social mobility of Machiavellianism
is facilitated by higher intellectual abilities and that Machiavellians with
lower intelligence are markedly hindered in social mobility.

Leadership Personality. Early research on leadership tends to center around
the trait theory of leadership (Stodgill, 1948). This approach assumed that
leaders can be identified by certain personality characteristics from those
who are not leaders. Stodgill (1948) in his survey of the literature on
leadership found that there is a general consensus among researchers that the
average person who occupies a position of leadership exceeds the average member
of the group in intelligence, activity and social participation, dominance,
originality, fluency of speech, judgment, insight and adaptability to changes.
Trait theory approach fails to comprehend the fact that leadership role is
determined by the relationship between personality traits of the individual
and his/her environment. Leadership is a function of dynamic elements- the
individual, the group and the situation (Lewin, 1935).

Later studies on leadership (Deveau, 1976; Fleishman, 1969; Fiedler,
1964) present an interactional analysis of the three elements; (1) leader-
ship as traits within the individual, (2) leadership as a function of the
group, and (3) leadership as a function of the situation. This approach
takes into account the fact that leadership role is related to personality
factors (Stodgill, 1948), the attitudes and needs of followers and the
structure of the group (Redl, 1942; Cartwright and Zandler, 1953; Cattell,
1953) and the situation (Gibb, 1968).

Definitions of leadership usually center around the notion of decision making and the exercise of authority (Dubin, 1951). Decision making represents a cognitive style similar to creative transactualization (Taylor, 1972). The leader assimilates various phenotypic problems of his/her environment and transforms them into solutions that promote changes in his/her environment. The implementation of solutions requires effective exercise of authority over the followers. The leader initiates the motion for changes by means of verbal persuasion, self performance and to a larger extent interpersonal manipulation (Dubin, 1951). The role of a leader therefore, is to initiate changes within his/her environment by manipulating his/her followers.

Self-Actualized Personality. Theoretical writings about self-actualization suggest that it is a state of psychological health experienced by the healthy personality (Maslow, 1973). Jung (1966) wrote that the healthy personality evolves through personal growth achieved by a gradual unfolding expression of the unconscious. It is the integration of these unfolding aspects of personality that leads to an integrated and meaningful way of life. Maslow (1950) stated that the healthy personality represents the acceptance and expression of the inner-self, which involves the actualization of latent capacities, potentialities, and full functioning to one's personal limit.

The Self-Actualizer (SA) represents the healthy person. Maslow (1950) characterized the SA as having a more efficient perception of reality and being problem centered and creative. He wrote that "self-actualizing people distinguished far more easily than most the fresh, concrete and idiosyncratic from the generic, abstract, and rubricized" (p. 182).

The development of the POI (Shostrom, 1974) offers an instrument to measure empirically the subjective state of self-actualization. The scale has been used in studies to measure subjects' psychological health changes after psychotherapy (Shostrom, Knapp and Knapp, 1975). Research on creativity has also utilized the POI as an instrument to measure the psychological health of creative persons (Maul, 1970). He found that there is a moderate relationship of .14 to .53 between the subscales of "Torrance Tests of Creative Thinking" (TTCT) and the POI.

Authoritarian Personality. The Authoritarian personality emerged from the research of Adorno, et. al. (1950) which indicates the syndrome that exemplifies the broadest instance of potential fascism. The person satisfies his internal fear of authority by replacing it with obedience and subordination. This appears to be similar to Eric Fromm's (1941) concept of "sado-masochistic" character. Later descriptions of the Authoritarian person have shifted the conception of fascism and anti-semitism to the knowledge of personality in general and not merely a study in prejudice (Sanford, 1971). High Authoritarians have been observed to have five distinguishable traits: surface resentment, conventionality, autocratic, tough guy behavior, and manipulativeness; while Low Authoritarians are observed to be rigid, protesting, impulsive, easygoing, and genuinely liberal (Adorno, et. al., 1950). Sanford (1971) further commented that the manipulativeness of the High Authoritarian contributes to the manner he/she perceives others as "objects to be handled, administered, manipulated in accordance with the subject's theoretical or practical schemes" (p. 326).

Maslow (1943) indicated that "...the authoritarian person lives in a world which may be conceived to be pictured by him as a sort of jungle in which man's hand is necessarily against every other man's, in which the whole world is conceived of as dangerous, threatening, or at least challenging, and in which human beings are conceived of as a primarily selfish or evil or stupid. To carry the analogy further, this jungle is peopled with animals who either eat or are eaten, who are either feared or despised. One's safety lies in one's own strength and this strength consists primarily in the power to dominate. If one is not strong enough the only alternative is to find a strong protector" (p. 403).

Alienated Personality. Alienation as a psychosocial construct has various meanings as defined by different investigators. Marginal man (Lewin, 1935, Gould, 1969) exemplifies powerlessness, normlessness, isolation, self-estrangement (Seeman, 1959), cosmic outcastness, developmental estrangement, and individual alienation (Keniston, 1965). Though alienation can be expressed in a variety of ways, in most cases it merely implies a lack of relationship between the person and social institutions, norms, or to self. Another method to clarify the meaning of "alienation" is in regard to mode, (Keniston, 1965) whether it is alloplastic, i.e. involving attempts to transform the world; or autoplastic, i.e. involving self-transformation. Student radicals, revolutionaries, and political writers belong to the first mode of alienation because it involves detachment from the environment while making attempts to transform society to suit their intellectual or political movitations. Psychotics and neurotics, on the other hand, represent alienation of the second mode in that their ability to interact with their

environment has failed. What follows is the process of depersonalization and self-regression (Freud, 1938). It is the second mode of alienation, the autoplastic mode that the present study examined.

High Creative/High Machiavellian. There appears to be an inner drive in both the Creative personality and Machiavellian personality towards the implementation of goals. The attainment of goals depend upon the utilization of effective formulation in both personalities. Taylor (1970) has described a creative leader as one "who utilizes himself and his followers to produce social changes..." (p. 1), therefore is it not plausible that the successful utilization of self and followers to produce social changes demand certain personality characteristics of the High Machiavellian? Because the creative person has been described as transactive in his interaction with his/her environment (Taylor, 1972) we would like to further investigate the contribution of Machiavellian traits to such persons in the area of leadership. Geis, (1970) in her investigation of Machiavellianism suggests that personality characteristics of the High Machiavellian foster behavioral dispositions for emergent leadership role. High Machiavellians in her study tended to initiate and control group structure. They also manipulated and persuaded more than subjects who were Low Machiavellians.

Studies on leadership personality have suggested that leaders when compared to followers show greater success in interpersonal persuasion (Cowley, 1928; Gibb, 1947); MacClintock, 1963). The attainment of leadership is the process of influencing others within the group toward goal setting and goal achievement (Stodgill, 1948).

Therefore, it was hypothesized that (2), subjects who score high on

the CBDS scale and the Machiavellian scales would score significantly higher
on the LOQ scale, when compared with subjects from the other three contingency
groups.

High Creative/Low Machiavellian. Review of the literature on creativity shows
a general tendency to view creativity as a function of the healthy person
(Maslow, 1962). Rank (1932) emphasized the importance of the creative poten-
tial as the highest level of personality development, which has been identified
as similar to Jung (1966) and Shostrom (1967) conception of self-actualization.
Contemporary person-environment theories of creativity, such as Taylor's (1972)
have extended Rank's concept of self-actualization, so as to allow the exam-
ination of the person's relationship to his/her environment.

Studies on the creative personality have identified the various aspects
of self-actualization using Shostrom's POI. Maul (1970) investigated
empirically the presence and extent of the overlap between creative cognitive
processes and self-actualization. He found a significant relationship between
creativity and the subscales of the POI, which provided initial confirmation of
Roger's (1959) and Maslow's (1955) theories about the relationship between the
two personality types. He further postulates that perhaps these two person-
alities may be represented as a single, integrated type of behavior, where
either one set of behavior manifestations is found to be a subset of the
other, or where both behaviors suggest a larger underlying process. Shostrom's
(1967) theory of an actualizer-manipulator continuum has not been supported in
the literature (DiMarco, 1973). A partial purpose of the present study was
to examine further the relationship between creativity and self-actualization
when the individual's level of Machiavellianism is low. Low Machiavellians,

according to Geis, et. al. (1970) are more susceptible to social influence

and have a basic personality orientation to persons in his/her environment.

If the creativity aspects are taken into consideration, we will expect

greater manifestation of self-actualizing characteristics with persons who

have low levels of Machiavellianism. It was therefore hypothesized that (3)

subjects scoring high on the CBDS scale but low on the Machiavellian scales

would score significantly higher on the POI scale when compared with subjects

from the other three contingency groups.

Low Creative/High Machiavellian. Creativity and authoritarianism appear to

be inversely related to each other. Studies have indicated that the creative

person tends to be more flexible in thinking (Torrance, 1962), open to

experience (Rogers, 1959; Maslow, 1955), and original (Barron, 1957). The

Authoritarian personality tends to lack openness, is conservative, and is

opposed to changes (Adorno et. al., 1950; Eisenman, 1970). Authoritarians

have also been described as stereotypical, narrow in interest, unaware of

environment stimuli, submissive to authority, rigid, inflexible, lacking

insight, and suggestible (Adorno et. al., 1950). On the basis of the above

mentioned description of the Creative personality and the Authoritarian

personality, there may be an inverse relationship between the two constructs,

i.e. the more creative one is, the less authoritarian one is likely to be

and vice-versa.

Taylor (1975) formulated one possibility of a non self-actualized

transactive person as being an Authoritarian, one who can autocratically

shape the environment in accordance with his/her own purpose. It would

appear that the manipulative aspect of the High Machiavellian and High Authoritarian should correlate because both personalities perceive people as objects for manipulation. Based on Taylor's theoretical conception of a non self-actualized transactive person as an Authoritarian, it was therefore hypothesized that (4) subjects scoring low on CBDS but high on the Machiavellian scales would score significantly higher on the California F-scale when compared with subjects from the other three contingency groups.

Low Creative/Low Machiavellian. Studies on creativity and Machiavellianism tend to emphasize other personality correlates that cluster around people who were defined as either Creative persons or High Machiavellians, while ignoring personality syndromes of the Low Creative person and Low Machiavellian person. A review of the literature showed that most investigations separate their subjects into two groups: high and low on either one of the psychological constructs and examine the relationship to some other personality construct with subjects who were creative or high on Machiavellianism. Bachtold and Werner (1973) found their Creative subjects (female) to be aloof, imaginative, radical, and self-sufficient. Others have suggested that creative persons do not clearly differentiate themselves in sex-role identification (Barron, 1957; Maslow, 1962; Roe, 1963). MacKinnon (1962) has noted some evidence of reverse sex identification in creative persons.

Machiavellianism studies e.g. Skinner (1976) and Levenson (1975) utilize similar patterns of analysis when relationships with other personality correlates were examined. High Machiavellians have been observed to be more manipulatory in interpersonal relationships (Christie, 1970; Geis, et. al., 1970; Exline et. al., 1970). They were also shown to be more resistant to

social influence but showed better initiation and control over environmental stimuli (Geis et. al., 1970).

Except in a few instances, where brief summaries of the Low Creative persons and Low Machiavellians were discussed, no empirical attempts have been made to examine persons who score low on both creativity and Machiavellianism.

If creative transactualization represents a mode of transforming the environment and Machiavellianism, a mode for manipulating interpersonal relationships to suit internal needs, it is theoretically predictable that subjects who are non-transactive and non-manipulative in interpersonal relationships will indicate signs of estrangement or alienation from society and self. It was therefore hypothesized that (5) subjects scoring low on both the CBDS and Machiavellian scales would score significantly higher on the MAT when compared with subjects from the other three contingency groups.

Method

Subjects

One-hundred and twenty first year students from Lakehead University,
enrolled in the introductory psychology course, volunteered to participate
as subjects in this experiment. A two percent bonus mark was given to each
subject's final grade attained in their introductory psychology course for
their participation.

Apparatus and Material

An experimental room with a table that accomodates six chairs was used
to conduct the experiment. The following battery of paper and pencil tests
was administered: (1) CBDS, (2) Mach IV and Mach V, (3) Leadership Opinion
Questionnaire, (4) Personal Orientation Inventory, (5) California F-scale,
and (6) Maddi's Alienation Test.

The CBDS (Taylor, 1979) is a scale that measures the subjects' degree
of creative transactualization in five behavioral dispositions to creativity.
These dispositions are: expressive, technical, inventive, innovative, and
emergentive. It consists of 75 behavioral disposition items which can be
completed in approximately thirty minutes. Split-half reliabilities ranging
from .82 to .96 have been reported by Taylor (1979).

The Mach IV scale, (Christie, 1970) consists of 20 statements which
utilize a Likert-scaling format, and the Mach V scale which utilizes the same
20 statements in a forced choice format to control for the social desirability
of the items, were used to measure the subjects' behavioral disposition to
Machiavellian attitudes. The Mach V yields a more disguished measure of
Machiavellianism than Mach IV. Both the scales were used to evaluate the

subjects' true level of Machiavellianism by averaging the score from both scales. Split-half reliabilities ranging from .70 to .90 have been reported by Christie (1970). Each scale can be completed in approximately 10 minutes.

The LOQ (Fleishman, 1969) consists of 40 items and measures the subjects' degree of supervisory leadership in two separate areas: Consideration (C) and Structure (S). Twenty items are contained in each of the areas. Internal reliabilities obtained by split-half method ranging from .62 to .89 for Consideration, and .67 and .88 for Structure were reported by Fleishman (1969). The scale can be completed in approximately 10 minutes.

The POI consists of 150 items that measure values and behavior seen to be of importance in the development of self-actualization. The scales can be scored twice, first to obtain two basic scales: Inner Directedness and Time Competence and second, for ten subscales consisting of: (1) Self-Actualizing Value, (2) Existentiality, (3) Feeling Reactivity, (4) Spontaneity, (5) Self-regard, (6) Self-acceptance, (7) Nature of Man, (8) Synergy, (9) Acceptance of Aggression and (10) Capacity for Intimate Contact. Test-retest reliability of the 12 scales range from .52 to .82 (Klauetter and Morgan, 1967). Adequate validity of the scale has been reported that discriminates the self-actualizing population from the non self-actualizing population (Shostrom, 1974). The POI takes approximately 30 minutes to complete.

The California F-scale (Adorno et. al., 1950) consists of 30 items which utilize a Likert-scaling format. The scale measures the subjects' degree of authoritarianism and can be completed in approximately 10 minutes. Test-retest reliabilities show a coefficient of .90.

The MAT (Maddi, 1977) consists of a 60 item test, with 15 items in four types of alienation. The four types of alienation measured by the scale are, (1) Powerlessness, (2) Vegetativeness, (3) Nihilism and (4) Adventurousness. Test-retest reliability of the scale as reported by Maddi (1977) ranges from .59 to .78. The scale takes approximately 30 minutes to complete.

Procedure

The subjects were administered the test battery in groups of six. The administration of the seven tests were conducted in two sessions and took approximately two hours to complete. Figure 1 in Appendix A presents the various permutations of the tests administered in Sessions I and II to control for an order effect. At the beginning of the first session, the subjects were informed that the investigation would consist of two sessions and that they were to return a week from then to complete the second session. The two-percent bonus mark would be given only to subjects who completed both sessions. They were also informed that the purpose of the experiment was to examine various personality patterns in general that may reflect cognitive styles of perceiving their social environment. They were instructed that there was no time limit for completing the tests, and to place their name, sex, and age on the first page of the test battery. After the completion of the first session, the subjects were asked to cooperate by avoiding any discussion of the nature of the tests and process of the experiment with their friends and co-subjects.

The same instructions given at the beginning of the first session, i.e. no time limit, etc. were used during the second session of the experiment.

After the completion of the tests, the subjects were debriefed concerning the full nature of the investigation. All the subjects who completed the first session of the experiment returned to complete the second session.

Results

The correlations between CBDS and the Machiavellian scores of Mach IV, Mach V and Average Mach were found to be not significant, r (119) = $-.05$, $-.03$, and $-.05$. The Average Mach score was derived by adding the Mach IV and Mach V scores and dividing by two. The Average Mach score was used in this study to represent the level of Machiavellianism of the subjects. Four contingency groups, 30 subjects in each (Figure 2, Appendix A), were formed by using the medians of the CBDS: 4397.50 and Average Mach: 97.07 as cut-off points. The equal distribution of subjects within each cell was obtained by first dividing the subjects into High Creative and Low Creative groups. The High Creative subjects were then rank ordered according to their Average Mach scores. The top 30 subjects were classified as High Creative/High Machiavellian subjects and the bottom 30 subjects as High Creative/Low Machiavellian subjects. The same procedure was followed for the Low Creative subjects in order to classify subjects as Low Creative/High Machiavellian and Low Creative/Low Machiavellian. The medians of Average Mach scores for the High and Low Creative groups were similar. High Creative/High Machiavellian (Group 1) consisted of subjects whose scores on creativity and Machiavellianism were above the two medians. High Creative/Low Machiavellian (Group 2) consisted of subjects whose creativity scores were above the CBDS median but with Machiavellian scores below the median of Average Mach. Low Creative/High Machiavellian (Group 3) consisted of subjects whose creativity scores were below the CBDS median but with Machiavellian scores above the Average Mach median. Low Creative/Low Machiavellian (Group 4) consisted of subjects whose scores were below both the medians of the CBDS and Average Mach.

Four preplanned orthogonal comparisons were carried out to determine the mean differences of the dependent variables on leadership: "Consideration", "Structure"; self-actualization: "Time Competence", "Inner Directedness"; authoritarianism, and alienation (Figure 3, Appendix A). The first contrast between High Creative/High Machiavellian and subjects from groups 2, 3, and 4 on Consideration was found to be not significant, F (1, 116) = 1.34. The High Creative/High Machiavellian group did not have a higher mean score on Consideration as predicted. The means were 52.53 for Group 1 and 54.14 for Groups 2, 3, and 4. Table 1 presents the means and standard deviations for Consideration for the individual groups. The High Creative/High Machiavellian subjects' mean on Structure was also found not to be significantly different from the mean of Groups 2, 3, and 4, F (1, 116) = 3.68. The means were 48.93 for Group 1 and 45.94 for Groups 2, 3, and 4. Table 2 presents the means and standard deviations for Structure of the individual groups. The High Creative/High Machiavellian subjects did not have a higher mean score on Structure as predicted.

The orthogonal contrasts of High Creative/Low Machiavellian group on Time Competence and Inner Directedness means with Groups 1, 3 and 4 were found to be not significant, F (1, 116) = 1.52 for Time Competence, and F (1, 116) = .81 for Inner Directedness. The Time Competence means for Group 2 was 16.80 and 16.05 for Groups 1, 3, and 4. The Inner Directedness means for Group 2 was 83.03 and 80.78 for Groups 1, 3, and 4. Tables 3 and 4 presents the means and standard deviations for Time Competence and Inner Directedness for the individual groups. The High Creative/Low Machiavellian subjects did not have a higher mean scores on Time Competence and Inner Directedness as predicted.

TABLE 1

CONSIDERATION

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS. (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	52.53	7.02	30
High Creative/ Low Machiavellian	55.06	7.81	30
Low Creative/ High Machiavellian	52.96	5.53	30
Low Creative/ Low Machiavellian	54.40	5.74	30

TABLE 2

STRUCTURE

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS. (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	48.93	7.42	30
High Creative/ Low Machiavellian	43.90	5.74	30
Low Creative/ High Machiavellian	46.93	8.07	30
Low Creative/ Low Machiavellian	47.00	7.96	30

TABLE 3

TIME COMPETENCE

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS.   (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	16.30	3.73	30
High Creative/ Low Machiavellian	16.80	3.05	30
Low Creative/ High Machiavellian	15.20	2.48	30
Low Creative/ Low Machiavellian	16.66	1.84	30

TABLE 4

INNER-DIRECTEDNESS

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS. (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	79.50	14.27	30
High Creative/ Low Machiavellian	83.03	11.12	30
Low Creative/ High Machiavellian	81.66	10.55	30
Low Creative/ Low Machiavellian	81.20	10.76	30

Low Creative/High Machiavellian group mean on authoritarianism was found not to be significantly different from the mean of Groups 1, 2, and 4 when contrasted, F (1, 116) = 1.60. The authoritarianism mean for Group 3 was 114.63 and 109.48 for Groups 1, 2 and 4. Table 5 presents the individual means and standard deviations for authoritarianism for the individual groups. The low Creative/High Machiavellian subjects were no more authoritarian than subjects from Groups 1, 2, and 4.

The last orthogonal contrast between Low Creative/Low Machiavellian subjects on alienation with subjects from Groups 1, 2 and 3 was found to be significant, F (1, 116) = 11.82, p < .001. The results obtained were significant, but the direction was opposite to that predicted. Subjects in the Low Creative/Low Machiavellian group were found to be less alienated than subjects from Groups 1, 2 and 3. The mean score on alienation from Group 4 was 1083.66 and 1503.90 for Groups 1, 2 and 3. Table 6 presents the means and standard deviations for alienation for the individual groups.

The data from the independent and dependent variables were further analyzed by the use of Pearson product moment correlation coefficients. Table 7 presents the correlational matrix for all the variables. The CBDS was found not to correlate significantly with Machiavellianism and the dependent variables of Time Competence, Inner Directedness, Consideration, Structure, authoritarianism and alienation. The relationship between Machiavellianism and authoritarianism was, r (119) = .36, p < .001, and r (119) = .53, p < .001 with alienation. The results indicate that Machiavellians share some underlying personality characteristics with the Authoritarian and Alienated personalities. Machiavellianism was further found to be

TABLE 5

AUTHORITARIANISM

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS.   (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	114.83	20.92	30
High Creative/ Low Machiavellian	108.66	20.96	30
Low Creative/ High Machiavellian	114.63	18.29	30
Low Creative/ Low Machiavellian	104.96	16.15	30

TABLE 6

ALIENATION

MEANS AND STANDARD DEVIATIONS BETWEEN

THE FOUR CONTINGENCY GROUPS. (N = 120)

GROUPS	MEAN	STANDARD DEVIATION	N
High Creative/ High Machiavellian	1674.43	711.27	30
High Creative/ Low Machiavellian	1130.43	502.28	30
Low Creative/ High Machiavellian	1706.86	615.81	30
Low Creative/ Low Machiavellian	1083.66	454.61	30

TABLE 7

CORRELATION MATRIX OF CBDS, MACHIAVELLIANISM, CONSIDERATION, STRUCTURE, TIME COMPETENCE, INNER DIRECTEDNESS, AUTHORITARIANISM AND ALIENATION. (N = 120)

	MACHIAVELLIANISM	CONSIDERATION	STRUCTURE	TIME COMPETENCE	INNER DIRECTEDNESS	AUTHORITARIANISM	ALIENATION
CBDS	-.05	-.07	-.01	.06	.11	-.07	-.10
MACHIAVELLIANISM		-.30***	-.08	-.23**	-.20*	.36***	.53***
CONSIDERATION			-.17*	.12	.04	-.33***	-.17
STRUCTURE				-.01	-.09	.13	.09
TIME COMPETENCE					.38***	-.43***	-.37***
INNER DIRECTEDNESS						-.43***	-.35***
AUTHORITARIANISM							.47***

*$\underline{p}$ < .05
**$\underline{p}$ < .01
***$\underline{p}$ < .001

negatively related to Time Competence, r (119) = .-23, p < .01 and Inner

Directedness, r (119) = -.20, p < .05. The level of Machiavellianism

decreases for subjects who scored high on self-actualization. Machiavellian-

ism was also found to be negatively related to Consideration, r (119) = -.30,

p < .001, but no significant relationship was found with Structure.

The Time Competence and Inner Directedness scales were found to correlate

negatively with the F-scale, r (119) = -.43, p < .001, and r (119) = -.43,

p < .001. Both the scales of the POI were also observed to correlate

negatively with alienation, r (119) = .-37, p < .001, and r (119) = -.35,

p < .001. The results indicate that the level of self-actualization depends

upon the degree of authoritarianism and alienation. The F-scale was found

to be positively related to alienation, r (119) = .47, p < .001. The Alien-

ated personality seems to share some form of authoritarianism.

Subsequent statistical analyses (2 X 2 Analysis of Variance) were

conducted to examine the data for empirical interest on a post hoc basis.

Tables 8, 9, 10, 11, 12, and 13 present the 2 X 2 analysis of variance for

the dependent variables for Consideration, Structure, Time Competence, Inner

Directedness, authoritarianism, and alienation. No interaction effect

between Creativity and Machiavellianism was found on the dependent variables.

Subjects in each of the contingency groups were found to be not significantly

different from each other on the measured personality variables of leadership,

self-actualization, authoritarianism, and alienation. There were no main

effects that discriminate between the High Creative and Low Creative subjects.

High Creative subjects did not score higher or lower on the measured

personality varibles when compared with the Low Creative subjects.

TABLE 8

CONSIDERATION

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARE	F
MACH	118.008	1	118.008	2.714
CBDS	0.408	1	0.408	0.009
MACH X CBDS	9.075	1	9.075	0.209
RESIDUAL	5043.422	116	43.478	
TOTAL	5170.914	119	43.453	

TABLE 9

STRUCTURE

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARE	F
MACH	185.008	1	185.008	3.412
CBDS	9.075	1	9.075	0.167
MACH X CBDS	195.075	1	195.075	3.597
RESIDUAL	6290.316	116	54.227	
TOTAL	6679.477	119	56.130	

TABLE 10

TIME COMPETENCE

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARE	F
MACH	29.008	1	29.008	3.533
CBDS	11.408	1	11.408	1.389
MACH X CBDS	7.008	1.	7.008	0.357
RESIDUAL	952.555	116	8.212	
TOTAL	999.980	119	8.403	

TABLE 11

INNER DIRECTEDNESS

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARE	F
MACH	70.533	1	70.533	0.508
CBDS	0.833	1	0.8333	0.006
MACH X CBDS	120.00	1	120.00	0.865
RESIDUAL	16091.715	116	138.722	
TOTAL	16283.082	119	138.833	

TABLE 12

AUTHORITARIANISM

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARE	F
MACH	1880.208	1	1880.208	5.106*
CBDS	114.075	1	114.075	0.310
MACH X CBDS	91.875	1	91.875	0.250
RESIDUAL	42714.551	116	368.229	
TOTAL	44800.711	119	376.477	

* p < .05

TABLE 13

ALIENATION

2 X 2 ANALYSIS OF VARIANCE.

SOURCE	SUM OF SQUARES	df	MEAN OF SQUARES	F
MACH	10217668.000	1	10217668.000	30.408*
CBDS	1540.833	1	1540.833	0.005
MACH X CBDS	47045.000	1	47045.000	0.140
RESIDUAL	38978464.000	1	336021.188	
TOTAL	49244720.000	1	413821.125	

* p < .001

Two main effects were found to discriminate between High Machiavellian and Low Machiavellian subjects on authoritarianism, F (1, 116) = 5.106, p < .05, and alienation, F (1, 116) = 30.408, p < .001. High Machiavellian subjects were found to have a higher mean score on authoritarianism, ($\overline{X}$ = 114.73) than Low Machiavellian subjects, ($\overline{X}$ = 106.81). High Machiavellian subjects were also found to have a higher mean score on alienation, ($\overline{X}$ = 1690.65) than Low Machiavellian subjects ($\overline{X}$ = 1170.05).

Discussion

In this study, it was found that the relationship between creativity

and Machiavellianism as measured by the CBDS and the Mach IV and Mach V,

was not significantly different from zero. The four major hypotheses derived

by assuming the interaction between Creativity and Machiavellianism and the

dependent variables of leadership, self-actualization, authoritarianism, and

alienation were not supported.

High Creative/High Machiavellian (Group 1) subjects were not found to

possess more leadership traits as measured by the LOQ when compared with

subjects from Groups 2, 3, and 4. The second hypothesis, predicting that

High Creative/Low Machiavellian (Group 2) would possess more self-actualizing

attitudes, i.e. to live in the present and show more inner directedness was

also not supported. The subjects in this group did not show a significant

difference in mean scores on the subscales of the POI (Time Competence and

Inner Directedness) when compared with subjects from Groups 1, 3, and 4.

High Creative/Low Machiavellian subjects did not show any indications that

they were more self-actualized than the others. The third hypothesis pre-

dicting that Low Creative/High Machiavellian (Group 3) to be more author-

itarian as measured by the California F-scale when compared with subjects

from Groups 1, 2, and 4 was also not supported. Low Creative/High

Machiavellian subjects were not shown to possess higher authoritarian values

and attitudes. The forth hypothesis, predicting that subjects who are

Low Creative/Low Machiavellian (Group 4) would be more alienated as

measured by the MAT was also not supported. Instead a significant difference

in mean score was obtained in the comparison between Low Creative/

Low Machiavellian subjects and subjects from Groups 1, 2, and 3. Low
Creative/Low Machiavellian subjects were found to be less alienated when
compared with the other subjects. This point will be further discussed later.

Using one of the most powerful statistical tools, orthogonal
comparisons (Edwards, 1972), the analyses failed to demonstrate any of
the predicted differences in personality patterns. Several important
questions emerged as to the feasibility of examining the multidimensional
interaction of creativity and Machiavellianism. Do the Creative and
Machiavellian personalities share some common underlying personality factors
that will reveal multifaceted aspects of their interaction to the dependent
variables? Minimally, this study tried to demonstrate that subjects iden-
tified as High Creative and High Machiavellian share some parallel form of
cognitive style and subconscious desire to interact with their environment.
The investigator is aware that High Machiavellian subjects manipulate inter-
personal relationships more often when compared to subjects identified as
Low Machiavellian, to suit their conscious and subconscious needs and
interests (Christie, 1970), while the Creative person manipulates his/her
environment for personal growth (Taylor, 1972). In this investigation,
some form of manipulation is the sole factor that can be discerned from
the two personalities. Further investigation is needed for basic under-
standing of both these personalities other than in terms of manipulation
and how they may relate to other patterns of personality.

Various writers have commented upon the multidimensional nature of
creativity and Machiavellianism. Getzels (1962) between creativity and
intelligence, Taylor (1978) on creativity and leadership, while Mark

(1966) examined the relationship between intelligence and Machiavellianism. These studies examined the interaction effect of high levels of creativity and Machiavellianism with the dependent variables while neglecting other personality patterns. The present study utilized a similar experimental design to examine the interaction effect of levels of creativity and Machiavellianism with other personality patterns that may relate to persons who were identified as high on both independent variables, high on one and low on the other, or low on both.

Another reason for the failure in this study to demonstrate empirically the differences between the experimental groups was the assumption that High and Low subjects (Creative and Machiavellian) as identified by the personality scales used were diametrically opposite types of personalities. Based upon the theoretical writings about the Creative and Machiavellian personality, it was assumed that persons who were identified as High Creative or High Machiavellian would belong to the opposite side of the bipolarity and thus share certain characteristics that were diametrically opposed to the said personalities. In this investigation it was proposed that Machiavellians were superior manipulators in interpersonal relationships because of some underlying cognitive disposition and inner drive while the Creative persons were seen as transactualizers. In this study we postulated the opposite psychological phenomena from persons who were not identified as High Creative or High Machiavellian. This might be a proper assumption to examine personality patterns, but it may not be appropriate to examine empirically, through questionnaire tests, the bipolar differences they were expected to possess. The assumption that High Creative persons are transactive and

that Low Creative persons are non-transactive may be incorrect. There may be identifiable variables to classify Creative persons as a homogeneous group unique in itself, i.e., since they can be considered to be more expressive, innovative, emergentive, inventive, and technical as measured by the CBDS. Subjects who did not score high on the items presented in the scale may have responded in two ways: the items in the scale were not relevant to their life styles or their personal scoring style was simply lower. Either manner of response would result in a lower score on the scale. This manner of subjects' response renders the investigator to question the categorization of Low Creatives. It may be safe to assume that the High Creative group represented creative subjects while the Low Creative group consisted of subjects who were either true non-transactualizers or low scorers. The CBDS is a scale developed to measure creative trans-actualization and is not a bipolar scale. The same rationale can also be applied to the High Machiavellian subjects and Low Machiavellian subjects as measured by the Mach scales. Both the CBDS and the Mach scales do not examine bipolar personalities as some other personality instruments do, for example, Eysenck's (1964) Introversion-Extroversion personality inventory.

The present investigation focused on the multidimensional aspects of creativity and Machiavellianism while making attempts to relate the two on a unidimensional plane with leadership, self-actualization, authoritarianism, and alienation. Perhaps the dependent variables are also multidimensional in nature. This factor may have also contributed to the lack of support of the hypotheses. More data and theoretical deductions need to be examined before the present predicted hypotheses can be adequately tested.

We need to know how the different dimensions of these personalities relate
to each other.

For further experimental interests, post hoc 2 x 2 analyses of variance
were conducted to examine the data. No interaction effects between creativity
and Machiavellianism were found on the subscales of the LOQ, POI, F-scale,
and the MAT. Subjects in each of the four contingency groups were found to
be not significantly different from each other on the dependent variables
of leadership, self-actualization, authoritarianism, and alienation. Further
examination of the data revealed main effects that discriminate between
High and Low Machiavellians on authoritarianism and alienation. High Mach-
iavellians were found to be more authoritarian. The results obtained
suggest that Machiavellianism and authoritarianism are not independent from
each other as Christie (1970) reported. It would be safe to assume that
the Authoritarian would say "People are no damn good, but they ought to be",
while the Machiavellian would agree with the former but would add a slight
twist "So what? Take advantage of it" (Christie, 1970; p. 38). The assumption
of sharing a negative perception about mankind, perhaps contributed to the
interrelationship between the two personalities. Most of the items in the
F-scale and Christie's Mach scales tap the respondent's attitudes towards
people.

The last hypothesis based upon the theoretical deduction that Low
Creative/Low Machiavellian subjects would be more alienated was also not
supported by the use of analysis of variance. The failure to empirically
demonstrate that Low Creative/Low Machiavellian subjects are more alienated
was confounded by the positive relationship found between the Machiavellian

and alienation scales. Main effects were found to discriminate between the
High Machiavellian subjects and Low Machiavellians on the alienation scores.
This perhaps explained the reason for the significant results that showed
Low Creative/Low Machiavellian group to be less alienated than the subjects
from the other three contingency groups. The analysis of variance showed
that the High Machiavellian subjects have a significant higher mean score
on the MAT than the Low Machiavellian subjects. The obtained results were
not expected and renders new information about the High Machiavellian. The
tendency of the High Machiavellian to manipulate interpersonal relationships
for his/her own interest may be a symptom of self-regression and expression
of hostilities. Another factor, negativistic attitudes, could explain the
relationship found between the Machiavellian type personality and Alienated
personality. This rational of negativistic attitudes holds more weight as
we examine further the positive relationships obtained between the three
scales that measure Machiavellianism, authoritarianism, and alienation.
These scales measure the subjects' attitudes towards mankind. The inability
of the Alienated person to adjust to his/her environment may have caused him/
her to utilize manipulative interpersonal behavior as a form of a defence
mechanism. Further empirical studies are needed to expand our understanding
and speculation of the relationship between Machiavellianism, authoritarianism,
and alienation.

No significant main effects were found between High and Low Machiavellian
groups on leadership and self-actualization. Geis's (1970) study have
reported that High Machiavellians were identified more often as emergent
leaders when compared to Low Machiavellians. But the present study showed

no significant differences between the two groups. The failure to demonstrate that High Machiavellians possess more leadership traits could be due to the nature of the instrument used in this study to measure leadership traits. The paper and pencil test (LOQ) does not allow the High Machiavellians to utilize their ability in verbal persuasion and actual interpersonal manipulation. Geis's (1970) study utilized a group situation where the criterion of leadership was based upon the process of peer selection. Such a design allows High Machiavellians the opportunity to practice their craft of interpersonal manipulation and be identified as the dominant member of the group. The present results indicated that being a High Machiavellian does not necessarily foster attitudinal dispositions towards leadership. Even if High Machiavellians have the tendency to be identified as emergent leaders, we should examine further the types of leadership styles they possess, i.e., democratic or authoritarian. Furthermore, their ability to sustain the leadership role and the structure of the group process may be of empirical interest for future investigation.

Significant but small negative relationships were observed between Machiavellianism and the two subscales of the POI. The results failed to replicate the study conducted by DiMarco (1973), who examined the relationship between Machiavellianism and self-actualization. The present results obtained do not give us the indication that Shostrom's (1967) theoretical deduction of the actualizer-manipulator continuum can be put to an empirical test. The small negative relationships between the Machiavellian and the self-actualizer may be a result of statistical artifact. Further investigation of the two personalities is needed before any concrete conclusion can be made.

Post hoc analyses of variance failed to show any significant differences between the High and Low Creative groups on measures of leadership, self-actualization, authoritarianism, and alienation. Also, the results obtained failed to duplicate the Eisenman and Cherry's (1968) findings of an inverse relationship between creativity and authoritarianism. The notion that creativity is a function of self-actualization was also not demonstrated. High Creative subjects were not found to have a significant higher scores on the main scales of the POI than the Low Creative subjects. A correlation not significantly different from zero was found between the CBDS and the two main scales of the POI. Furthermore, creativity was not found to be related to alienation. The present results are similar to Heussenstamm's (1969) failure in his investigation for an inverse relationship between creativity and alienation. More research needs to be undertaken to assess the relationship between these two personalities.

Secondary information on personality relationships were also obtained from the present study. The POI that measures self-actualization was found to be inversely related to Machiavellianism, authoritarianism, and alienation. Subjects who scored high on the POI showed a tendency to score lower on the Mach scales, F-scale, and the MAT. The results supports the theoretical implications of self-actualization, i.e. that a fully functioning and enriched person is supposedly opposite to the Machiavellian, Authoritarian, and Alienated personalities who perceive life as a process of deficit budgeting.

Fleishman's (1969) LOQ subscale of "Consideration" which has been acknowledged to reflect leaders who are person-oriented, showed a significant inverse relationship with the F-scale and Machiavellian scales. "Considerate" leaders were less authoritarian and manipulative in their perceived role as

supervisors. This information lends further support to the subscale as identifying leaders who place their follower's welfare first. The subscale, Structure, did not show any significant relationships with Machiavellianism, authoritarianism, and alienation.

Several limitations of the present study should be noted. The independent measures of creativity and Machiavellianism were obtained by means of paper and pencil instruments. The scales represent attitudinal dispositions to creativity and Machiavellianism and do not necessarily measure effectiveness of interpersonal manipulation or creative production. The same also applies to the instruments used for the measurement of leadership, self-actualization, authoritarianism, and alienation. There are certain shortcomings with paper and pencil instruments, for example, the reliabilities of content and construct validity vary across different population samples.

Full scale scores of the CBDS, POI, and MAT were used in the study to represent creativity, self-actualization, and alienation. Therefore, no attempts were made to examine the different dispositions of creativity, self-actualization, types of alienation, and how they interact. The reason for using only the full-scale scores of the CBDS, MAT, and the two main subscales of the POI was the fear of increasing the probability of making Type 1 errors in the analyses of the data. If all the subscales' scores of the test instruments were used, it would take approximately 95 orthogonal comparisons to complete the data analysis.

The subjects in the study were divided into four experimental groups by using the medians of the CBDS and Average Mach. Therefore, the selection of High Creative, High Machiavellian, Low Creative, and Low Machiavellian

subjects may not represent distinct groups of highly creative or Machiavellian subjects. Subjects that have scored in the medium range might be identical to each other irrespective of being classified as High or Low Creative and Machiavellian. The median split may not have been an adequate representation of High and Low Creative and Machiavellianism. However, later data analyses using the top and bottom quartiles of the population also failed to support the above assumption.

Due to the sex ratio of subjects that volunteered for the experiment (102 females, 18 males) no attempt was made in the study to examine sex differences on the personality variables. Nevertheless, t-tests for independent samples failed to show any significant sex differences on the personality variables.

The present investigation also suggest problems that might be avoided in future research of this kind. There should be a better criterion to identify subjects as creative, rather than just the score from a paper and pencil test such as the CBDS. The CBDS should be accompanied with a second form of creative measure, for example, the Torrance Tests of Creative Thinking. The scores from both these scales would allow us to identify subjects with creative dispositions or productions with a higher degree of certainty. This would allow for a better evaluation process for identifying creative subjects than from just one scale. Perhaps, the best method for identifying the Creative person would be selecting people who are accepted in our society as creative persons, i.e., artists, writers, poets, or students in advanced fine arts programs in university settings.

In future investigations of this kind, a different statistical analysis

and experimental design that sets out to examine what personality patterns
will discriminate between the High and Low groups of Creative persons or
Machiavellian persons could be used. The subjects can be screened for high
and low levels of creativity and than be administered the Mach V, LOQ, POI,
F-scale, and the MAT. Discriminate analyses would allow us to examine which
factors within the dependent measures of Machiavellianism, leadership,
self-actualization, authoritarianism, and alienation discriminate between
the High and Low Creative subjects. Such an approach may give us a better
understanding of the relationship between creativity as measured by the
CBDS and Machiavellianism as measured by the Mach scales. Also, new inform-
ation about contributing factors from leadership, self-actualization, author-
itarianism and alienation may be obtained. In the present study, we have
observed that there is a possible triadic relationship between Machiavellian-
ism, authoritarianism, and alienation due to a common negative perception of
mankind. The suggested experimental design and statistical analyses of the
data may produce evidence that the scales measuring Machiavellianism,
authoritarianism, and alienation share an underlying measure of negative
perception of mankind.

The present investigation failed to show any significant interaction
effect between creativity and Machiavellianism on leadership, self-actual-
ization, authoritarianism, or alienation as they were measured in this
study. In our failure to demonstrate support for the predicted hypotheses
we have gained new insights about the complexity of examining interaction
effects of the two independent variables and how they relate to the other
patterns of personalities. Future studies of this nature are needed for

a better understanding of creativity and Machiavellianism and their relation-
ship with patterns of leadership, self-actualization, authoritarianism, and
alienation.

References

Adorno, T. W., Frenkel-Brunswil, E., Levinson, D. J., & Sanford, R. N. The Authoritarian Personality. New York: Harper, 1950.

Bachtold, G. M., & Werner, E. E. Personality characteristics of creative women. Perceptual Motor Skills, 1973, 36.

Barron, F. The needs for order and for disorder as motivation in creative activity. In C. W. Taylor, & F. Barron (Eds.). Scientific Creativity: Its Recognition and Development. New York: Wiley, 1963.

Barron, F. Originality in relation to personality and intellect. Journal of Personality, 1957, 25, 730-742.

Boo, S. S. The relationship between creativity and Machiavellianism and how they are affected by simultaneous sensory stimulation. Unpublished Honour's Thesis, 1977, Lakehead University.

Cartwright, D., & Zander, A. Group dynamics: Research and Theory (Ed.), Evanston, Ill.: Row, Peterson and Company, 1953.

Cattell, R. B., & Stice, G. F. The Psychodynamics of Small Groups. Final Report on Research Project, Human Relations Branch, Office of Naval Research, University of Illinois, 1953.

Christie, R., & Geis, F. L. Studies in Machiavellianism. New York: Academic Press, 1970.

Cowley, W. H. Three distinctions in the study of leaders. Journal of Abnormal and Social Psychology, 1928, 23, 144-157.

Deveau, R. J. The relationships between the leadership effectiveness of first-line supervision and measures of authoritarianism, creativity, general intelligence and leadership style. Dissertation Abstracts, 1976, Vol. 37 (A), 1360-1361.

DiMarco, N. J., & Wilhelm, P. Relationship between self-actualization and

    manipulation. Psychological Reports, 1973, 33, 633-634.

Dubin, R. Human Relations in Administration. New York: Prentice Hall,

    1951.

Edwards, A. L. Experimental Design in Psychological Research, New York:

    Holt, Rinehart & Winston, 1972, 4th Edition.

Eisenman, R., & Cherry, H. O. Creativity and authoritarianism. Paper

    presented at the meeting of the Southeastern Psychological Association.

    Roanoke, Va., April, 1968.

Eysenck, H. J., & Eysenck, S. B. G. Manual of the Eysenck Personality

    Inventory. San Diego: Educational & Industrial Testing Service,

    1964.

Exline, R. V., Thibaut, J., Hickey, C. B., & Gumbert, R. Visual inter-

    action in relation to Machiavellianism and an unethical act. In

    R. Christie, & F. L. Geis. Studies in Machiavellianism. New York:

    Academic Press, 1970.

Fiedler, F. E. A contingency model of leadership effectiveness. In

    L. B. Berkowitz (Ed.). Advances in Experimental Social Psychology.

    New York: Academic Press, 1964.

Fleishman, E. A. Manual for Leadership Opinion Questionnaire. Chicago

    Science Research Associates, 1969.

Freud, S. The Basic Writings of Sigmund Freud. Translated and edited

    by Dr. A. A. Brill. New York: The Modern Library, 1938.

Fromm, E. Escape From Freedom. New York: Avon, 1941.

Geis, F. L., & Christie, R. Overview of experimental research. In

    R. Christie, & F. L. Geis. Studies in Machiavellianism. New York:

    Academic Press, 1970.

Getzels, J. W., & Jackson, P. W. Creativity and Intelligence. New York:

    Wiley, 1962.

Gibb, C. A. Leadership. In G. Lindzey, & E. Aronson. The Handbook of

    Social Psychology, 2nd edition, Vol. 4, Don Mills: Addison Wesley,

    1968.

Gibb, C. A. The principles and traits of leadership. Journal of Abnormal

    and Social Psychology, 1947, 42, 267-284.

Golann, S. E. Psychological study of creativity. Psychological Bulletin,

    1963, 60, 548-565.

Gould, L. J. Conformity and marginality: two facts of alienation. Journal

    of Social Issues, 1969, 25, 39-63.

Guilford, J. P., Christensen, P. R., & Merrifield, P. R. Consequences:

    Manual for administration, scoring and interpretation. Beverely Hills,

    Calif.: Sheriden Psychological Services, 1958.

Heussenstamm, F. K. Creativity and alienation: an exploration of their

    relationship in adolescence. Dissertation Abstract, 1969, Vol. 29,

    2888-A.

Jung, C. G. The spirit in man, art and literature. New York: Pantheon

    Books, 1966.

Kanner, A. D. Femininity and masculinity: their relationship to creativity

    in male architects and their independence from each other. Journal of

    Consulting and Clinical Psychology, 1976, 44, 802-805.

Keniston, K. The Uncommited: Alienated Youth in American Society. New

York: Brace and World, 1965.

Klauetter, R. E., & Morgan, R. E. Stability and internal consistency of

a measure of self-actualization. Psychological Reports, 1967, 21,

422-424.

Levenson, H., & Mahler, I. Attitudes towards others and components of

internal-external locus of control. Psychological Reports, 1975,

36, 209-210.

Lewin, K. Psycho-sociological problems of a minority group. Character and

Personality, 1935, 3, 175-187.

MacKinnon, D. W. The personality correlates of creativity: A study of

American architects. Proceedings of the Fourteenth Congress of Applied

Psychology.

Maddi, S. R., Kobasa, S. C., & Hoover, M. The Alienation Test: A structured

measure of a multidimensional subjective state. Prepublication draft,

1977, University of Chicago.

Maslow, A. H. Self-actualizing people: a study of psychological health.

In R. J. Lowry. Dominance, Self-esteem, Self-actualization: Germinal

Papers of A. H. Maslow (Ed.), California: Brooks/Cole, 1973.

Maslow, A. H. Emotional blocks to creativity. In S. J. Parnes, & H. F.

Hardings (Eds.). A Source Book for Creative Thinking. New York:

Scribner's, 1962.

Maslow, A. H. Creativity in self-actualizing people. In H. H. Anderson

(Ed.). Creativity and Its Cultivation. New York: Harper, 1959.

Maslow, A. H. Deficiency motivation and growth motivation. In M. R. Jones

(Ed.). Nebraska Symposium on Motivation, 1955. Lincoln, Nebraska:

University of Nebraska Press, 1955.

Maslow, A. H. The authoritarian character structure. Journal of Social

Psychology, 1943, 18, 401-411.

Maul, T. L. An investigation of the relationships between self-actualization

and creative thinking processes. Dissertation Abstract, 1971, 32(a),

793.

McClintock, C. G. Group support and the behavior of leaders and non-leaders.

Journal of Abnormal and Social Psychology, 1963, 67, 105-113.

McLaughlin, B. Incidental learning and Machiavellianism. Journal of Social

Psychology, 1970, 82, 109-116.

Osborn, A. F. Applied Imagination. New York: Scrivner's, 1963.

Rank, O. Art and Artist. New York: Knopt, 1932.

Redl, F. Group emotion and leadership. Psychiatry, 1942, 5, 573-596.

Roe, A. Personal problems and science. In C. W. Taylor, & F. W. Barron (Eds.).

Scientific Creativity: Its Recognition and Development. New York:

Wiley, 1963.

Rogers, C. Toward a theory of creativity. In H. H. Anderson (Ed.). Creativity

and its Cultivation. New York: Harper, 1959.

Sanford, A. The approach of the authoritarian personality. In F. I. Greenstein,

& M. Lerner (Eds.). A Source Book for the Study of Personality and

Politics. Chicago: Markham, 1971.

Seeman, M. On the meaning of alienation. American Sociological Review,

1959, 24, 783-791.

Shostrom, E. L. Manual for the Personal Orientation Inventory. San Diego: Educational and Industrial Testing Service, 1974.

Shostrom, E. L. Man the Manipulator. Nashville: Abingdon Press, 1967.

Shostrom, E. L., Knapp, L. F., & Knapp, R. R. Actualizing Therapy: Foundations for a Scientific Ethic. San Diego Edits, 1975.

Skinner, N. F. Personality correlates of Machiavellianism: 1. Consensual validation. Social Behavior and Personality, 1976, 4, 273-276.

Stogdill, R. M. Personal factors associated with leadership. Journal of Psychology, 1948, 25, 35-71.

Taylor, I. A. A theory of creative transactualization. Creative Educational Foundation, Inc., 1972.

Taylor, I. A. In search of creative leadership: Creative leadership as social transaction. Paper presented in symposium on Creative Leadership in Organized Human Endeavor at the 78th Annual Meeting of the American Psychological Association, Miami Beach, 1970.

Taylor, I. A. Characteristics of Creative Leaders. The Journal of Creative Behavior, 1978, 12, 221-222 (Abstract).

Taylor, I. A., & Getzels, J. W. (Eds.). Perspective in Creativity. Chicago: Aldine, 1975.

Taylor, I. A., & Fish, T. A. The Creative Behavior Disposition Scale: A Canadian Validation. Canadian Journal of Behavioral Science, 1979, 11, 95-97 (Brief Report).

Torrance, E. P. Torrance Tests of Creative Thinking: Norms-technical Manual. Princeton, N. J.: Personnel Press, 1966.

Torrance, E. P. Guiding Creative Talent. Englewood Cliffs, N. J.: Prentice-
  Hall, 1962.

Touhey, J. C. Intelligence, Machiavellianism and social mobility. British
  Journal of Social and Clinical Psychology, 1973, 12, 34-37.

Windholz, G. The relation of creativity and intelligence constellations to
  traits of temperament, interest, and value in college students.
  Journal of General Psychology, 1968, 79, 291-299.

APPENDIX A

Figure 1

COMBINATION OF THE TEST BATTERY

	SESSION I	SESSION II
GROUP I	CBDS MACH IV LOQ	POI MACH V F-SCALE MAT
GROUP II	POI MACH V F-SCALE MAT	CBDS MACH IV LOQ
GROUP III	POI LOQ MACH V	MAT F-SCALE MACH IV CBDS
GROUP IV	MAT F-SCALE MACH IV CBDS	POI LOQ MACH V

APPENDIX A

Figure 2

FOUR CELLS REPRESENTING THE CONTINGENCY GROUPS

	HIGH	LOW
HIGH	LEADERSHIP	SELF-ACTUALIZATION
LOW	AUTHORITARIANISM	ALIENATION

CREATIVITY (row label)

MACHIAVELLIANISM

APPENDIX A

Figure 3

COMPARISONS OF THE MEANS OF THE FOUR CONTINGENCY GROUPS (ORTHOGONAL)

	HIGH CREATIVE HIGH MACH	HIGH CREATIVE LOW MACH	LOW CREATIVE HIGH MACH	LOW CREATIVE LOW MACH
LEADERSHIP	+3	-1	-1	-1
SELF-ACTUALIZATION	-1	+3	-1	-1
AUTHORITARIANISM	-1	-1	+3	-1
ALIENATION	-1	-1	-1	+3

APPENDIX B

Table 14

CORRELATION MATRIX OF ALIENATION AND POWERLESSNESS,

VEGETATIVENESS, NIHILISM AND ADVENTUROUSNESS. (N = 120)

	POWERLESSNESS	VEGETATIVENESS	NIHILISM	ADVENTUROUSNESS
ALIENATION (TOTAL)	.91***	.92***	.91***	.82***
POWERLESSNESS		.81***	.80***	.64***
VEGETATIVENESS			.85***	.67***
NIHILISM				.62***

*** p < .001

APPENDIX B

Table 15

CORRELATION MATRIX OF CBDS AND INNOVATIVE, EXPRESSIVE, TECHNICAL, EMERGENTIVE AND INVENTIVE.   (N = 120)

	INNOVATIVE	EXPRESSIVE	TECHNICAL	EMERGENTIVE	INVENTIVE	CBDS
INNOVATIVE		.61***	.64***	.80***	.79***	.83***
EXPRESSIVE			.41***	.61***	.60***	.67***
TECHNICAL				.57***	.57***	.70***
EMERGENTIVE					.81***	.82***
INVENTIVE						.78***

*** p < .001

APPENDIX B

Table 16

CORRELATIONSHIPS OF CBDS, MACHIAVELLIANISM, TIME COMPETENCE, INNER DIRECTEDNESS, CONSIDERATION, STRUCTURE, F-SCALE WITH ALIENATION SUB-SCORES OF POWERLESSNESS, VEGETATIVENESS, NIHILISM AND ADVENTUROUSNESS. (N = 120)

	POWERLESSNESS	VEGETATIVE	NIHILISM	ADVENTUROUSNESS
CBDS	.05	.05	.01	.02
MACHIAVELLIANISM	.46***	.51***	.54***	.40***
TIME COMPETENCE	-.39***	-.32***	-.34***	-.33***
INNER DIRECTEDNESS	-.36***	-.32***	-.38***	-.23**
CONSIDERATION	-.15	-.09	-.24**	-.18*
STRUCTURE	.05	.03	.11	.10
F-SCALE	.45***	.37***	-.43***	.44***

*** p < .001

** p < .01

APPENDIX C

BEHAVIOR DISPOSITION SCALE

Lakehead University
Thunder Bay, Ontario, Canada

Dr. Irving A. Taylor
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Directions

This booklet contains statements which may or may not be true of you.
Please indicate how you feel about each item by placing a number from
0 to 100 in the space provided. A zero indicates that you feel the
item is not at all true of you; a 100 indicates that you feel the item
is completely true of you.

    Example:

    A. I like to do new things.   <u>85</u>

    B. I like to meet new people.   <u>10</u>

The answer to Example A indicates this item is very true of the respondent.
The answer to B indicates that the item is not very true of the respondent.

These statements are designed to understand specific ways that you as an
individual prefer to behave in everyday situations. There are no right
or wrong answers. Be sure to answer all of the items on the basis of how
you feel now.

THERE ARE FIVE SECTIONS TO THIS TEST. READ THE INSTRUCTIONS AT THE TOP

OF EACH PAGE BEFORE BEGINNING.

Part I

THE FOLLOWING ITEMS HAVE TO DO WITH YOU AS A <u>PERSON</u>.

_____ 1. I am an ingenious person.

_____ 2. I am an originator of ideas.

_____ 3. I am a spontaneous person.

_____ 4. I am an inventive person.

_____ 5. I am a disciplined person.

_____ 6. I am involved with new concepts.

_____ 7. I am involved with the implications of basic ideas.

_____ 8. I am perfectionistic

_____ 9. I am an impulsive person.

_____ 10. I am an organizer of other people's ideas.

_____ 11. I am an exacting person.

_____ 12. I am the first to think of new ideas.

_____ 13. I am a practical problem-solver.

_____ 14. I am an uninhibited person.

_____ 15. I am an innovator in the world of ideas.

Part II

THE FOLLOWING ITEMS HAVE TO DO WITH THE KINDS OF <u>PROBLEMS</u> YOU DEAL WITH.

_____ 16.   I locate essential aspects of a problem.

_____ 17.   I identify the underlying problems of an idea.

_____ 18.   I locate central issues right away.

_____ 19.   I seek out problems that need to be solved.

_____ 20.   I clarify problematic issues extensively.

_____ 21.   I can formulate problems that are fundamental and basic.

_____ 22.   I can identify the problems involved in applying ideas.

_____ 23.   Problems I work at require training.

_____ 24.   I quickly sense the real problem.

_____ 25.   I locate essential problems of existing ideas.

_____ 26.   The problems I work with require skillful preparation.

_____ 27.   I can break an idea into its most fundamental problem parts.

_____ 28.   I reduce a problem to its essential underlying parts.

_____ 29.   I recognize basic problems readily.

_____ 30.   I reduce a problem to its essential underlying implications.

Part III

THE FOLLOWING ITEMS HAVE TO DO WITH THE PROCESSES YOU USE OR THE WAY YOU GO ABOUT DEALING WITH PROBLEMS.

_____ 31. I find new solutions to old problems.

_____ 32. I formulate new principles.

_____ 33. I handle things in an impromptu manner.

_____ 34. I combine things in new ways.

_____ 35. I handle things skillfully at each step.

_____ 36. I formulate important ideas.

_____ 37. I broadly conceptualize implications from existing theories.

_____ 38. I am proficient at each stage of my endeavor.

_____ 39. I manage activities spontaneously.

_____ 40. I draw out implications of ideas and apply them in new ways.

_____ 41. I carefully complete each stage of a project.

_____ 42. I develop elaborate theories about things.

_____ 43. I use ingenuity in solving problems.

_____ 44. I organize my approach to things rapidly.

_____ 45. I spell out the implications of basic concepts.

Part IV

THE FOLLOWING ITEMS HAVE TO DO WITH THE RESULTING OUTCOME
OR <u>PRODUCTS</u> YOU MAKE.

_____ 46. I invent new objects.

_____ 47. I produce finished theories about things.

_____ 48. My products are free flowing.

_____ 49. My products are ingenious.

_____ 50. My products are carefully executed.

_____ 51. I complete projects which contain a great deal of original thought.

_____ 52. I produce innovative organizations.

_____ 53. The things I produce are complete in every detail.

_____ 54. The fruits of my endeavor have immediate appeal.

_____ 55. The projects I complete are innovative.

_____ 56. My projects are skillfully completed.

_____ 57. The outcomes of my thinking are complete, original, and elaborate.

_____ 58. The outcomes of my endeavors are inventive.

_____ 59. The outcome of my endeavors has an air of freedom.

_____ 60. I produce new applications from existing ideas.

Part V

THE FOLLOWING ITEMS HAVE TO DO WITH THE <u>CLIMATE</u> WITHIN
WHICH YOU WORK BEST.

_____ 61. I surround myself with gadgets and puzzles.

_____ 62. I live in a world of ideas.

_____ 63. I am immediately stimulated by textures.

_____ 64. I like a challenging environment which requires concrete solutions.

_____ 65. I like environments that provide a lot of good materials and equipment.

_____ 66. I associate with friends who stimulate basic thoughts.

_____ 67. I like an environment where a lot of new applications are being developed.

_____ 68. I prefer conditions that support technical proficiency.

_____ 69. I am attracted to stimulating sounds.

_____ 70. I like situations that encourage innovation on ideas.

_____ 71. I value good tools and materials.

_____ 72. I like an environment which brings me in contact with strange new ideas.

_____ 73. I like conditions which support ingenuity.

_____ 74. I like to be turned on by strong sensations.

_____ 75. I like an environment that allows me to develop basic ideas to
their fullest.

MACH IV

The following statements refer to opinions regarding a number of social issues about which some people agree and others disagree. Please mark each statement in the left hand margin according to your agreement or disagreement as follows:

+1   slight support, agreement   -1   slight oppostion, disagreement
+2   moderate support, agreement   -2   moderate oppostion, disagreement
+3   strong support, agreement   -3   strong opposition, disagreement

_____ 1.   The best way to handle people is to tell them what they want to hear.

_____ 2.   It is hard to get ahead without cutting corners here and there.

_____ 3.   Barnum was very wrong when he said there's a sucker born every minute.

_____ 4.   Generally speaking, men won't work hard unless they're forced to do so.

_____ 5.   Honesty is the best policy in all cases.

_____ 6.   One should take action only when sure it is morally right.

_____ 7.   People suffering from incurable diseases should have the choice of being put painlessly to death.

_____ 8.   Most men are brave.

_____ 9.   Never tell anyone the real reason you did something unless it is useful to do so.

_____ 10.   The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.

_____ 11.   Anyone who completely trusts anyone else is asking for trouble.

_____ 12.   When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.

_____ 13.   Most men forget more easily the death of their father than the loss of their property.

_____ 14.   All in all, it is better to be humble and honest than important and dishonest.

_____ 15.   It is wise to flatter important people.

_____ 16.   Most people who get ahead in the world lead clean, moral lives.

_____ 17.   There is no excuse for lying to someone.

_____ 18.   It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

_____ 19. Most people are basically good and kind.

_____ 20. It is possible to be good in all respects.

APPENDIX E

MACH V ATTITUDE INVENTORY

Below are twenty groups of statements. Each group contains three statements. Each one refers to a way of thinking about people or things in general. They reflect opinions and not matters of fact, and different people have been found to agree with different ones.

Read the three statements in each group. Decide first which of the three, A, B, or C, is most true or comes the closest to describing your own beliefs. Mark a + on the answer sheet next to the letter that represents this statement. Then decide which of the remaining two statements is most false or the farthest from your own beliefs. Write a 0 on the answer sheet next to this letter.

Here is an example:

_____ A. It is easy to persuade people but hard to keep them persuaded.

_+_ B. Theories that run counter to common sense are a waste of time.

_0_ C. It is only common sense to go along with what other people are doing and not be too different.

In this case, statement B would be the one you believe most strongly (or reject least strongly), and A and C would be less characteristic of your opinion. Statement C would be the one you believe least strongly of the three. On your answer sheet you would mark a + next to B and a 0 next to C.

You will find some of the choices easy to make; others will be quite difficult. Do not fail to make a choice no matter how hard it may be. Do not omit any groups of statements.

You may tear this page out of the question booklet and keep it in front of you as you answer the items if you wish.

1. ____ A. It takes more imagination to be a successful criminal than a successful business man.

   ____ B. The phrase, "the road to hell is paved with good intentions" contains a lot of truth.

   ____ C. Most men forget more easily the death of their father than the loss of their property.

2. ____ A. Men are more concerned with the car they drive than with the clothes their wives wear.

   ____ B. It is very important that imagination and creativity in children be cultivated.

   ____ C. People suffering from incurable diseases should have the choice of being put painlessly to death.

3. ____ A. Never tell anyone the real reason you did something unless it is useful to do so.

   ____ B. The well-being of the individual is the goal that should be worked for before anything else.

   ____ C. Once a truly intelligent person makes up his mind about the answer to a problem he rarely continues to think about it.

4. ____ A. People are getting so lazy and self-indulgent that it is bad for our country.

   ____ B. The best way to handle people is to tell them what they want to hear.

   ____ C. It would be a good thing if people were kinder to others less fortunate than themselves.

5. ____ A. Most people are basically good and kind.

   ____ B. The best criteria for a wife or husband is compatibility -- other characteristics are nice but not essential.

   ____ C. Only after a man has gotten what he wants from life should he concern himself with the injustices in the world.

6. ____ A. Most people who get ahead in the world lead clean, moral lives.

   ____ B. Any man worth his salt shouldn't be blamed for putting his career above his family.

   ____ C. People would be better off if they were concerned less with how to do things and more with what to do.

7. ____ A. A good teacher is one who points out unanswered questions rather than gives explicit answers.

____ B. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.

____ C. A person's job is the best single guide as to the sort of person is.

8. ____ A. The construction of such monumental works as the Egyptian pyramids was worth the enslavement of the workers who built them.

____ B. Once a way of handling problems has been worked out it is best to stick with it.

____ C. One should take action only when sure it is morally right.

9. ____ A. The world would be a much better place to live in if people would let the future take care of itself and concern themselves only with enjoying the present.

____ B. It is wise to flatter important people.

____ C. Once a decision has been made, it is best to keep changing it as new circumstances arise.

10. ____ A. It is a good policy to act as if you are doing the things you do because you have no other choice.

____ B. The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.

____ C. Even the most hardened and vicious criminal has a spark of decency somewhere within him.

11. ____ A. All in all, it is better to be humble and honest than to be important and dishonest.

____ B. A man who is able and willing to work hard has a good chance of succeeding in whatever he wants to do.

____ C. If a thing does not help us in our daily lives, it isn't very important.

12. ____ A. A person shouldn't be punished for breaking a law which he thinks is unreasonable.

____ B. Too many criminals are not punished for their crime.

____ C. There is no excuse for lying to someone else.

13. ____ A. Generally speaking, men won't work hard unless they're forced to do so.

____ B. Every person is entitled to a second chance, even after he commits a serious mistake.

____ C. People who can't make up their minds aren't worth bothering about.

14. ____ A. A man's first responsibility is to his wife, not his mother.

____ B. Most men are brave.

____ C. It's best to pick friends that are intellectually stimulating rather than ones it is comfortable to be around.

15. ____ A. There are very few people in the world worth concerning oneself about.

____ B. It is hard to get ahead without cutting corners here and there.

____ C. A capable person motivated for his own gain is more useful to society than a well-meaning but ineffective one.

16. ____ A. It is best to give others the impression that you can change your mind easily.

____ B. It is a good working policy to keep on good terms with everyone.

____ C. Honesty is the best policy in all cases.

17. ____ A. It is possible to be good in all respects.

____ B. To help oneself is good; to help others even better.

____ C. War and threats of war are unchangeable facts of human life.

18. ____ A. Barnum was probably right when he said that there's at least one sucker born every minute.

____ B. Life is pretty dull unless one deliberately stirs up some excitement.

____ C. Most people would be better off if they controlled their emotions.

19. ____ A. Sensitivity to the feelings of others is worth more than poise in social situations.

____ B. The ideal society is one where everybody knows his place and accepts it.

____ C. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

20. ____ A. People who talk about abstract problems usually don't know what they are talking about.

____ B. Anyone who completely trusts anyone else is asking for trouble.

____ C. It is essential for the functioning of a democracy that everyone vote.

CHECK YOUR ANSWER SHEET TO BE SURE YOU HAVE ANSWERED EVERY ITEM.

F – SCALE

The following statements refer to opinions regarding a number of social issues, about which some people agree and others disagree. Please mark each statement in the left-hand margin according to your agreement or disagreement, as follows:

+1 slight support, agreement   −1 slight opposition, disagreement
+2 moderate support, agreement   −2 moderate opposition, disagreement
+3 strong support, agreement   −3 strong opposition, disagreement

_____ 1. Obedience and respect for authority are the most important vitures children should learn.

_____ 2. No weakness or difficulty can hold us back if we have enough will power.

_____ 3. Science has its place, but there are many important things that can never possibly be understood by the human mind.

_____ 4. Human nature being what it is, there will always be war and conflict.

_____ 5. Every person should have complete faith in some supernatural power whose decisions he obeys without question.

_____ 6. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

_____ 7. A person who has bad manners, habits, and breeding can hardly expect to get along with decent people.

_____ 8. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

_____ 9. Some people are born with an urge to jump from high places.

_____ 10. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

_____ 11. An insult to our honor should always be punished.

_____ 12. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

_____ 13. It is best to use some pre-war authorities in Germany to keep order and prevent chaos.

_____ 14. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders, in whom the people can put their faith.

_____ 15. Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.

_____ 16. People can be divided into two distinct classes: the weak and the strong.

_____ 17. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

_____ 18. Some day it will probably be shown that astrology can explain a lot of things.

_____ 19. Nowadays more and more people are prying into matters that should remain personal and private.

_____ 20. Wars and social troubles may someday be ended by an earth-quake or flood that will destroy the whole world.

_____ 21. Most of our social problems would be solved if we could some-how get rid of the immoral, crooked, and feebleminded people.

_____ 22. The wild sex life of the old Greeks and Romans was tame compared to some of the goings-on in this country, even in places where people might least expect it.

_____ 23. If people would talk less and work more, everybody would be better off.

_____ 24. Most people don't realize how much our lives are controlled by plots hatched in secret places.

_____ 25. Homosexuals are hardly better than criminals and ought to be severely punished.

_____ 26. The business man and the manufacturer are much more important to society than the artist and the professor.

_____ 27. No sane, normal, decent person could ever think of hurting a close friend or relative.

_____ 28. Familiarity breeds contempt.

_____ 29. Nobody ever learned anything really important except through suffering.

_____ 30. America is getting so far from the true American way of life that force may be necessary to restore it.

APPENDIX G

MADDI'S ALIENATION TEST

The items below consist of statements with which you may agree or disagree. Please indicate how you feel about each item by placing a number from 0 to 100 in the space provided. A zero indicates that you feel the item is not at all true; 100 indicates that you feel the item is completely true.

As you will see, many items are worded very strongly. This is so you will be able to decide the degree to which you agree or disagree.

Please read all the items carefully. Be sure to answer all on the basis of the way you feel now.

```
     0                    100

  not at              completely
  all true            true
```

THESE ITEMS HAVE TO DO WITH YOUR ATTITUDE TOWARD WORK

_____ Those who work for a living are manipulated by the bosses.

_____ I wonder why I work at all.

_____ Most of life is wasted in meaningless activity.

_____ If you have to work, you might as well choose a career where you deal with matters of life and death.

_____ No matter how hard you work, you never really seem to reach your goals.

_____ I find it difficult to imagine enthusiasm concerning work.

_____ It doesn't matter if people work hard at their jobs; only a few boses profit.

_____ Ordinary work is too boring to be worth doing.

_____ I feel no need to try my best at work for it makes no difference anyway.

_____ I don't like my job or enjoy my work; I just put in my time to get paid.

_____ I find it hard to believe people who actually feel that the work they perform is of value to society.

_____ If a job is dangerous, that makes it all the better.

THESE ITEMS HAVE TO DO WITH YOUR ATTITUDE TOWARD SOCIAL INSTITUTIONS

_____ Politicians control our lives.

_____ Our laws are so unfair that I want nothing to do with them.

_____ The only reason to involve yourself in society is to gain power.

_____ I would drop almost anything in order to join some big cause.

_____ Most of my activities are determined by what society demands.

_____ In order to avoid being hassled by society, I feel I must go my own way and not get involved.

_____ No matter how sincerely you work for social change, society never really seems to improve.

_____ My most meaningful experiences have come through participation in social movement.

_____ There are only certain strict paths to follow if one is to be successful in our society.

_____ Our society holds no worthwhile values or goals.

_____ Why should I bother to vote; none of the candidates will be able to change things for the better.

_____ I admire those who participate in protest movements that are full of danger and drama.

THESE ITEMS HAVE TO DO WITH YOUR ATTITUDE TOWARD INTERPERSONAL RELATIONS

_____ Everyone is out to manipulate you toward his own ends.

_____ I am better off when I keep to myself.

_____ Most people are happy not to know that what they call love is really self-interest.

_____ Big parties are very exciting to me.

_____ Often when I interact with others, I feel insecure over the outcome.

_____ There is no point in socializing -- it goes nowhere and is nothing.

_____ Why bother to try to love or care for people; they'll only hurt you in the end.

_____ What really turns me on about socializing is the challenge of a group of people disagreeing and arguing.

_____ I try to avoid close relationships with people so that I will not be obligated to them.

_____ Most social relationships are meaningless.

_____ People who believe that "Loves makes the world go around" are fooling themselves.

_____ The best reason for getting involved with other people is participation in some action that can catch everybody up.

THESE ITEMS HAVE TO DO WITH YOUR ATTITUDE TOWARD FAMILY

_____ When you marry and have children you have lost your freedom of choice.

_____ I would just as soon avoid any contact with my children except an occasional letter.

_____ The idea of a family is a social invention to limit individual freedom of action.

_____ It would be really exciting to have another, secret life, to supplement your family life.

_____ My parents imposed their wishes and standards on me too much.

_____ Parents work hard for their children only to be disappointed and rejected.

_____ The only reason to marry is for convenience and security.

_____ Strange though it may seem, it is at times of family crisis that I feel most alive.

_____ I am not sure I want to stay married because I don't want to feel tied down.

_____ For me, home and family have never had much positive meaning.

_____ Families do not provide security and warmth, they just restrict a person and give him unnecessary responsibilities.

_____ What I really like about family life is the huge, action-filled reunions at holiday times.

THESE ITEMS HAVE TO DO WITH YOUR ATTITUDE TOWARD <u>SELF</u>

_____ Thinking of yourself as a free person leads to great frustration and difficulty.

_____ The human's fabled ability to think is not really such an advantage.

_____ The attempt to know yourself is a waste of effort.

_____ I am really interested in the possibility of expanding my consciousness through drugs.

_____ No matter how hard I try, my efforts will accomplish nothing.

_____ Life is empty and has no meaning in it for me.

_____ The belief in individuality is only justifiable to impress others.

_____ I wish I could be carried away by a revelation, as apparently happened to some historically important persons.

_____ Often I do not really know my own mind.

_____ I long for a simple life in which body needs are the most important things and decisions don't have to be made.

_____ Unfortunately, people don't seem to know that they are only creatures after all.

_____ The most exciting thing for me is my own fantasies.

Leadership Opinion Questionnaire

by Edwin A. Fleishman

	Raw Score	Percentile	Other
C			
S			

Description of Norm Group

Organization _____

Position _____

(Last) (First) (Middle)

INSTRUCTIONS:

For each item, choose the alternative which most nearly expresses your opinion on how frequently you *should* do what is described by that item. Always indicate what you, as a supervisor, or manager, sincerely believe to be the desirable way to act. Please remember—there are no right or wrong answers to these questions. Different supervisors have different experiences and we are interested only in your opinions.

Answer the items by marking an "X" in the box before the alternative that best expresses your feeling about the item. *Mark only one* alternative for each item. If you wish to change your answer, draw a circle around your first "X" and mark a new "X" in the appropriate box.

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the welfare of your unit above welfare of any person in it.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

e in to your subordinates in ussions with them.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very Seldom

courage after-duty work by sons of your unit.

- ☐ A great deal
- ☐ Fairly often
- ☐ To some degree
- ☐ Once in a while
- ☐ Very seldom

out your own new ideas in unit.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

k up what persons under you

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

ticize poor work.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

for more than the persons ler you can accomplish.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

fuse to compromise a point.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

ist that persons under you fol- to the letter those standard tines handed down to you.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

lp persons under you with their sonal problems.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

11. Be slow to adopt new ideas.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

12. Get the approval of persons under you on important matters before going ahead.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

13. Resist changes in ways of doing things.

- ☐ A great deal
- ☐ Fairly much
- ☐ To some degree
- ☐ Comparatively little
- ☐ Not at all

14. Assign persons under you to particular tasks.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

15. Speak in a manner not to be questioned.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

16. Stress importance of being ahead of other units.

- ☐ A great deal
- ☐ Fairly much
- ☐ To some degree
- ☐ Comparatively little
- ☐ Not at all

17. Criticize a specific act rather than a particular member of your unit.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

18. Let the persons under you do their work the way they think is best.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

19. Do personal favors for persons under you.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

20. Emphasize meeting of deadlines.

- ☐ A great deal
- ☐ Fairly much
- ☐ To some degree
- ☐ Comparatively little
- ☐ Not at all

21.
Insist that you be informed on decisions made by persons under you.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

22.
Offer new approaches to problems.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

23.
Treat all persons under you as your equals.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

24.
Be willing to make changes.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

25.
Talk about how much should be done.

- ☐ A great deal
- ☐ Fairly much
- ☐ To some degree
- ☐ Comparatively little
- ☐ Not at all

26.
Wait for persons in your unit to push new ideas.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

27.
Rule with an iron hand.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

28.
Reject suggestions for changes.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

29.
Change the duties of persons under you without first talking it over with them.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

30.
Decide in detail what shall be done and how it shall be done by the persons under you.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

31.
See to it that persons under you are working up to capacity.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

32.
Stand up for persons under you, even though it makes you unpopular with others.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

33.
Put suggestions made by persons in the unit into operation.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

34.
Refuse to explain your actions.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

35.
Ask for sacrifices from persons under you for the good of your entire unit.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

36.
Act without consulting persons under you.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

37.
"Needle" persons under you for greater effort.

- ☐ A great deal
- ☐ Fairly much
- ☐ To some degree
- ☐ Comparatively little
- ☐ Not at all

38.
Insist that everything be done your way.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

39.
Encourage slow-working persons in your unit to work harder.

- ☐ Often
- ☐ Fairly often
- ☐ Occasionally
- ☐ Once in a while
- ☐ Very seldom

40.
Meet with the persons in your unit at certain regularly scheduled times.

- ☐ Always
- ☐ Often
- ☐ Occasionally
- ☐ Seldom
- ☐ Never

PERSONAL ORIENTATION INVENTORY

POI

EVERETT L. SHOSTROM, Ph.D.

DIRECTIONS

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.

Section of Answer
Column Correctly
Marked

	a	b
1.	▌	⫶
	a	b
2.	⫶	▌

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 <u>some</u> 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.

1. a. I am bound by the principle of fairness.

   b. I am not absolutely bound by the principle of fairness.

2. a. When a friend does me a favor, I feel that I must return it.

   b. When a friend does me a favor, I do not feel that I must return it.

3. a. I feel I must always tell the truth.

   b. I do not always tell the truth.

4. a. No matter how hard I try, my feelings are often hurt.

   b. If I manage the situation right, I can avoid being hurt.

5. a. I feel that I must strive for perfection in everything that I undertake.

   b. I do not feel that I must strive for perfection in everything that I undertake.

6. a. I often make my decisions spontaneously.

   b. I seldom make my decisions spontaneously.

7. a. I am afraid to be myself.

   b. I am not afraid to be myself.

8. a. I feel obligated when a stranger does me a favor.

   b. I do not feel obligated when a stranger does me a favor.

9. a. I feel that I have a right to expect others to do what I want of them.

   b. I do not feel that I have a right to expect others to do what I want of them.

10. a. I live by values which are in agreement with others.

    b. I live by values which are primarily based on my own feelings.

11. a. I am concerned with self-improvement at all times.

    b. I am not concerned with self-improvement at all times.

12. a. I feel guilty when I am selfish.

    b. I don't feel guilty when I am selfish.

13. a. I have no objection to getting angry.

    b. Anger is something I try to avoid.

14. a. For me, anything is possible if I believe in myself.

    b. I have a lot of natural limitations even though I believe in myself.

15. a. I put others' interests before my own.

    b. I do not put others' interests before my own.

16. a. I sometimes feel embarrassed by compliments.

    b. I am not embarrassed by compliments.

17. a. I believe it is important to accept others as they are.

    b. I believe it is important to understand why others are as they are.

18. a. I can put off until tomorrow what I ought to do today.

    b. I don't put off until tomorrow what I ought to do today.

19. a. I can give without requiring the other person to appreciate what I give.

    b. I have a right to expect the other person to appreciate what I give.

20. a. My moral values are dictated by society.

    b. My moral values are self-determined.

21. a. I do what others expect of me.

    b. I feel free to not do what others expect of me.

22. a. I accept my weaknesses.

    b. I don't accept my weaknesses.

23. a. In order to grow emotionally, it is necessary to know why I act as I do.

    b. In order to grow emotionally, it is not necessary to know why I act as I do.

24. a. Sometimes I am cross when I am not feeling well.

    b. I am hardly ever cross.

25. a. It is necessary that others approve of what I do.

   b. It is not always necessary that others approve of what I do.

26. a. I am afraid of making mistakes.

   b. I am not afraid of making mistakes.

27. a. I trust the decisions I make spontaneously.

   b. I do not trust the decisions I make spontaneously.

28. a. My feelings of self-worth depend on how much I accomplish.

   b. My feelings of self-worth do not depend on how much I accomplish.

29. a. I fear failure.

   b. I don't fear failure.

30. a. My moral values are determined, for the most part, by the thoughts, feelings and decisions of others.

   b. My moral values are not determined, for the most part, by the thoughts, feelings and decisions of others.

31. a. It is possible to live life in terms of what I want to do.

   b. It is not possible to live life in terms of what I want to do.

32. a. I can cope with the ups and downs of life.

   b. I cannot cope with the ups and downs of life.

33. a. I believe in saying what I feel in dealing with others.

   b. I do not believe in saying what I feel in dealing with others.

34. a. Children should realize that they do not have the same rights and privileges as adults.

   b. It is not important to make an issue of rights and privileges.

35. a. I can "stick my neck out" in my relations with others.

   b. I avoid "sticking my neck out" in my relations with others.

36. a. I believe the pursuit of self-interest is opposed to interest in others.

   b. I believe the pursuit of self-interest is not opposed to interest in others.

37. a. I find that I have rejected many of the moral values I was taught.

   b. I have not rejected any of the moral values I was taught.

38. a. I live in terms of my wants, likes, dislikes and values.

   b. I do not live in terms of my wants, likes, dislikes and values.

39. a. I trust my ability to size up a situation.

   b. I do not trust my ability to size up a situation.

40. a. I believe I have an innate capacity to cope with life.

   b. I do not believe I have an innate capacity to cope with life.

41. a. I must justify my actions in the pursuit of my own interests.

   b. I need not justify my actions in the pursuit of my own interests.

42. a. I am bothered by fears of being inadequate.

   b. I am not bothered by fears of being inadequate.

43. a. I believe that man is essentially good and can be trusted.

   b. I believe that man is essentially evil and cannot be trusted.

44. a. I live by the rules and standards of society.

   b. I do not always need to live by the rules and standards of society.

45. a. I am bound by my duties and obligations to others.

   b. I am not bound by my duties and obligations to others.

46. a. Reasons are needed to justify my feelings.

   b. Reasons are not needed to justify my feelings.

47. a. There are times when just being silent is the best way I can express my feelings.

    b. I find it difficult to express my feelings by just being silent.

48. a. I often feel it necessary to defend my past actions.

    b. I do not feel it necessary to defend my past actions.

49. a. I like everyone I know.

    b. I do not like everyone I know.

50. a. Criticism threatens my self-esteem.

    b. Criticism does not threaten my self-esteem.

51. a. I believe that knowledge of what is right makes people act right.

    b. I do not believe that knowledge of what is right necessarily makes people act right.

52. a. I am afraid to be angry at those I love.

    b. I feel free to be angry at those I love.

53. a. My basic responsibility is to be aware of my own needs.

    b. My basic responsibility is to be aware of others' needs.

54. a. Impressing others is most important.

    b. Expressing myself is most important.

55. a. To feel right, I need always to please others.

    b. I can feel right without always having to please others.

56. a. I will risk a friendship in order to say or do what I believe is right.

    b. I will not risk a friendship just to say or do what is right.

57. a. I feel bound to keep the promises I make.

    b. I do not always feel bound to keep the promises I make.

58. a. I must avoid sorrow at all costs.

    b. It is not necessary for me to avoid sorrow.

59. a. I strive always to predict what will happen in the future.

    b. I do not feel it necessary always to predict what will happen in the future.

60. a. It is important that others accept my point of view.

    b. It is not necessary for others to accept my point of view.

61. a. I only feel free to express warm feelings to my friends.

    b. I feel free to express both warm and hostile feelings to my friends.

62. a. There are many times when it is more important to express feelings than to carefully evaluate the situation.

    b. There are very few times when it is more important to express feelings than to carefully evaluate the situation.

63. a. I welcome criticism as an opportunity for growth.

    b. I do not welcome criticism as an opportunity for growth.

64. a. Appearances are all-important.

    b. Appearances are not terribly important.

65. a. I hardly ever gossip.

    b. I gossip a little at times.

66. a. I feel free to reveal my weaknesses among friends.

    b. I do not feel free to reveal my weaknesses among friends.

67. a. I should always assume responsibility for other people's feelings.

    b. I need not always assume responsibility for other people's feelings.

68. a. I feel free to be myself and bear the consequences.

    b. I do not feel free to be myself and bear the consequences.

69. a. I already know all I need to know about my feelings.

b. As life goes on, I continue to know more and more about my feelings.

70. a. I hesitate to show my weaknesses among strangers.

b. I do not hesitate to show my weaknesses among strangers.

71. a. I will continue to grow only by setting my sights on a high-level, socially approved goal.

b. I will continue to grow best by being myself.

72. a. I accept inconsistencies within myself.

b. I cannot accept inconsistencies within myself.

73. a. Man is naturally cooperative.

b. Man is naturally antagonistic.

74. a. I don't mind laughing at a dirty joke.

b. I hardly ever laugh at a dirty joke.

75. a. Happiness is a by-product in human relationships.

b. Happiness is an end in human relationships.

76. a. I only feel free to show friendly feelings to strangers.

b. I feel free to show both friendly and unfriendly feelings to strangers.

77. a. I try to be sincere but I sometimes fail.

b. I try to be sincere and I am sincere.

78. a. Self-interest is natural.

b. Self-interest is unnatural.

79. a. A neutral party can measure a happy relationship by observation.

b. A neutral party cannot measure a happy relationship by observation.

80. a. For me, work and play are the same.

b. For me, work and play are opposites.

81. a. Two people will get along best if each concentrates on pleasing the other.

b. Two people can get along best if each person feels free to express himself.

82. a. I have feelings of resentment about things that are past.

b. I do not have feelings of resentment about things that are past.

83. a. I like only masculine men and feminine women.

b. I like men and women who show masculinity as well as femininity.

84. a. I actively attempt to avoid embarrassment whenever I can.

b. I do not actively attempt to avoid embarrassment.

85. a. I blame my parents for a lot of my troubles.

b. I do not blame my parents for my troubles.

86. a. I feel that a person should be silly only at the right time and place.

b. I can be silly when I feel like it.

87. a. People should always repent their wrong-doings.

b. People need not always repent their wrong-doings.

88. a. I worry about the future.

b. I do not worry about the future.

89. a. Kindness and ruthlessness must be opposites.

b. Kindness and ruthlessness need not be opposites.

90. a. I prefer to save good things for future use.

b. I prefer to use good things now.

91. a. People should always control their anger.

b. People should express honestly-felt anger.

92. a. The truly spiritual man is sometimes sensual.

    b. The truly spiritual man is never sensual.

93. a. I am able to express my feelings even when they sometimes result in undesirable consequences.

    b. I am unable to express my feelings if they are likely to result in undesirable consequences.

94. a. I am often ashamed of some of the emotions that I feel bubbling up within me.

    b. I do not feel ashamed of my emotions.

95. a. I have had mysterious or ecstatic experiences.

    b. I have never had mysterious or ecstatic experiences.

96. a. I am orthodoxly religious.

    b. I am not orthodoxly religious.

97. a. I am completely free of guilt.

    b. I am not free of guilt.

98. a. I have a problem in fusing sex and love.

    b. I have no problem in fusing sex and love.

99. a. I enjoy detachment and privacy.

    b. I do not enjoy detachment and privacy.

100. a. I feel dedicated to my work.

    b. I do not feel dedicated to my work.

101. a. I can express affection regardless of whether it is returned.

    b. I cannot express affection unless I am sure it will be returned.

102. a. Living for the future is as important as living for the moment.

    b. Only living for the moment is important.

103. a. It is better to be yourself.

    b. It is better to be popular.

104. a. Wishing and imagining can be bad.

    b. Wishing and imagining are always good.

105. a. I spend more time preparing to live.

    b. I spend more time actually living.

106. a. I am loved because I give love.

    b. I am loved because I am lovable.

107. a. When I really love myself, everybody will love me.

    b. When I really love myself, there will still be those who won't love me.

108. a. I can let other people control me.

    b. I can let other people control me if I am sure they will not continue to control me.

109. a. As they are, people sometimes annoy me.

    b. As they are, people do not annoy me.

110. a. Living for the future gives my life its primary meaning.

    b. Only when living for the future ties into living for the present does my life have meaning.

111. a. I follow diligently the motto, "Don't waste your time."

    b. I do not feel bound by the motto, "Don't waste your time."

112. a. What I have been in the past dictates the kind of person I will be.

    b. What I have been in the past does not necessarily dictate the kind of person I will be.

113. a. It is important to me how I live in the here and now.

    b. It is of little importance to me how I live in the here and now.

114. a. I have had an experience where life seemed just perfect.

    b. I have never had an experience where life seemed just perfect.

115. a. Evil is the result of frustration in trying to be good.

    b. Evil is an intrinsic part of human nature which fights good.

116. a. A person can completely change his essential nature.

    b. A person can never change his essential nature.

117. a. I am afraid to be tender.

    b. I am not afraid to be tender.

118. a. I am assertive and affirming.

    b. I am not assertive and affirming.

119. a. Women should be trusting and yielding.

    b. Women should not be trusting and yielding.

120. a. I see myself as others see me.

    b. I do not see myself as others see me.

121. a. It is a good idea to think about your greatest potential.

    b. A person who thinks about his greatest potential gets conceited.

122. a. Men should be assertive and affirming.

    b. Men should not be assertive and affirming.

123. a. I am able to risk being myself.

    b. I am not able to risk being myself.

124. a. I feel the need to be doing something significant all of the time.

    b. I do not feel the need to be doing something significant all of the time.

125. a. I suffer from memories.

    b. I do not suffer from memories.

126. a. Men and women must be both yielding and assertive.

    b. Men and women must not be both yielding and assertive.

127. a. I like to participate actively in intense discussions.

    b. I do not like to participate actively in intense discussions.

128. a. I am self-sufficient.

    b. I am not self-sufficient.

129. a. I like to withdraw from others for extended periods of time.

    b. I do not like to withdraw from others for extended periods of time.

130. a. I always play fair.

    b. Sometimes I cheat a little.

131. a. Sometimes I feel so angry I want to destroy or hurt others.

    b. I never feel so angry that I want to destroy or hurt others.

132. a. I feel certain and secure in my relationships with others.

    b. I feel uncertain and insecure in my relationships with others.

133. a. I like to withdraw temporarily from others.

    b. I do not like to withdraw temporarily from others.

134. a. I can accept my mistakes.

    b. I cannot accept my mistakes.

135. a. I find some people who are stupid and uninteresting.

    b. I never find any people who are stupid and uninteresting.

136. a. I regret my past.

    b. I do not regret my past.

137. a. Being myself is helpful to others.

    b. Just being myself is not helpful to others.

138. a. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstasy or bliss.

    b. I have not had moments of intense happiness when I felt like I was experiencing a kind of bliss.

139. a. People have an instinct for evil.

    b. People do not have an instinct for evil.

140. a. For me, the future usually seems hopeful.

    b. For me, the future often seems hopeless.

141. a. People are both good and evil.

    b. People are not both good and evil.

142. a. My past is a stepping stone for the future.

    b. My past is a handicap to my future.

143. a. "Killing time" is a problem for me.

    b. "Killing time" is not a problem for me.

144. a. For me, past, present and future is in meaningful continuity.

    b. For me, the present is an island, unrelated to the past and future.

145. a. My hope for the future depends on having friends.

    b. My hope for the future does not depend on having friends.

146. a. I can like people without having to approve of them.

    b. I cannot like people unless I also approve of them.

147. a. People are basically good.

    b. People are not basically good.

148. a. Honesty is always the best policy.

    b. There are times when honesty is not the best policy.

149. a. I can feel comfortable with less than a perfect performance.

    b. I feel uncomfortable with anything less than a perfect performance.

150. a. I can overcome any obstacles as long as I believe in myself.

    b. I cannot overcome every obstacle even if I believe in myself.