

T  
960

THE SELF-CONCEPT/SELF-IDEAL DISCREPANCY OF  
REPRESSORS AND SENSITIZERS:  
A VALIDATIONAL STUDY OF THE R-S SCALE

By

Mary Keushgerian

A Thesis

Submitted in Partial Fulfilment of the Requirement of  
Degree of Master of Arts in the Psychology  
Department of the American University of Beirut

Beirut, Lebanon

May, 1968

AMERICAN UNIVERSITY OF BEIRUT

THE SELF-CONCEPT/SELF-IDEAL DISCREPANCY  
OF REPRESSORS AND SENSITIZERS:  
A VALIDATIONAL STUDY OF THE R-S SCALE

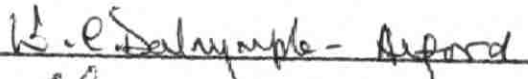
By

Mary Keushgerian

Approved:



Adviser



Member of Committee



Member of Committee

Date of Thesis Presentation: May 21, 1968.

## TABLE OF CONTENTS

	Page
List of Tables .....	iii
List of Figures .....	iv
Abstract .....	v
Introduction .....	1
Chapter I Repression-Sensitization: A Personality Variable.....	3
Chapter II Repression-Sensitization, the SC/SI Discrepancy and Maladjustment.....	13
Chapter III The Present Study.....	30
A. Implications of Research Findings	
B. Rationale	
C. Hypotheses	
D. Method	
Results and Discussion .....	40
Summary.....	63
Appendix	
A. Tables	
Table 1: R-S Scale Scores.....	66
Table 2: ACL Scores for Dominance.....	67
Table 3: ACL Scores for Love.....	68
B. Tests and Instructions	
R-S Scale.....	70
ACL.....	75
Definitions.....	77
Bibliography.....	79

## LIST OF TABLES

Table		Page
1	Critical Ratio Comparison of R-S Scale Means and Standard Deviations of the American Standardization and the AUB Samples.....	41
2	R-S Scale Means and Differences Between Means of AUB Repressors, Normals and Sensitizers.....	42
3	Summary of Analysis of Variance of Self-concepts, Self-ideal-concepts, and Self-concept/Self-ideal Discrepancies on the Dimension of Dominance of the Adjective Check List at Different Levels of Repression-Sensitization.....	44
4	ACL Means of Self-concepts and Self-ideal-concepts of Repressors, Normals and Sensitizers on the Dimension of Dominance.....	45
5	Summary of Analysis of Variance of Self-concepts, Self-ideal-concepts, and Self-concept/Self-ideal Discrepancies on the Dimension of Love of the Adjective Check List at Different Levels of Repression-Sensitization.....	47
6	ACL Means of Self-concepts and Self-ideal-concepts of Repressors, Normals and Sensitizers on the Dimension of Love.....	49

## LIST OF FIGURES

Figure		Page
1	Graphical Presentation of Self and Ideal-self Descriptions and Self/Ideal Discrepancies at Different Levels of Repression-Sensitization on the Dimension of Dominance.....	45
2	Graphical Presentation of Self and Ideal-self Descriptions and Self/Ideal Discrepancies at Different Levels of Repression-Sensitization on the Dimension of Love.....	49
3	Repressor Group Profile for Self-concept and Ideal-self-concept.....	53
4	Normal Group Profile for Self-concept and Ideal-self-concept.....	54
5	Sensitizer Group Profile for Self-concept and Ideal-self-concept.....	55
6	Repressor Octant Profile for Self-concept....	57
7	Repressor Octant Profile for Ideal-self concept.....	58
8	Normal Octant Profile for Self-concept.....	59
9	Normal Octant Profile for Ideal-self-concept.	60
10	Sensitizer Octant Profile for Self-concept...	61
11	Sensitizer Octant Profile for Ideal-self-concept.....	62

## ABSTRACT

Research with the R-S Scale has established the presence of a personality dimension called repression-sensitization which characterizes individual approach-avoidance tendencies in threatening situations. The R-S Scale is a reliable measure of this personality dimension among American student populations. In the present study an attempt was made to find out the predictive value of the Scale as a measure of repression-sensitization among Middle Eastern students at A.U.B.

The Scale and two copies of the ACL were given to 180 A.U.B. male and female students. The R-S Scale was used to measure defensiveness. Once copy of the ACL was used to obtain self-descriptions and one for ideal-self descriptions.

Based on findings on American subjects, self-concept, ideal-self, self-concept/ideal-self discrepancy relationships were hypothesized, the confirmation of which would support the predictive value of the R-S Scale. The results showed a significant difference between the comparison samples: the A.U.B. mean was higher and the spread of scores wider compared to the American standardization group. However, the general trends appearing among A.U.B. students were similar to those observed in the American sample. On the self-concept self-ideal discrepancy measures A.U.B. repressors and sensitizers were similar to their American analogues on the Dominance dimension of Leary's diagnostic grid system, but the A.U.B. sensitizers had a higher self-ideal. On the dimension of Love, comparisons between the two samples were uncertain due to contradictory findings on this dimension among American subjects. It was concluded that the R-S Scale is applicable to Middle Eastern students at A.U.B.

## INTRODUCTION

Psychological defenses are generally defined as unconscious anxiety-reducing activities. Of the large number of defense mechanisms described in psychological literature consistent tendencies have been observed among individuals in their selective use of some or other of these mechanisms. On the basis of such behavioral consistency individuals are grouped into two distinct categories of personality structure: a) Repressors, b) Sensitizers. Repressors are characterized by avoidance type of reactions; they tend to deny the existence of threatening stimuli and attempt to escape them. The defenses of repression, denial and reaction-formation are called "repression type mechanisms." Sensitizers, on the other hand, are people who admit their anxiety, try to approach a threatening situation and attempt to control the anxiety-arousing stimulus. Their favored reactions tend to be projection, rationalization, compulsivity and intellectualization. These are called "sensitization type mechanisms."

The research background from which the behavior dimension of repression-sensitization emerged involved the early perceptual defense studies dealing with individual differences in perceptual adaptation to threat. In these studies two distinct response patterns were observed among subjects: increased perceptual defense and increased perceptual vigilance to threatening versus non-threatening stimuli. The perceptual studies, therefore, suggested the presence of an approach-avoidance dimension in defensive behavior (e.g., Carlson, 1954; Carpenter, Wiener, and Carpenter, 1956; Lazarus, Eriksen, and Fonda, 1951; Shanon, 1962).

In line with the above suggestion, a number of recent studies have established that repressors tend to defend themselves by avoidance and sensitizers by approach and anxiety-oriented behavior. These studies are based on the use of the Byrne Repression-Sensitization Scale (RS Scale) according to which repressors are classified as low scorers, sensitizers high scorers, and normals as middle-range scorers (Byrne, 1961; Byrne, Barry and Nelson, 1963).

A review of the literature will reveal more clearly the implications of categorizing defensive behavior in terms of a unidimensional continuum of repression-sensitization and will specify its relationship with other personality variables. It will also point up the value of the continuum as an empirical criterion that provides measures of individual adjustment.



## CHAPTER I

### REPRESSION-SENSITIZATION:

#### A PERSONALITY VARIABLE

Empirical repression-sensitization research began in the late 1950's with the development of several MMPI-derived self-descriptive scales. The scales were specifically devised to measure the new personality variable called repression-sensitization, which emerged from studies on perception and repression. Three important findings from these studies generated the bulk of basic data necessary to establish the operational meaning of the repression-sensitization variables. Two of these findings came from perceptual studies: namely, the observation of two different response patterns to threatening stimuli among individuals, and differential recognition thresholds for matched pairs of neutral and emotionally-tuned stimuli. Response patterns were found to have characteristics of "perceptual approach" and "perceptual avoidance," while recognition thresholds varied with increasing amounts of anxiety. With greater anxiety there was greater perceptual defense and greater perceptual vigilance (Bruner and Postman, 1947).

The third finding came from repression studies dealing with individual differences and perceptual defense (Carpenter, Wiener, and Carpenter, 1956; Eriksen and Lazarus, 1952; Lazarus and Longo, 1953). There was evidence for consistency among some subjects in the use of perceptual defense to threatening stimuli. Furthermore, scores on perceptual tasks, obtained by differential threshold measures, were found to have a significant relationship with several other behavioral tendencies of

approach-avoidance obtained through some other response measures as, for example, the recall of incomplete tasks. The threatening stimuli used in these experiments included: the provocation of sexual expression, inciting the expression of emotion, especially of anger and hostility, and situations involving the evaluation of the individual by others. The most common experimental tools used were sentence completion questionnaires, projective tests, and material associated with painful electric shock.

The following are some of the important findings of these studies:

(1) Individuals responding with perceptual vigilance on perceptual tasks tended also to recall failures and material associated with painful shock, while individuals responding with perceptual defense gave evidence of selective forgetting (Lazarus and Longo, 1953); (2) Sensitizers had shorter latencies for aggressive words on a word-association test, and showed acceptance of aggressive concepts on the Rorschach, whereas repressors expressed less hostility and sexuality (Eriksen and Lazarus, 1952). The latter also tended to respond with blocking, avoidance, denial, and clichés on sentence-completion tests (Lazarus et.al, 1951; Carpenter, Wiener, and Carpenter 1956). On the Rorschach and the TAT, repressors gave evidence of inhibition and they told fewer stories with aggressive themes (Kissin, Gottesfold, and Dickes, 1957; Eriksen, 1952). (3) Finally, repressive individuals on perceptual tasks were correctly identified as being repressors on the basis of case history and interview material (Lazarus, Eriksen, and Fonda, 1951).

In his considerations for building a theory of repression-sensi-

tization, Byrne states:

"...the repression-sensitization variable should be placed within a framework of empirical laws. It will be possible to predict individual differences along this dimension when its antecedents are known and to predict the effects of these differences on other behavior when its correlates and consequents are known... The end point will be the specification of lawful relationships among variables rather than a colorful literary description of repressors and sensitizers" (11, p.212).

With this goal in mind, the author devised the R-S scale. His initial expectations were: a) The scale would measure repression-sensitization:

"Individuals may be placed along a continuum with respect to their characteristic learned response to threatening stimuli; avoiding mechanisms define one end of this continuum and approaching mechanisms the other" (11, p.212).

b) The scale would measure adjustment:

"A curvilinear relationship should be found between an individual's position on this continuum and various indices of his maladjustment" (11, p.212).

The Byrne Repression-Sensitization Scale (or R-S Scale).

The R-S scale was derived from six partially independent MMPI scales. Prior to the construction of the R-S scale, MMPI items had been used to create two other repression-sensitization measures; namely, the Altrocchi repression-sensitization index (Altrocchi, Parsons, and Dickoff, 1960) and the Ullmann's Facilitation-Inhibition scale (F-I) (Ullmann, 1962). The R-S scale was a refinement of the two in the sense that it eliminated item overlap among the six MMPI scales through the application of a new scoring system devised by Byrne. Seventy per cent of Altrocchi's items and fifty per cent of Ullmann's items were retained in the final R-S Scale. The three scales are interchangeable instruments to measure defensive behavior. The F-I

has been found to correlate .76 with the R-S scale on a student population (Byrne, 1961) and .94 on neuropsychiatric patient population (Ullman, 1962).

The new scoring system of Byrne was based on the construction of a questionnaire ("Health and Opinion Survey") made up of 182 items taken from six original MMPI scales. Of these, 156 were scorable and 26 were buffer items. The total number of scores ranged from zero to 156. One point was assigned for each item answered in the sensitization direction. High scores on the test were meant to indicate sensitization and low scores repression. On an internal-consistency item-analysis, reliability coefficients were .94 for split-half, and .82 for test-retest reliability over six weeks (Byrne, 1963).

The Validation of the R-S Scale. Establishing the construct validity of the R-S scale involved producing evidence that scores on the scale were related to repressing versus sensitizing behavioral variables. More specifically, it was necessary to show that people described as repressors were consistently low scorers and sensitizers high scorers on the scale. Preliminary work relating behavioral variables to defense patterns had already been done in perceptual and repression studies mentioned above. Further investigations along this line, this time using a scale as the response measure, would help establish both the construct validity of the measuring instrument and at the same time be instrumental in confirming (or rejecting) the hypothesized personality dimension of repression-sensitization. In other words, Byrne's first hypothesis, that with the use of the R-S scale as a measuring instrument individuals may be placed on an approach-avoidance continuum with

respect to their characteristic learned response to threatening stimuli had to be tested experimentally.

The construct validity (predictive value) of the R-S scale was supported by a variety of experimental evidence. R-S scores were shown to be relevant in predicting repression and sensitization responses in anxiety-provoking situations involving: 1) selective forgetting, 2) perceptual defense, 3) physiological response to threat, 4) awareness of anxiety, and 5) response to humor. A review of the research is given below.

Gossett (1964) attempted to produce selective forgetting by combining threatening conditions with a memory task. The subjects were 48 repressors and 48 sensitizers selected on the basis of R-S scores. All subjects learned a list of 12 nonsense syllables and were tested for recall on the fifth day. A second recall measure was taken following the administration of an "Intelligence and Personality Test" at which time failure was induced in the experimental group via false norms, while the control group was tested as a standardization sample. To control "suppression" the experimental group was offered a reward of \$10 for remembering correctly. Failure in the experimental group was attributed to personality and intelligence factors. A third recall test was given following the explanation of the purpose of the experiment. When the repression factor was controlled, significant differences in recall were found between repressors and sensitizers. This was interpreted to mean that subjects scoring low on the R-S scale repress threatening material.

Tempone (1962) tested the proposition that R-S scores are related

to differential perceptual recognition thresholds for threatening versus non-threatening stimuli on an eight-item anagram task. Half of each group of 40 repressors and 40 sensitizers were given a failure experience (two or less anagrams correct) and the other half a success-experience (six or more anagrams correct). After each trial the subjects were given the correct solution to each anagram. In the second phase of the experiment a perceptual test consisting of words previously used in the anagram solutions was administered. Nineteen words were presented tachistoscopically at gradually increasing exposure speeds. The stimuli were three practice words, eight correct anagram solutions and eight neutral words. Word thresholds were measured in terms of the number of trials required for correct recognition. An analysis of variance revealed that recognition thresholds were related to defensive modes. On the success condition there was no difference between repressors and sensitizers, while on the failure condition repressors revealed higher thresholds for threat words. For neutral words no relationship was found between thresholds and defensiveness in the two experimental conditions.

Byrne and Sheffield (1965) used sexual stimuli to test for awareness of anxiety. Since sexual stimuli are assumed to constitute a threat, individuals differing in repression-sensitization would be expected to respond in different ways to sexual threat. It was hypothesized that sensitizers would respond with greater verbalized anxiety to sexually arousing stimuli than repressors. Using the R-S scale, 44 repressors and 44 sensitizers were selected from a pool of 150 undergraduate males. Half the subjects were given vivid

sexual passages to read and half read a series of neutral passages. Self-ratings on six scales dealing with their feelings while reading the literary selections were taken immediately afterwards. They were asked to express to what extent they were sexually aroused, disgusted, entertained, anxious, bored and angry. As predicted, sex arousal was greater for experimental groups. In the sex arousal condition, sensitizers were more anxious than repressors, but there was no difference between the two groups in the neutral situation. Furthermore, sensitizers associated sex arousal with feelings of entertainment, lack of boredom and anxiety, while repressors indicated disgust and anger.

With respect to the experiment just described, the question is raised as to whether repressors were also threatened but were unwilling to verbalize their anxiety. In a similar study (Lazarus and Alfert, 1964) sensitizers responded with greater verbal anxiety than repressors, while physiological measures taken on both groups showed a discrepancy between the awareness of their physical reactions and actual reactions. When repressors deny anxiety, physiological measures taken indicate increased responsiveness. Sensitizers admit anxiety, but physiological measures show only slight responsiveness. One explanation offered for this discrepancy was the possibility that the willingness of sensitizers to verbalize their anxiety helps them externalize the stress reaction, and consequently feel less anxious in reality (Lomont, 1965).

Further evidence that the denial of anxiety by repressors in threatening situations is accompanied by indirect indicators of

anxiety is given by Lomont (1963). The R-S scale, the IPAP Self-Analysis Form, and a 66-item word association test were administered to 35 hospitalized patients. As measured by the IPAP, sensitizers responded with greater anxiety ( $r=.76$ ) but repressors indicated greater disturbance. The signs of disturbance were long reaction time, blocking and reproduction failure.

Responses to ambiguous stimuli are known to be, to a certain extent, a function of individuals' characteristic defense mechanisms. Byrne (1961) hypothesized that if R-S scores measure approach avoidance tendencies, and if sexual and aggressive stimuli constitute some sort of threat to almost everyone, subjects with high scores on the R-S scale should respond with more sexuality, aggression, and greater number of emotional words to TAT cards than subjects with low scores. The hypothesis was only partially confirmed. Sensitizers for both sexes had higher sex scores than repressors, but no relationship was found between R-S scores and aggressive fantasy and emotional words.

In addition to experimental evidence for the construct validity of the R-S scale as a measure of defense mechanisms, there is also evidence from correlational findings.

In one study (Byrne et.al, 1963) expert judges were asked to respond to the R-S scale as sensitizers would. There was correspondence on 90 per cent of the items among judges.

Davidson (1963) factor analyzed the responses of 48 male students to several measures of coping mechanisms. The R-S scale was one of the measures. It was found that one of the three clusters obtained from the analysis of the 32 variables was essentially defined by the R-S



scale. This cluster included intellectualization as judged in an interview situation.

That the R-S scale is a measure of defense mechanisms is, thus, established both from experimental and correlational findings.

The R-S Scale and Self-evaluation. The rationale for hypothesizing a relationship between self-evaluation and R-S scores was that repressors would tend to attribute less negative qualities to themselves due to the nature of their defenses. That is, since they tend to avoid and deny threatening stimuli, they were assumed to be less aware of any negative qualities in themselves. Consequently, they were expected to think of themselves more positively than would sensitizers. Evidence for this was found on two self-description measures. On Leary's Interpersonal Check List (Altrocchi et.al, 1960) and in a Q-sort task (Block and Thomas, 1955; Chodorkoff, 1954) repressors described themselves more positively than did sensitizers. Using independent measures of the self-concept (SC) and of the ideal-self-concept (SI) it was further found that the SC/SI discrepancy of repressors was significantly less than that of sensitizers in two different samples of student nurses tested with the R-S scale. This difference resulted from descriptions of the self rather than from descriptions of the ideal self, since repressors and sensitizers did not differ in ideal self. Sensitizers described themselves as more rebellious, aggressive and self-effacing, and less dominant than repressors. It was concluded that self-ideal discrepancy is a function of negative self-concept. A subsequent study showed that with higher R-S scores individuals tended to describe themselves as more hostile and in more negative

terms (Altrocchi, Shrauger, and McLeod, 1964).

Lomont (1963) used the Holtzman Ink Blot Test as an indirect measure of hostility to study the relationship between R-S scores and self-report measure of hostility on the Buss-Durkee Inventory. In a sample of 27 college students R-S scores correlated .74 ( $p < .01$ ) with the self-description scores (Buss-Durkee scores), but not with ink blot hostility measure ( $r = .28$ ). This was interpreted as being the effect of repression.

Evidence that high R-S scores do in fact assess SC/SI discrepancy was strong. The R-S scale correlated with self-ideal discrepancy ( $r = .63$ ;  $p < .01$ ) and with negative self-description ( $r = .68$ ;  $p < .01$ ) (Byrne, 1963).

Hence, there is good experimental support for Byrne's first proposition that repression-sensitization is a meaningful dimension of personality, and that the R-S scale is a reliable measure of this dimension. The repressing end of the dimension is characterized by people who are low scorers on the R-S scale, who avoid threatening stimuli, who give positive self-descriptions and show no SC/SI discrepancy. Individuals on the sensitizing end are high scorers on the R-S scale, they approach threatening stimuli, tend to give negative self-descriptions and show SC/SI discrepancy.

## CHAPTER II

### REPRESSION-SENSITIZATION, THE SC/SI DISCREPANCY

#### AND MALADJUSTMENT

At this stage when psychology is moving towards becoming a behavioral science, attempts to understand the structure and the dynamics of personality have necessarily to depend on clinical observations as well as empirical data. Self-theory (derived from a clinical approach to personality) and repression-sensitization (an empirical approach to personality) offer a common ground for the scientific study of personality due to the fact that both use the same psychological constructs in conceptualizing maladjustment. Self-concept/self-ideal discrepancy, incongruencies, perceptual distortion, anxiety and defense, and related concepts are utilized by both, in a more or less similar manner. However, along with the overlap of knowledge from the two approaches, there are theoretical differences worth noting.

In the self-theory developed by Carl Rogers, the total person and the subjective perception of experience are the two central themes in explaining maladjustment. The phenomenal world is organized through experiences in interpersonal relationships. Rewards and punishments coming from "significant others" determine whether experience will be properly symbolized and assimilated into the self system, or create incongruencies and disorganization in the personality structure. The inaccurate symbolization of experience comes about with the interference of perceptual defenses developed as security measures against threat. As perceptual inaccuracies increase, a distance is

created between the individual's phenomenal world and the actual experiences, resulting in negative self-esteem. Adjustment, then, is congruence between phenomenal-self-symbolization and the real experience in harmonious interpersonal relationships. This position puts heavy emphasis on the importance of self-esteem and incongruencies in the process of "experiencing."

In contrast to the self-theory, the repression-sensitization approach takes stimulus-response relationships as its theoretical point of departure. Behavior is assumed to be mechanistic. Therefore, maladjustment can be studied from without in stimulus response terms. Within this theoretical framework, the repression-sensitization line of research has succeeded in studying defense mechanisms through empirical procedures. The most significant aspect of the knowledge acquired through repression-sensitization experiments is the fact that a number of operationally defined variables are identified which have predictive value congruent with clinical theory and observations. For example, certain behavioral variables related to self-ideal incongruencies and other personality variables are established. Hence, it is known that sensitizers (high scorers on the R-S scale) have large self-ideal discrepancies, have negative attitudes towards themselves, are prejudiced, socially less competent and less successful in schollastic adjustment (Byrne, 1964; Walker et.al, 1965).

Byrne (Byrne, 1964) predicted that repression-sensitization should have a curvilinear relationship with adjustment. The prediction was based on the assumption that exaggerated defensiveness characterized by the extremes of repressor-type and sensitizer-type defenses is

maladaptive. Overintellectualizing and/or frantically avoiding conflicts are equally maladaptive since neither tendency is conducive to a realistic solution to threat.

A second notion of maladjustment has already been introduced: maladjustment as a function of the magnitude of SC/SI discrepancy. Given that SC/SI discrepancy is a result of negative self-concept, there is a linear relationship between negative self-concept and maladjustment. According to the "linearity" notion, only sensitizers are maladjusted since there is no evidence for significant SC/SI discrepancy among repressors. The obvious implication here is that repressors are free of anxiety.

Linear/Curvilinear Hypotheses of Maladjustment. Whether the self-concept and its correlates are defined in broad self-theory terms of "phenomenal-self" and "experience incongruencies," or they are quantified into terms like "self-concept/self-ideal discrepancy," methods of observation involve the elicitation of verbal responses to verbal stimuli (i.e., Q sorts, adjective check lists, self-rating scales) and the comparison of the elicited responses with other responses (i.e., other behavioral variables, population comparisons). The measurement problems facing self-theorists and repression-sensitization investigators have been identical in that both have had to devise techniques to establish reliable and orderly relationships between the stimulus response measures taken. Complications in operationalizing concepts and finding techniques to circumvent response sets had to be overcome by both. Giving culturally imposed responses, tendencies to conceal inferiorities, anxiety about what use is going

to be made of this highly sensitive information, the individual's lack of knowledge of his repressed experiences, and so forth, have posed specific methodological problems. While the self-theorists have depended exclusively on verbal self-description measures, the repression-sensitization investigators have utilized additional measures across response modalities, i.e., heart rate and GSR. Questions and arguments concerning the use of both types of measures are taken up in the second section of this chapter. This section will include a review of research done from the two theoretical points of view concerning the relationship between self-concept and maladjustment.

Evidence of Linearity. Research focused on the linear hypothesis can be summarized through a representative sample of work done by Butler and Haig (1954), Chodorkoff (1954), Akeret (1965), Turner and Vanderlipee (1958), and a few others, who have stayed within the Rogerian theoretical inclination of studying the self-in-a-phenomenal-base.

The most widely used technique by the self-theorists was the Q-sort. Stephenson developed this method based on the rationale presented by Butler and Haigh (1954). The assumption was that an individual's specific self-perceptions about his phenomenal self could be operationally defined as "like me" and/or "unlike me." Furthermore, these self-judgements could be used to find out to what degree the individual values those self-perceptions as desirable or undesirable for himself when obtained under the instruction of "like my ideal" and/or "unlike my ideal." When the same statements, descriptive of a wide range of personality characteristics, are sorted by the same indi-

vidual once as "self-sort" and another time as "ideal sort," the discrepancy between the two sorts would indicate the degree of dissatisfaction with one's self and could be used as an index of maladjustment.

The original Q-sort developed by Butler and Haigh consisted of a group of 100 self-statements randomly taken from therapy protocols. Each statement was re-worded for clarity and placed on a card for Q-sorting. The "self-sort" instructions were: "Sort these cards to describe yourself as you see yourself today, from those that are least like you to those that are most like you." The "ideal-sort" instructions were: "Now sort these cards to describe your ideal person-- the person you would most like within yourself to be" (10, p.442).

One of Roger's major propositions was that experiences inconsistent with the self-concept would be perceived in a distorted form. By developing perceptual defense, the self-concept stability could be maintained against threatening stimuli. With greater discrepancy between self and experience, increased perceptual defense would develop.

Chodorkoff (1954) devised a method of obtaining the self-experience discrepancy which accounted for the perceptual defense variable. On 30 male undergraduates Q-sort self-concepts were obtained and correlated with another set of Q-sorts (judges' sort) made for each subject by clinical psychologists using the same test items. The clinicians' judgements were based on the subject's responses to a biographical inventory, the Rorschach, a word-association test and the TAT. The correlation between the subject's self-sort and the judges' sort was

used as an index of the accuracy of the subject's self-perception. The next stage of the experiment involved the tachistoscopic presentation of a perceptual defense task specially prepared for each subject on the basis of his reaction time on word-association items. For each subject, 10 words yielding the longest reaction time (most threatening) and 10 words yielding the shortest reaction time (least threatening) were selected and randomly presented at decreasing speeds to a criterion of "accurate perception on two consecutive trials." The assumption was: the greater the number of trials required for accurate perception, the greater the perceptual defense. Perceptual defense scores were computed for each subject. The correlation between the accuracy of self-perception score and the perceptual defense score was  $-.53$  ( $p < .01$ ) indicating that perceptual defense was less for the subjects whose self-sort was like the judges' sort. On a second measure better adjustment was correlated with less perceptual defense ( $r = .62$ ;  $p < .01$ ). This was based on judges' estimate of each subject's adjustment and the perceptual defense score. The results were consistent with Roger's formulations concerning defenses.

Expression of aggression as a measure of congruence between experience and the self-concept raises the issue of "accuracy in conceptualization" in response to a frustrating agent. A well adjusted person is assumed to admit aggression into his awareness and to be able to direct it on the proper target (the frustrating agent), while the individual lacking self-concept/experience congruence would use disguised aggression in the form of either self-blame or displacement onto an inappropriate target. Moses and Duvall (1960) hypothesized that



individuals with high self-ideal discrepancy would direct feelings of hostility inwardly when given a frustrating task in which the attainment of success was made very difficult. This was confirmed with a group of high self-ideal discrepancy and a group of low self-ideal discrepancy subjects. Subjects were asked to guess how many correct guesses they had made on a Humphries board in which they had previously been tested. The task had involved predicting which light would go with which key when actually the lights were randomly operated. The low-discrepancy group guessed that they had predicted correctly on 95.58 trials out of 210 trials, while the high-discrepancy group guessed 76.88 trials.

Accuracy of recall of "inconsistent self-related information" in relation to the degree of inconsistency between the self-concept and the new material (Suinn et.al, 1962) was tested on 30 Freshmen by means of an adjective rating scale derived from Gough Adjective Check List. It was found that accuracy decreased with increase in degree of discrepancy of the adjectives to be recalled.

A somewhat broader approach to the self-concept was undertaken by Akeret (1959). He attempted to evaluate "self acceptance" in relation to the self-concept by studying the interrelationships among four dimensions of the self-concept: perception of self-characteristics, of self-in-relationship-to-others, of values around which the self is organized, and of goals and ideals. The self-concept dimensions chosen were: academic values, interpersonal relations, sexual adjustment and emotional adjustment. The purpose of the study was to find out whether an individual accepts or rejects himself totally, or accepts or rejects

himself in some areas but not others. All self-concept dimensions correlated positively ( $r=.260$ ,  $p<.01$ ) with the total self acceptance, but there were no significant intercorrelations between the self-concept dimensions suggesting that self acceptance or rejection does not occur in an all-or-none fashion.

Another series of studies dealt with the 'changes' in the self-concept as a function of mood fluctuation, evaluation by others, age and psychotherapy. Of interest here are the latter.

Butler and Haigh (1954) reported a correlation of  $-.01$  for pretherapy self-ideal congruence and  $.34$  for post-therapy self-ideal congruence, significant at the  $.01$  level.

Process change in psychotherapy was explained by Rogers as a movement from fixity towards fluidity and changingness in the personality structure of the client. A scale to measure process change was devised (Walker et.al, 1960) on the basis of six elements ("strand" identified in therapy protocols. The general direction of change from fixity to flow was measured in terms of change in relation to feelings and personal meanings, manner of experiencing, degree of incongruence, communication of self, construing of experience, relationship to problems and manner of relating to others. It was assumed that the strands would be more distinct at the fixity end of the continuum and more integrated at the flow end. Two different applications of the scale on 24 unidentified samples, selected from late interviews on six cases, were compared with counselor ratings and other objective evidence of progress in therapy. There was high agreement between two judges, working independently, on the relia-

bility of the scale in all comparisons.

Turner and Vanderlippe (1958) used six self sorts to obtain a composite picture of self-ideal congruence and adjustment on 175 introductory psychology students. Subjects with high self-ideal congruence gave evidence for higher adjustment as measured by the five criteria used in the experiment; participation in extracurricular activities, higher scholastic average, higher sociometric ratings, higher adjustment ratings on the Q-adjustment score and on traits measured by the Guilford-Zimmermann Temperament Survey.

The basic assumption that "satisfaction with one's self" can be used as an index of adjustment is supported from evidence obtained through Q-sort studies. There is a linear relationship between self-ideal incongruence and maladjustment.

Evidence of Curvilinearity. The next group of investigations to be reviewed here started off with the assumption that the extreme modes of defensiveness designated by both ends of the repression-sensitization continuum were maladaptive, hence, a curvilinear relationship should be found between R-S scale scores and various other indices of psychological adjustment.

Using the F-I scale in a population comparison study between male students and neuropsychiatric patients (Ullmann, 1962), extreme scores on repression-sensitization and significantly higher standard deviation was obtained for the patient group. As expected, the patients were on the extreme facilitating or sensitizing end of the continuum.

In another population comparison study (Hillson and Worchell, 1957)

it was hypothesized that self-ideal disparity is a function of defensive pattern. The prediction was made that neurotics, characterized by anxiety, would show a higher self-ideal discrepancy than schizophrenics (maladjusted with defensive patterns) and normals. A self-rating (SAI) was administered to 47 normals, 37 neurotics, and 36 schizophrenics. Self, Ideal, and Self and Others Scores were computed. On self descriptions the neurotic group gave significantly poorer self-appraisals than the schizophrenic and the normal groups. The latter two were practically similar on the self-concept. On the ideal-self there was no significant difference between the mean ideal scores of neurotics, and normals, but the schizophrenics set their ideal significantly lower relative to that of normals. However, when the effect of the self-rating was partialled out, the self-ideal discrepancy for the neurotics was significantly greater than that for normals and schizophrenics. On the self-other discrepancy the normals differed significantly from the maladjusted groups; the former enhanced, whereas the latter depreciated themselves. In brief, the maladjusted subjects with anxiety defenses (i.e., neurotics) presented a depreciated self picture, reported high ideals, and showed a high self-ideal discrepancy, whereas the subjects maladjusted with the defensive patterns (i.e., schizophrenics) indicated little self-ideal discrepancy and presented a self picture similar to that of normals.

Block and Thomas (1955) produced further evidence that the nature of an individual's maladjustment determines the degree of self-ideal disparity. Rejecting the one-sided interpretation of the meaning of "expressed satisfaction with self," they proposed that subjects who

describe themselves as being very close to their ego-ideals are just as well maladjusted because they tend to deny and suppress the threatening features of themselves. Going back to the argument presented by Chodorkoff (1954) that an individual who is incapable to properly differentiate and symbolize aspects of himself and his environment cannot deal with threat effectively, the authors argued that "overcontrollers" (i.e., repressors) are "metestable." They are self-satisfied and adapted, but are lower in self-maintenance and adaptability. In a benign environment the "overly-integrated" person is adapted; but when social realities and pressures become too threatening, he is incapable of adaptive flexibility due to the rigidity of his defenses. Once the rigid adaptive mechanisms of the overcontroller starts going off he will be unable to correct himself, whereas the behavioral oscillations and conflicts of the under-controller (i.e., sensitizer) are transient because of the fact that the variability of his defense mechanisms allow negative feedback which makes self-correction possible. In terms of the above argument, it was predicted that OC'ers (overcontrollers, or repressors) should express more self-satisfaction than AC'ers (appropriate-controllers, or normals), who in turn should express more self-harmony than the UC'ers (undercontrollers, or sensitizers) (Block and Thomas, 1955). The two general hypotheses were (1) the degree of self-satisfaction is curvilinearly related to the social dimension of adjustment and (2) the degree of self-satisfaction ordinaly related to the conceptual dimension of ego-control. On a sample of fifty-six college students MMPI measure of maladjustment and Q-sort self/self-ideal descriptions

were taken and correlated for satisfaction with self, in terms of self/ideal-self discrepancy, and MMPI adjustment variables. There was support for the contention that high self-ideal discrepancy goes along with maladjustment as defined on MMPI scales. High discrepancy scores correlated positively with the F scale.

Social Desirability as a Variable. In the above study two important problems were raised (a) hidden pathology, not detectable with the MMPI scale and (b) the nature of the repressor's defense which forces him to give socially desirable responses.

Relative to the latter of those problems, Edwards (1953) used the criterion of "social desirability" to test the hypothesis that responses to personality inventories may be influenced by factors not related to the item content of the test. He found a correlation of .87 between the probability of agreement with the item content and its social desirability. As to whether SC/SI discrepancy has any meaning independent of social desirability was seriously contested by Cowen and Gongas (1959) who reported a correlation of .906 ( $p < .001$ ) between self-concept and social desirability, and .958 ( $p < .001$ ) between ideal-self and social desirability. The authors attempted to conclude that empirically observed SC/SI discrepancies are due to differential social desirability stereotypes rather than self-conceptual variations. In a review of a substantial number of studies, Byrne concluded that social desirability was negatively related to repression-sensitization (Byrne, 1964).

The positive evidence reported by several investigators with the use of physiological indicators to tap hidden pathology, i.e., repressed anxiety, brings further support to the above conclusion.

Gordon (1959) studied the effects on anxiety of repression, suppression and verbalization of threatening stimuli. Ten undergraduate females were stimulated to recall conflicts with their parents under hypnosis. Three post-hypnotic suggestions as "not to think about" (repression), "think about but not talk about" (suppression) and "talk about" (verbalization) were given and GSR recordings made. There was consistent over-all increase in skin conductance throughout the experimental session indicating continuous increase in anxiety. Conductance was more rapid under repression than suppression, but slopes during suppression were significantly steeper than during verbalization. These findings are in line with the interpretation that (Lomont, 1965) the repressor may actually be less anxious because of "unawareness" of his conflict. "Floating conflict" (i.e., suppression), which does not allow expression, produced the stronger stress reaction.

Using a 3-track motion picture which portrayed a primitive subincision ritual, conditions for defensive and intellectualization reactions were set up experimentally (Speisman et.al, 1964). The subjects were a group of students and another group of air executives. The trauma track pointed up the threatening aspect of the film. The other two defensive tracks were designed to encourage interpretations of the film's contents to reduce threat. One track consisted of denial and reaction formation statements, the other of intellectualization statements about the film. On the trauma track continuous increase of skin conductance was recorded. The defensive sound tracks reduced skin conductance. Intellectualization, as a stress response, was

effective for students, but denial was not as effective as compared to air executives. In interpreting the results the authors pointed up that autonomic indicators are necessary, but not sufficient measures of stress reaction. The difference between the groups was ascribed to "cognitive dispositions", i.e., the individual's re-appraisal of a stimulus as threatening or nonthreatening depending on the significance of the threat to his welfare or ego defense.

Anxiety, a repression-sensitization variable and basic to the dynamics of psychological malfunctioning, is confirmed to be a sensitizer characteristic. Scores on the R-S scale and on some other reliable anxiety scales such as Taylor's Manifest Anxiety Scale, the Welsh Anxiety Scale, Ullmann's F-I Scale, etc., correlate highly for sensitizers. Emotional instability is another characteristic found among sensitizers. On paper-pencil tests of emotional stability sensitizers are low scorers, representing the more unstable group. Yet, extremely assaultive criminals were identified to be chronically overcontrolled individuals who gave less aggressive, more conventional and moralistic test responses than sensitizers and normals (Megargee and Nendelsohn, 1964). A cross-validated MMPI scale was used to discriminate extreme criminals from other criminals and normals. In a group of 14 assaultive criminals, 28 moderately assaultive criminals and 44 nonviolent criminals, plus 50 male undergraduates, the R-S scale correlated  $-.41$  ( $p < .01$ ) with the MMPI criminal scale. The negative correlation was predicted since over-control necessitates denial and repression mechanisms. This is a significant finding in view of the fact that repressors admit little



hostility (Altrocchi et.al, 1964), get higher sociometric peer ratings and higher Q-sort adjustment ratings (Turner et.al, 1958). Block and Thomas's (1955) assertion that the overcontroller's breakdown is hopelessly severe once his defense mechanisms go off is given some experimental support from this study. The self-concept self-ideal discrepancy of the "young rebel" was elsewhere explained in psychoanalytic terms of ego-weakness (Shippee-Blum, 1959). Blum defined ego-strength as the ability to resist distortion, repression, displacement and uninhibited attack or flight, in tension producing situations.

Other data presenting a "less adjusted" picture of the sensitizers is reviewed by Byrne (1964). Characteristics relevant to the personality of sensitizers measured on MMPI variables, CPI variables, Myers-Briggs Type Indicator and Guilford's Inventory of Factors STDCR are summarized. Sensitizers tend to respond as the members of the opposite sex do, they give unconventional and deviant responses, they tend to be depressed and discouraged, anxious and agitated, socially introverted and neurotic, cynical and self-debasing. One interesting finding about repressive females was that they had obstetric complications like disorders of the gestation period, developmental abnormalities of the foetus and delivery irregularities. No relationship was found, however, between repression-sensitization and intelligence, authoritarianism and right opinionation, whereas repression-sensitization was found to correlate positively with dogmatism, left opinionation and prejudice. The fact that sensitizers fall in the latter group is contrary to reasonable expectations and no

theoretical explanation is offered for it. Similarly research geared towards establishing repression-sensitization childhood antecedents in parent-child relationships and in interpersonal relationships remains subject to uncertain interpretations.

SC/SI Discrepancy as an Index of Maladjustment. While equally adequate data is available to argue parallelly in favor of the linear and curvilinear hypotheses of maladjustment, it remains indisputable that SC/SI discrepancy is predictive of maladjustment. The fact that "sensitizing type" of maladjustment is continuously accompanied with SC/SI discrepancy provides an empirical ground for agreement between the two points of view.

Smith (1958) used six measures of self-concept discrepancy and instability. For each of the six measures he attempted to find interrelations, reliability, and relation to other personality variables. Discrepancy measures were taken between self and ideal-self, between self and social-self, between social-self and ideal-self. Instability measures were taken for self, ideal-self and social-self. The subjects were 24 college males. All six measures were found to be positively correlated with each other. Eleven of the 13 correlations were significant at .05 level of confidence, using a two-tailed test. In addition to the six self-concept measures, 49 other personality measures were used. The personality measures included one measure of self-insight, 12 measures of average-mood and 36 other measures taken from the following personality inventories: the Cattell 16 Personality Factors Questionnaire, the Maslow Security-Insecurity Inventory, the Manson Evaluation, the Edwards

Personal Preference Schedule and the Minnesota Thinking, Social and Emotional Introversiion-Extraversiion Test. All six self-concept measures correlated highly with the variables of adjustment obtained from the personality inventories (self-insight, anxiety, dejection, friendliness, insecurity, social introversiion, will control, etc.). High discrepancy scores on all three discrepancy measures and high instability scores on all three instability measures were related to poor adjustment.

Rapaport (1958) used the technique of experimentally induced set by giving "Ideal Self" instructions and observed MMPI profile changes. On a sample of 48 military psychiatric patients the "ideal self" instructional set produced changes in the MMPI patternings in a direction of clinical improvement, resulting in fewer scores in the "critical" ranges. The more marked changes were obtained from the more deviant MMPI records. On the real-self administration of the test the group reflected a great deal of psychiatric disorder. This group of psychiatric subjects showed more correspondence in assessing what they thought was "ideal" behavior than in judging their current state of maladjustment.

## CHAPTER III

### THE PRESENT STUDY

A. Implications of Research Findings. Studies on American college students and neuropsychiatric patients have confirmed the presence of a repression-sensitization (R-S) dimension of personality. Furthermore, on a wide variety of measures SC/SI discrepancy has been shown to be a consistent correlate of maladjustment. While theoretical issues concerning the maladaptive nature of repressive defenses remain unresolved, maladjustment in terms of SC/SI discrepancy has been found to be related to sensitization defenses. This relationship has been consistently obtained regardless of sex differences, levels of maturity and the degree and type of maladjustment (See Byrne, 1964). Thus, repressors and sensitizers differ on self-ideal discrepancy (Altrocchi et.al, 1960; Lomont, 1966) and self-ideal discrepancy correlates with repression-sensitization (Byrne, 1961; Byrne et.al, 1963).

Repression-sensitization, self-concept, ideal-self-concept, and self-ideal discrepancy measures were taken with the use of the R-S Scale and the SAI (Worchel's Self Activity Inventory). Repression-sensitization was found to be related to self-ideal discrepancy and to negative self-description, but not to negative self-ideal. On a group of 77 Ss the R-S scores correlated .63 ( $p < .01$ ) to self-ideal discrepancy, and .68 ( $p < .01$ ) to negative self-description, the correlation for the negative ideal-self being nonsignificant (Byrne, 1963).

Self-ideal discrepancy has been repeatedly accounted for by some

specific differences in the self-concept and not in the ideal-self concept. Altrocchi (1960) found that sensitizers described themselves negatively, i.e., as more rebellious-distrustful, aggressive-sadistic, and self-effacing-masochistic than repressors. They manifested high self-ideal discrepancies since they tended to ruminate about their conflicts and negative qualities. Persons with low self-ideal discrepancies were those who used repressive and denial defenses which helped them remain unaware of their conflicts and focus on their positive qualities.

The relation of positive or negative self-evaluation and SC/SI discrepancy at different levels of repression-sensitization were further investigated on two specific personality dimensions. These were the dimensions of Dominance and Love described in Leary's diagnostic grid system (Leary, 1955). Two leading studies dealing with those specific relationships are cited below.

Using the ACL as a measure of SC/SI discrepancy Altrocchi (1960) found that repressors described themselves positively on both dimensions, i.e., as more dominant and loving than sensitizers, and showed a smaller self/ideal-self discrepancy. The discrepancy was evident in both Dominance and Love scores. This difference resulted from the sensitizers' tendency to attribute negative qualities to themselves, i.e., having negative self-concepts, since repressors and sensitizers did not differ on the ideal-self-concepts.

A contrary finding was reported by Lomont (1966). He found increased linear relationship for both sexes only between self-concepts

of Dominance and repression-sensitization, but no relationship was found for either sexes between repression-sensitization scores and self-concepts on the dimension of Love. As to self-ideal discrepancy, on the Dominance dimension the self-concept curves of both sexes approached the ideal-self curves toward the repression end of the R-S dimension. This was indicated by the fact that the correlations between R-S and SC were significantly more negative than the corresponding correlations between R-S and SI:

"It appears that self-ratings on dominance ascend toward the same persons' ideal self concepts with increasing repressive tendency, but that there is no nonparallelism between self concepts and ideal self concepts on the love dimension" (36, p.236).

While Altrocchi (1960) found that R-S was related to self-concepts and ideal-self-concepts on the dimension of Dominance and Love, Lomont (1966) found a similar relationship only on the dimension of Dominance. Hence, R-S and SC/SI relationships on the dimension of Love remain uncertain. The same test, AGL, was used in both studies. The difference in the two sets of findings were left "unclear" since there was no reason to believe that the discrepancy was due to any differences between the two populations.

To summarize, self-ideal discrepancy is a function of repression-sensitization, the biggest discrepancy is attributed to sensitizers, and SC/SI discrepancy is evidenced regularly on the dimension of Dominance but not as regularly on the dimension of Love.

B. Rationale. R-S research has been primarily carried on in the United States. The degree of the universality of generalizations from this research is practically unknown.

Preliminary R-S research in A.U.B. (Tucker, 1967) has revealed higher sensitization on Arab students than normal American samples. It has also shown that A.U.B. sensitizers tend to be approval-dependent compared to American sensitizers who tend to be rebellious and hostile (Altrocchi, 1960).

The present study sought to establish the generality of some specific relationships among R-S variables and certain other measures of personality observed on American students to see if similar relationships existed on a sample of Arab students at A.U.B. The relationships searched for were posed in three specific questions.

Firstly, does the A.U.B. student population provide a mean and spread of scores on the R-S Scale comparable to the American standardization sample? Secondly, are R-S score differences for A.U.B. students predictive of individual differences in other test situations in the same way as they are for American students? Thirdly, what are some of the personality characteristics of those people who score High, Average and Low on the R-S test?

The answer to the first question could be obtained by computing a critical ratio for the American standardization sample vs the A.U.B. sample.

The answer to the second question would involve seeing whether the extreme scorers on the R-S Scale in either direction behave in other test situations in a manner similar to American subjects. The instrument chosen for this analysis was the ACL which has been used successfully to establish R-S and SC/SI relationships.

The third question would involve overall personality profile

comparisons at different levels of repression-sensitization.

Finally, the justification for attempting a validation study of this sort was that despite the lack of identical validation procedures used with the American standardization samples, if it could be established that such regularities as R-S, SC/SI discrepancies obtain on A.U.B. students, the R-S Scale could be used as a valid research tool on Arab populations.

C. Hypotheses. The following hypotheses were formulated on the basis of the findings described above concerning self-concept, self-ideal-concept, and self-ideal discrepancies along the personality dimensions of Dominance-Submission, Love-Hate as measured by the ACL.

Hypothesis I. Repressors (R) will show significantly more Dominant self-concepts than normals (M) as measured by the ACL. In turn, normals will show significantly more dominant self-concepts than sensitizers (S).

Hypothesis II. There will be no difference in self-concepts between R, M, and S groups on the dimension of Love as measured by the ACL.

Hypothesis III. On self-ideal-concepts for Dominance, using the ACL as a measure, there should be little or no difference between R, M, S groups. However, the self-concept/self-ideal (SC/SI) discrepancy should be significantly greater for sensitizers than repressors.

Hypothesis IV. On the self-ideal for Love and on the SC/SI comparison for Love, there should be little or no difference between R, M, S groups.



D. METHOD.

Subjects. Subjects were 180 students enrolled in four sections of Psychology 201 at A.U.B. Of these, 75 were selected for use in this study. The sample consisted of 57 males and 18 females, including 53 Lebanese, 10 Syrians, 6 Jordanians, 4 Palestinians, 1 Egyptian and 1 Iraqi.

Tests. The R-S scale was used to measure the general repression-sensitization tendencies. The SC/SI discrepancy measures were obtained by using the ACL.

The check list (ACL) is a paper and pencil self-rating instrument containing descriptions of various kinds of interpersonal attitudes and behavior. It was derived by Leary from the study of psychiatric patients. Five thousand patients were taken and classified into 16 generic categories representing personality-structure patterns. Clusters of traits falling into the 16 groups were factor analyzed from which two basic personality dimensions of dominance-submission, love-hate emerged. These dimensions can be summarized by a single point on a so called diagnostic grid. Normative data is available for these points providing the stability necessary for complex statistical analysis.

In Leary's system a trait is defined as a consistent pattern of interpersonal relationship. The 16 personality variables (managerial-autocratic, competitive-narcissistic, aggressive-sadistic, rebellious-distrustful, self-effacing-masochistic, docile-dependent, cooperative-overconventional, responsible-hypernormal) covering all of the observable personality are represented on a circular continuum. All

the 16 variables, or generic ways of interaction, are systematically related to each other. Similar patterns of behavior are spatially near, and antithetical ones at the opposite ends of the diameter. There is an orderly descending relationship between the variables, the ones opposite each other being negatively correlated. For example, blunt and aggressive behavior is placed at the opposite pole from cooperative, conventional behavior. High observer reliability and intercorrelations between the variables have been established (Leary, 1955; Lorr and McNair, 1963).

The special feature of the system is that it permits analysis at different levels of communication. The 16 personality variables, or anxiety coping habits, occur on five different levels: Level I, Public Communication, consists of the overt behavior as rated by others along the sixteen-point circular continuum. It gives a measurement of the social "stimulus value" of the individual. Level II, Conscious Descriptions, consists of descriptions of an individual made about 'self' and 'others'. This gives the subjects reported perceptions about himself and his phenomenological world. Level III, Private Symbolization, consists of projective, fantasy materials. It provides a systematic measurements of the autistic, symbolic aspect of the personality in terms of the same 16 interpersonal variables. Level IV, represents the Unexpressed Unconscious. The definition of this is not yet resolved. Level V, Values, reflects the individual's "superego judgement", his system of moral and ego ideal.

All 16 variables occur at all five levels to different degrees

resulting in different personality structures. The circular matrix classification of these variables makes possible to compare systematically and in operational terms data from the five different levels. This can be done by plotting personality profiles. To plot a profile the 16-variable scores are converted into a single summary point by the following formulas: (a) the Vertical factor:  $AP-HI+.7(BC+NO-JK-FG)$ . This gives the Dominance-Submission dimension. (b) The Horizontal factor:  $LM-DE+.7(NO+JK-FG-BC)$ . This gives the Love-Hate dimension. The center of the circle is determined by the mean scores of the vertical and horizontal distributions. Individual summary scores for interpersonal behavior scatter around the center of the circle.

The internal consistency of the ACL was determined (Armstrong, 1958) by six ratings taken from a group of 50 normal and 50 alcoholic males. Kuder-Richardson estimates of reliability applied on all six ratings were highly significant: the  $r_{tt}$ 's ranged from .953 to .976. There were no significant differences between any of the twelve reliability coefficients.

Experimental Design. The R-S scale and two copies of the ACL were combined into a booklet with proper instructions attached to each test. The ACL was used twice, once for "self-concept" and once for "ideal-self-concept" description. All tests were taken in the same order: R-S scale, ACL for self-concept, ACL for ideal-self-concept. In addition to the test booklet a glossary of difficult words used in the tests was distributed. A trial session with another group of Psychology 201 students had been run previously to determine (a) the

length of time needed to answer all three tests, (b) the clarity of instructions and (c) the difficult words used in the tests. To produce appropriate set the test booklets were distributed after the experimenter was introduced by the professor teaching the course. To enhance positive set further, the experimenter commented on the "purely research purpose" of the information asked for. All Ss were asked to indicate name, nationality and sex. Names were taken to contact Ss later, if necessary. The choice of not participating was given in order to obtain as frank answers as possible from those Ss who chose to take the tests. Four Psychology 201 sections were tested in four different sessions. With few exceptions, subjects had no difficulty in completing the three tests in a single session.

In evaluating the results, 75 tests were selected for analysis. The selection was done to include only completed tests and to eliminate subjects of foreign nationalities since a large number of them were found in the groups (i.e. Americans, British, Chinese, Greeks, etc.). Two completed tests were also eliminated at random in order to keep 25 in each group.

The R-S scores for the 75 subjects were rank ordered. Repressors were defined as those scoring in the lower fifteen of the ranking, normals were defined as those scoring in the middle fifteen and sensitizers as those scoring in the upper fifteen of the ranking.

To answer the first question, as to whether the A.U.B. sample had a mean and a spread of scores on the R-S Scale comparable to the American standardization sample, the mean and the standard deviation of R-S scores of the A.U.B. sample was computed and a critical ratio comparison was made with the American sample, where

$OR = (M_1 - M_2) / \sigma_{Diff.}$ , as in Lindquist (1953).

For the answer of the second question, as to whether A.U.B. subjects scoring on the extremes of the R-S scale behave in other test situations in a manner similar to American subjects, two separate analysis of variance were made: one for Dominance, one for Love. A 3 x 2 mixed factorial design was constructed with SC and SI taken as repeated measures, and the treatment categories R, M, S taken as the between subjects variable. A significant RS main effect (SC: R>M>S) for Dominance was hypothesized. The SC/SI discrepancy should be evidenced by a significant SC/SI interaction. That is, it would be expected that the difference between SC Dom score ( $SC_{Dom}$ ) for sensitizers and the SI Dom score ( $SI_{Dom}$ ) for sensitizers would be reliably greater than the analogous SC - SI comparison for repressors:

$$(SC_{Dom,S} - SI_{Dom,S} > SC_{Dom,R} - SI_{Dom,R}).$$

On the dimension of Love no significant RS main effect was expected (SC:R=M=S), and little or no SC/SI discrepancy hypothesized.

To answer the third question, as to what kind of people are A.U.B. subjects who score high, average, and low on the R-S scale, personality profiles were plotted for each group, R,M,S, from their group means on the vertical and horizontal factors. To obtain the mean Dominance and Love scores needed for plotting group profiles all ACL scores were normalized by reference to appropriate tables within the diagnostic grid system. Scores were derived in the 16 generic categories represented by 8 octants, and the Vertical and Horizontal formulas were applied to obtain the scores for the Dominance-Submission, Love-Hate dimensions. The mean Dominance and Love scores for R,M,S

were computed by averaging total Dominance and Love scores for each group.

In analyzing the results male and female scores were mixed in all treatments since previous studies had shown the sex factor not to be relevant to the hypotheses tested here (Altrocchi, 1960; Lomont, 1966).

#### D. Results and Discussion.

The Critical Ratio test between the means and standard deviations of the comparison groups revealed that the groups were significantly different:  $z=5.08$  ( $p < .001$ ). The first question as to whether the A.U.B. sample would provide a comparable mean and spread of scores to that of the standardization group was answered in the negative. Table 1 shows the means and the standard deviations for the comparison groups. The A.U.B. sample has the higher mean and spread of scores. The higher mean of this group means that the A.U.B. sample is more sensitizing since high scores on the R-S Scale indicate sensitization and low scores repression. Furthermore, Table 2 shows that the A.U.B. normal group leans towards the sensitization direction, that is, the R-S curve does not have a perfectly normal distribution: it is slightly skewed. There is a difference of 28.93 between repressor and normal (R/M) means, and 22.74 between normal and sensitizer (M/S) means.

The second question was whether similar R-S and SC/SI relationships could be obtained in the A.U.B. sample as observed in the standardization sample. These relationships were stated in four specific hypotheses.

	<u>American Sample</u>	<u>AUB Sample</u>
N	624	75
M	62.44	74.08
	16.95	18.94

CR=5.08\*

\*significant at the .001 level ( $p < .001$ ).

N number of subjects

M mean

$\sigma$  standard deviation

TABLE 1: Critical Ratio Comparison of R-S  
Scale Means and Standard Deviations  
of the American Standardization and  
AUB Samples.

	<u>Means</u>	<u>Differences</u>
Repressors	47.6	
Normals	76.53	R/M 28.93
Sensitizers	99.27	M/S 22.74

Group mean RMS 74.08

TABLE 2: R-S Scale Means and Differences Between Means of AUB Repressors, Normals and Sensitizers.



In the first hypothesis a significantly more Dominant self-concept for repressors than normals, and in turn, more Dominant self-concept for normals than sensitizers was predicted. The expected relationship was not obtained at a statistically significant level as seen by the RMS source of variance in Table 3. Nevertheless, the hypothesized trend was observed, graphically shown in Figure 1. The means in Table 4 show this trend numerically, the repressor self-concept mean being the highest, the normal mean the next higher, and the sensitizer mean being the lowest. On the basis of this general trend indicating a definite difference between the RMS groups, A.U.B. sensitizers appeared to be similar to American sensitizers in describing themselves as less dominant than do normals and repressors, the latter having the more Dominant self-concept of the three groups.

With regard to the ideal-self description on Dominance little or no difference was expected between repressors, normals and sensitizers (Hypothesis III). The means in Table 4 and the trend illustrated in Figure 1 revealed this not to be the case. Sensitizers had a higher ideal-self than normals and repressors indicating that the SC/SI discrepancy for A.U.B. sensitizers was not uniquely a function of a negative self-concept. Unlike the American sensitizers, the SC/SI discrepancy in this sample seemed to be partially due to a higher ideal-concept.

A second prediction in Hypothesis III was that sensitizers would show a significantly greater SC/SI discrepancy on Dominance than repressors and normals. This prediction was fully confirmed. The SC/SI source of variance in Table 3 shows a significant SC/SI simple effect

<u>Source of Variance</u>	<u>df</u>	<u>Sums of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Ss	44	18,715.49		
RMS	2	2,431.02	1,215.51	3.14 <sup>n.s.</sup>
error (b)	42	16,284.97	387.72	
Within Ss	45	17,307.50		
SC/SI	1	8,429.35	8,429.35	70.48 <sup>***</sup>
SC/SI x RMS	2	3,855.01	1,927.51	16.12 <sup>***</sup>
error (w)	42	5,023.14	119.60	
Total	89	36,022.99		

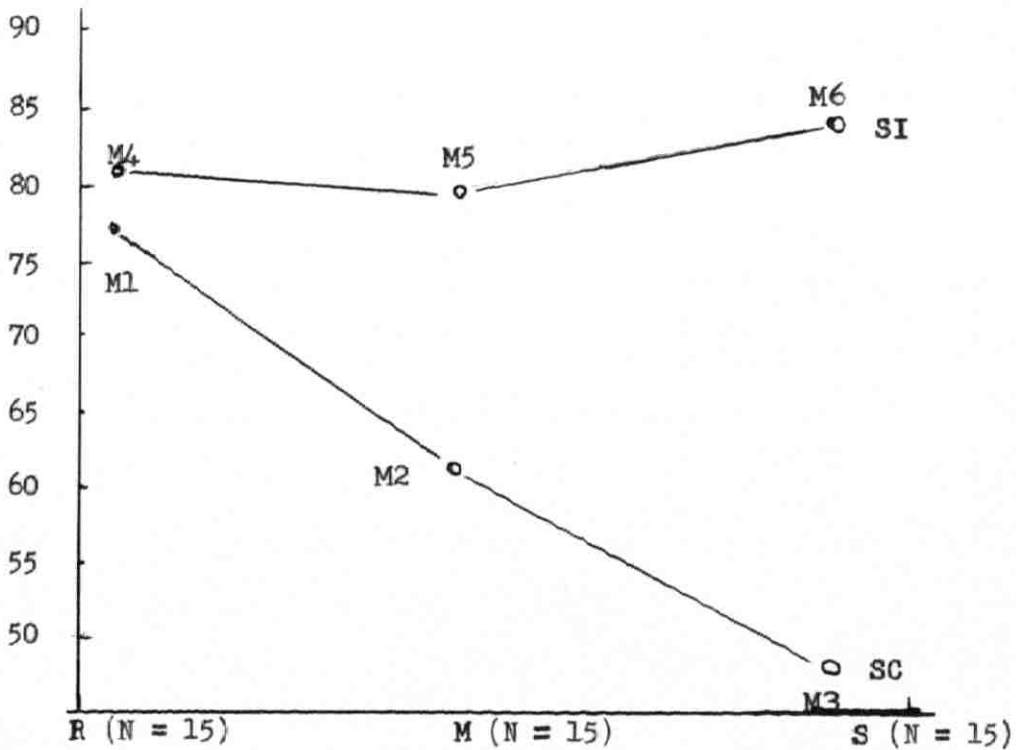
n.s. nonsignificant

\*\*\* significant at the .001 level ( $p < .001$ ).

TABLE 3: Summary of Analysis of Variance of Self-Concepts, Self-ideal-concepts, and Self-concept/Self-ideal Discrepancies on the Dimension of Dominance of the Adjective Check List at Different Levels of Repression-Sensitization.

	SC	SI	Diff.
R <sub>s</sub>	76.73	80.60	3.94
M <sub>s</sub>	61.40	79.60	18.20
S <sub>s</sub>	48.20	84.13	35.93

TABLE 4: ACL Means of Self-concepts, Self-ideal-concepts, and SC/SI Mean Differences for RMS groups on the Dimension of Dominance.



N = number of subjects

Figure 1: Graphical Presentation of Self and Ideal-self Descriptions and Self/Ideal Discrepancies at Different Levels of Repression-Sensitization on the Dimension of Dominance.

( $F = 70.48$ ;  $p < .001$ ), and the SC/SI x RMS source of variance shows a significant interaction effect at three levels of repression-sensitization. Thus, the difference between the self-concept/Dominance scores for sensitizers and the self-ideal/Dominance scores for sensitizers (35.93) is reliably greater than the difference (3.94) for the analogous self-concept/self-ideal comparison for repressors. The mean differences for the three groups are given in Table 4. The mean difference for sensitizers is the highest and the mean difference for repressors is the lowest, the normals being closer to the center of the distribution. According to these results, there seems to be a linear relationship between repression-sensitization and SC/SI discrepancy among A.U.B. students which is similar to the relationship obtained in American samples. However, the lack of an RMS main effect evidenced by the analysis of variance suggests that the two samples are different on other repression-sensitization variables not observed here. Even though the two samples seem to be similar with respect to the specific R-S, SC/SI relationships stated above, the measured repression-sensitization dimension does not seem to be comparable. Nevertheless, whatever differences that exist between the U.S. and the Arab sample on the dimension of repression-sensitization, the overall results for Dominance show that the R-S Scale can be used to measure SC/SI relationships among Arab students similar to those obtained with the U.S. sample.

On the dimension of Love little or no difference was expected between RMS groups for the self-concept (Hypothesis II). The RMS source of variance in Table 5 does not show a significant RMS main effect.

<u>Source of Variance</u>	<u>df</u>	<u>Sums of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Ss	44	22,028.60		
RMS	2	1,403.26	701.63	1.43 <sup>n.s.</sup>
error (b)	42	20,625.34	491.08	
Within Ss	45	12,355		
SC/SI	1	2,777.78	2,777.78	13.01 <sup>***</sup>
SC/SI x RMS	2	607.38	303.69	1.42 <sup>n.s.</sup>
error (w)	42	8,969.84	213.57	
Total	89	34,383.60		

n.s. nonsignificant

\*\*\* significant at the .001 level ( $p < .001$ ).

TABLE 5: Summary of Analysis of Variance of Self-concepts, Self-ideal-concepts, and Self-concept/Self-ideal Discrepancies on the Dimension of Love of the Adjective Check List at Different Levels of Repression-Sensitization.

According to the above result, there is no relationship between repression-sensitization and the way an individual perceives himself with respect to the dimension of Love. This implies that individuals with avoidance defenses as well as those with approach defenses think of themselves as "loving", and that there is no difference between the amount of "lovingness" people with different defenses ascribe to themselves.

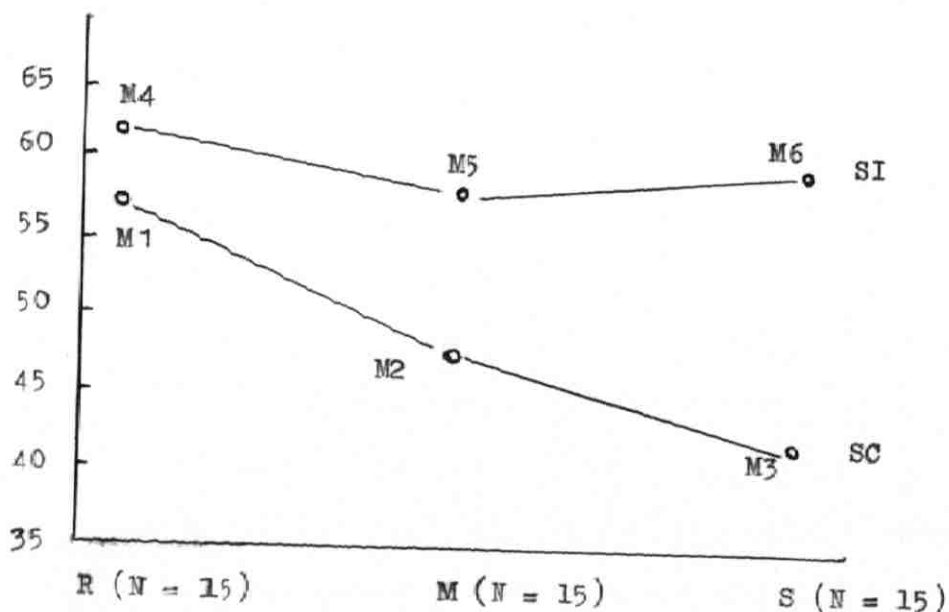
As in Dominance, a trend for SC/Love not specified by the analysis of variance appeared graphically. Figure 2, drawn from the means given in Table 6, shows a relationship between repression-sensitization and the self-concept for Love which was not predicted in the hypothesis. A progressive increase in "lovingness" ascends towards the repression end of the curve, the respective means ranging from 42.53 (Ss), to 48.47 (Ms), to 58.13 (Rs). The range for the means for Love is not as wide as the means for Dominance which ranged from 76.73 (Rs), to 61.40 (Ms), to 48.20 (Ss); yet, the trend is observable.

To test the differences between RMS groups for the self-concept on the dimension of Love, an analysis of simple effects was made using the Newman-Keuls procedure (Winer, 1962). Only the self-concept scores for Rs were significantly different from the self-concept scores for Ss ( $p < .01$ ). Other differences were not significant (i.e.,  $M_1 \text{ signif. } > M_3$ , but the  $[M_1 - M_2]$ ,  $[M_2 - M_3]$  differences were not significant).

Results on the dimension of Love are consistent with Altrocchi's (1961) findings and contrary to Lemont's (1966). The former reported a positive linear relationship between repression-sensitization and self-concept on the dimensions of Dominance and Love while the latter found such linearity only on the dimension of Dominance.

	SC	SI	Diff.
Rs	58.13	63.27	5.14
Ms	48.47	58.87	10.40
Ss	42.53	60.33	17.80

TABLE 6: ACL Means of Self-concepts, Self-ideal-concepts, and SC/SI Mean Differences for Repressors, Normals and Sensitizers on the Dimension of Love.



N = number of subjects

Figure 2: Graphical Presentation of Self and Ideal-self Descriptions and Self/Ideal Discrepancies at Different Levels of Repression-Sensitization on the Dimension of Love.

Another prediction for the dimension of Love was that no difference should appear between the RMS groups on the ideal-self. Here again, an inspection of the means in Table 6 points up the contrary. The mean for the normals is the lowest (58.87), but the repressors' (63.27) and sensitizers' (60.33) means are not as widely different. This again is not perfectly in line with the similarity for RMS groups predicted in Hypothesis IV.

The final prediction (Hypothesis IV) was that there should be no SC/SI discrepancy between the RMS groups on the dimension of Love. The results are at variance with this prediction. The SC/SI source of variance in Table 5 shows a significant simple effect for the between subjects variable ( $F = 13.01$ ;  $p < .001$ ). On the other hand, the absence of an SC/SI x RMS interaction effect suggests that the SC/SI discrepancy is not related to all levels of repression sensitization for this sample. The discrepancy may be resulting mainly from the sensitization end of the curve. A test for least significant difference was not felt to be necessary since the RMS source of variance indicated that the discrepancy did not apply to all levels of repression-sensitization. On the basis of the largest mean distance on the graph appearing at the sensitization end of the curve (Figure 2), it was assumed that the S-group was responsible for the bigger part of the discrepancy.

Like with the self-concept/Love results, the SC/SI discrepancy on the dimension of Love obtained in this data is consistent with Altrecchi's (1960) findings, but not with Lomont's (1966).

In general, then, with regard to the hypothesized similarity relationships between the two samples, the answer is a qualified but positive one.



On the dimension of Dominance statistically significant effects were obtained for SC/SI discrepancies but not for self-concept differences at different levels of repression-sensitization. The self-concept differences appeared only as a general trend.

On the dimension of Love it can only be said that the results are similar to some American results and not to others, since research findings on the Love dimension are contradictory.

In conclusion, the overall results from this data were similar to results obtained in American samples. The confirmation of most of the specific relationships hypothesized in this study indicates that the two samples are similar in certain specific ways relevant to this study, even though they appear to be different on the general repression-sensitization dimension.

For example, despite the fact that the A.U.B. sample has a higher mean, which means that the group as a whole is more sensitizing than the American group, the self-concept and SC/SI discrepancy relationships obtained with this sample are similar to that of the American sample. The fact that SC/SI discrepancy is a function of negative self-concept, and that the discrepancy is linearly related to repression-sensitization (at least on the dimension of Dominance) is confirmed from this data.

Hence, given that the hypothesized similarity relationships between the two samples are mostly tenable from these results, it appears that the R-S Scale can be used as a measure of defensiveness among students at A.U.B.

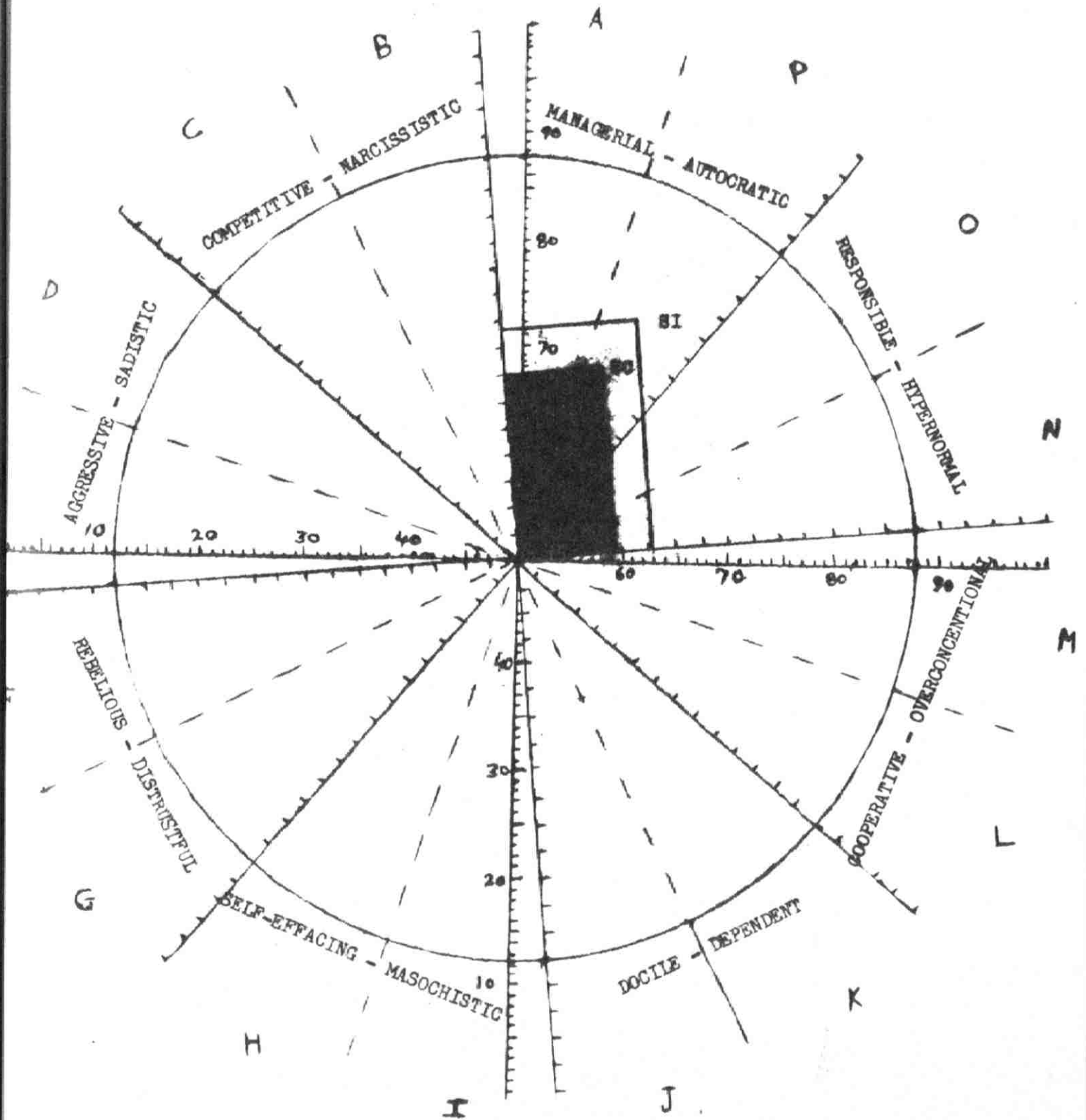
As to the third question, group personality profiles representing overall pictures of what sort of people are individuals belonging to RMS groups are seen in Figures 3-11. They are drawn according to the diagnostic grid classification of 16 generic personality traits discussed earlier.

The profiles in Figures 3-5 describe self and ideal-self concepts on the dimensions of Dominance and Love at three levels of repression-sensitization. They picture in a circular grid form the SC/SI descriptions and discrepancies graphically represented in Figures 1 and 2. Personality characteristics corresponding to each level are seen in the octant traits.

The main trends and the relationships discussed earlier in analyzing the results reappear in these profiles. Namely, the self-concept/self-ideal relationships at different levels of repression-sensitization in relation to Dominance and Love appear in a personality profile form. In addition, profiles show the degree to which each of the 16 character traits apply to various R-S levels on each dimension.

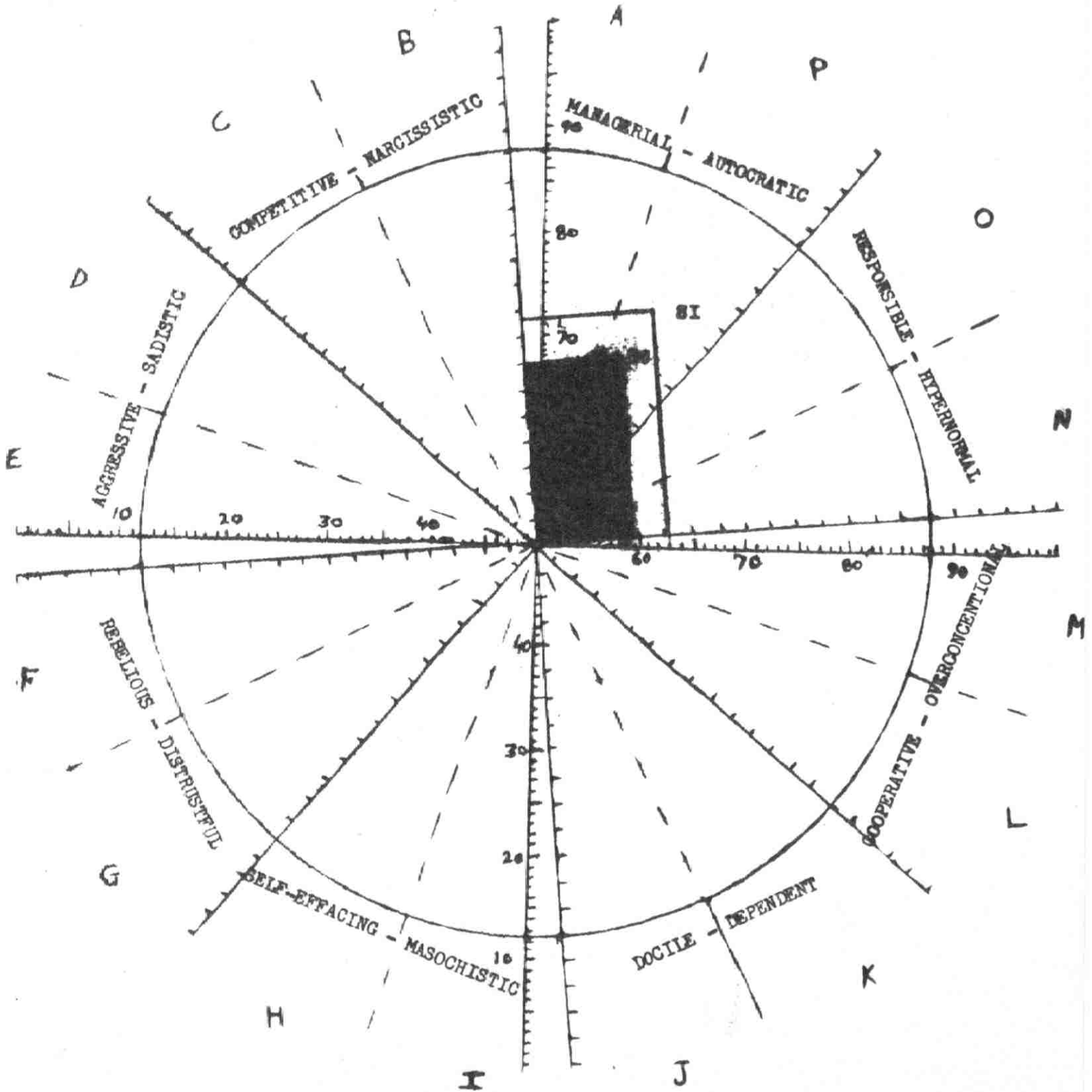
Inspection of Figures 3-5 shows that sensitizers have the highest Dominance ideal-self-concepts, and the biggest self-ideal discrepancy. Normals are closer to repressors in self-ideal on Dominance and have a bigger self-ideal discrepancy than repressors, but smaller than sensitizers. Repressors, in turn have a lower ideal-self-concept than sensitizers, and the lowest SC/SI discrepancy of the three groups. In other words, the relationships revealed through the analysis of the data for Dominance and Love are also seen pictorially in Figures 3-5.

Figures 6-11 are not derived from the application of the Vertical



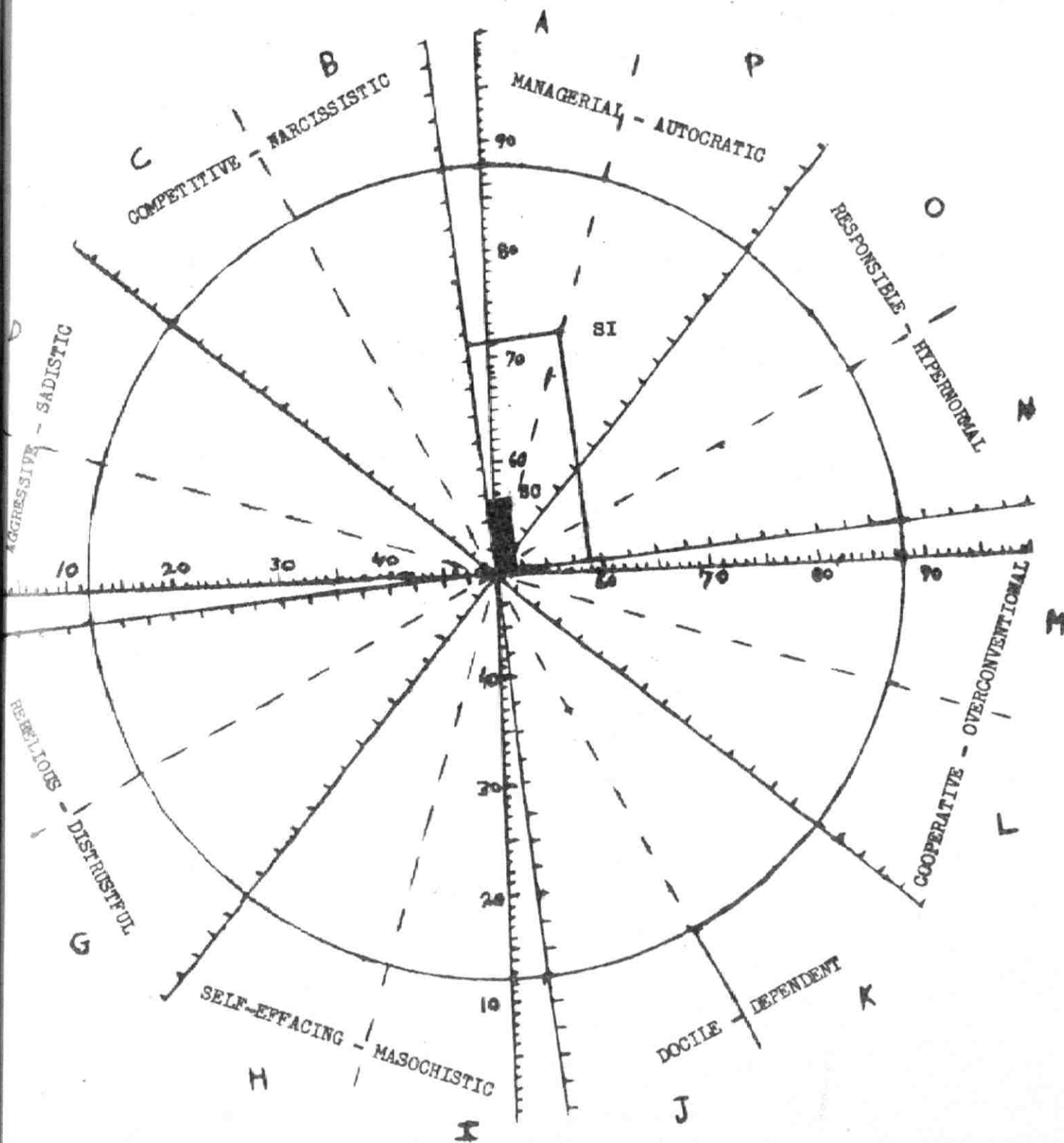
Repressors: SC/SI Group Profile

Figure - 3



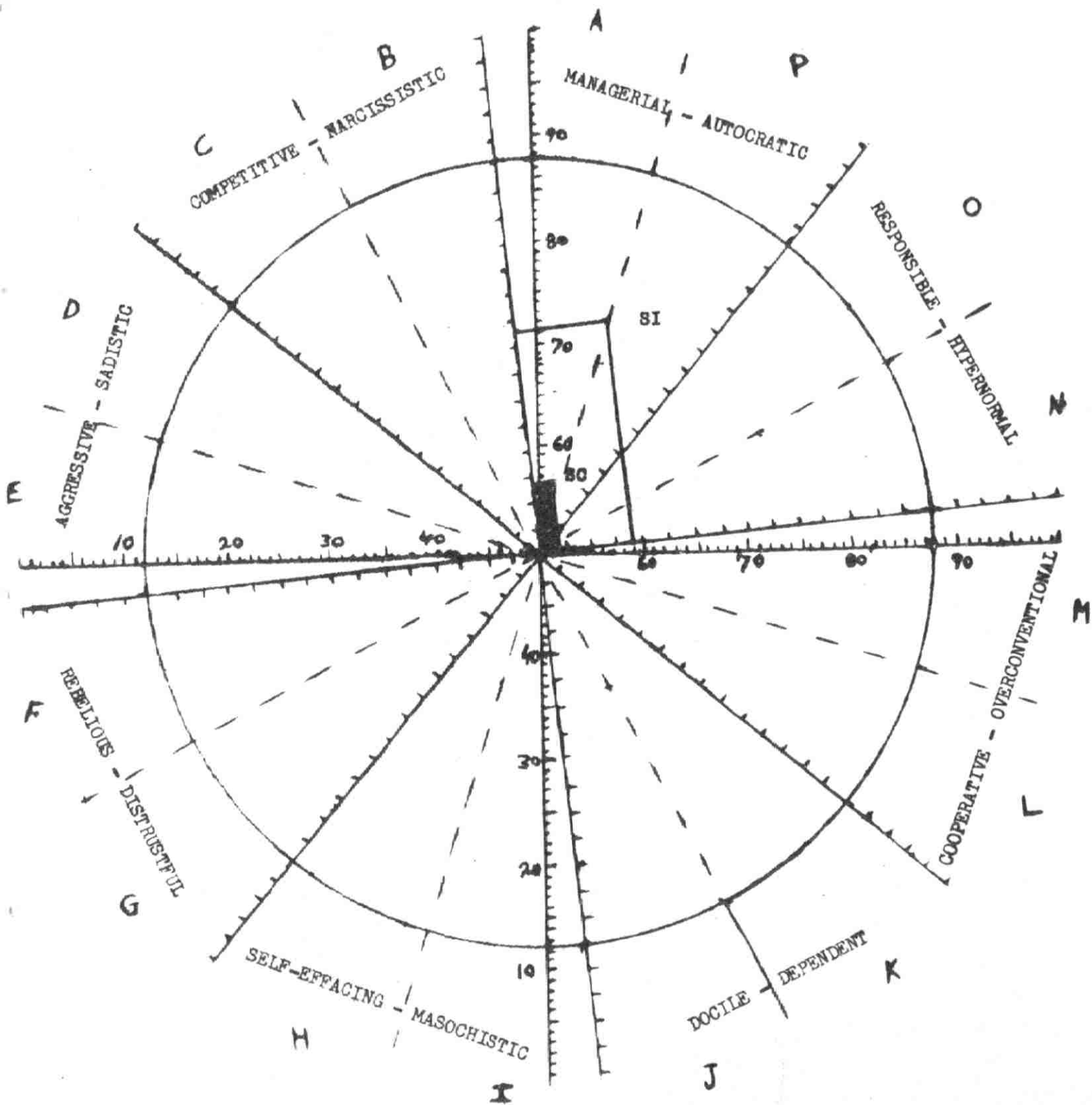
Repressors: SC/SI Group Profile

Figure - 3



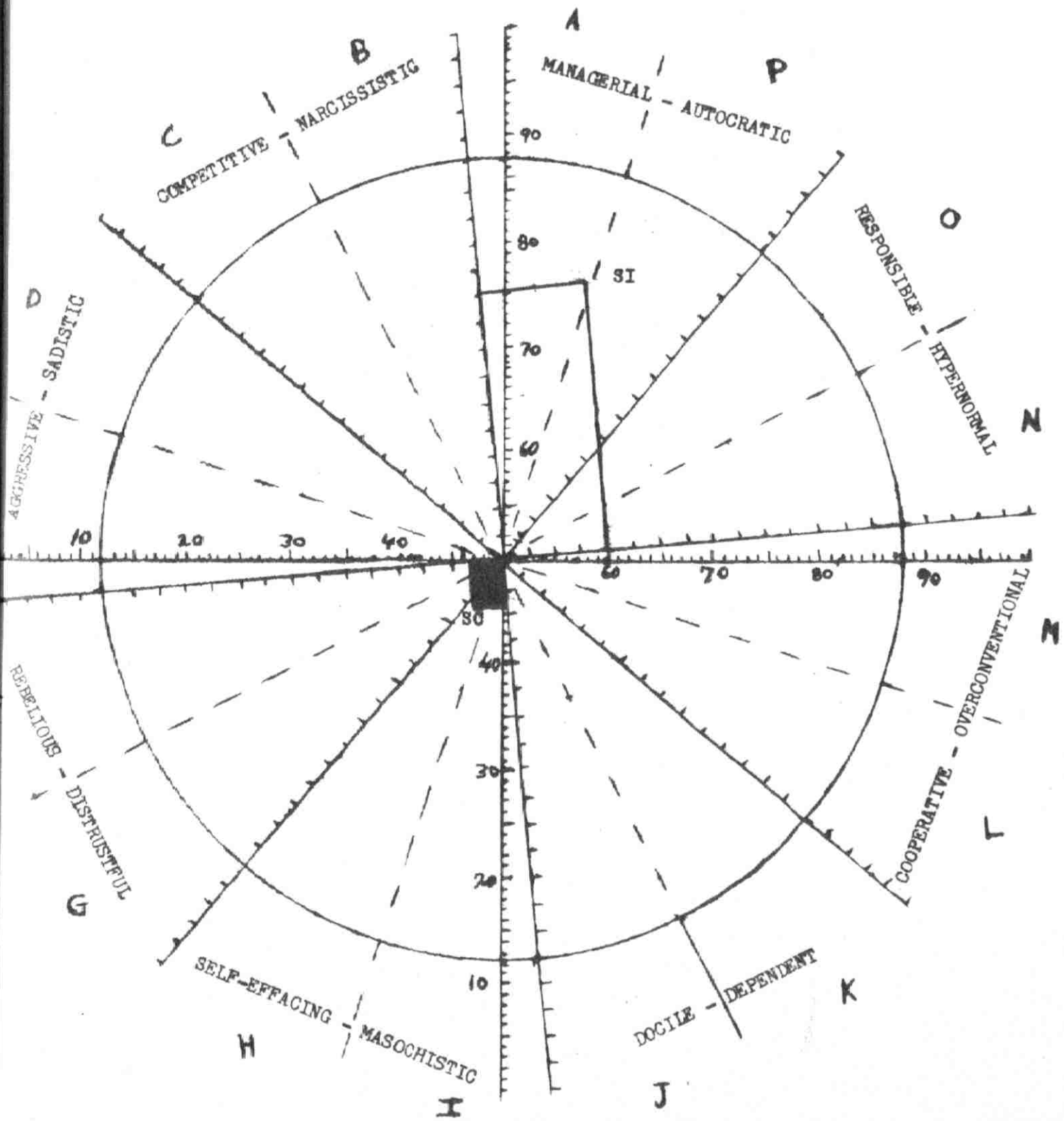
Normals: SC/SI Group Profile

Figure - 4



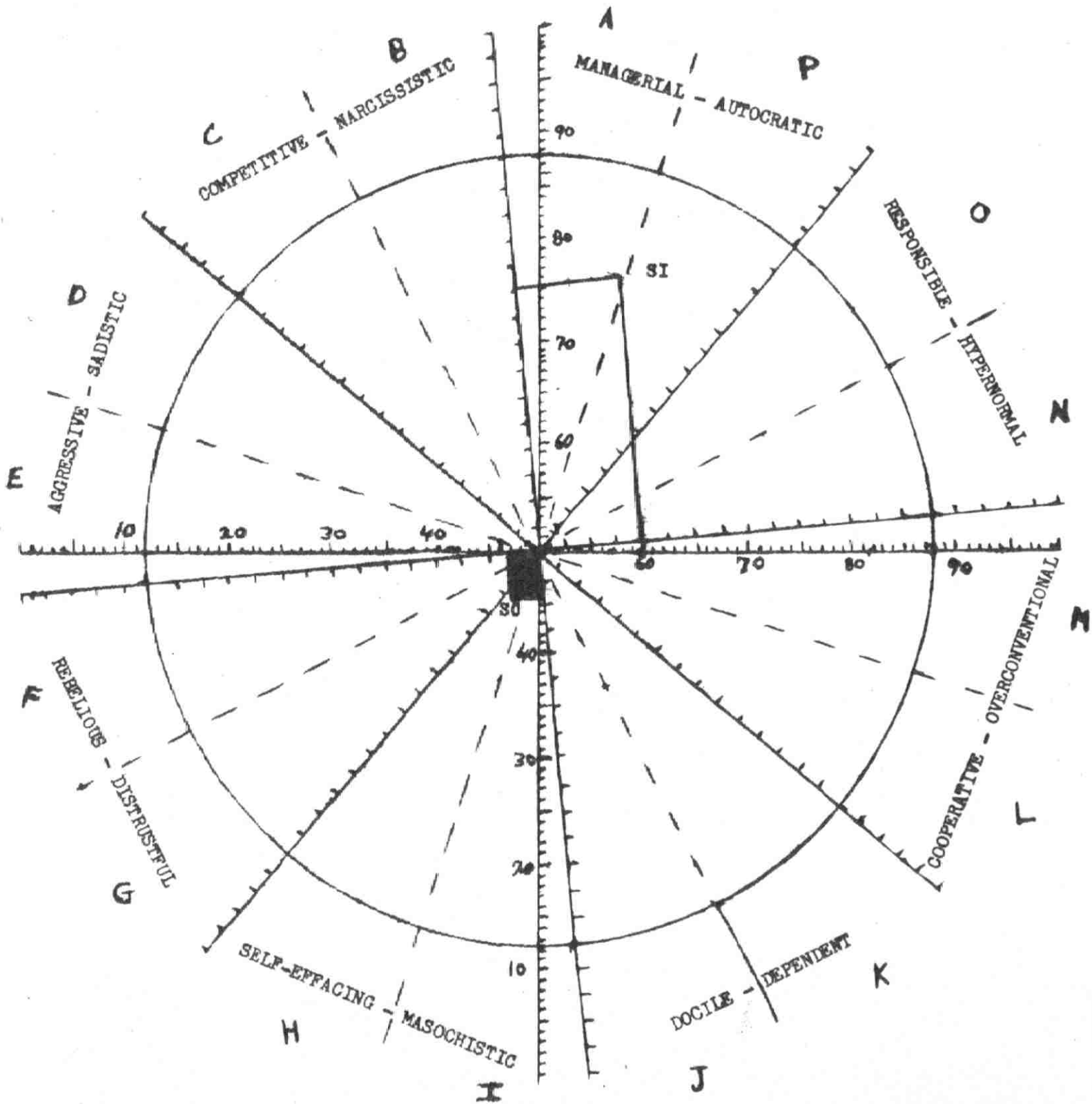
Normals: SC/SI. Group Profile

Figure - 4



Sensitizers: SC/SI Group Profile

Figure - 5



Sensitizers: SC/SI Group Profile

Figure - 5



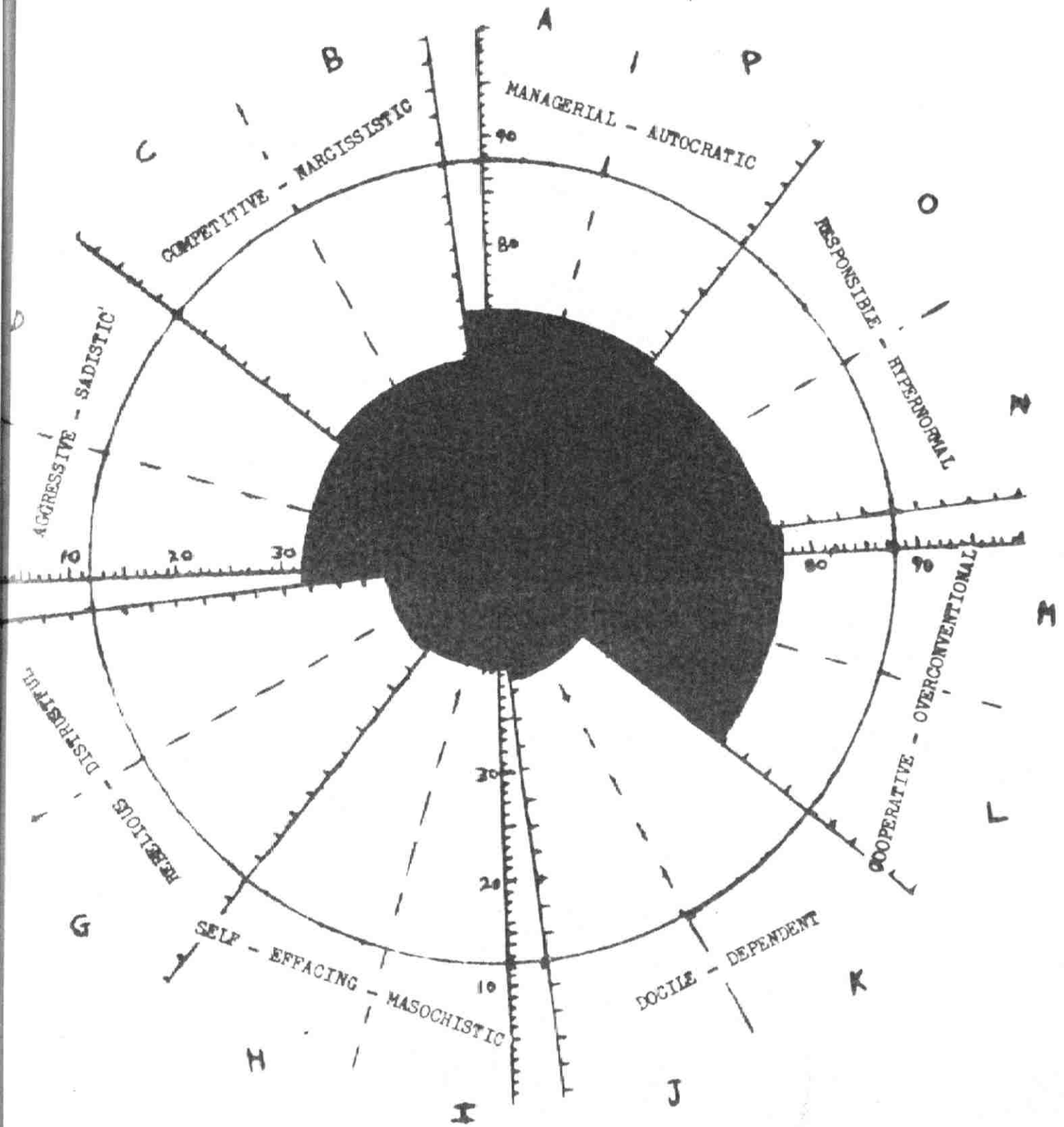
and Horizontal formulas. They are based on separate octant means of self and ideal-self concepts for the three R-S levels. These profiles were plotted specifically to find out the degree to which traits defined in each octant apply to the RMS levels of repression-sensitization relative to self and ideal-self appraisals.

The self-concept of repressors, Figure 6, is characterized mainly by Cooperative-Overconventional, Managerial-Autocratic and Responsible-Narcissistic and Aggressive-Sadistic traits.

Figure 7 represents a repeated confirmation of the similarity between repressors' self and ideal-self.

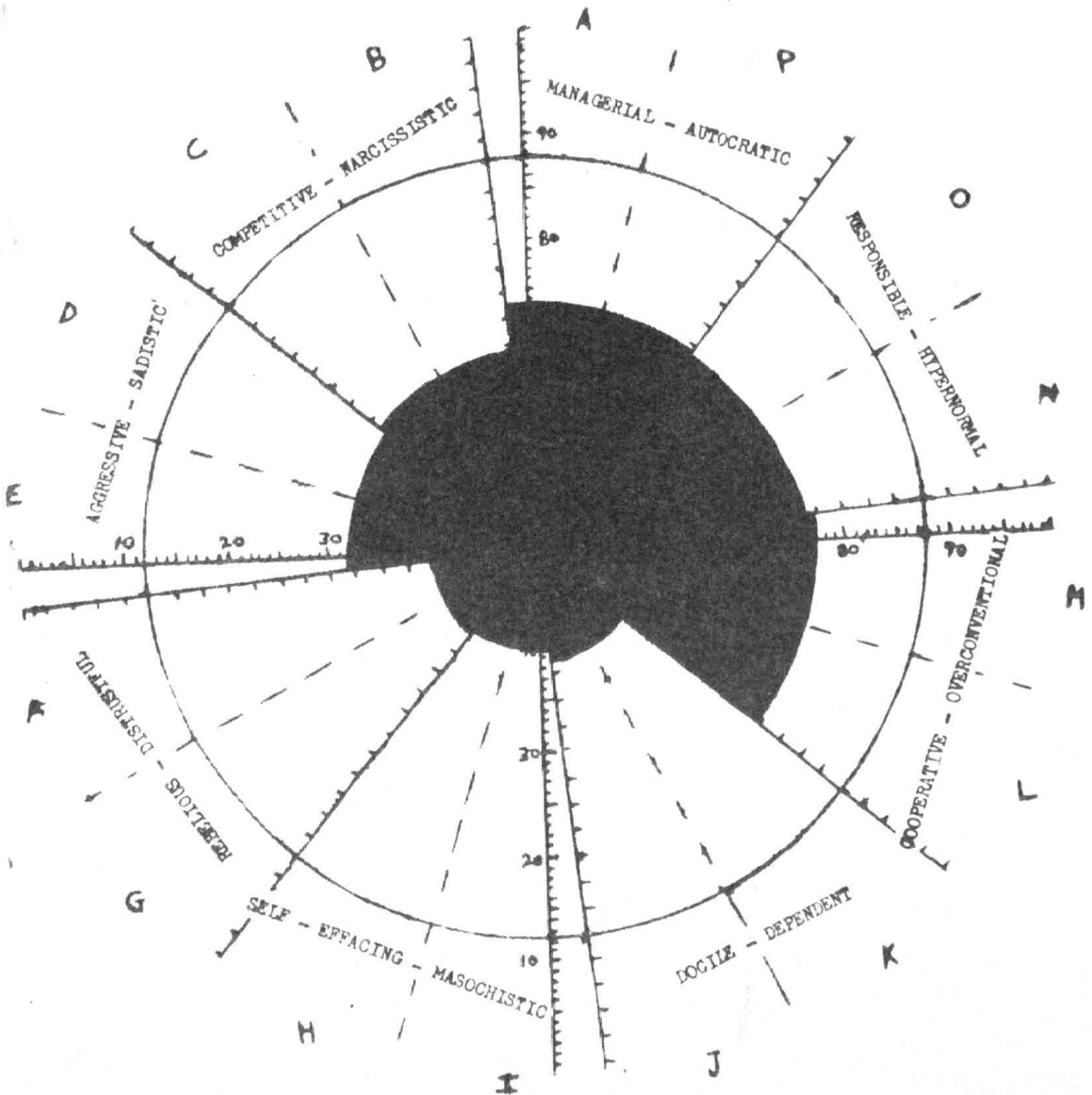
Figures 8 and 9, showing the self and ideal-self concepts of normals can be interpreted in a similar manner as done in inspecting Figures 6 and 7. One particular trend appearing in this comparison is the high ideal of normals for Managerial-Autocratic traits. The same trend is also seen in sensitizers' self-ideal profile.

The outstanding feature of sensitizers' personality is "exaggeration" of responses. Figures 10 and 11 illustrate this tendency which seems to apply both to self and ideal-self concepts. Sensitizers think of themselves as being basically Rebellious-Distrustful and Self-effacing-Masochistic, whereas ideally they would like to be on the opposite extreme. Their ideal falls within the range of Managerial-Autocratic and Cooperative-Overconventional traits.



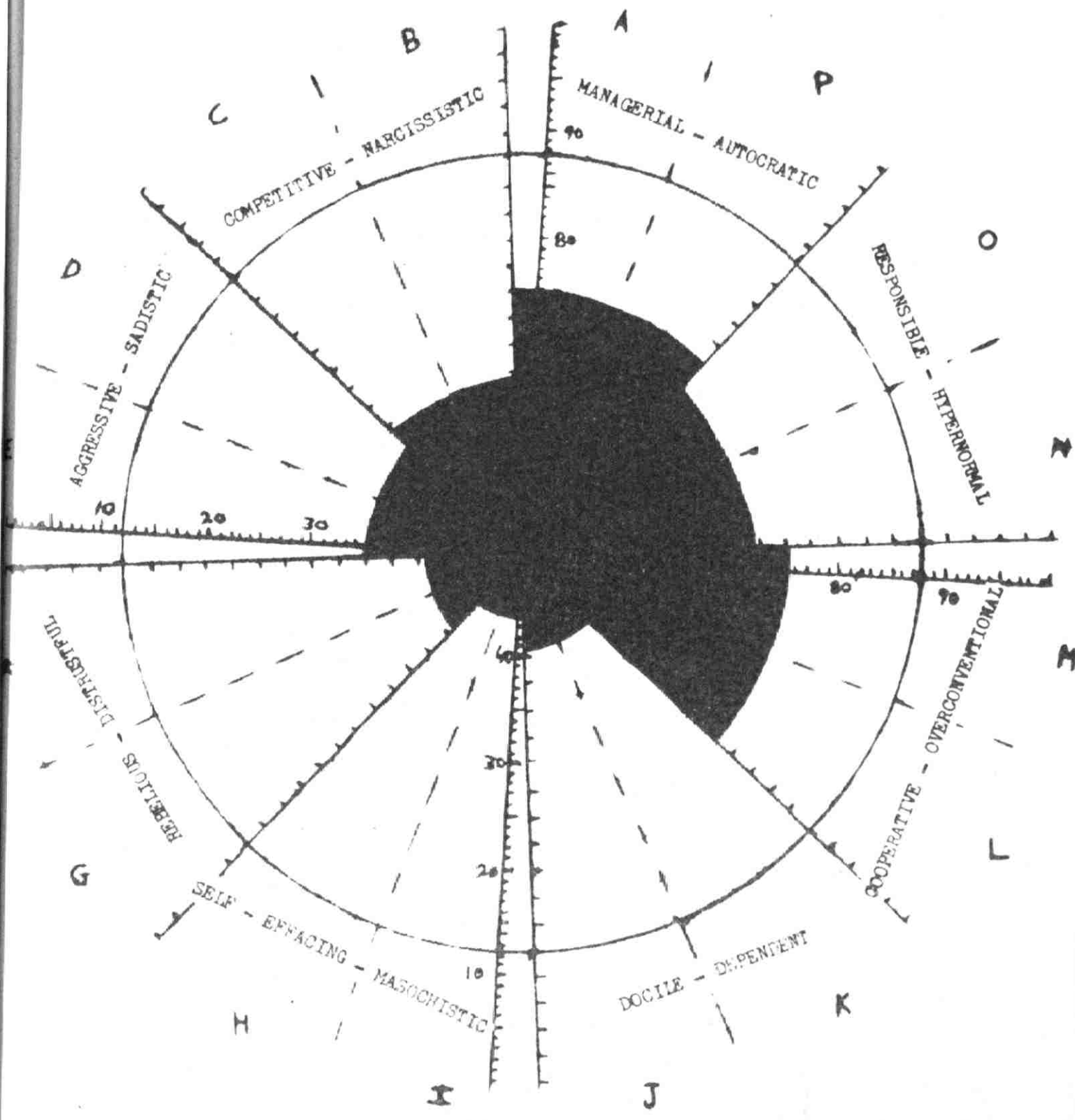
Repressors: Self-concept Octant Profile

Figure - 6



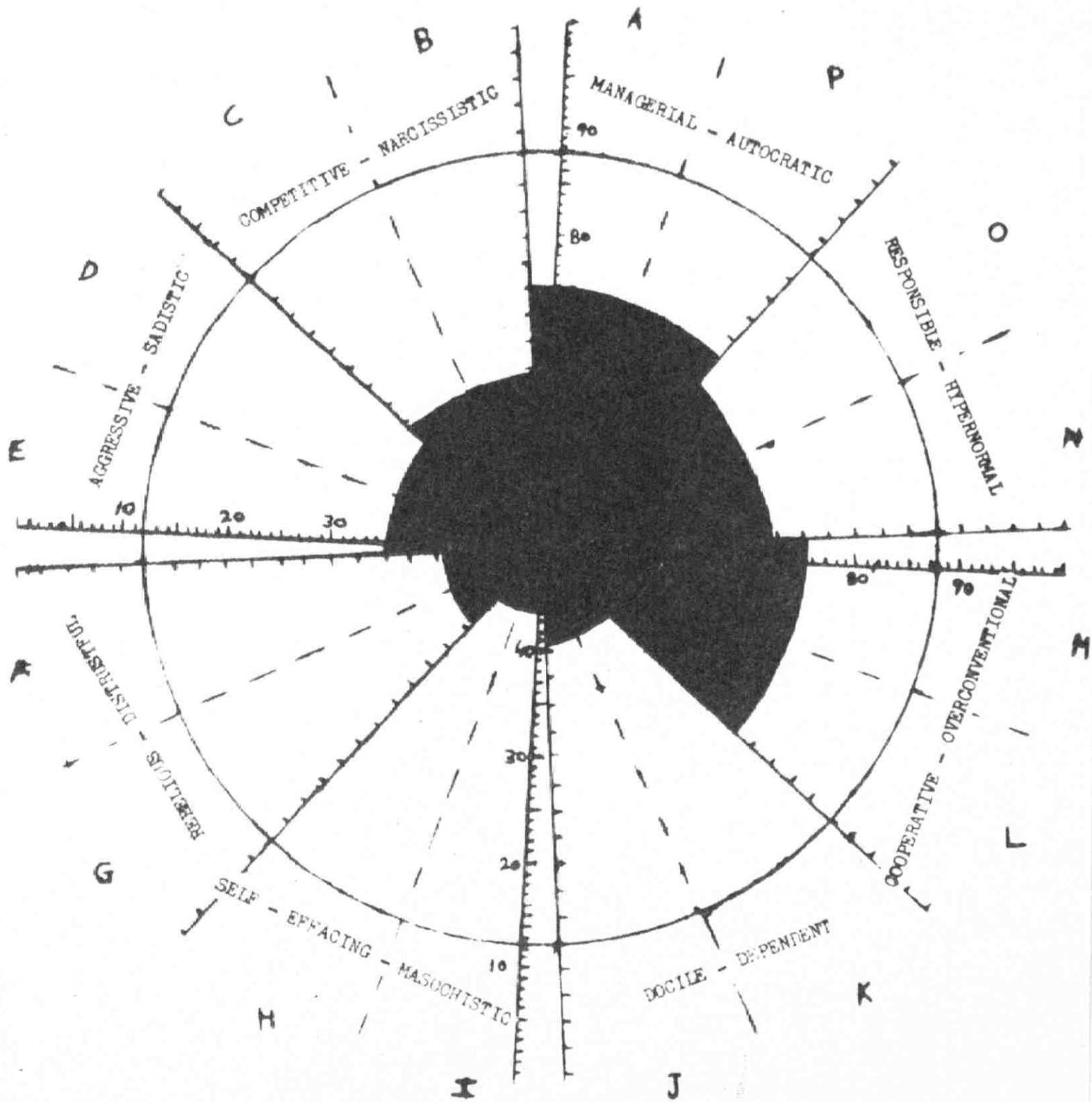
Repressors: Self-concept Octant Profile

Figure - 6



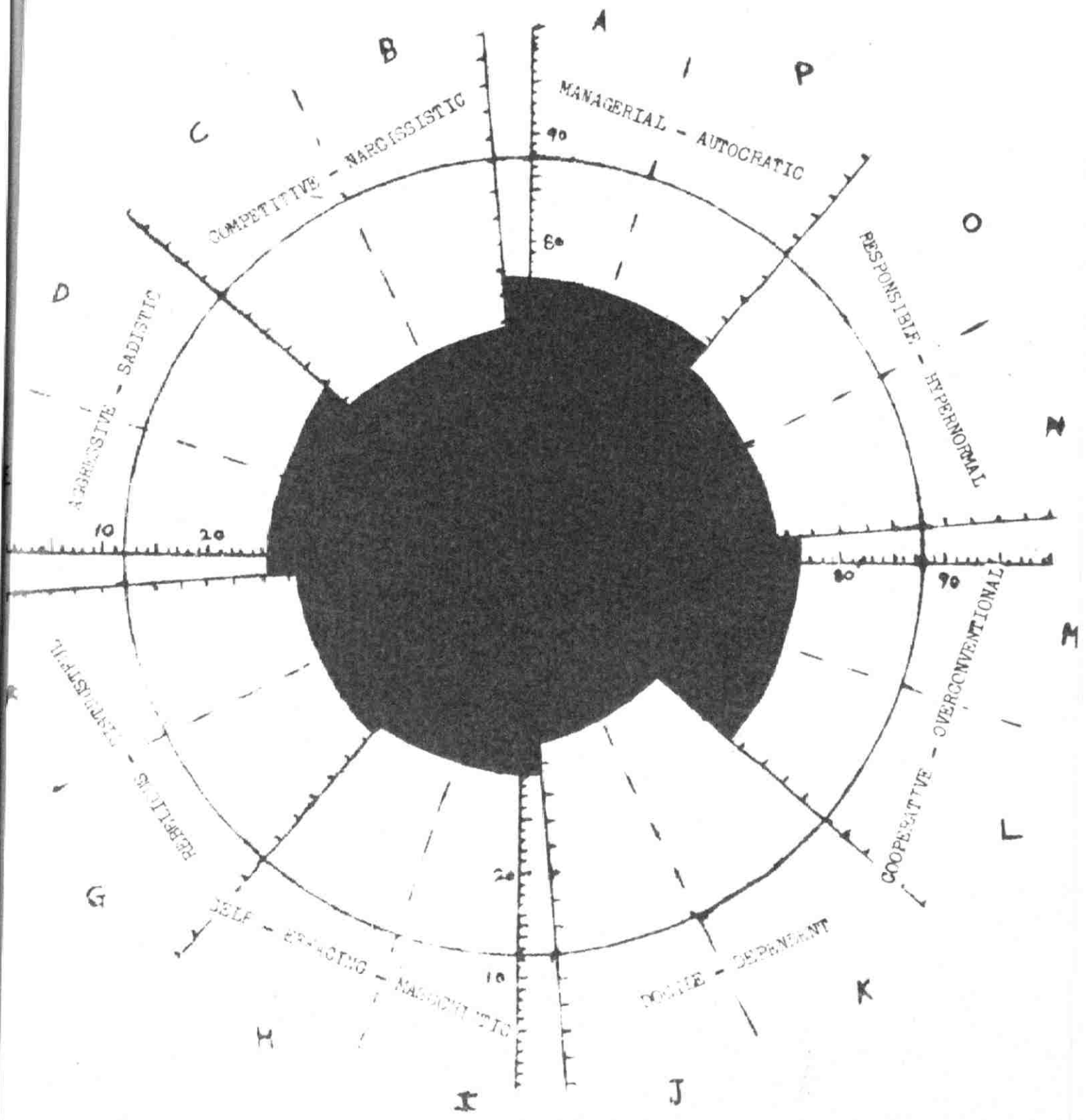
Repressors: Self-ideal-concept Octant Profile

Figure - 7



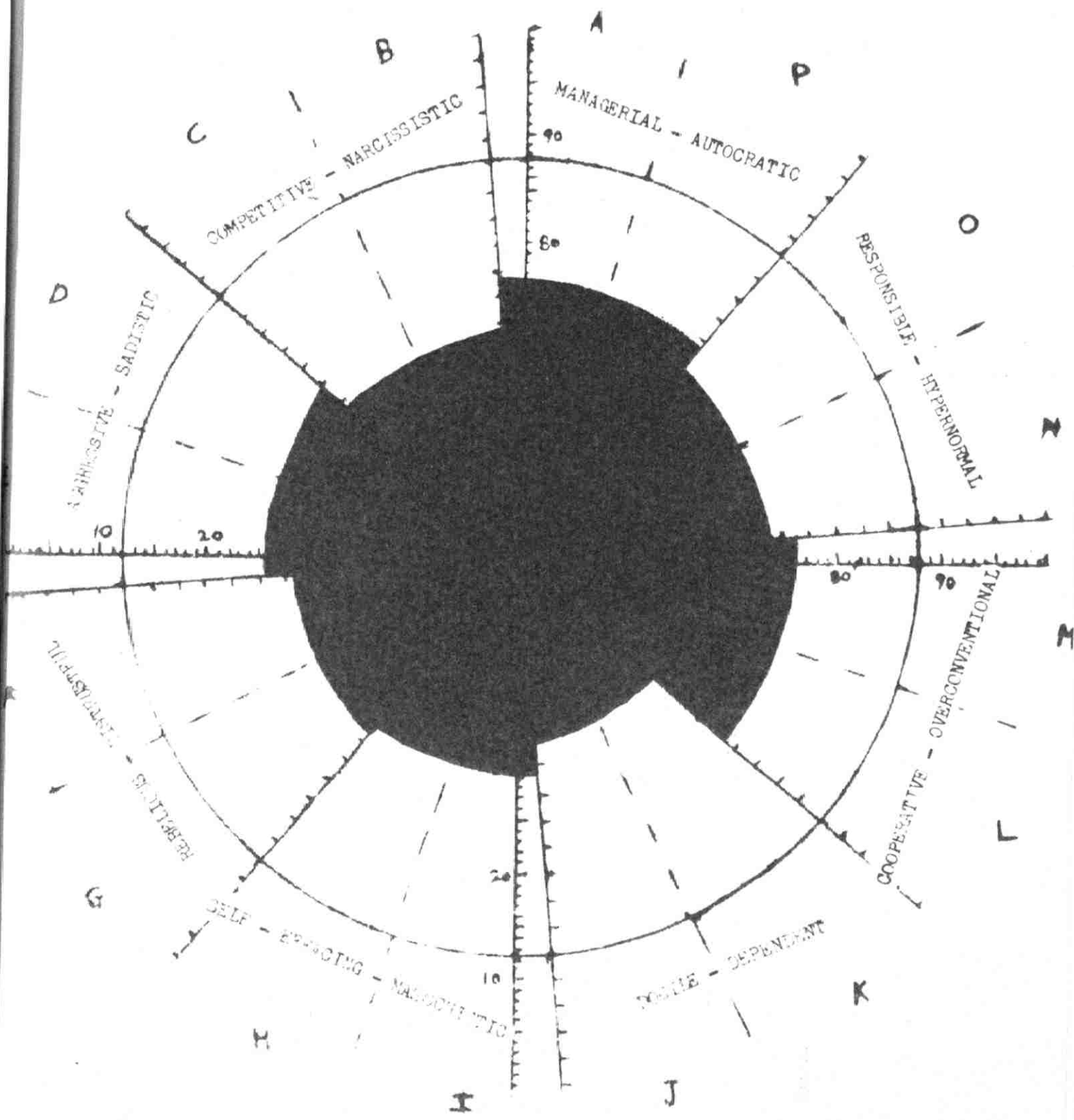
Repressors: Self-ideal-concept Octant Profile

Figure - 7



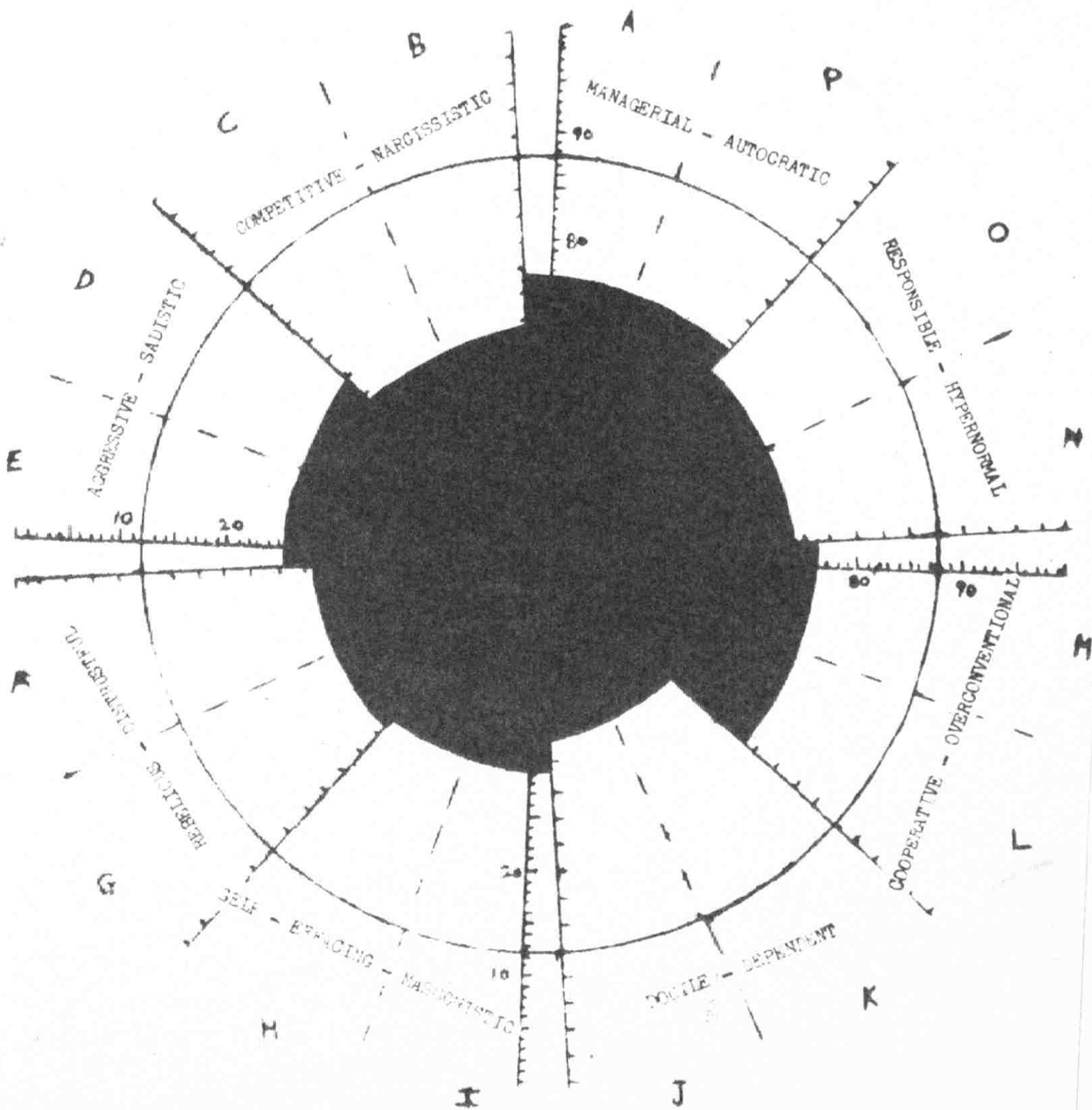
Normals: Self-concept Octant Profile

Figure - 8



Normals: Self-concept Octant Profile

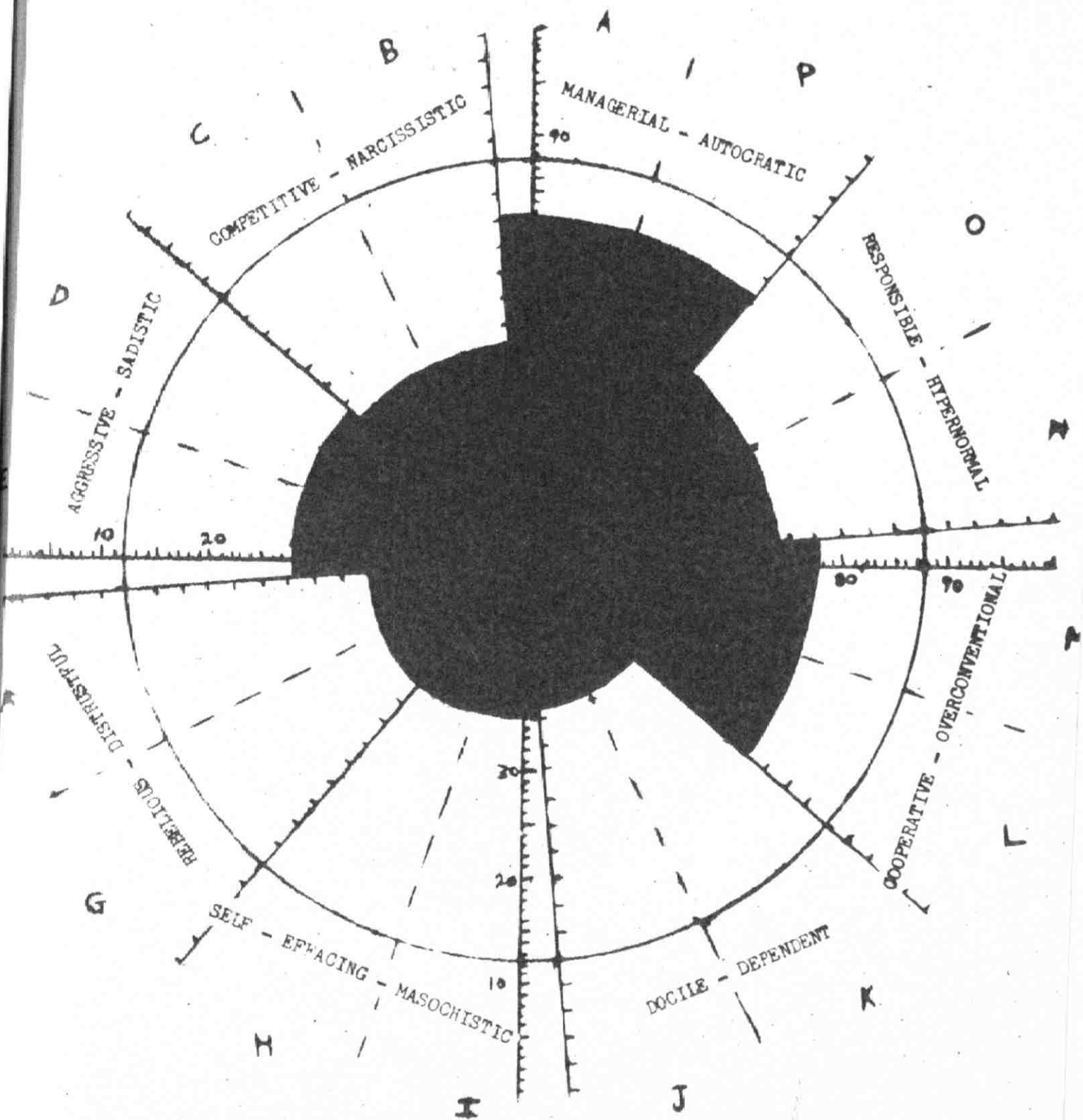
Figure - 8



Normals: Self-concept Ontant Profile

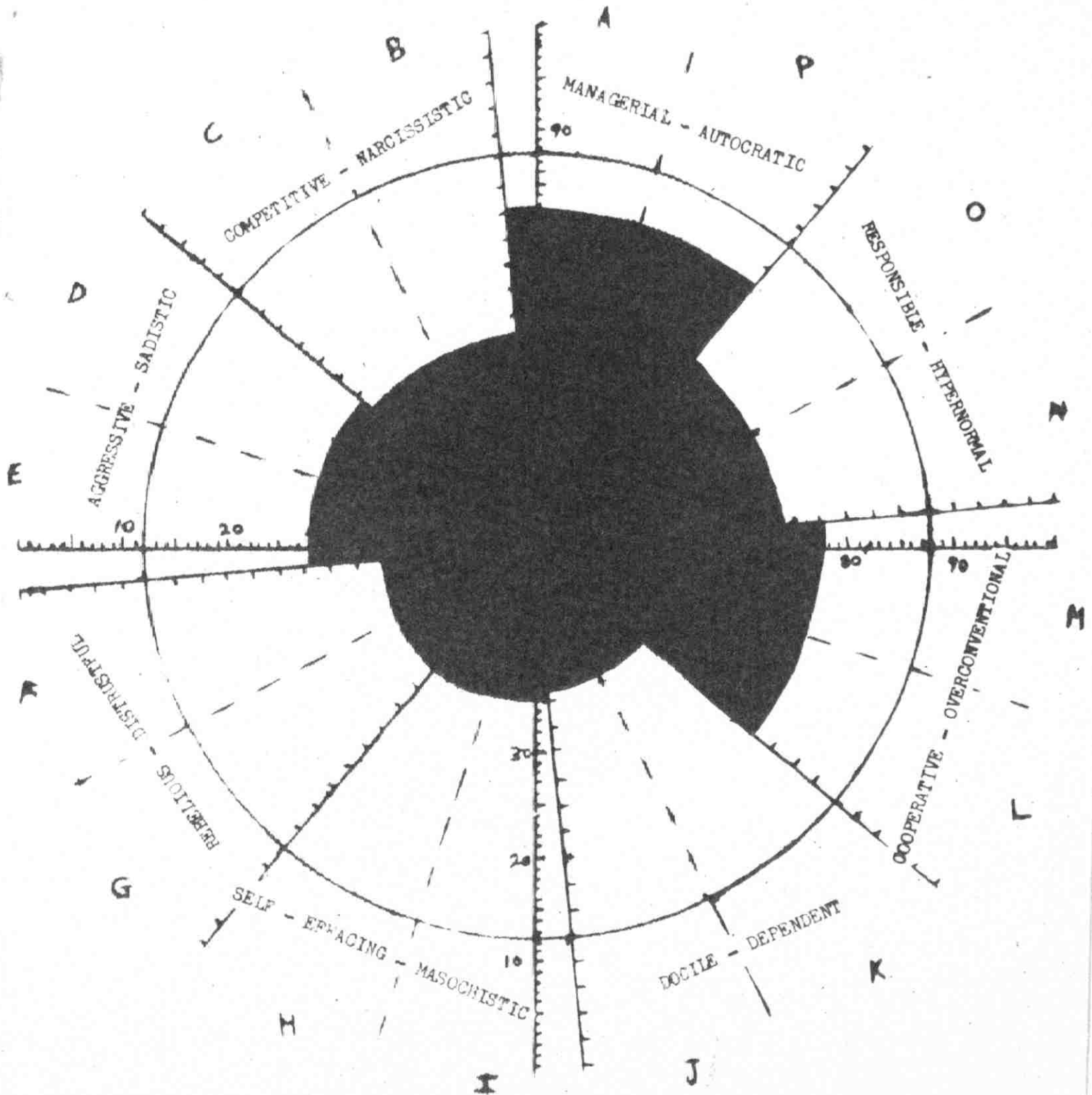
Figure - 8





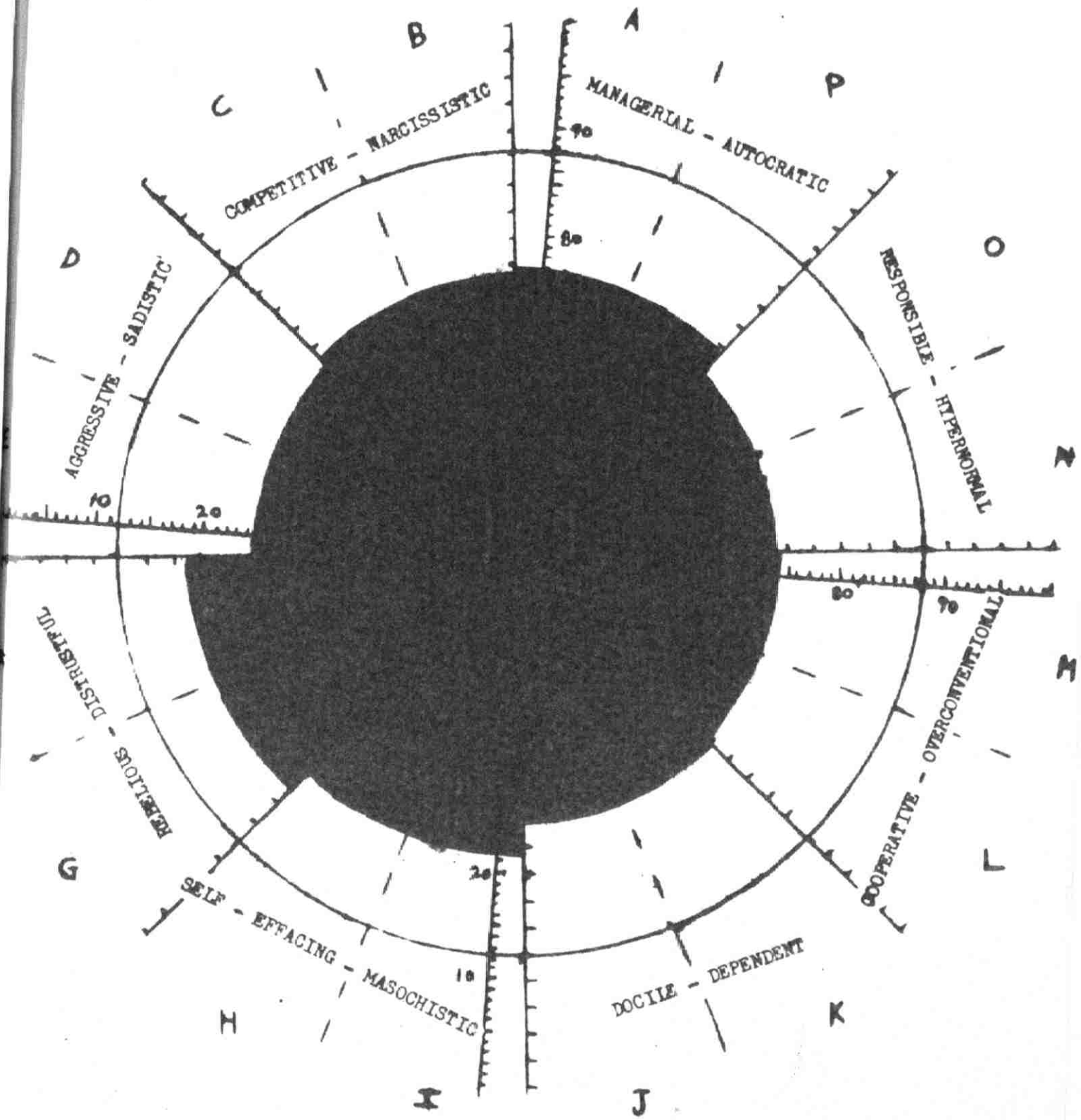
Normals: Self-ideal-concept Octant Profile

Figure - 9



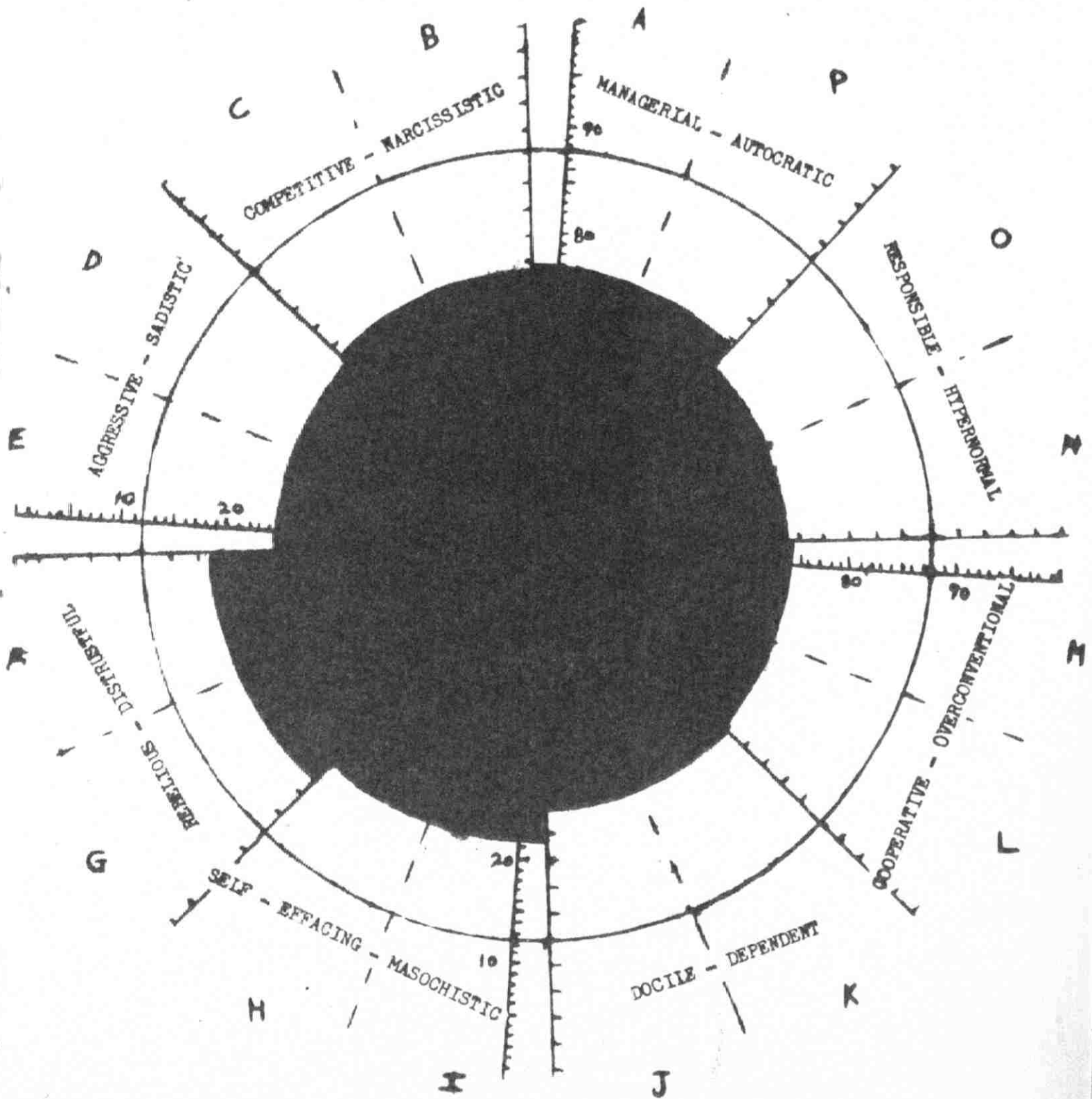
Normals: Self-ideal-concept Ontant Profile

Figure - 9



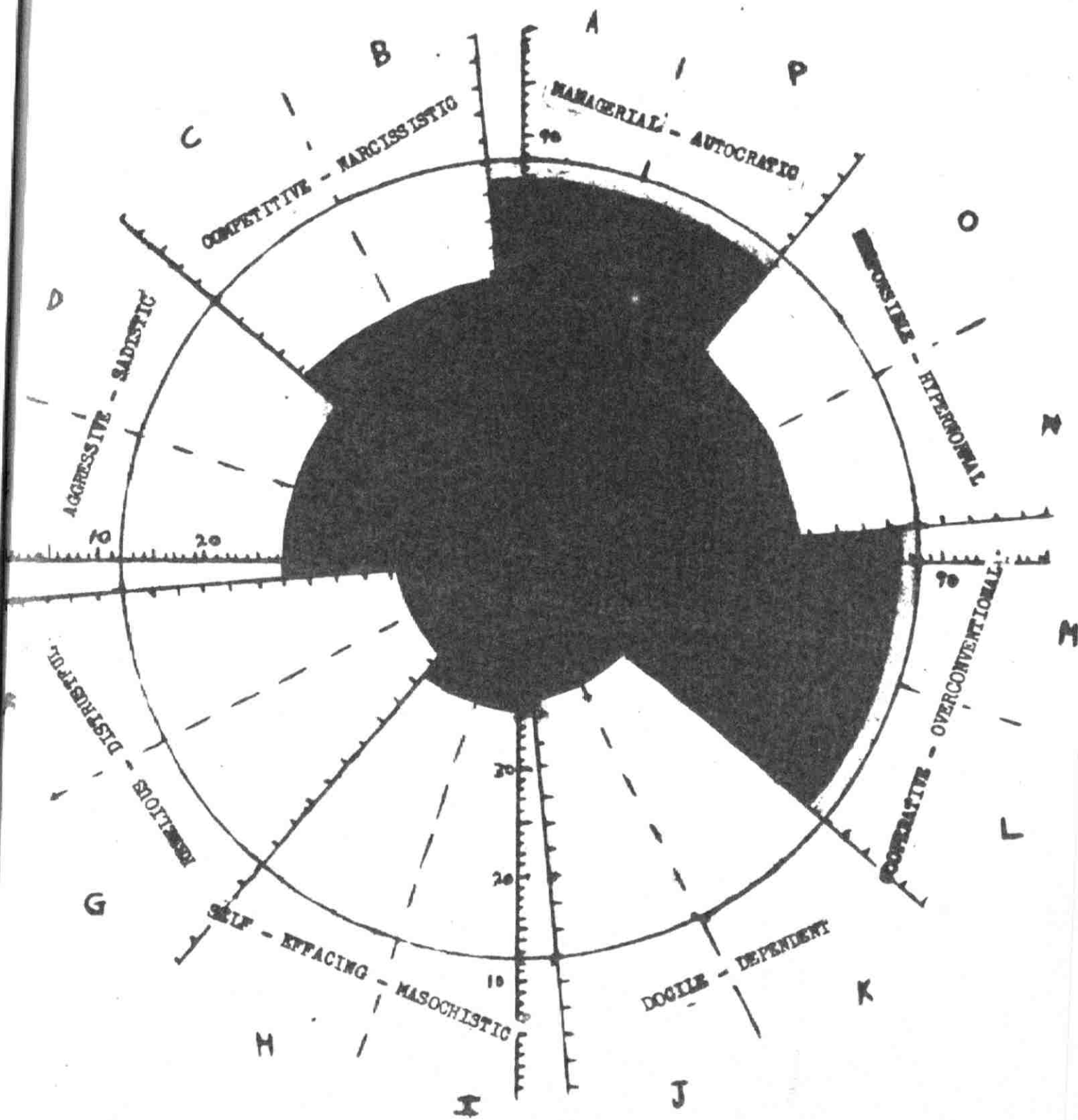
Sensitizer: Self-concept Octant Profile

Figure - 10



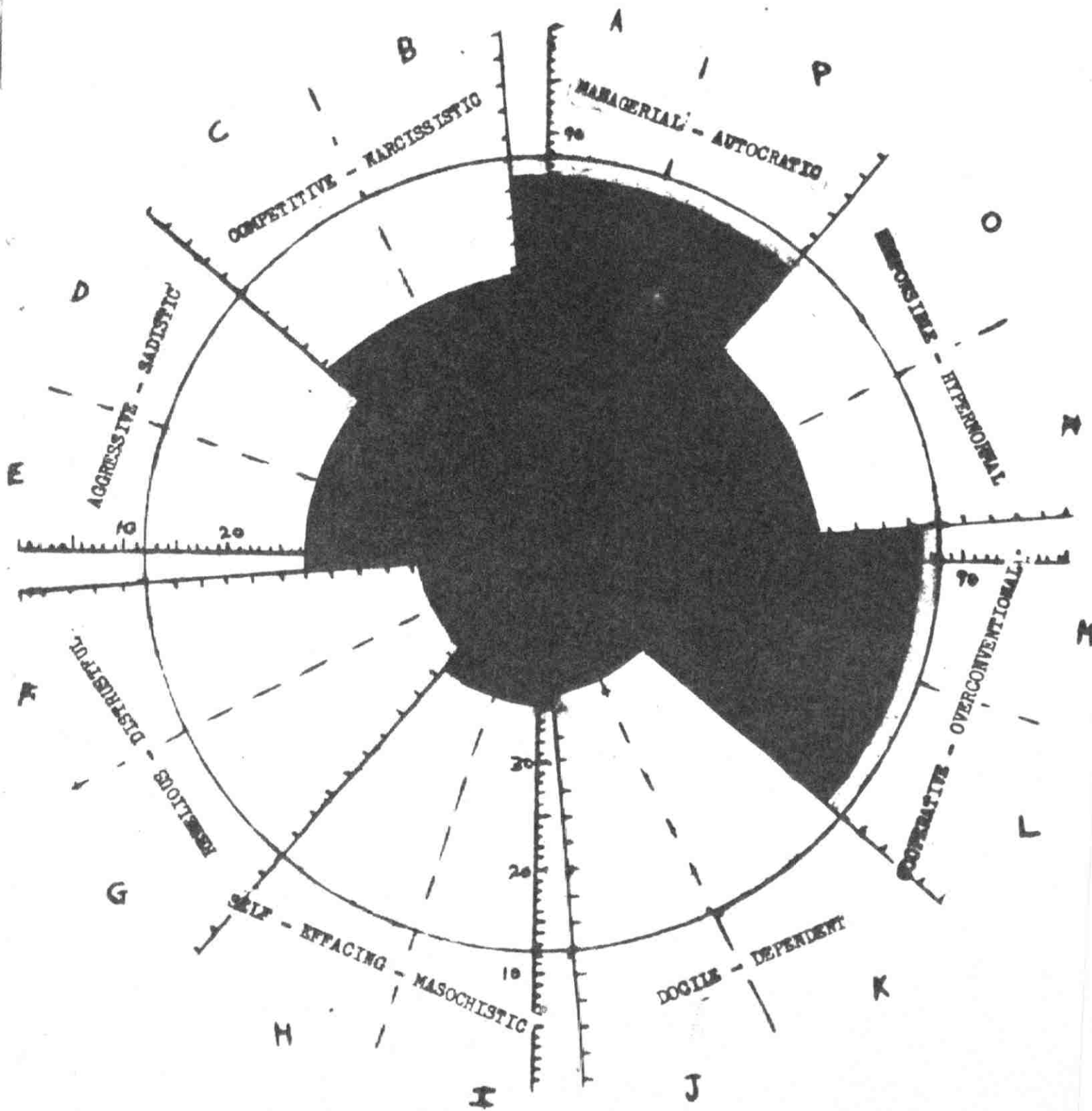
Sensitizer: Self-concept Ontant Profile

Figure - 10



Sensitizers: Self-ideal concept Octant Profile

Figure - 11



Sensitizers: Self-ideal concept Ontant Profile

Figure - 11

Summary.

Interest in individual differences in response patterns started with perceptual defense studies indicating behavioral approach-avoidance tendencies obtained by differential threshold measures and through some other response measures as selective forgetting, response blocking and denial of anxiety.

Repression-sensitization research emerged from findings concerning approach-avoidance defense patterns on the basis of which relationships between defense patterns and other personality variables were formulated and tested. The result was an organized body of data giving operational meaning to repression-sensitization variables.

Further research on R-S variables related response patterns to psychological adjustment or maladjustment. Repressors gave evidence for better adjustment than sensitizers as measured by personality inventories, population comparisons, on anxiety measures and self description instruments. Clinical and experimental findings showed that self-concept self-ideal congruence was basic to psychological adjustment. On Q-sorts, adjective check lists, clinical ratings and self-description scales repressors revealed self-concept self-ideal congruence while sensitizers showed discrepancies.

Using the ACL as a measure of self/ideal-self discrepancy consistent repression-sensitization and self/ideal-self relationships were reported by several researchers. Based on such findings the purpose of this study was to investigate for similar relationships among Middle Eastern students at AUB. Evidence for comparable relationships between AUB and American students would support the reliability of the R-S Scale

as a measure of repression-sensitization among Middle Eastern students.

The second and third hypotheses formulated in this study were confirmed, and a general trend supporting the first appeared. The fourth hypothesis was rejected. While all the predicted relationships were not tenable, the data indicated the applicability of the R-S Scale as a measure of repression-sensitization in the A.U.B. sample. From this data observations obtained on A.U.B. students were comparable to results found in the American standardization sample, even though the A.U.B. mean was higher and the standard deviation was larger.

On the dimension of Dominance, the general trend showing the highest self-concept for repressors and the lowest for sensitizers was consistent with findings on American students. On the self-concept/ ideal-self comparison A.U.B. sensitizers showed significantly greater SC/SI discrepancy than normals, and the discrepancy for normals was greater than for repressors. The linear relationship obtained among American subjects between repression-sensitization and SC/SI discrepancy appeared in this sample as well. One difference in the A.U.B. sample, however, was the unexpected higher ideal-self-concept for sensitizers, since little or no difference was predicted between Rs, Ms, and Ss in this respect.

On the dimension of Love no difference was expected in the self-concept between Rs, Ms and Ss. The little difference seen in the results was not significant to reject the hypothesized relationship above.

Finally, the predication of little or no difference in the ideal-self-concept and the SC/SI discrepancy for the RMS groups on the dimension of Love was not supported. However, since contradictory results



have been reported on the dimension of Love, a comparison on these variables was not possible between the two samples.

**APPENDIX**

R-S SCALE SCORES

Subjects' Code no.	R-S Scores	Subjects' Code no.	R-S Scores	Subjects' Code no.	R-S Scores
24	29	7	64	12	85
49	32	38	66	13	85
9	37	52	66	30	85
1	42	69	66	40	85
56	44	22	67	57	85
46	51	32	69	31	86
48	51	67	70	34	87
35	52	53	71	27	89
36	52	4	72	21	90
11	53	14	75	42	90
16	53	51	75	72	90
50	53	73	76	2	91
20	54	61	78	74	91
43	55	87	9	54	94
60	56	10	79	64	94
25	57	59	79	65	94
55	57	5	80	39	95
29	58	66	81	70	96
58	58	3	82	47	100
17	59	18	82	19	101
28	60	44	82	45	103
41	60	23	83	26	105
6	61	37	83	71	110
33	61	62	84	68	111
63	62	75	84	15	114

Table 1

ACL SCORES  
FOR DOMINANCE

Subjects	<u>Repressors</u>		<u>Normals</u>		<u>Sensitizers</u>	
	SC	SI	SC	SI	SC	SI
S1	77	59	47	65	57	88
S2	53	58	69	87	14	76
S3	71	54	64	73	45	83
S4	78	89	38	69	84	97
S5	76	76	41	102	39	98
S6	73	91	69	95	46	72
S7	61	64	80	94	90	90
S8	75	81	81	102	39	66
S9	89	100	62	85	28	54
S10	68	100	83	89	54	91
S11	77	64	56	54	60	101
S12	73	83	53	76	48	102
S13	95	102	70	72	41	95
S14	96	97	67	84	51	71
S15	89	92	41	47	27	78

Table 2

ACL SCORES  
FOR LOVE

Subjects	<u>Repressors</u>		<u>Normals</u>		<u>Sensitizers</u>	
	SC	SI	SC	SI	SC	SI
S1	56	65	66	62	27	73
S2	72	64	11	29	68	70
S3	36	53	91	91	43	73
S4	66	67	20	50	34	33
S5	59	58	50	87	43	76
S6	69	54	65	74	70	52
S7	42	63	50	58	24	63
S8	61	62	42	54	6	64
S9	77	71	40	81	33	5
S10	29	41	46	78	28	66
S11	44	52	12	30	74	59
S12	76	77	51	21	59	84
S13	59	69	56	77	46	82
S14	72	77	60	65	35	54
S15	54	76	67	26	48	51

Table 3

Instructions for the ACL

A. Self-Concept

NAME \_\_\_\_\_

SEX \_\_\_\_\_

Check the numbers in the left hand margin corresponding to the traits that you feel apply to you. When you are hesitant about a trait, check it only if IT APPLIES MORE OFTEN THAN NOT.

B. Ideal-Self-Concept

NAME \_\_\_\_\_

SEX \_\_\_\_\_

Check the numbers in the left hand margin corresponding to the traits you would ideally like to have. That is, the traits that you think you would have if you were at your best. Remember, you are not being asked to check the traits that apply to you as you are now. You are to check only those traits that would apply to you IF YOU WERE WHAT YOU IDEALLY LIKE TO BE.

Instructions for the R-S Scale

NAME \_\_\_\_\_

SEX \_\_\_\_\_

This inventory consists of numbered statements. If a statement is TRUE as applied to you, write "T" to the left of the statement. If a statement is FALSE as applied to you, write "F". If a statement does not apply to you or if it is something you don't know about, make no mark beside the statement. However, attempt to answer all statements. If you are undecided, then check the one that you think best applies.

Remember to give your own opinion of yourself.

The Byrne R-S Scale

1. I have a good appetite.
2. I wake up fresh and rested most mornings.
3. I think I would like the work of a librarian.
4. I am easily awakened by noise.
5. I like to read newspaper articles on crime.
6. My daily life is full of things that keep me interested.
7. I am about as able to work as I ever was.
8. There seems to be a lump in my throat much of the time.
9. I enjoy detective or mystery stories.
10. Once in a while I think of things too bad to talk about.
11. I am very seldom troubled by constipation.
12. At times I have fits of laughing and crying that I cannot control.
13. I would like to be a singer.
14. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
15. I find it hard to keep my mind on a task or job.
16. I seldom worry about my health.
17. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going".
18. My sleep is fitful and disturbed.
19. I do not always tell the truth.
20. My judgement is better than it ever was.
21. I am in just as good physical health as most of my friends.
22. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
23. I am a good mixer.
24. Everything is turning out just like the prophets of the Bible said it would.
25. I do not read every editorial in the newspaper every day.
26. I sometimes keep on at a thing until others lose their patience with me.
27. I wish I could be as happy as others seem to be.
28. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
29. I get angry sometimes.
30. Most of the time I feel blue.
31. I like poetry.
32. I sometimes tease animals.
33. I am certainly lacking in self-confidence.
34. I usually feel that life is worth while.
35. Once in a while I put off until tomorrow what I ought to do today.
36. I would like to be a nurse.
37. I think most people would lie to get ahead.
38. I do many things which I regret afterwards (I regret things more or more often than others seem to).
39. I go to church almost every week.
40. I have very few quarrels with members of my family.

41. I believe in the second coming of Christ.
42. My hardest battles are with myself.
43. I don't seem to care what happens to me.
44. Sometimes when I am not feeling well I am cross.
45. Much of the time I feel as if I have done something wrong or evil.
46. I am happy most of the time.
47. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
48. My table manners are not quite as good at home as when I am out in company.
49. I seem to be about as capable and smart as most others around me.
50. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
51. I like dramatics.
52. Often I can't understand why I have been so cross and grouchy.
53. I have never vomited blood or coughed up blood.
54. I do not worry about catching diseases.
55. At times my thoughts have raced ahead faster than I could speak them.
56. If I could get into a movie without paying and be sure I was not seen I would probably do it.
57. I commonly wonder what hidden reason another person may have for doing something nice for me.
58. Criticism or scolding hurts me terribly.
59. I like to cook.
60. My conduct is largely controlled by the customs of those about me.
61. I certainly feel useless at times.
62. At times I feel like picking a fist fight with someone.
63. I have often lost out on things because I couldn't make up my mind soon enough.
64. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
65. I would rather win than lose in a game.
66. Most nights I go to sleep without thoughts or ideas bothering me.
67. During the past few years I have been well most of the time.
68. I have never had a fit or convulsion.
69. I am neither gaining nor losing weight.
70. I cry easily.
71. I cannot understand what I read as well as I used to.
72. I resent having anyone take me in so cleverly that I have had to admit that it was one on me.
73. I like to study and read about things that I am working at.
74. I like to know some important people because it makes me feel important.
75. What others think of me does not bother me.
76. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
77. I frequently have to fight against showing that I am bashful.
78. I liked school.
79. My memory seems to be all right.
80. I find it hard to make talk when I meet new people.
81. I am afraid of losing my mind.



82. I am against giving money to beggars.
83. I feel weak all over much of the time.
84. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.
85. I do not have spells of hay fever or asthma.
86. I do not like everyone I know.
87. I like to visit places where I have never been before.
88. I wish I were not so shy.
89. I would like to be a journalist.
90. I enjoy many different kinds of play and recreation.
91. I like to flirt.
92. In walking I am very careful to step over sidewalk cracks.
93. I frequently find myself worrying about something.
94. I think I would like the work of a building contractor.
95. I like science.
96. I very much like hunting.
97. I gossip a little at times.
98. I should like to belong to several clubs or lodges.
99. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.
100. I get mad easily and then get over it soon.
101. I brood a great deal.
102. I have periods of such great restlessness that I cannot sit long in a chair.
103. I dream frequently about things that are best kept to myself.
104. I believe that I am no more nervous than most others.
105. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world".
106. I can be friendly with people who do things which I consider wrong.
107. Sometimes at elections I vote for men about whom I know very little.
108. I have difficulty in starting to do things.
109. I sweat very easily even on cool days.
110. It is safer to trust nobody.
111. Once a week or oftener I become very excited.
112. When in a group of people I have trouble thinking of the right things to talk about.
113. When I leave home I do not worry about whether the door is locked and the windows closed.
114. I do not blame a person for taking advantage of someone who lays himself open to it.
115. I have often felt that strangers were looking at me critically.
116. I drink an unusually large amount of water every day.
117. If I were a reporter I would very much like to report sporting news.
118. I am troubled by attacks of nausea and vomiting.
119. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.
120. I work under a great deal of tension.
121. I am likely not to speak to people until they speak to me.
122. Life is a strain for me much of the time.

123. In school I found it very hard to talk before the class.
124. Even when I am with people I feel lonely much of the time.
125. I think nearly anyone would tell a lie to keep out of trouble.
126. I am easily embarrassed.
127. I worry over money and business.
128. I almost never dream.
129. I easily become impatient with people.
130. I feel anxiety about something or someone almost all the time.
131. Sometimes I become so excited that I find it hard to get to sleep.
132. I forget right away what people say to me.
133. I usually have to stop and think before I act even in trifling matters.
134. Often I cross the street in order not to meet someone I see.
135. I often feel as if things were not real.
136. I have a habit of counting things that are not important such as bulbs on electric signs, and so forth.
137. I have strange and peculiar thoughts.
138. I get anxious and upset when I have to make a short trip away from home.
139. I have been afraid of things or people that I knew could not hurt me.
140. I have no dread of going into a room by myself where other people have already gathered and are talking.
141. I have more trouble concentrating than others seem to have.
142. I have several times given up doing a thing because I thought too little of my ability.
143. Bad words, often terrible words, come into my mind and I cannot get rid of them.
144. Sometimes some unimportant thought will run through my mind and bother me for days.
145. Almost every day something happens to frighten me.
146. I am inclined to take things hard.
147. I am more sensitive than most other people.
148. At periods my mind seems to work more slowly than usual.
149. I very seldom have spells of the blues.
150. I wish I could get over worrying about things I have said that may have injured other people's feelings.
151. People often disappoint me.
152. I feel unable to tell anyone all about myself.
153. My plans have frequently seemed so full of difficulties that I have had to give them up.
154. I love to go to dances.
155. Often, even though everything is going fine for me, I feel that I don't care about anything.
156. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
157. I often think, "I wish I were a child again".
158. I have often met people who were supposed to be experts who were no better than I.
159. It makes me feel like a failure when I hear of the success of someone I know well.
160. I am apt to take disappointments so keenly that I can't put them out of my mind.

161. At times I think I am no good at all.
162. I like or have liked fishing very much.
163. I like to read newspaper editorials.
164. I like to attend lectures on serious subjects.
165. I worry quite a bit over possible misfortunes.
166. I am apt to pass up something I want to do because others feel that I am not going about it in the right way.
167. I find it hard to set aside a task that I have undertaken, even for a short time.
168. I used to like hopscotch.
169. I have several times had a change of heart about my life work.
170. I must admit that I have at times been worried beyond reason over something that really did not matter.
171. I like to let people know where I stand on things.
172. I have a daydream life about which I do not tell other people.
173. I have often felt guilty because I have pretended to feel more sorry about something than I really was.
174. I would like to hunt lions in Africa.
175. I think I would like the work of a dressmaker.
176. I feel tired a good deal of the time.
177. I like to read about history.
178. I like parties and socials.
179. I like to read about science.
180. If I were an artist I would like to draw children.
181. I sometimes feel that I am about to go to pieces.
182. I would like to be a private secretary.

Leary's Adjective Check List

1. \_\_\_ Bitter
2. \_\_\_ Straightforward and Direct
3. \_\_\_ Able to take care of self
4. \_\_\_ Likes to be taken care of
5. \_\_\_ Able to criticize self
6. \_\_\_ Gives freely of self
7. \_\_\_ Spineless
8. \_\_\_ Cooperative
9. \_\_\_ Skeptical
10. \_\_\_ Critical of others
11. \_\_\_ Self-respecting
12. \_\_\_ Able to give orders
13. \_\_\_ Always giving advice
14. \_\_\_ Self-seeking
15. \_\_\_ Considerate
16. \_\_\_ Manages others
17. \_\_\_ Apologetic
18. \_\_\_ Likes to compete with others.
19. \_\_\_ Can be indifferent to others
20. \_\_\_ Somewhat snobbish
21. \_\_\_ Friendly all the time
22. \_\_\_ Always ashamed of self
23. \_\_\_ Dominating
24. \_\_\_ Appreciative
25. \_\_\_ Often unfriendly
26. \_\_\_ Encouraging others
27. \_\_\_ Thinks only of himself
28. \_\_\_ Easily led
29. \_\_\_ Self reliant and assertive
30. \_\_\_ Touchy and easily hurt
31. \_\_\_ Distrusts everybody
32. \_\_\_ Boastful
33. \_\_\_ Modest
34. \_\_\_ Likes responsibility
35. \_\_\_ Jealous
36. \_\_\_ Acts important
37. \_\_\_ Lets others make decisions
38. \_\_\_ Complaining
39. \_\_\_ Can be obedient
40. \_\_\_ Dictatorial
41. \_\_\_ Warm
42. \_\_\_ Firm but just
43. \_\_\_ Independent
44. \_\_\_ Likes everybody
45. \_\_\_ Eager to get along with others
46. \_\_\_ Able to doubt others
47. \_\_\_ Egotistical and conceited
48. \_\_\_ Stubborn
49. \_\_\_ Hard-hearted
50. \_\_\_ Clinging Vine
51. \_\_\_ Forgives anything
52. \_\_\_ Can be frank and honest
53. \_\_\_ Good leader
54. \_\_\_ Loves everyone
55. \_\_\_ Self-confident
56. \_\_\_ Shy
57. \_\_\_ Will believe anyone
58. \_\_\_ Kind and reassuring
59. \_\_\_ Wants everyone to like him
60. \_\_\_ Proud and self-satisfied
61. \_\_\_ Sociable and neighborly
62. \_\_\_ Business like
63. \_\_\_ Hard to impress
64. \_\_\_ Frequently disappointed
65. \_\_\_ Dependent
66. \_\_\_ Well thought of
67. \_\_\_ Want to be led
68. \_\_\_ Stern but fair
69. \_\_\_ Sarcastic
70. \_\_\_ Admires and imitates others
71. \_\_\_ Too easily influenced by friends
72. \_\_\_ Usually gives in
73. \_\_\_ Obeys too willingly
74. \_\_\_ Easily embarrassed
75. \_\_\_ Will confide in anyone
76. \_\_\_ Cruel and unkind
77. \_\_\_ Can be strict if necessary
78. \_\_\_ Trusting and eager to please
79. \_\_\_ Too lenient with others
80. \_\_\_ Hardly ever talks back
81. \_\_\_ Outspoken
82. \_\_\_ Hard-boiled if necessary
83. \_\_\_ Passive and unaggressive
84. \_\_\_ Meek
85. \_\_\_ Often helped by others
86. \_\_\_ Tries to be too successful
87. \_\_\_ Resents being bossed
88. \_\_\_ Over-sympathetic
89. \_\_\_ Rebels against everything
90. \_\_\_ Overprotective of others
91. \_\_\_ Always pleasant and agreeable
92. \_\_\_ Fond of everyone
93. \_\_\_ Cold and unfeeling
94. \_\_\_ Slow to forgive a wrong
95. \_\_\_ Wants everyone's love
96. \_\_\_ Tender and soft-hearted
97. \_\_\_ Often gloomy
98. \_\_\_ Timid
99. \_\_\_ Enjoys taking care of others
100. \_\_\_ Bossy

- |        |                                 |        |                                |
|--------|---------------------------------|--------|--------------------------------|
| 101. — | Resentful                       | 115. — | Big-hearted and unselfish      |
| 102. — | Affectionate and understanding  | 116. — | Expects everyone to admire him |
| 103. — | Friendly                        | 117. — | Accepts advice readily         |
| 104. — | Impatient with others' mistakes | 118. — | Grateful                       |
| 105. — | Respected by others             | 119. — | Agrees with everyone           |
| 106. — | Self punishing                  | 120. — | Tries to comfort everyone      |
| 107. — | Often admired                   | 121. — | Frequently angry               |
| 108. — | Irritable                       | 122. — | Easily fooled                  |
| 109. — | Very anxious to be approved of  | 123. — | Spoils people with kindness    |
| 110. — | Selfish                         | 124. — | Forceful                       |
| 111. — | Generous to a fault             | 125. — | Too willing to give to others  |
| 112. — | Can complain if necessary       | 126. — | Very respectful to authority   |
| 113. — | Shrewd and calculating          | 127. — | Lacks self confidence          |
| 114. — | Makes a good impression         | 128. — | Helpful                        |

### Definitions

#### Tests I and II

7. Spineless: a weak, courageless person.
9. Skeptical: doubtful and critical - a state of questioning things as opposed to seriously believing in things.
14. Self-seeking: selfish.
17. Apologetic: arguing in defense of something, or, presenting excuses for oneself, or, regretfully acknowledging something.
20. Snobbish: giving excessive value to richness, to social rank.
32. Boastful: to like to talk proudly about ones possessions, successes, etc.
47. Egotistical and conceited: saying "I" very often - frequently referring to oneself (often in a selfish way).
50. Clinging Vine: a dependent person; one who needs a lot of support and encouragement from others (just like a child).
81. Outspoken: bold; someone who tells his opinion directly (without fear of disapproval).
82. Hard-boiled: tough, strong, firm.
84. Meek: gentle and kind all the time (exaggerated gentleness).
101. Resentful: feeling displeasure about something; not accepting something willingly.

#### Test III

8. Lump: a disturbing swelling or a mass.
11. Constipation: a condition of the large intestines in which emptying of waste matter from the intestines is infrequent and difficult.
17. "get going": to get oneself started on a job; be able to start working.
18. Fitful: restless, unstable, disturbed.
23. Good mixer: sociable; one who can get along well with people and enjoys people.

30. Feel blue: be sad, melancholic.
44. Cross: become easily angry.
52. Grouchy: angry, displeased, irritable.
55. Race ahead: run ahead, rush.
56. Fit or convulsion: a sudden attack or outburst of anger or a mood.
72. The sentence means: I am angered for being deceived so cleverly that at the end I have to admit having been deceived.
76. Stunt: a skilful trick (example: to ride bicycle without holding hands).
84. Embarrassed: feel self-conscious, confused.
85. Flirt: to carry on a superficial love affair; not having serious intentions in love.
101. Brood: think anxiously; think in a moody way.
105. "on top of the world": feel very happy, contented.
119. Disgusted: feel a sickening dislike towards something.
140. Dread: extreme fear.
149. Spells of blues: sudden and successive attacks of feelings of sadness.
160. Apt to take disappointments keenly: tend to be intensely disturbed over frustrations.
168. Hopscotch: a children's game that involves jumping over lines drawn on the ground.
169. Change of heart: change of decision.

BIBLIOGRAPHY

1. Akeret, Robert U. Interrelationships among various dimensions of the self-concept. In Gardner and Hall (editors) Theories of Personality: Primary Sources and Research. New York, J. Wiley, 1965.
2. Altrocchi, J. Interpersonal perceptions of repressors and sensitizers and component analysis of assumed dissimilarity scores. J. abnorm. soc. Psychol., 1961, 62, 528-534.
3. \_\_\_\_\_, Parsons, Oscar A., and Dickoff, Hilda. Changes in self-ideal discrepancy in repressors and sensitizers. J. abnorm. soc. Psychol., 1960, 61, 67-72.
4. \_\_\_\_\_, and Perlitsch, and Dickoff, Hilda. Ego control patterns and attribution of hostility. Psychol. Rep., 1963, 12, 811-818.
5. \_\_\_\_\_, Shrauger, S., and McLeod, Mary A. Attribution of hostility to self and others by expressors, sensitizers, and repressors. J. clin. Psychol., 1964, 20, 233.
6. Armstrong, Renate G. The Leary Interpersonal Check List: A reliability study. J. clin. Psychol., 1958, 14, 393-394.
7. Block, J., and Thomas, H. Is satisfaction with self a measure of adjustment? J. abnorm. soc. Psychol., 1955, 51, 254-259.



8. Bruner, J. S., and Postman, L. Emotional selectivity in perception and reaction. J. Pers., 1947, 16, 69-77.
9. Butler, J. M., and Haigh, G. V. Changes in the relation between self-concepts and ideal-concepts consequent upon client-centered counseling. In C.R. and Dymond (editors) Psychotherapy and Personality Change. Chicago, University of Chicago Press, 1954.
10. Byrne, Donn. An Introduction to Personality: A Research Approach. Englewood Cliffs, N.J., Prentice-Hall, 1966.
11. \_\_\_\_\_, Repression-Sensitization as a dimension of personality. In Maher (ed.) Progress in Experimental Personality Research. New York, Academic Press, 1964.
12. \_\_\_\_\_, The Repression-Sensitization Scale: Rationale, reliability, and validity. J. Pers., 1961, 29, 334-349.
13. \_\_\_\_\_, Barry, J., and Nelson, D. Relation of the revised Repression-Sensitization scale to measures of self-description. Psychol. Rep., 1963, 13, 323-334.
14. \_\_\_\_\_, Donn, and Sheffield, John. Response to sexually arousing stimuli as a function of repressing and sensitizing defenses. J. abnorm. soc. Psychol., 1965, 70, 114-118.
15. \_\_\_\_\_, Terrill, J., and McReynolds, P. Incongruency as a predictor of response to humor. J. abnorm. soc. Psychol., 1961, 62, 435-438.

16. Carlson, V.R. Individual differences in recall of word-association-test-words. J. Pers., 1954, 23, 77-87.
17. Carpenter, B., Wiener, M., and Carpenter, J.T. Predictability of perceptual defense behavior. J. abnorm. soc. Psychol., 1956, 52, 380-383.
18. Chodorkoff, B. Self-perception, perceptual defense, and adjustment. J. abnorm. soc. Psychol., 1954, 49, 508-512.
19. Cowen, Emory L., and Gongas, Phoebus N. The social desirability of trait descriptive terms: applications to a self-concept inventory. J. consult. Psychol., 1959, 23, 361-365.
20. Davidson, L.A. Adaptation to a threatening stimulus. Unpublished doctoral dissertation, University of California, Berkeley, California, 1963.
21. Eriksen, Charles W. Defense against Ego-Threat in memory and perception. J. abnorm. soc. Psychol., 1952, 47, 230-235.
22. \_\_\_\_\_, and Lazarus, R.S. Perceptual defense and projective tests. J. abnorm. soc. Psychol., 1952, 47, 302-308.
23. Gordon, Jesse E. GSRs during repression, suppression, and verbalization in psychotherapeutic interviews. J. consult. Psychol., 1959, 23, 243-251.
24. Gosset, J.T. An experimental demonstration of Freudian repression proper. Unpublished doctoral dissertation, University of Arkansas, Fayetteville, Arkansas, 1964.

25. Hillson, Joseph S. and Worchel, Philip. Self-concept and defensive behavior in the maladjusted. J. consult. Psychol., 1957, 21, 83-87.
26. Kissen, B., Gottesfeld, H., and Dicks, R. Inhibition and tachistoscopic thresholds for sexually charged words. J. Psychol., 1957, 43, 333-339.
27. Lazarus, R.S., and Alfert, Elizabeth. Short-circuiting of threat by experimentally altering cognitive appraisal. J. abnorm. soc. Psychol., 1964, 69, 195-205.
28. \_\_\_\_\_, R.S., Eriksen, C.W., and Fonda, C.P. Personality dynamics and auditory perception recognition. J. Pers., 1951, 19, 471-482.
29. \_\_\_\_\_, R.S., and Hongo, N. The consistency of psychological defense against threat. J. abnorm. soc. Psychol., 1953, 48, 395-499.
30. Leary, Timothy. Interpersonal Diagnoses of Personality. New York, Ronald Press, 1957.
31. \_\_\_\_\_, The theory and measurement methodology of interpersonal communication. Psychiatry, 18, 1955, 147-161.
32. \_\_\_\_\_, and Coffey, H.S. Interpersonal diagnosis: some problems of methodology and validation. J. abnorm. soc. Psychol., 1955, 50, 110-124.

33. Linquist, E.F. Design and Analysis of Experiments in Psychology and Education. Boston, Houghton Mifflin, 1953.
34. Lomont, J.F., Personal communication with Byrne (see reference 11, p.189), 1963.
35. \_\_\_\_\_, The repression-sensitization dimension in relation to anxiety responses. J. consult. Psychol., 1965, 29, 84-86.
36. \_\_\_\_\_, Repressors and sensitizers as described by themselves and their peers. J. Pers., 1966, 34, 224-240.
37. Lorr, M., and McNair, D. An interpersonal behavior circle. J. abnorm. soc. Psychol., 1963, 67, 68-75.
38. Megargee, E.I., and Nendelsohn, G.A. The assessment of the chronically overcontrolled assaultive person. Unpublished manuscript, 1964.
39. Moses, M., and Duvall, R. Depreciation and the self-concept. J. clin. Psychol., 1960, 16, 387-388.
40. Rapaport, Gerald M. "Ideal self" instructions, MMPI profile changes, and the prediction of clinical improvement. J. consult. Psychol., 1958, 22, 459-463.
41. Rogers, G.R. A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.) Psychology: A Study of a Science, Vol.III:

Formulations of the Person and the Social Context.  
New York, McGraw-Hill, 1959.

42. Shannon, D.T. Clinical patterns of defense as revealed in visual recognition thresholds. J. abnorm. soc. Psychol., 1962, 64, 370-377.
43. Shippee-Blum, Eva Maria. The young rebel: self-regard and ego-ideal. J. consult. Psychol., 1959, 23, 44-50.
44. Siegel, S. Certain determinants and correlates of authoritarianism. Gent. psychol. Monog., 1954, 49, 187-229.
45. Smith Gene Marshall. Six measures of self-concept discrepancy and instability: their interrelations, reliability, and relations to other personality measures. J. consult. Psychol., 1958, 22, 101-112.
46. Speisman, J.D., Lazarus, R.S., Mordkoff, A., and Davidson, L. Experimental reduction of stress based on ego-defense theory. J. abnorm. soc. Psychol., 1964, 68, 367-380.
47. Suinn, Richard M., Osborne, D., and Winfree, Page. The self-concept and accuracy of recall of inconsistent self-related information. J. clin. Psychol., 1962, 18, 473-474.
48. Tempons, V.J. Differential thresholds of repressors and sensitizers as a function of a success and failure experience. Unpublished doctoral dissertation, University of Texas, Austin, Texas, 1962.

49. Tucker, Irving. Preliminary repression-sensitization research Arab students. Unpublished research, A.U.B., 1967.
50. Turner, Ralph H., and Vanderlippe, Richard H. Self-ideal congruence as an index of adjustment. J. abnorm. soc. Psychol., 1958, 57, 202-206.
51. Ullmann, L.P. An empirically derived MMPI scale which measures facilitation-inhibition of recognition of threatening stimuli. J. clin. Psychol., 1962, 18, 127-132.
52. Walker, Alan M., Rablen, Richard A., and Rogers, Carl R. Development of a scale to measure process changes in psycho-therapy. J. clin. Psychol., 1960, 16, 78-85.
53. Winer, B. J. Statistical Principles in Experimental Design. New York, McGraw-Hill, 1962.