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GRADUATE COLLEGE

THE INTERPERSONAL CHECK LIST AS AN INSTRUMENT IN PERSON PERCEPTION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

ROBERT LOWELL SPENCER

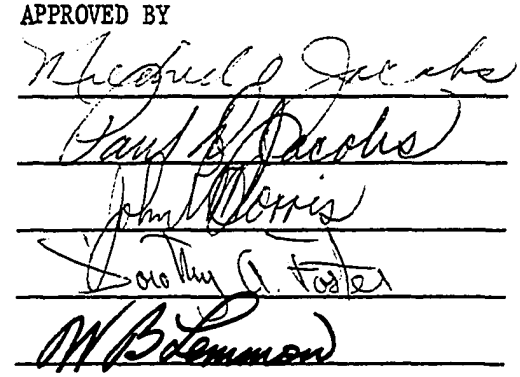
Norman, Oklahoma

1968

THE INTERPERSONAL CHECK LIST AS AN

INSTRUMENT IN PERSON PERCEPTION

APPROVED BY



DISSERTATION COMMITTEE

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THE INTERPERSONAL CHECK LIST AS AN INSTRUMENT IN PERSON PERCEPTION

CHAPTER I

INTRODUCTION

How individuals react to others and how individuals characterize others as reacting to them are important psychological variables. Interpersonal variables are salient factors in child socialization and development, in marital adjustment, in job satisfaction, in formal and informal organizations, in psychodiagnosis, and in psychotherapy.

In clinical psychology considerable attention has been given to the interpersonal realm. Szasz (1961) and Berne (1961) define psychological maladjustment primarily in interpersonal terms. Fairbairn (1952) and Searles (1965) have focused on introjected others as desiderata in psychotherapy, and have discussed how such internalized others determine and distort perceptions of others and interpersonal relations. Fairbairn (1952) has gone so far as to suggest that the major dynamic is not pleasure-seeking but object-seeking. The increasing use of group psychotherapy and psychotherapy with families has increased interest in interpersonal relations; such investigators as Boszormenyi-Nagy (1965), Bowen (1965) and Lidz, Fleck and Cornelison (1965) have suggested that psychopathology is more a function of interaction patterns than individual personality organizations.

However, psychological testing has scarcely kept pace with this burgeoning interest in interpersonal relations. Bales (1950), Leary (1957), Schutz (1958), and Stern (1958) have devised systematic ways of assessing interpersonal behavior, but these all have their limitations. The commonly used clinical tests such as the Rorschach, MMPI, Bender-Gestalt and Szondi have only a limited usefulness in assessing interpersonal relations, and only the TAT and similar picture techniques are oriented specifically towards interpersonal relations.

Thus instruments and methods are needed for assessing interpersonal behavior and for assessing how a person perceives his own and others' interpersonal behavior. These three classes of data, and the relationships among these three classes of behavior, constitute significant information in social psychology, in diagnostic evaluation and in evaluating psychotherapeutic processes and results. The purpose of this study is to show how an existing technique of assessing interpersonal behavior can be used more meaningfully and more accurately.

This study uses portions of the Interpersonal System of Diagnosis as developed by Leary and others at the Kaiser Foundation Hospital in Oakland, California (Freedman, Leary, Ossorio & Coffey, 1951; Leary, 1957). This system seems to come closer than any other present formulation or measurement method to meeting the needs for assessment of interpersonal perceptions and interpersonal behavior. In particular, the Interpersonal Check List (ICL), the major measuring instrument in the Interpersonal System, is used. The ICL can be viewed as a test of person perception--how a person views himself or another--and hence advantage can be taken of the relatively sophisticated methodology of person

perception to clarify the meanings of ICL data.

Description of the Interpersonal System

The Interpersonal System of Diagnosis posits five levels of personality, varying in degree of "depth," which is to say accessibility to consciousness or accessibility to public observation. Level I is the level of public communication, and includes the interpersonal mechanisms that are observable by others. According to Leary (1957), level I is indexed by ratings of trained personnel, by sociometric ICL descriptions by peers, by special MMPI indices, or by scores from standard situational tests. Level II is the level of conscious communication, and includes the verbal content of the statements a person makes about himself and others. Level II is generally indexed by the ICL. Level III is the level of private symbolization and consists of the themes occurring in fantasy, dreams or projective materials. Level III data are generally obtained from TAT stories or from special MMPI indices. Level IV is the unexpressed unconscious level and consists of themes significantly omitted in the three levels above; Leary has presented no methods for obtaining level IV data. Level V is the level of values, and consists of the person's ego-ideal--what he wishes he were like.. Level V data are generally obtained from the person's description of his "ideal self" on the ICL.

At each of the five levels the same interpersonal circle with the same arrangement of categories is used. (See Figures 1 and 2). In the most differentiated classification, 16 classes of interpersonal behavior are used, although more commonly adjacent categories are combined

so that only octants are used. The 16 (or 8) categories of interpersonal behavior are arranged into a circular order so that adjacent categories are similar in nature and categories at opposite sides of the circle are opposite in meaning. This interpersonal circle is supposed to include all of the significant categories of interpersonal behavior. Degrees of intensity or of extremeness of behavior are measured outward from the center of the circle, such that intense behavior is represented as falling at the periphery. An inner circle, as in Figure 2, is drawn to represent one standard deviation in intensity with respect to some population.

This interpersonal circle has two dimensions which are orthogonal to each other: Love-Hostility and Dominance-Submission, hereafter referred to as Lov and Dom. The Lov and Dom axes are portrayed in Figure 2.

Although the ICL (LaForge & Suczek, 1955; Leary, 1956; Leary, 1957) is only one of several methods for obtaining data in the interpersonal system, it is an important and often-used method as it is the only published test specifically designed for the system. The ICL (Form 4) consists of 128 words or phrases that describe interpersonal behavior (see Appendix A). Subject is asked to check those items that describe some particular person. Each item, for scoring purposes, is positioned in a particular sixteenth of a circle, and the phrases in each sixteenth are divided into four degrees of intensity as determined from their frequencies of endorsement. The least intense items are checked about 90% of the time, intensity 2 items are checked 67% of the time, intensity 3 items are checked 33% of the time, and intensity 4 items, the most intense, are checked about 10% of the time.

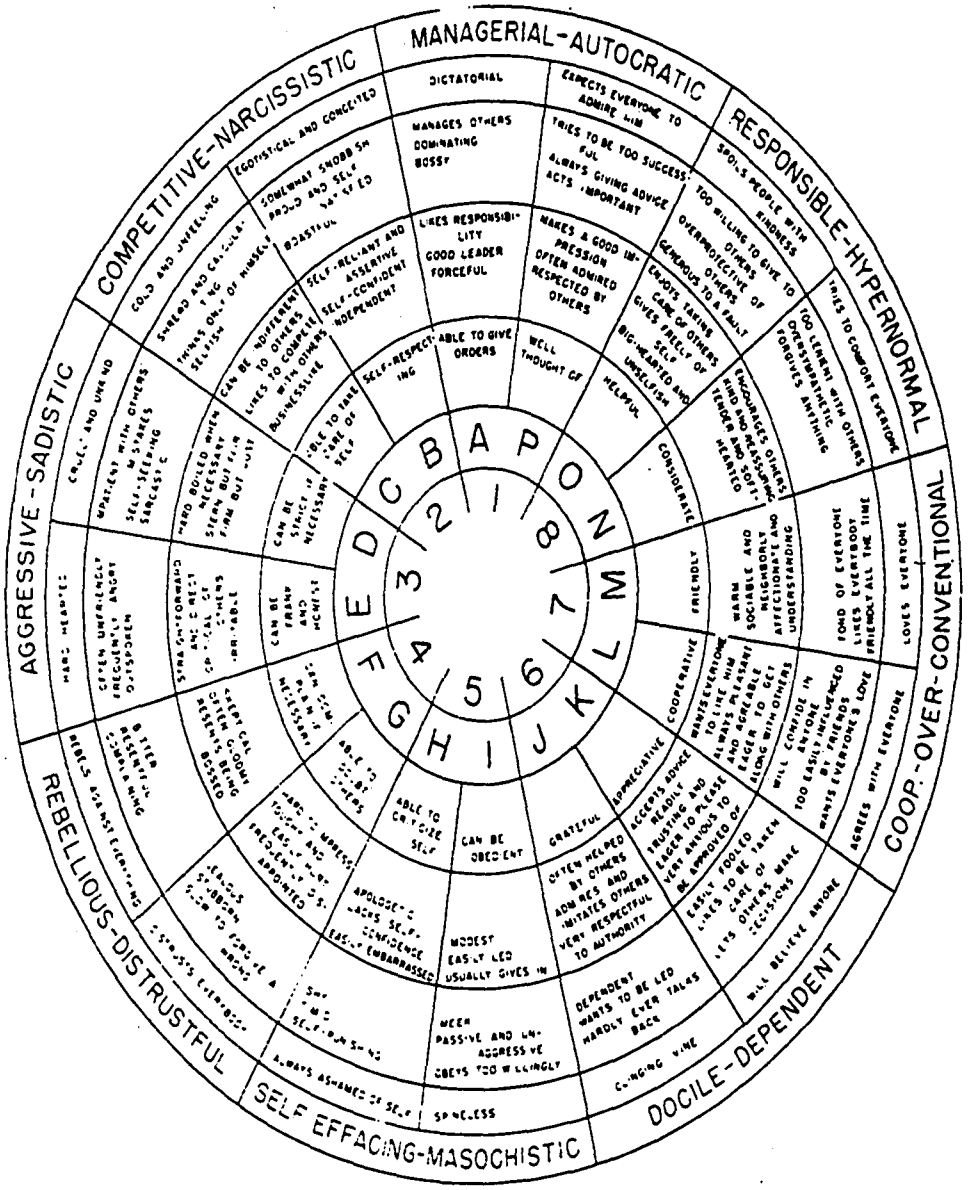


Fig. 1. Interpersonal Check List illustrating the classification of interpersonal behavior into sixteen variable categories

Timothy Leary -
INTERPERSONAL DIAGNOSIS OF PERSONALITY.
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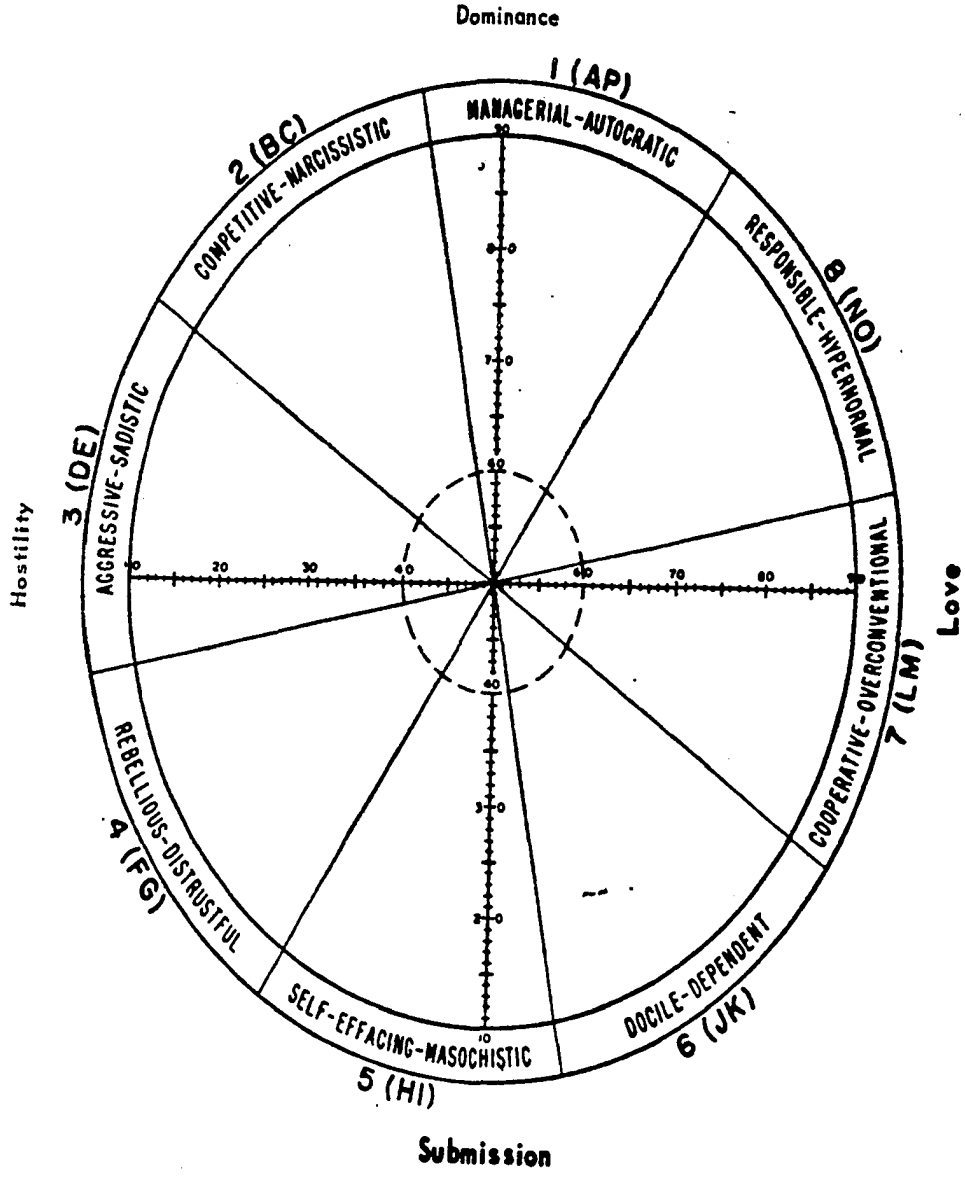


Fig. 2. Diagnostic grid showing the eight interpersonal variables in relation to the two dimensions of the circle.

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ICL data can be summarized in two ways. In the profile method, the relative emphases on each of the octants (or sixteenths) is determined from the number of items checked per octant. In the point summary method, the projections upon the Dom and Lov axes are computed by formulas derived from trigonometric relationships, and a description of a person is represented by a single point on the interpersonal circle.

Studies of the Structure of the ICL

The Dom and Lov dimensions. Many theoretical discussions and empirical studies have emphasized two dimensions similar to the Dom and Lov dimensions as defined in the interpersonal system. For example, Freud (1957), in "Instincts and their Vicissitudes," gave a prominent place in his discussion of defensive reactions to the change from active to passive and the change from love to hate.

Recent studies of interpersonal behavior have stressed these two dimensions explicitly. Foa (1961) and Adams (1964) discussed in detail the increasing convergences in the literature as to the significance of the Dominance-Submission and Love-Hostility dimensions in interpersonal behavior. Studies by Carter (1954), Schaefer (1959), Schutz (1958) and Chance and associates (Chance, 1959; Chance & Arnold, 1960; Chance, Arnold & Tyrell, 1962) have found factors similar to Dom and Lov to be highly significant in interpersonal behavior.

In social psychology, interpersonal attraction and status are major variables. Brown (1965), for instance, has studied ways of addressing others and related them to two dimensions of interpersonal relationships: solidarity (Lov) and status (Dom).

The circular order and the inclusiveness of the categories.

Foa (1961) has discussed the requirements for arranging a set of variables in a circular order. First a simplex pattern is required, in which variables are arranged linearly so that nearby variables are more highly correlated than variables farther apart. Then if the extreme positions are highly correlated, the variables can be arranged into a circle; if the variables at opposite sides of the circle are minimally or negatively correlated, then one has a circumplex order. For example, Borgatta, Cottrell and Mann (1958) factor analyzed 16 personality trait names and 24 behavior categories and found two major factors, Individual Assertiveness and Sociability. They then showed that the intercorrelations among the 13 variables loading most on the two factors could be arranged into a simplex pattern. As Foa (1961) pointed out, their data could be arranged into a circumplex pattern except that unsociable and unassertive traits were underrepresented. Schaefer (1959) and Stern (1958, 1962) similarly arrived at circumplex orders of interpersonal behaviors, and orders similar to that of the interpersonal circle of Leary et al.

Lorr and McNair (1963) used factor analysis on categories of interpersonal behavior and found three major factors: Control, Intropunitiveness and a bipolar factor with Affiliativeness on one end and Withdrawal and Hostility on the other end. The authors reanalyzed data from Stern (1958), Campbell (1959) and from the Interpersonal System and concluded that there was considerable similarity and overlap among the four sets of data. They concluded that much of the domain of interpersonal behavior could be arranged into a circular order, and that such an interpersonal circle is comprised of three basic ways of relating to

people: Control, Dependence and Affiliation vs. Detachment. Their hypothetical behavior circle based upon the four sets of data included 16 variables and was similar to the interpersonal circle in the system of Leary et al.

In a later study, Lorr and McNair (1965) discussed their Interpersonal Behavior Inventory, consisting of 160 statements about behavior. This inventory produces scores on 14 categories, 10 of which are highly similar to ICL sixteenths and arranged in the same order as the ICL sixteenths.

LaForge and Suczek (1955), Terrill (1961) and Wiggins (1961) have investigated the circular ordering of the categories in the Interpersonal System. They found that neighboring octants tend to correlate more highly than non-neighboring octants, and the correlations between octants are a decreasing monotonic function of the amount of separation between the variables.

Therefore, the conclusions of several investigators have been that most of the significant categories of interpersonal behavior can be appropriately arranged into a circular order, and these circles are fair approximations to the circle in the Interpersonal System. The interpersonal circle as described by Leary and associates has been shown to meet the requirements for a circular ordering.

Factor analyses of the Interpersonal circle. Briar and Bieri (1963) did a factor analytic and trait inference study of the ICL. The results of the factor analysis showed that the ICL measures two principal and orthogonal factors, Dom and Lov. A third factor, Inferiority Feelings, was also identified, but was thought to be possibly a pseudo-factor. The

trait inference part of the study consisted of giving four groups of subjects statements about hypothetical persons, describing them as either dominant, submissive, loving or hating, and the subjects scored the four hypothetical persons with the ICL. The differences between the mean octant scores of subjects receiving high or low Dom information or high or low Lov information were entirely consistent with the octant loadings on the Dom and Lov factors. The authors concluded that the findings of this double study provided general support for the bidimensionality of the ICL.

Wiggins (1961) factor analyzed ICL data and found three factors: Love, Hate, and a bipolar factor, Dominance-Submission. She had difficulty accounting for the orthogonality of Love and Hate. She suggested that the Hate factor was misnamed, and concluded that this factor is composed of diverse items for which it is difficult to give a single name.

LaForge (1963) reported that four factors best summarize ICL data: Dom, Lov, Ain (average intensity of items checked) and Nic (number of items checked). He suggested that other investigators who had found three orthogonal content factors had not taken Ain or Nic into account.

Thus considerable support has been given to the importance of Dom and Lov as the content factors of the ICL, and in addition response set factors of intensity and number of items checked may be important. Thus the ICL assesses Dom and Lov, which probably are the two most important factors in interpersonal behavior.

Response sets and the ICL. Response sets are characteristic ways of answering personality questionnaires or check lists, and may be considered as more or less consistent biases of the subject. Some investigators have considered response sets as artifacts to be removed

to obtain "pure" measures, but others have considered them to be valuable data in assessing personality.

Social Desirability (SD) has often been considered to be the most important response set in personality tests. SD refers to whether a subject believes a behavior or personality characteristic is considered to be desirable in his society. Edwards (1953) has shown that SD has a high correlation (typically, about .85) with the probability of endorsement of an item on a personality questionnaire. Edwards (1959) has also shown that liked persons are described as more socially desirable than persons who are not liked. Several investigators (Fordyce, 1956; Kogan, Quinn, Ax & Ripley, 1957; Sperber & Spanner, 1962; Wahler, 1958), using diverse instruments, have concluded that there is much similarity between describing oneself as socially undesirable and describing oneself as mentally ill. Giving socially desirable responses is also related to a repressive rather than to a sensitizing orientation (Byrne, Barry & Nelson, 1963; Feder, 1967).

On the ICL, Edwards (1957) found that SD and probability of endorsement correlates .83. Kogan (1963) found a correlation of -.73 between SD values of items and intensity levels on the ICL; hence, LaForge's Ain (average intensity of items checked) is largely a SD factor.

Acquiescence or "yea-saying" (the tendency to check many items) may not be very important on the ICL. LaForge (1963) showed that Nic (number of items checked) is closely related to Ain, as he obtained correlations of .67 for males and .57 for females. Rorer (1965) has argued that an Acquiescent set is probably not very important on most personality inventories.

Cognitive Complexity (see Bieri, 1955) may be a significant response set on the ICL. That is, some people use about the same phrases to describe everyone, whereas others differentiate highly among the persons described, both in the phrases used and in the summary scores derived. There is some evidence that Cognitive Complexity is associated with a sensitizing orientation (Altrocchi, 1961; Altrocchi, Parsons & Dickoff, 1960).

Reliability studies of the ICL. LaForge and Suczek (1955) reported average test-retest correlations to be .78 for octant scores and .73 for sixteenths. Armstrong (1958) found Kuder Richardson formula 20 reliabilities for the ICL as a whole to be .95. Wiggins (1961) found corrected intra-octant split half reliability coefficients (using the Spearman-Brown formula for double length) to range from .44 to .82 in the octants, with a mean of .70. LaForge (1963) obtained a direct measure of internal consistency from the communality of each of the sixteenth measures when their principal components were obtained. These ranged from .51 to .86. (When sixteenths are used, the communalities are based upon personality scales of only eight items.) These data suggest that the ICL has quite adequate reliability.

Summary of studies of the structure of the ICL. It has been shown that the two major dimensions of the ICL, Dom and Lov, have repeatedly been found to be among the two or three most important dimensions of interpersonal behavior. Several investigators have found that categories of interpersonal behavior can be arranged into circles much like the circle of the Interpersonal System, and most interpersonal behaviors can be included in this circle. The octants of the ICL meet the

requirements for a circular order. Factor analyses of the ICL have generally found that Dom and Lov are the two most significant factors. The response set of Social Desirability is important in ICL data, and response sets of Acquiescence and Cognitive Complexity may also be important. The ICL has been found to have adequate reliability.

The Validity of the ICL

Assessing the validity of psychological instruments is generally a complex task; in the case of the ICL, where some 50 studies have been done that bear on this point, a thorough discussion of validity would require more space than is warranted here.

Concurrent validity of the ICL has been approached by comparing ICL self descriptions with self descriptions of similar traits as defined by other instruments. Typically the correlations are positive, significant and low (Gynther, Miller & Davis, 1962; Zuckerman, Levitt & Lubin, 1961).

The ICL has been used to verify theoretical predictions in a wide variety of studies: in studying marital relationships (Bachove & Zubaly, 1959; Friedman & Lincoln, 1965; Levinger, 1963; Luckey, 1960abcd; Murstein & Glaudin, 1966); in studying alcoholics (Armstrong, 1957; Gynther & Brilliant, 1967; Hurwitz & Lelos, 1968; Kogan & Jackson, 1961, 1963abc; Mitchell, 1963); in studying mental patients (Dinitz, Mangus & Pasamanick, 1959); in studying changes due to training (R. Brown, 1964; Gaza, 1963; Kogan, Boe, Gocka & Johnson, 1966; McDonald, 1962a; McDonald & Gynther, 1963; Painton, 1966; Parsons, Altrocchi & Spring, 1964); in studying occupational role differences (Chenault & Seegars, 1962); in studying differences in socioeconomic status (Bieri & Lobeck, 1961;

McDonald & Gynther, 1965); in studying female delinquents (E. Brown, 1964, 1968); in showing changes due to group psychotherapy (Boe, Gocka & Kogan, 1966); in evaluating therapist-client relationships (Cripe, 1966; Heller, Myers & Kline, 1963; McNair, Callahan & Lorr, 1962); in studying families with disturbed children (McDonald, 1962b; Mitchell, 1966); and in other areas.

The present study is in part an assessment of the validity of the ICL. ICL responses probably convey some information about the interpersonal behavior of the person described, and probably convey some information as to the distortions in person perception of the perceiver. Insofar as the variance in ICL data can be apportioned into two parts, that due to the perceived and that due to the perceiver, then the validity of the ICL may be more clearly assessed.

Methodological Problems with the ICL

The major methodological problem with ICL research stems from the frequent use of discrepancy scores. Discrepancy scores arise when one compares the self-ideal self discrepancy for two sets of people (e.g., Dinitz, Mangus & Pasamanick, 1959), or when one compares how one person perceives another with consensual descriptions of the other's behavior (e.g., Dinitz, Mangus & Pasamanick, 1959). Discrepancy scores are also used to compare how a person perceives himself with consensual descriptions by others of the same person (e.g., Mitchell, 1963), or to compare one's perception of himself with one's perception of a parent (e.g., Bieri & Lobeck, 1961; Lockwood & Guerney, 1962). These comparisons are respectively referred to as self-acceptance measures, accuracy of person

perception, self-insight and identification. No matter which of these four theoretical concepts one is working with by the use of discrepancy scores, the methodological problems are quite similar.

A specific example illustrates some of the problems in the use of such discrepancy scores. Lockwood and Guerney (1962) defined the "self-dissatisfaction" score as the sum total of disagreements on ICL items when "self" was described in comparison with the description of "ideal self," each disagreement being scored as "plus 1." As Wylie (1961) has suggested: (1) adjective check lists should be factor analyzed and discrepancies based upon scores within factors rather than comparing discrepancies in toto over a multidimensional list; (2) when summing self-ideal self discrepancies over subjects, one should determine how much of the variance in the discrepancies is due to self and how much to ideal self, as it is often found that most of the variance in such a discrepancy measure is due to only one of the two parts; (3) summing absolute differences without regard to sign discards useful information.

Similarly Bronfenbrenner (1958) pointed out that much of the seeming identification found by having the subject describe himself and his parents on a check list occurs because of an intermediate response set in which the subject describes both himself and his parents in favorable terms.

There are some reasons to believe that response sets of checking relatively few items, responding to only a limited number of dimensions, or seeing oneself and all others as being similar might well be response sets that serve to make all discrepancy scores relatively small. For example, Luckey (1960a) and Lockwood and Guerney (1962) found that

several discrepancy scores were negatively correlated with some criteria of adjustment. Hence discrepancy scores in general may reflect a particular response set or personality style rather than the alleged concepts of identification, self-dissatisfaction, self-insight or accuracy of person perception.

One study that has dealt directly with the question as to the independence of discrepancy scores from an adjective check list is that of Lerman (1963). She had 83 college students describe self, ideal self, mother, mother's ideal, father and father's ideal with 79 adjectives. Then the correspondences between seven pairs of scores (for example, self-ideal self) were computed. Of the 42 such correlations, 35 were significant at the .05 level. It would appear that some sort of response set was operating so that all discrepancy scores covaried.

Thus, although discrepancy scores are frequently used in ICL research, there are several difficulties in the simple and straightforward use of these discrepancy scores. These difficulties have often not been faced in ICL studies, but have been squarely faced in several studies in the area of person perception. By the application of some person perception methodologies to the ICL, it will be shown how individual response sets can be isolated in ICL data so that spurious conclusions do not obtain. It can be seen that the parcelling out of response sets is the same problem as the separation of the total variance into that attributable to the perceiver and that attributable to the perceived.

Person Perception

Person perception is concerned with the process by which impressions, opinions or feelings about other persons are formed. With

the publication of a book on this topic (Tagiuri & Petrullo, 1958) and the inclusion of separate chapters on this topic in recent books in social psychology, person perception has come to be a more or less delimited area in psychology with its own problems, classes of variables, methodologies and theories.

In general, there are three types of variables in person perception: (1) the perceiver, who may vary in the constructs that are salient for him, his complexity or simplicity of personality organizations, his stereotypes, etc.; (2) the situation, which may involve varying types and amounts of information about the others, varying from photographs to extended personal acquaintance; (3) the stimulus object (person) who may vary in expressiveness, personality organization, etc. The judging instruments or tasks also vary, and have included trait ratings, predictions of behavior, postdicting scores on personality tests, and writing free global descriptions.

Experimental studies have tended to polarize around the subtopic of accuracy or the subtopic of process. Inasmuch as the present investigation is concerned with accuracy in person perception, the following sections will discuss some problems in research in accuracy of person perception and some of the findings in this area.

Some Problems in Research in Accuracy of Person Perception

A major consideration in research in accuracy of person perception relates to the criterion: How does one know the real characteristics of the object's personality? Previous studies have used one of three types

of criteria: responses of the object person, ratings or evaluations of associates, or evaluations by experts. Whether any of these methods constitutes a true personality assessment can be handled by asking the judge (J) to make a prediction as to how the object (O) will respond in a certain situation or by asking J to make a prediction as to how O will be evaluated. Accurate prediction of behavior assumes accurate perception of personality. However, predicting the descriptions by others is predicting the behavior of many and not one.

Most commonly, J is asked to predict how O will fill out some personality questionnaire, such as the MMPI. This is an objective and easily quantified method. However, this is a difficult task for J, as he must not just report on O's observed behavior, but J must estimate O's experience of himself and how honest O will be in describing this experience. The use of evaluations of associates may be a more representative and appropriate criterion, but such criteria are often more difficult to obtain and to quantify. Dana and Condry (1965) discussed this problem and argued for a criterion consisting of an average rating for each O on all variables by each J.

Whether J can be accurate would seem to depend in part on the amount and type of information available to J and on the type of judgment J must make. Seeing a person as displayed in a short movie film probably does not allow for as much accuracy as does extended acquaintance (for example, see Taft, 1966). Asking J to make a highly inferential judgment as to O's ego strength, for example, allows for less accuracy than asking for a judgment as to O's facial expressiveness. Many studies in this area have made the attainment of accuracy difficult by giving J

limited information about O and by asking for inferential predictions.

A major problem in assessing accuracy of person perception is the many statistical artifacts that are often involved. A couple of examples may make this clear. Consider first a situation in which employees are asked to rate their supervisor on a five point rating scale and he in turn is asked to predict their ratings of him. If a supervisor predicts that employees will rate him 5 (very good), then there will be a perfect correlation between the supervisor's perceptual accuracy and his receiving of high ratings as a supervisor. Second, consider another rating situation. Taft (1950) asked 40 graduate students to rate a number of fellow students on five point rating scales on several traits. Judging accuracy was defined by the sum of the differences between ratings given and the criterion ratings, which were the mean ratings by experts and peers. Inasmuch as the criterion ratings tended to regress towards a mean of 3, a cautious judge who rated everyone at 3 would get a better accuracy score than a judge who used extreme ratings of 1 or 5. Artifacts such as these were common prior to the middle 1950's when Cronbach, Gage and others (e.g., Cronbach, 1955; Gage & Cronbach, 1955) criticized naive empiricism in person perception research.

Several kinds of biases and response sets which can add error variance to accuracy scores have been listed by Cline (1964): (1) Social Desirability bias; (2) Assumed Similarity of J to O--J may respond to items on the assumption that O is like himself; (3) Acquiescent Set; (4) use of stereotype; (5) reactions of like or dislike, producing halo effects; (6) making use of an implicit personality theory, wherein J assumes that there is an invariant relationship between trait "a" observed

in O and traits "b," "c" and "d" (not observed but assumed to be correlated); (7) a tendency to make extreme ratings or judgments, or a tendency towards overdifferentiation; (8) semantic ambiguities in trait names. Most of these biases have been shown to affect accuracy scores (Shrauger & Altrocchi, 1964). Whether such biases should be controlled out or partialled out statistically so that they do not distort measures of accuracy, or whether such biases constitute the reasons for inaccuracy has been decided differently by different investigators.

Various types of scoring procedures to compute accuracy have been devised, appropriate to different judging tasks and criteria, and for controlling different response sets. Cline (1964) has listed many of these.

The most frequently used scoring procedure is the D^2 statistic, with Cronbach's (1955) analysis into the four component parts of Elevation, Differential Elevation, Stereotype Accuracy and Differential Accuracy. However, Cronbach (1958) subsequently criticized the D^2 method because it is dyadic and global. A dyadic statistic can appear to be a function of a difference, when in fact monadic elements, such as J response sets, may account for most of the variance. This surmise has been verified (Altrocchi, 1961; Bass & Fiedler, 1961; Crow and Hammond, 1957; LaForge, 1961). A global index disregards differences that might occur on different traits or item clusters considered separately.

The suggested rationale and statistical methods in Cronbach's (1958) article are particularly appropriate to the ICL and to this study. (Smith's 1966 analysis is similar.) First, Cronbach suggested organizing the items into orthogonal factors rather than using a global index over

a heterogeneous list. Second, J's "personality space," response biases or "implicit personality theory" can be determined by finding the mean and standard deviation for each factor for each J over all Os judged by each J, as well as by finding the correlational terms between the factors for each J. Then the mean scores on each factor attributed by each J are the constant biases or elevations; the standard deviations show the variability or differentiation within the factors; and the correlational terms show the covariation that is assumed between the factors. (See Figure 3.) Third, once the response biases have been removed, the perception of a particular O can be treated as a standard score, a deviation from J's mean or centroid. Further, dyadic or discrepancy scores can be measured with respect to J's frame of reference. It can be seen that such a transformation into standard scores minimizes the tendency for all discrepancy scores to be correlated as found by Lerman (1963).

Accuracy of Person Perception and Its Personality Correlates

A major question in person perception research is whether there is an ability of accuracy of person perception that is more or less consistent across judging tasks and across persons judged. Two major studies have addressed this question directly. Crow and Hammond (1957) concluded that their data did not demonstrate the generality of accuracy. What little individual consistency they found could be attributed to response sets rather than to accuracy. In another study of the same type, Cline and Richards (1960, 1961) concluded that there is some generality

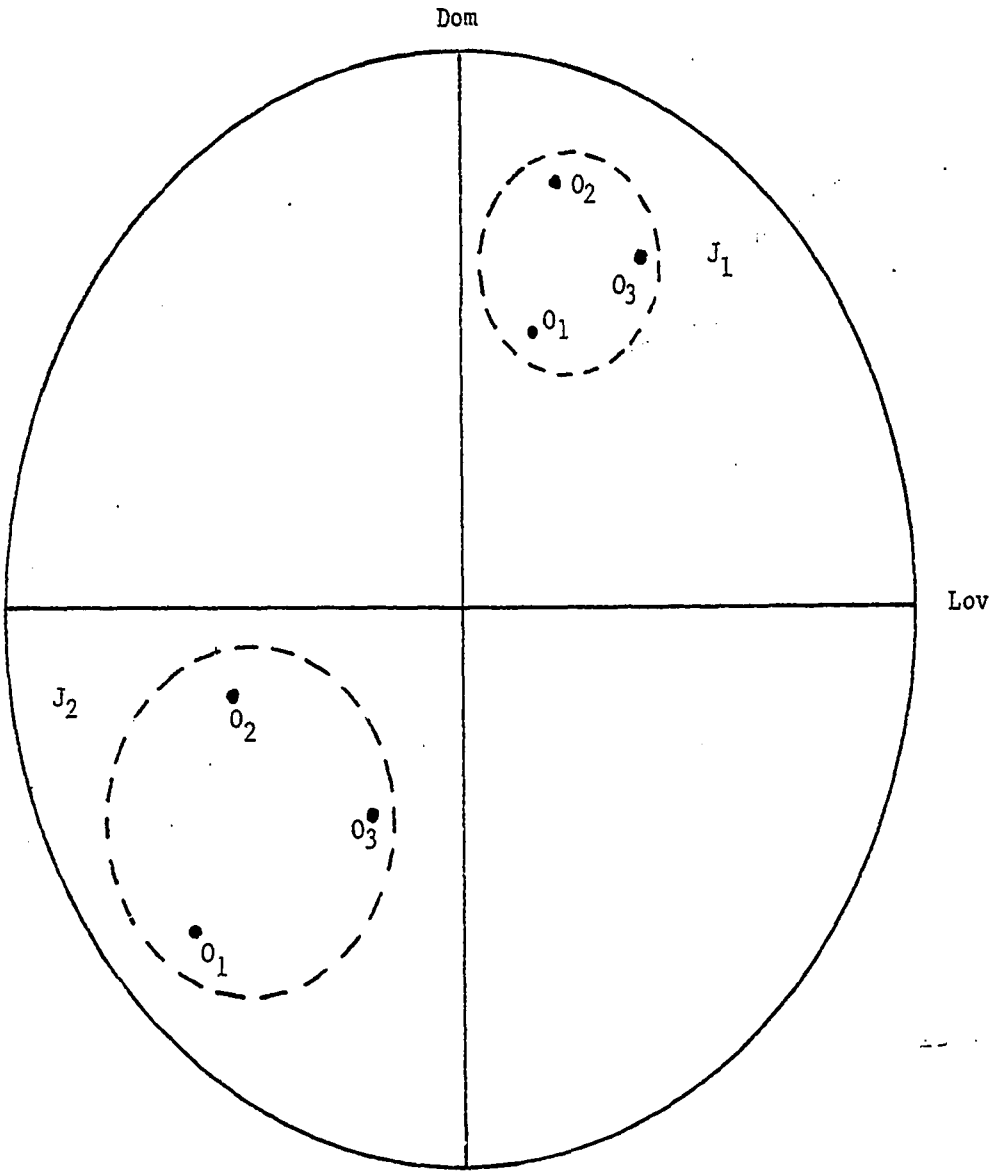


Fig. 3. Illustration of Cronbach's (1958) paradigm for removing response sets. $\underline{J}_1$ and $\underline{J}_2$ have each described the three persons $\underline{O}_1$, $\underline{O}_2$ and $\underline{O}_3$ similarly in relation to each other, but much differently in absolute values; this is so as $\underline{J}_2$ used a larger spread of judgments than $\underline{J}_1$, and $\underline{J}_1$ used a higher Elevation on Dom and Lov than $\underline{J}_2$. If the response sets are removed by setting the means and standard deviations equal, the two sets of descriptions will be congruent. (The correlation between the two factors is not depicted.)

in accuracy, although the average interinstrument correlation was only .25. In other studies bearing on this issue, Bronfenbrenner, Harding and Gallwey (1958) and Grossman (1963) concluded that accuracy was a consistent ability or set of abilities. Hatch's (1962) study, which entailed much methodological rigor and over 60 hours of computer time, found only slightly above chance accuracy by his 30 judges. Thus the evidence that there is a consistent ability of accuracy of person perception is tentative at best.

Several investigators have studied the personality characteristics of accurate subjects . Sechrest and Jackson (1961) found no personality correlates and Hatch (1962) concluded that accuracy was unrelated to human relations skills. Bronfenbrenner et al (1958) found accurate men to be tactful, inoffensive, warm and resourceful, and accurate women to be withdrawn, considerate and accepting. Murstein (1961, 1966) found accuracy as measured by ranking on hostility to be negatively related to the objective possession of hostility. Smith (1966), in his review of the literature, concluded that the accurate person is more intelligent, more tolerant, more independent, and is responsible and considerate with others.

Two hypotheses as to personality correlates of accuracy seem promising. First, accuracy might be positively related to mental health, as it is sometimes suggested that neurotics and psychotics do not assess themselves accurately, misperceive the behaviors and intents of others, and consequently behave inappropriately. Second, one might suspect that self-insight (perceiving one's own behavior accurately) is related to accuracy in perceiving others. Not only might accuracy in perceiving

persons be a general trait across self and others, but according to Secord and Backman's (1961) interpersonal congruency theory, one tends to distort the interpretation of one's own behavior to make it fit with the perception of the behavior of associates and vice versa, so that cognitive consistency obtains.

Some findings bear on the relationship between accuracy and mental health. Insofar as hostility is a nonadjustive trait, then Murstein's (1961, 1966) studies imply that accuracy and adjustment are positively related. Dinitz, Mangus and Pasamanick (1959) found that mental patients viewed others differently than the others viewed themselves, which also implies a positive relationship. Chance (1958) was unable to confirm or deny a relationship between mental health and accuracy. Baker and Block (1957) concluded that appropriately controlled Js were more accurate. Chance and Meaders (1960) described their accurate Js in terms that imply adjustment: active and outgoing, liking people without being dependent, and ascendent without being hostile or competitive. Cline (1964) concluded that his accurate Js had superior intellectual ability, had less pathological MMPI scores, and were less authoritarian and ethnocentric. Truax and Carkhuff (1967) concluded that less disturbed therapy clients perceived their therapists with significant accuracy, but hospitalized mental patients did not.

As to the relationship between accuracy and self-insight, there are only a few studies with sufficient methodological rigor to be worth citing. Murstein (1961, 1966) found no significant relationship between accuracy and self-insight with respect to hostility. Dana and Condry (1965) found positive relationships between accuracy and self-insight.

Dinitz, Mangus and Pasamanick (1959) found that their mental patients were inaccurate in perceiving others but accurate in describing themselves. Hence it is somewhat unlikely that accuracy and self-insight are related.

Some of Naboisek's (1953) findings are particularly worthy of attention, as he used a preliminary version of the ICL to study relationships among consensually described self, accuracy of person perception and self-insight. Naboisek used group psychotherapy patients, and divided them into four classes corresponding to their falling into four "ICL" quadrants according to a dual criterion of check list self descriptions and MMPI scores. The measures used were of composite individuals--all those who were classified into one of the quadrants. The most accurate group in describing another class described themselves by the dual criterion as in Class III (weak and hostile), and the least accurate group was Class I (strong and friendly). The classes varied as to which dimension (Dom or Lov) they were most accurate on: the weak classes were most accurate on Dom and the hostile classes were most accurate on the Lov dimension. Class II (weak and friendly) was most accurate in describing themselves, using consensus descriptions as a criterion and Class IV (strong and hostile) showed the least self-insight. In general, self description summary points and consensual descriptions by the other three classes fell in the same quadrants, suggesting a moderate degree of self insight for the subjects as a whole. These findings contradict Murstein's (1961, 1966) findings regarding accuracy and hostility, and seem to contradict the findings relating mental health to accuracy.

However, it should be noted that Naboisek's discrepancy scores were gross measures, as he used composite rather than individual scores.

One fairly consistent finding is that there are sex differences in person perception. Murstein (1961, 1966) found women to be more accurate than men. Bronfenbrenner et al (1958) found that there were behavioral differences between Js accurate in judging same-sexed persons and Js accurate in judging opposite-sexed persons. Further, specific sorts of male-female interactions in mixed-sex groups altered the accuracy scores for the groups. Cline (1964) reported that he had found sex differences in nearly all of his studies. He made separate analyses for male and female Js and recommended separate analyses for male and female Os.

Summary on accuracy of person perception. It is arguable whether there is a general ability of accuracy of person perception, but the evidence is generally positive. In general, it seems that accuracy of person perception is positively related to mental health, and accurate Js are warm, tolerant, intelligent, independent and non-authoritarian. Accuracy and self-insight do not seem to be related. There are marked sex differences in person perception. The problem of controlling response sets makes many studies in this area questionable, and widely varying tasks and procedures are used.

Cronbach's (1958) summary of person perception studies, "the literature has broken out with a rash of results which are interesting, statistically significant, and exasperatingly inconsistent [p. 353]," still seems timely.

CHAPTER II

PROBLEM

The ICL has shown much promise as an instrument for assessing the perceptions of interpersonal behavior of self and of others. However, clinicians have expressed doubt as to the meaning and interpretation of ICL scores, and these misgivings may well reflect unresolved logical and methodological problems with the ICL. A parallel dilemma is reflected in the experimental literature, where response sets and artifactual discrepancy scores have sometimes led to spurious conclusions from ICL data. The purpose of this study is to apply some of the logic developed in the area of person perception to ICL data so that some improvements can be made in clinical interpretation and so that experimental use of the ICL does not run afoul of statistical artifacts.

Conceptually, one person's perception of another on the ICL can be broken down into four meaningful components: (1) the consistent ways that J sees all Os--J's biases or response sets; (2) the actual characteristics of the O being described; (3) the characteristic and relatively unique way that the O behaves relative to the J doing the describing; and (4) J's perceptual distortions of a particular O's interpersonal behavior. The isolation of the first component resolves the major difficulties involved with discrepancy scores. To the extent that the four components can be isolated and assessed, the clinical meanings of ICL data become clearer. This study attempts to isolate the first two components.

Three different types of response sets seem to be particularly significant in ICL data. Although Social Desirability has been shown to influence ICL responses, the nature and extent of this influence is in need of clarification. Whether Js use characteristic levels of the factors, or have characteristic means over all Os described, is in need of assessment. Whether Js show a characteristic spread of judgments or a characteristic degree of differentiation over the factors also needs clarification.

Because the above investigations result in assessments of the accuracy of perception of the interpersonal behavior of others and of self, it is important to determine whether some Js are more accurate at person perception than others, whether some Js are more insightful into their own interpersonal behavior than others, and whether the accurate and insightful differ from the inaccurate and uninsightful in some characteristics, if indeed there are interjudge differences. Not only would such findings be useful in clinical interpretation of ICL protocols, but might be of some interest in the more general field of person perception.

Subjects were chosen in part to assure maximum generalizeability to the clinical and experimental populations generally used in work with the ICL. Groups of normal, moderately disturbed and hospitalized mental patients were used because of the frequent clinical use of the ICL with these populations. Only males were included in these groups because of the complications previously found in person perception research involving both males and females. Families were also used in another part of the research as families are frequently assessed with the ICL for both clinical and experimental purposes.

This study makes use of consensual descriptions by peers as the criterion of the real interpersonal behavior of the subjects. This seems to be a reasonable assumption in view of the extended and often intimate acquaintances among the subjects. However, because of the possibility that agreement among peers might represent agreement in error rather than agreement in truth, another group of subjects was employed to test this assumption. This group of subjects consisted of beginning graduate students (peers) and some clinical experts who knew the beginning graduate students. The agreements between the clinical experts and the consensual peer descriptions served as a check on the objectivity of the consensual peer evaluations as assumed in the later phases of the study.

The specific hypotheses were:

1. Individual judges tend to describe all persons similarly; that is, judges have characteristic response sets consisting of similar levels or means on particular factors over all Os judged.

2. Objects are described with some similarity by different judges; that is, there is some accuracy in ICL descriptions.

3. Judges have characteristic differences amongst them in the spread of scores used in describing others.

4. Judges vary in the Social Desirability attributed to others.

5. Consensual descriptions of objects vary in the dimension of Social Desirability; that is, persons vary in the Social Desirability of their interpersonal behavior.

6. Judges vary in the accuracy with which they describe others.

7. Judges vary in the accuracy with which they describe themselves.

8. Accuracy in describing others and self-insight (defined as accuracy in describing own interpersonal behavior) are positively related.

9. The more mentally healthy a man is, the more accurate he is in describing others.

10. The more mentally healthy a man is, the more self-insight he demonstrates.

CHAPTER III

METHOD

Subjects

Phase I; Students. The 42 student subjects were clinical aspirants in an introductory graduate course in clinical psychology. They ranged in age from 21 to 49, with a median age of 24. Thirteen were female, 15 had masters' degrees, 20 were married, and they had graduated from colleges in 19 states. Part of their required activities for the course consisted of weekly one hour meetings in small groups of 3, 4, or 5 students with an advanced graduate student consultant. During these 15 meetings, the major purpose was to discuss how to administer and write up a Stanford-Binet Intelligence Test; secondarily, it gave the clinical aspirants and advanced clinical students a chance to get to know each other and evaluate each other. The four advanced graduate students who conducted these group meetings comprised one consultant group which made criterion descriptions on the ICL. These four graduate students had partial responsibility for evaluating the clinical aspirants for the clinical training program. Besides the advanced graduate student consultants, there was a second group who made criterion descriptions of the clinical aspirants. This was a group of five staff members: three had doctoral degrees in clinical psychology and from 5 to 11 years of professional experience, one was a recent doctorate in clinical psychology, and one was completing an internship in clinical psychology. These

five staff members each had one individual 45 minute interview with the clinical aspirants, and in addition some had other contacts, such as being in class together, observing the students in a televised interview, etc.

Phase II; Male Groups. The 96 male subjects were in 12 groups of 8 each, four groups each of normals, moderately disturbed, and institutionalized mental patients.

The first normal group was Fraternal Group, the members of which met weekly for social as well as charitable purposes such as the sponsoring of a Boy Scout troop; many had known each other for more than 8 years. Work Group I went out on trucks in small groups of two or three to do electrical repair; in addition, they congregated for about one half hour per day to get work assignments, talk, play dominoes, etc., and during bad weather would be together all day long at the work center. Half of the group had been working there for more than 10 years. Work Group II also did electrical repair work, but they generally went out singly. They spent about one half hour per day together, getting their work assignments and turning in reports of work completed. Half of this group had been employed in this fashion for more than 10 years. Church Group I had been attending the same Sunday School class regularly, most of them for more than 15 years. In addition, many attended other church functions and had mutual business contacts, and a few met socially at nonchurch functions.

The first disturbed group was Church Group II. This was a Sunday School class of single men who discussed problems in living and in dealing with women, with the help of a clinical psychologist. They

had met regularly for 3 years or more, and besides their discussion meetings went to social functions such as dancing and bowling. The Therapy Group met for 2 hours a week to discuss individual problems. Most of them were unemployed. Their length of attendance varied from 1 to 8 months. Alcoholic Group I was composed of men who either were currently living in or who had recently left a small private residential center for alcoholics. These men maintained the house, worked at a social service center, and participated in discussions together, spending most of their time together. Their lengths of mutual contact varied from 1 week to 2 years. Alcoholic Group II was an Alcoholics Anonymous group which met twice a week. The leader described this as a particularly frank and intimate group where many personal problems were discussed. Most of the men had been in the group for 4 years or more.

The first hospitalized group, VA-1, was from one psychiatric ward of a Veterans Administration Hospital. They had been participating in recreational therapy, group therapy, occupational therapy, etc., and living together on a ward. The diagnoses, lengths of stay and numbers of prior hospitalizations for this and the other three hospitalized groups are displayed in Table 1. VA-2 was from another psychiatric ward of the same hospital, with similar daily activities. State-1 subjects were from a large locked ward of some 60 men in a state mental hospital. The men were idle together on the ward for most of the day, although they participated in large group counselling for one hour per day and some worked on the grounds part time. State-2 subjects were from the same ward as the State-1 subjects.

TABLE 1

Hospitalized Subjects: Diagnosis, Length of Stay, and Number of Prior Hospitalizations

Diagnoses		Days in Hospital (Range and Mean)	Number of Prior Hospitalizations (Range and Mean)
VA-1			
Schizophrenia	3	12-52	0-12
Depression	2		
Anxiety Reaction	1	33	4
Depressive Reaction	2		
VA-2			
Schizophrenia	2		
Schizophrenic reaction	2		
Paranoid schizophrenic	1	28-101	0-11
Emotionally unstable personality	1	57	2
Anxiety reaction severe	1		
Psychosis, unclassified	1		
State-1			
Paranoid schizophrenic	2		
Schizophrenic reaction, catatonic type	1		
Schizophrenic reaction, schizo-affective type	1	17-3960	0-11
Manic depressive	1		
Psychopathic personality	1	588	3
Reaction depression	1		
Psychoneurotic depressive reaction	1		
State-2			
Paranoid schizophrenic	5		
Psychotic depressive reaction	1		
Psychoneurotic depressive reaction, with alcohol addiction	1	18-165 90	0-11 4
Schizoid personality	1		

Selection of groups was dictated largely by estimates of the mean age, education and socioeconomic status of the groups. The attempt was made to equate the groups on these variables, as well as in the amount of interpersonal contact. Socioeconomic status for each subject was determined as being 1 (highest), 2, 3, 4, or 5 on the basis of occupation, education and religious affiliation. (See Appendix B for method of determining socioeconomic status.) It can be seen in Table 2 that the groups and classes (normal, disturbed, hospitalized) are fairly homogeneous in age, education and socioeconomic status. Although the mean number of hours of acquaintance varied considerably, these figures represent only gross estimates, and do not take into consideration the nature of the togetherness. For example, although Therapy Group averaged only 30 hours of mutual acquaintance, there were only 8 - 10 in the group and the group was fairly open and intimate, whereas the Fraternal Group meetings sometimes had 20 or more in attendance, and some of the togetherness consisted of sitting as an audience at a business meeting.

Participation of the organizations and participation by men in the organizations were often influenced by the willingness to participate. Among the normal and disturbed groups, less than one in four of the organizations contacted consented to participate. But once a group agreed to participate, most of the regular and longstanding members did complete the forms. In the hospitalized population, selection was not only by length of stay, age, etc., but also only those who were thought to be able to perform the task in a competent manner were solicited. Thus those who were unusually depressed, obviously irrational, negativistic, or whose vision was blurred were excluded. Approximately 90% of the mental patients approached agreed to cooperate.

TABLE 2

Male Group Subjects: Means of Groups and Classes on Age, Socioeconomic Status and Hours of Acquaintance

	Age	Years of Education	Socioeconomic Status	Estimated Hours of Acquaintance
Normals				
Fratneral Group	40	13.0	2.9	300
Work Group I	36	11.4	3.8	3000
Work Group II	36	11.8	3.6	1000
Church Group I	42	13.4	2.9	1500
Disturbed				
Church Group II	44	15.0	2.9	200
Therapy Group	37	14.9	3.2	30
Alcoholic Group I	44	12.5	3.3	600
Alcoholic Group II	50	12.1	3.1	500
Hospitalized				
VA-1	43	10.9	3.1	400
VA-2	39	12.1	3.5	600
State-1	35	10.6	3.9	900
State-2	34	11.6	3.9	700
Normals	38	12.4	3.3	1450
Disturbed	44	13.6	3.1	330
Hospitalized-	38	11.3	3.6	650

Phase III; Families. Ten families were obtained by asking students in a large sophomore psychology course to volunteer if there were six members in their family who were 13 years of age or older who would be likely to participate. Of the 15 such student volunteers, complete data were received from 10 families. Most of the families were intact and living in one home, but in some cases a child was away at school during the week, or a married child lived separately but nearby. The usual family consisted of two parents, with ages ranging from 40 to 60, and four children in the age range of 14 to 30. The mean years of education for the fathers was 13.3 years; the mean socioeconomic status was 2.9. These families reflected a broad spectrum, embracing urban and rural residents, six different religious affiliations, and reported yearly income varied from $4,500 to $100,000; paternal occupations included a civil service worker, an oil producer, a life insurance executive, a motel owner and a kitchen aide.

Procedures

The form of the ICL used was the approximately alphabetical order of the 128 words or phrases as listed by LaForge (1963). All 128 phrases were on one legal size dittoed page, with a circle in front of each phrase for checking an answer. (See Appendix C for the ICL format used.) The use of an approximately alphabetical order rather than listing the items by octant and intensity as was done in the form of the ICL published by Leary probably minimized tendencies for the subjects to discover the dimensions tapped by the check list. Separate sheets were used for each person described, and this tended to encourage the subjects to describe

persons independently without ready reference to the persons previously described; again, this is in contrast to the ICL forms published by Leary. Thus the format used served to minimize response sets.

The directions for student, male group and family member subjects were quite similar, in that subjects were instructed to check an item if it applied and to leave the circle blank if it did not apply or if there was much doubt as to whether the item applied. The actual directions, one set for students, student consultants and staff for Phase I, and one set for the male groups and families of Phases II and III, are reproduced as Appendix D and Appendix E.

Some identifying information was requested of male group subjects in Phase II and from the fathers in Phase III. The information requested was: age, highest school grade completed, marital status, main occupation, 1967 gross income, and church preference.

Information as to age, education, marital status and place of college graduation of the students in Phase I was obtained from informational material provided by the students as part of the usual course procedures.

The beginning graduate students, consultants and staff of Phase I were given the ICL forms and the sheet of written instructions, and asked to return the completed forms at a later date. The ICL forms and written instructions were passed out to the student-children of Phase III and the family member subjects returned the forms by mail in separate envelopes. In Phase II, all of the normal subjects and half of the disturbed subjects were given ICL forms and instructions as in Phase III and asked to mail in the completed data. The groups of hospitalized subjects,

the Therapy Group, and Alcoholic Group I each sat together as a group filling out the forms and handed the data in before they left the room.

Data Analysis

The basic scores used in the analysis of the data consisted of the profiles or scores on the octants, the Dom score, the Lov score, and the SD score. The octant scores were obtained by adding the number of items checked that were positioned in each octant. The Dom and Lov scores were computed from Leary's (1956) formulas,

$$\text{Dom} = 0.7(\text{BC} + \text{NO} - \text{FG} - \text{JK}) + \text{AP} - \text{HI}$$

$$\text{Lov} = 0.7(\text{JK} + \text{NO} - \text{BC} - \text{FG}) + \text{LM} - \text{DE}$$

where the double letter symbols refer to octant scores. The SD score was obtained by finding the mean of the SD values of the items checked. The SD values for the items were obtained from W. S. Kogan, and are reproduced in Appendix A along with the sixteenth and intensity designation for each item.

The computational paradigm used with the factor (Dom, Lov and SD) scores to isolate response sets has been outlined above in the discussion of Cronbach's (1958) recommendations for analyzing person perception data.

Another computational paradigm was also used, both to verify and to supplement the analysis by factors. This paradigm uses octant scores or profiles. The computational procedures were developed by Hays (1959) specifically for the ICL in order to determine the degree of similarity or dissimilarity between two or more profiles. Hays pointed out that the use of rank order correlation or a chi square comparison to

compare profiles disregards an important characteristic of ICL profiles: the circular order. That is, the fact that adjacent categories on the circle are more highly correlated than distant categories should be incorporated into the statistical analysis. To this end, Hays developed a Circle Dissimilarity Index (CD*) which expresses the dissimilarity of two profiles while taking into account the differential correlations among the octants. CD* can vary from 0 (complete similarity) to 1 (complete dissimilarity). Hays also described an Average Dissimilarity Index ($\overline{CD}$*) to characterize the profile dissimilarities among all pairs of a number of profiles.

CHAPTER IV

RESULTS

Before proceeding to a discussion of the substantive results of the two major phases of the study, those using the male group subjects and the family member subjects, two assumptions will be examined. (1) Much of the analysis hinged on the independence of Dom, Lov and SD; hence, whether these factors are correlated had to be determined. (2) As the criterion of accuracy of perception was the consensual descriptions by peers, some determination had to be made as to whether such consensual descriptions primarily reflected common misperception or objective assessments of interpersonal behavior.

The correlations among Dom, Lov and SD are displayed in Table 3. These were computed from the 768 male group protocols and from the 360 family protocols. It can be seen that the Dom-Lov and Lov-SD correlations were nonexistent to slight, but the Dom-SD correlation was moderate, averaging .57 for the two sets of data.

Whether agreement among peers can be regarded as common misperception or as accurate perception can be partially answered by reference to the Phase I data from graduate students and staff.

The Average Circle Dissimilarity Indices ($\overline{CD}$*s) between the student peers and the clinical experts are presented in Table 4. "Peer Mean" represents the mean octant profiles of two to four students describing another student, "Self" represents the octant profile of the

TABLE 3

Correlations between Dom, Lov and SD

	Male Group Data (N = 768)	Family Data (N = 360)	$\bar{r}$
Dom-Lov	-.231***	-.088	-.160***
Lov-SD	.370***	.245***	.308***
Dom-SD	.485***	.648***	.566***

***$p < .001$, two-tailed

TABLE 4

Student Data: Relative Accuracy by Profile Dissimilarities (CD* Scores)

	N	$\overline{CD}$*	s	t
Peer Mean vs. Student Consultants	42	.031	.036	3.08**
Peer Mean vs. Consultant Pairs	42	.027	.023	3.43**
Self vs. Student Consultants	42	.042	.037	2.49**
Self vs. Consultant Pairs	42	.036	.031	2.90**
Randon CD*s	20	.089	.080	--

**$p < .01$

student as given by himself, "Student Consultant" represents the octant profile as given by one advanced graduate student consultant, and "Consultant Pair" represents the mean octant profile given by pairs composed of one advanced student and one staff member. CD* represents the amount of dissimilarity between the designated pairs of profiles, where "0" reflects complete similarity and "1" reflects maximum dissimilarity.

Although CD* can vary from 0 to 1, a CD* value of .2 or higher was extremely rare in these data, probably because of consistencies in the ways that subjects use the ICL. Hence, some baseline was needed to determine the values of CD* that would reflect chance similarity. For this purpose, 20 pairs of profiles were drawn at random; for example, S 23's description of S 24 was compared with S 42's description of S 38. In this manner, a distribution of random CD*s was generated for comparison purposes. The data in the last row of Table 4 are for these random CD*s.

Each of the four experimental distributions of CD* was compared with the random distribution by t test. All four experimental distributions differed significantly from the random distribution. This demonstrated that both the Peer Mean profiles as a whole and the Self profiles as a whole represented significant accuracy, using the consultant profiles as criteria. (As might be surmised, many of the individual Self and Peer Mean profiles appeared to reflect no accuracy at all.)

To obtain an estimate of the degree of relationship between Self profiles and Peer Mean scores on the one hand, and consultant scores on the other hand, correlations on the three factors of Dom, Lov and SD were calculated. These correlations are displayed in Table 5.

It can be seen from Table 5 that the correlational analysis by

TABLE 5

Student Data: Degree of Accuracy by Correlations on Dom, Lov and SD (N = 42)

	Dom	Lov	SD	$\bar{r}$	$\overline{\%}$ Variance Explained
Peer Mean with Student Consultants	.59***	.41**	.47***	.49***	24
Peer Mean with Consultant Pairs	.58***	.52***	.48***	.53***	28
Self with Student Consultants	.37**	.32*	.29*	.33*	11
Self with Consultant Pairs	.40**	.44**	.33*	.39**	15

*$p < .05$, one-tailed
**$p < .01$, one-tailed
***$p < .001$, one-tailed.

factors verified the results from the CD* analysis in that there was a significant degree of accuracy associated with Peer Mean scores as a whole and with Self scores as a whole; this is shown by the consistently significant correlation coefficients. However, the $\bar{r}$ between Peer Mean and Consultant Pairs over the three factors was only .53, which means that there was also considerable inaccuracy in perception of interpersonal behavior in the Peer Mean scores.

Phase II; Data from the Male Groups

Three analysis of variances were performed on the raw male group scores, one analysis each for Dom, Lov and SD. These calculations could not be done in a single analysis because of the obviously differing values of SD relative to the other two factors, and because of the varying correlations over the three factors. The results of these analyses are displayed in Table 6. The between class (that is, over the mental health dimension) variance was nonsignificant on two factors and was significant at the .05 level on SD. The between groups variance was non-significant on two factors but was significant at the .05 level on Dom. Thus the group and class dimensions had relatively little effect upon ICL descriptions. The between judges variances on all three factors were highly significant; this means that judges had characteristic response sets consisting of levels of factors attributed to all others. The between objects variances were highly significant on all three factors, indicating significant agreement among the group members as to the interpersonal characteristics of particular others.

Over all three of these analyses, 5% of the total variance is estimated as attributable to the class effect, and 7% is attributable to

TABLE 6

Male Group Data: Analysis of Variance Using Raw Dom, Lov and SD Scores.

		Dom		Lov		SD		
	df	MS	F	MS	F	MS	F	$\overline{\%}$ Variance Explained
Class (normal, etc.)	2	1431.6	2.93	160.2	.47	24.24	5.94*	5
Group (within Class)[a]	9	489.8	2.18*	341.2	1.06	4.09	1.44	7
Judge (within Class and Group)	84	80.8	2.66***	116.3	2.51***	1.90	4.64***	19
Object (within Class and Group)	84	158.8	5.22***	250.3	5.40***	1.23	3.00***	27
Judge X Object (within Class and Group)	588	30.4		46.4		.41		42

[a]Group tested by quasi F ratio, $F'' = \frac{MS_G + MS_{JO}}{MS_O + MS_J}$, because direct application of the rules based upon expected values of mean squares did not produce an appropriate F ratio.

*$p < .05$
**$p < .01$
***$p < .001$

group characteristics. Approximately 10% of the total variance is due to level response sets of the Js, and about 27% of the variance is attributable to agreement as to O characteristics. A rather large proportion (42%) of the total variance is attributable to error in these analyses.

It can be noted that there were highly significant differences between Js and between Os on SD, which suggests the importance of this factor. As the magnitude of the Fs for SD were commensurate with the equivalent Fs for Dom and Lov, the implication is that SD is equally potent as a determiner of ICL descriptions. There was a reversal with SD, however; the F for SD was higher for the between J variance than for the between O variance, which was not true for Dom and Lov. This suggests that SD may be more in the eye of the beholder than it is a characteristic of the actual O.

The octant scores were used to compute Average Circle Dissimilarity Indices ($\overline{CD}$*) over scores attributed to others by each J and over scores received by each O. This resulted in two distributions, one of dissimilarities of profiles given by Js and one of dissimilarities of profiles received by Os. In order to provide a comparison baseline, a third distribution of $\overline{CD}$*s was generated by randomly putting together 120 groups of five profiles apiece from the family data, resulting in a distribution of random $\overline{CD}$*s. As can be seen in Table 7, there was a highly significant similarity among profiles received by Os and a highly significant similarity among profiles given by Js. These results confirmed the results from the analysis of variances above, in that both level response sets and agreements as to O characteristics were significant.

TABLE 7

Male Group Data: Average Circle Dissimilarity Indices ($\overline{CD}$*s) Given by Js and Received by Os, Compared with Random $\overline{CD}$*s.

(N = 96)

	Mean of $\overline{CD}$*s	$\sigma_{\overline{CD}}$*	t
Given by Js	.052	.039	2.45**
Received by Os	.041	.026	5.48***
Random	.065	.038	---

**p < .01, one-tailed
***p < .001, one-tailed

TABLE 8

Male Group Data: Correlations Between Standard Deviations of J Attributions on Dom, Lov and SD to Assess a Response Set of Differing Spread of Judgments

	N	$r_{\sigma_D \sigma_L}$	$r_{\sigma_L \sigma_{SD}}$	$r_{\sigma_D \sigma_{SD}}$	$\bar{r}$
Class 1: Normals	32	.54**	.14	.31*	.33*
Class 2: Disturbed	32	.71***	.20	.18	.36*
Class 3: Hospitalized	32	.50**	.27	.51**	.43**
Over All Classes	96	.59***	.25**	.37***	.40***

*p < .05, one-tailed
**p < .01, one-tailed
***p < .001, one-tailed.

To assess the presence of a response set of differing variability or spread of judgments among Js, correlations between the standard deviations on Dom, Lov and SD as attributed by each J were determined, both for the classes separately and for Js in all three classes taken together. These results are presented in Table 8. These results are somewhat difficult to evaluate, as the correlations between the standard deviations on the factors were probably influenced to some extent by the correlations between the raw factor scores. Thus, although most of these correlations between standard deviations were significantly different from zero, only the correlations between standard deviations on Dom and Lov were significantly different ($p < .01$) from the respective correlations between the raw factor scores. To clarify the question as to the existence of a response set of varying spread of judgments between Js, Hartley F_{max} tests were calculated for the variances within factors and within groups. Of the 36 such tests, 12 were significant at the .01 level (four for each class), thus indicating significant differences in variability between Js within groups and factors. The results of the two types of statistical calculations regarding spread of judgments by Js demonstrates that Js do vary significantly in their spread of judgments, and this effect is not specific to the class.

An analysis of variance was calculated to determine whether there were differences among classes, groups or Js in their accuracy of person perception. First, the raw factor scores were converted to standard scores by finding the mean and standard deviation of each J's scores on each factor separately. The description of an O by a J was thus expressed relative to a J's description of all Os described by him, with both level

and spread response sets statistically removed by expression in standard scores. Then the mean standard score received by each O (with the exception of the score given to him by himself) was determined as a consensual standard score for that O. The absolute difference between the standard score given to an O by a J and the consensual standard score for that O represented the inaccuracy by a J in describing an O. Only accuracy on Dom and Lov were used, as the modest raw factor score correlations between SD and the other two factors might have resulted in spurious agreements in the calculations as to consistency of accuracy. Thus each J had 14 values reflecting his accuracy of person perception. This matrix of absolute standard difference scores was used in a five way analysis of variance (Class X Group X Judge X Factor X Replications, with Group nested in Class and Judge nested within Group and Class) to determine differential accuracies.

The results of the analysis of variance on accuracy of person perception are displayed in Table 9. It can be seen that there were no consistent differences between Js and classes in accuracy. Further, neither Dom nor Lov were judged more accurately than the other. There was a highly significant difference in accuracy among the groups, and, as the Factor X Group interaction was significant, some groups were more accurate on one factor and some groups on the other.

In order to determine whether Js were consistent across Dom and Lov in accuracy of self-description, absolute standard difference scores, two for each J, were calculated in the same way as for deriving the above absolute standard difference scores for accuracy in perceiving others. These absolute standardized difference scores were differences between

TABLE 9

Male Group Data: Differences in Accuracy of Person Perception; Analysis of Variance Using Standardized Difference Scores to Eliminate Response Sets

Factor	df	MS	F
Class (normal, disturbed, or hospitalized)	2	.712	1.47
Factor (Dom or Lov)	1	.103	.25
Group (within Class)	9	.485	3.68**
Judge (within Class and Group)	84	.131	.80
Class X Factor	2	.071	.18
Group X Factor	9	.405	2.04*
Judge X Factor	84	.198	1.20
Replications (within Class, Group, Factor and Judge)	1152	.165	--

*$p < .05$
**$p < .01$

standardized self scores and standardized consensus scores. Then a correlation was computed between the Js' Dom and Lov self-insight scores. This correlation of .29, although significantly different from zero at the .01 level, may have been inflated by the significant (-.23) correlation between Dom and Lov raw scores. Hence, having only two fairly independent measures of self-insight, and the correlation between these two measures being of questionable significance, there is little evidence if any for within J consistency in self insight.

Finally, the groups and classes were compared on several other characteristics to determine what significant differences there might be. (See Table 10.) All of these calculations were by analysis of variance.

The groups and classes were compared as to their differential use of response sets, using the $\overline{CD}$*s for Js. Groups did not vary in the use of response sets but the classes did. Inasmuch as the mean $\overline{CD}$* for normal Js was .039, for disturbed Js was .059, for hospitalized Js was .059, and for random Js was .065, it is clear that normals used consistent level response sets but the disturbed and hospitalized Js did not.

A similar analysis of variance but using $\overline{CD}$*s received by Os was done to determine whether there were differences between groups and/or classes in agreement as to O characteristics, without the removal of response sets. The between classes variance was non-significant, but the between groups variance was significant. These results confirmed the results found by analysis of variance of Dom and Lov absolute standard difference scores, in that there were variations among groups

TABLE 10

Male Group Data: Analysis of Variances Testing Whether Groups and Classes Differ on Various Measures

	Mean Squares			F_s	
	Classes df = 2	Groups df = 9	Judges df = 84	Classes	Groups
Response Sets in $\overline{CD}$*s	3475	534	1373	6.51*	.39
Accuracy in $\overline{CD}$*s (Response sets left in)	2630	1263	570	2.08	2.22*
Standardized Self-Insight Scores	.48	.14	.35	3.43	.40
Raw Self Scores					
Dom	177.0	100.2	39.5	1.76	2.54*
Lov	95.5	99.5	59.4	.96	1.67
SD	346.0	38.2	45.3	9.06**	.84
Distance from Center of Interpersonal Circle (Self-Descriptions)	70.5	31.0	28.9	2.28	1.07

*$p < .05$
**$p < .01$

but not among classes in accuracy, and show that this was also true with response sets still present.

In order to determine whether groups and/or classes varied in self-insight, the mean absolute standard difference scores over the three factors (that is, the mean self-insight score with response sets removed) were employed in an analysis of variance. Neither classes nor groups varied significantly in self-insight.

The self descriptions of the Js on Dom, Lov and SD were used in three analysis of variances to determine whether groups and/or classes varied in their descriptions of themselves. The groups varied on Dom at the .05 level, and the classes varied on SD at the .01 level. The other variance comparisons were nonsignificant. The mean SD given to selves by normals was 6.22, by disturbed Js was 5.63, and by hospitalized patients was 5.68; thus the only statistical difference among the classes in self descriptions was that the disturbed and hospitalized Js described themselves as behaving in less socially desirable ways.

It will be remembered that the analysis of variance on the raw factor scores showed a significant between class variance on SD. The means of all SD scores given to others by all Js in each class were: normals, 6.04; disturbed, 5.78; hospitalized patients, 5.41. There were thus some similarities in the ways the three classes described themselves and the ways they were described by others on the SD factor, the main difference being that hospitalized subjects described themselves as being as socially desirable as the disturbed subjects described themselves, whereas hospitalized subjects were described by other hospitalized subjects as being less socially desirable than the disturbed subjects were described by other disturbed subjects.

Although the classes did not differ on Dom and Lov self descriptions, it was thought that the more pathological subjects might describe themselves more extremely (that is, higher or lower) on either Dom or Lov. A "normal center" of the interpersonal circle was determined from data from LaForge (1963), where 209 beginning psychology students gave themselves mean Dom and Lov scores of 1.6 and 1.8 respectively. Then the distance from this "normal center" was determined for each subject's self-description by the following formula:

$$\text{Distance} = \sqrt{(1.6 - D)^2 + (1.8 - L)^2}$$

An analysis of variance was performed on these distance scores, and there were no significant class or group differences, meaning that the classes and groups did not vary significantly in extremeness of geometrically combined Dom and Lov scores.

Phase III; Data from the Families

The three analysis of variances, one each for the raw factor scores on Dom, Lov and SD, are displayed in Table 11. The between family variances were consistently nonsignificant, which means that there were no significant differences between families in their descriptions of family members. The between J variances were highly significant on Lov and on SD, but only approached significance on Dom; these results suggest the presence of consistent response biases in terms of the levels of Lov and SD used in describing others. The between O variances were highly significant on all three factors, which means that there were highly significant agreements among family members in describing particular others.

TABLE 11

Family Data: Analysis of Variances Using Raw Dom, Lov and SD Scores

		Dom		Lov		SD		
	df	MS	F	MS	F	MS	F	$\overline{\%}$ Variance
Family[a]	9	156.97	.58	170.38	.46	2.171	.78	7
Judge within family	50	32.82	1.37	94.78	2.58***	.768	3.54***	13
Object within family	50	277.58	11.60***	358.99	9.68***	2.290	10.56***	54
Judge X Object within family	250	23.97		37.12		.217		26

[a]Family tested by quasi F ratio, $F'' = \frac{MS_F + MS_{FJO}}{MS_{FO} + MS_{FJ}}$.

***$p < .001$

Slightly over half (54%) of the variance can be attributed to similarity of perceptions as to particular Os; about 13% can be attributed to J level response sets; about 7% can be attributed to similar perceptions unique to the family; and about 26% is, by this analysis, error.

Again, the highly significant between J and between O variances on SD imply the importance of SD in determining ICL responses. As was found for the male group data, the sizes of the Fs for SD were commensurate with the sizes of the Fs for Dom and Lov, which implies that SD is about equally potent as Dom and Lov in determining ICL descriptions. SD did not appear here primarily as a response set, however, as between O variance on SD was much larger than the between J variance on SD.

The distribution of $\overline{CD}$*s attributed to others by Js and the distribution of $\overline{CD}$*s received by Os were compared to the random distribution of $\overline{CD}$*s by t tests. As can be seen in Table 12, there was a highly significant similarity among profiles received by Os, but J response sets were not significant, as the mean of this distribution of $\overline{CD}$*s was almost identical to the mean of the random distribution. Thus the significance of response sets in terms of levels of factors remains equivocal in the family data.

To assess the significance of differing variability or spread of judgments between Js, correlations between the standard deviations on Dom, Lov and SD as attributed by each J were determined. The Dom-Lov correlation was .21 ($p = .05$, one-tailed), the Lov-SD correlation was -.23 (in the opposite direction from the prediction), and the Dom-SD correlation was .40 ($p < .001$). Again, it is somewhat difficult to

TABLE 12

Family Data: $\overline{CD}$*s Given by Js and Received by Os, compared with random $\overline{CD}$*s

(N = 60)

	Mean of $\overline{CD}$*s	$\sigma_{\overline{CD}}$*	t
Given by Js	.068	---	---
Received by Os	.031	.023	7.44***
Random	.065	.038	---

***$p < .001$, one-tailed.

evaluate these correlations, as the correlations among standard deviations are probably somewhat influenced by the (modest) correlations among the raw scores on the factors. However, at best these correlations do not present convincing evidence of consistent response sets of differing spreads of judgments. A second test to assess differences in spread utilized the Hartley F_{max} test within families and factors to determine whether interjudge differences in variances were significant. Of the 30 such tests, only four were significant at the .05 level. Hence, these two sets of tests provided no substantial evidence that Js had consistent response sets in spread of judgments or significantly differed among themselves in the spread of judgments used. Nevertheless, examination of the standard deviations used by Js on different factors revealed that often one family member had a standard deviation on a factor that was three times the standard deviation of another J in that family on that factor.

To test whether some Js and some families were more accurate than others in their perceptions of interpersonal behavior, a four way analysis of variance (Family X Judge X Trait X Replications, with Judge nested within Family) was done, using absolute standard difference scores on the two traits of Dom and Lov. The results of this analysis are displayed in Table 13. It can be seen that the Js did not differ significantly in accuracy, either on the traits considered separately or over both traits taken together. Neither Dom nor Lov were judged more accurately than the other. Only two Fs were significant, one testing the between family variance and one testing the Family by Trait interaction. This means that accuracy of person perception was greater

in some families than in others, and some families were more accurate on one trait and some were more accurate on the other trait.

In order to determine whether Js were consistent across Dom and Lov in accuracy of self-description, absolute standard difference scores were obtained for Dom, Lov and SD. The correlation between the standardized self-insight score for Dom and that for Lov was .03 (n.s.) and the correlation between the insight scores for Lov and SD was .36 ($p < .01$). Inasmuch as the raw score correlation between Lov and SD for the families was .24, and the present correlations between standard difference scores may be slightly contaminated by the raw score correlations, the present limited data offer no substantial evidence of any consistent ability to be insightful towards own interpersonal behavior.

In view of the relatively high level of agreement among the family members which accounted for 54% of the total variance in the raw scores on the three factors, it was of some interest to determine just how accurate an individual score on a factor by a J was, both in describing others and in describing himself. For this purpose, each J's raw score of one O taken at random was correlated with the consensual raw score (using the four remaining family members) on that factor, and each J's raw score of himself on one factor was correlated with the consensual raw score (using the five remaining Js) on that factor. The resulting correlations, which approximated the accuracy of individual other and self scores on the three factors, are displayed in Table 14. It can be seen that a J's scoring of an O was highly correlated with the consensual score for that O, and gave a good approximation to that O's interpersonal behavior as consensually viewed by other family members. The

TABLE 13

Family Data: Differences in Accuracy of Person Perception; Analysis of Variance Using Standardized Difference Scores to Eliminate Response Sets

Factor	df	MS	F
Family	9	.423	4.29**
Trait (Dom or Lov)	1	.172	.18
Family X Trait	9	.979	9.91**
Judge (within Family)	50	.090	.91
Trait X Judge (within Family)	50	.080	.81
Replications (within Trait, Judge and Family)	480	.099	--

**$p < .01$

TABLE 14

Family Data: Correlations on Dom, Lov and SD between Raw Score Consensual Descriptions on the One Hand and Descriptions of Self and of Others on the Other Hand (an Assessment of Self-insight and Accuracy of Person Perception)

	N	r_{Dom}	r_{Lov}	r_{SD}	$\overline{\%}$ Variance Explained
Consensus vs. other	60	.73***	.72***	.73***	53
Consensus vs. self	60	.62***	.67***	.50***	36

***$p < .001$, one-tailed.

raw self scores were a little less accurate, but still appeared to be fair approximations to the interpersonal behavior of the describer as perceived consensually by others in the family. Both sets of correlations probably would be slightly higher if standardized scores, with response sets removed, were used instead of raw scores.

Correlates of Accurate Families and Groups

It has been shown that some families were more accurate than others in describing Os, and some male groups were more accurate than others in describing Os. The distribution of the ten mean accuracy scores for the ten families was compared by *t* test with the distribution of the twelve mean accuracy scores for the twelve male groups. The resulting *t* of 4.67 was significant at the .001 level, demonstrating that the families as a whole were significantly more accurate than the male groups as a whole.

It was of interest to analyze the data further to attempt to determine the characteristics of the male and family groups that were more accurate in their descriptions of group members. Initially, the two most accurate families were compared with the two least accurate families, and the two most accurate male groups were compared with the two least accurate male groups on several characteristics: age, education, socioeconomic status and mean descriptions of self and of others on the three factors; in addition, the accurate and inaccurate male groups were compared as to estimated length of acquaintance. The only apparent differences were that the most accurate male groups described themselves as less loving than the two least accurate male groups, and the most

accurate families had fathers with slightly higher education and socio-economic status.

Inasmuch as these tentative findings did not seem to explain intergroup differences in accuracy as they were not replicated across the two sets of data, the variabilities were examined. First, six analysis of variances were done, one each on the three factor standard deviations for family groups and male groups separately. The scores used in these analyses consisted of the standard deviations in the raw scores attributed to Os by Js in a family or male group on a particular factor. These scores reflected in part the response sets of spread of judgments used by Js in a family or male group but reflected more the variabilities on the factors by Os in the family or male group. The results of these analyses are displayed in Table 15. It can be seen that there were highly significant differences between families and between male groups in variability on Lov, and also significant differences in variability between male groups on SD. There were no significant interclass differences in variability in the data on male groups.

Next variabilities on the three factors within families and within male groups were correlated with the accuracy scores for the families and male groups. The correlations were between the mean accuracy scores (i.e., absolute standard difference scores) for families, for male groups, and for families and male groups combined on the one hand, and the standard deviations of the consensual scores for Os on a factor for the families and male groups on the other hand. These results are presented in Table 16. It can be seen that variability on Dom in the families was significantly correlated with the accuracy of the families,

TABLE 15

Analysis of Variances of within Family and within Male Groups Variability on Dom, Lov and SD

		Dom		Lov		SD	
	df	MS	F	MS	F	MS	F
Families							
Groups	9	37.5	.69	66.3	5.91**	.29	.05
Judges	50	54.4		11.2		6.15	
Male Groups							
Classes	2	22.5	2.10	48.0	1.37	.21	1.17
Groups	9	10.7	1.65	34.9	3.23**	.18	2.37*
Judges	84	6.5		10.8		.076	

*$p < .05$
**$p < .01$

TABLE 16

Correlations between Standard Deviations on Factors and Accuracy Scores for Families and Male Groups, Separately and Combined[a]

	N	$r_{\sigma_{Dom}\,\sigma_{Acc}}$	$r_{\sigma_{Lov}\,\sigma_{Acc}}$	$r_{\sigma_{SD}\,\sigma_{Acc}}$
Families	10	.695*	.178	.430
Male Groups	12	.399	.261	.299
Combined	22	.603**	.337	.620**

[a]Scores transformed from negative correlations with "inaccuracy" scores to positive correlations with accuracy scores.

*$p < .05$, one-tailed
**$p < .01$, one-tailed.

and variabilities on Dom and on SD, using the families and male groups combined, were significantly correlated with accuracy.

The variabilities on the factors for the families were compared with the variabilities on the factors for the male groups by *t* test. The variabilities used were determined as above for the correlations: the standard deviations of the consensual scores of Os on a factor within a family or a male group. The *t*s for the Dom and Lov comparisons, 1.36 and 1.23, respectively, were nonsignificant, although the trend was for the families to have larger standard deviations than the male groups. On the SD dimension, the *t* of 2.54 was significant at the .01 level, showing that variability on SD received by Os within families was greater than for Os within male groups.

Thus, although there were no significant differences between families or between male groups on variability on Dom or SD, the spread of consensual Dom and SD raw scores within families and male groups combined were both significantly correlated with accuracy of person perception and the spread of consensual family raw scores on Dom for Os was also significantly correlated with accuracy. Further, the family groups differed significantly from the male groups in that there was a greater spread of consensual SD scores within the families than within the male groups. These results imply that differential intergroup accuracy of person perception was in part a function of two group characteristics: the spread of group members in the possession of two traits, Dom and SD, with the groups with the greater spread of scores showing the more accuracy in person perception.

Summary

Hypothesis 1 was partially supported. Male group Js had consistent response sets of levels of attribution on the factors and on the octant profiles, but the evidence for family Js was equivocal.

Hypothesis 2 was verified. Os were described with considerable agreement by male groups and by families.

Hypothesis 3 was partially supported. Characteristic differences among Js in spread of scores used were found for male group Js but not for family Js.

Hypothesis 4 was verified. Js varied significantly in the SD attributed to others.

Hypothesis 5 was verified. Consensual descriptions of Os varied in the SD dimension.

Hypothesis 6 was not verified. There were no consistent differences between Js in their accuracy of person perception.

Hypothesis 7 could not be adequately tested with these data. What evidence there was did not suggest that there were consistent differences between Js in their insight into own interpersonal behavior.

Hypothesis 8 could not be tested. It was not possible to determine whether self-insight and accuracy of person perception covaried because consistent individual differences in these attributes were not found.

Hypothesis 9 was not verified. There were no differences on the mental health dimension of accuracy of person perception.

Hypothesis 10 was not verified. There were no differences in the mental health dimension in degree of insight into own interpersonal behavior.

The major nonhypothesized results were:

1. The dimension of mental health as here represented had very little effect upon ICL descriptions of self and of others, although numerous analyses were made. The major difference among the three classes in the mental health dimension was on the SD factor, the normals describing themselves and other normals as more socially desirable.

2. Male groups and families varied significantly in the accuracy with which members described the interpersonal behaviors of others in the group.

3. Family members were more accurate in describing other family members than male group members were in describing other male group members, although most of the male group members had had frequent contact with others in the group for several years.

4. Differences in accuracy of person perception among family groups and male groups were associated with greater intragroup spread on the possession of Dom and SD traits, the groups with the greater spread showing more accuracy.

5. A description of a family member's interpersonal behavior by another family member was found to be quite accurate, as shown by the mean correlation between individual description and consensual description of .73. The self description was a little less accurate, the mean correlation between self description and family consensus being .60.

CHAPTER V

DISCUSSION

A major assumption which has had implications for many of the hypotheses tested was that agreement among members of a group as to the characteristics of an O substantially represented characteristics of O's actual interpersonal behavior. To the extent that this assumption was unwarranted, then the conclusions concerning accuracy of person perception and self-insight were invalid, and what has been called "accuracy of person perception" would have been more properly called "conformity with perceptions of other group members."

The test of this assumption in Phase I was somewhat inconclusive in that the correlation between the consultant Pair ("expert") descriptions and the Peer Mean descriptions was only .53, which means that only 28% of the variation in one set of scores could be explained from the other set. However, there are several reasons for believing that the Peer Mean scores in Phase I might have been much less accurate than the consensual scores for the male groups and the families. First, the Peer Mean scores in Phase I were based upon a minimum acquaintance of 13 hours in a small group (some had other classes together, studied together, etc.), whereas the consensual scores in the male groups and families were typically based upon hundreds or thousands of hours of contact. Second, the Peer Mean scores in Phase I were based upon two to four subjects, whereas in the later phases, five to seven subjects were used to derive consensual scores.

Third, the criterion scores by the advanced student and staff consultants ("experts") were subject to error, especially in that the students might have behaved differently towards the staff who were evaluating them for acceptance into the clinical training program than they did towards each other. Fourth, there were too few Qs described by the students in Phase I for the removal of response sets to be practical, so the Phase I Peer Mean scores were probably contaminated by individual response sets which no doubt lowered the accuracy of the peer descriptions. Hence, it is likely that the .53 correlation between consensual peer descriptions and the accuracy criterion substantially underestimates the degree of accuracy in consensual scores in the male group and family data.

The Mental Health Dimension

One of the more puzzling findings was the failure to find many significant differences between normal males, disturbed males and hospitalized mental patients. That these designations were not grossly inaccurate might be inferred from the percent who were currently married in the respective groups: 97%, 18%, and 44%. Again, in spite of similar education, socioeconomic status and age across the three classes in the mental health dimension, the respective mean 1967 gross incomes for the three classes were: $8,300, $5,500 and $2,600. Thus there is some independent evidence that the less "normal" men were living somewhat disordered and unproductive lives.

It might be argued that the less normal men did not differ on the various ICL measures because they were misperceiving themselves and

others, and thus that their descriptions should not be trusted. However, the self-insight and inaccuracy of person perception results showed no significant differences between the classes. These results are in contrast to the conclusions of Dinitz, Mangus and Pasamanick (1959), who found that mental patients were inaccurate in perceiving themselves, and to the conclusions of Truax and Carkhuff (1967), who stated that hospitalized mental patients perceived their therapists without significant accuracy. Perhaps one relevant difference is that in the present study only patients who appeared to be more rational and functioning moderately well were included as subjects. Thus the present results as to mental patients apply not to average hospitalized mental patients, but only to the better functioning hospitalized mental patients.

Another possibility in explaining these results is that the descriptions were relative to the interpersonal environments in which the men lived. For example, it may well be that if one of the more dominant mental patients had been placed in one of the normal work groups that in this new social context he might actually behave in less dominant ways and be perceived by himself and by others as being less dominant.

It is not concluded that there are no differences in interpersonal behavior between persons with differing degrees of mental health, but only that the profiles on the ICL, the factor scores on Dom and Lov, and the measures derived therefrom showed no significant differences. Possibly an item analysis and probably the use of specialized scales would show marked differences in interpersonal behavior along the mental health dimension. Further, the use of mixed diagnostic categories in the disturbed and hospitalized groups could have served to obscure differences.

The significant differences along the mental health dimension were found on the SD dimension. In general, the non-normal subjects described themselves and their non-normal peers as being less socially desirable than the normals described themselves and their peers. SD was also shown in the male groups as being at least as much a response set as an actual O characteristic. Hence, it seems that the pathological subjects perceived themselves and their pathological peers as not being socially desirable, but this may be more in the eye of the beholder than an objective characteristic of the Os described. These SD results are entirely consistent with previous findings (e.g., Feder, 1967; Fordyce, 1956; Kogan, Quinn, Ax & Ripley, 1957).

Response Sets

It was noted that response sets, both as to characteristic level used in describing all others and as to spread of descriptions used, were more pronounced in the male groups than in the family groups. It was also concluded that the family groups were more accurate. It seems likely, then, that response sets may not be significant considerations when a person knows another person intimately, but where there is not extended and intimate interaction with another person, then response sets as habitual ways of seeing others come increasingly into play. Quite probably then, the emphasis upon response sets that is common in the experimental literature reflects the typically superficial interpersonal contacts that are often examined.

Social Desirability

SD has generally been considered by other investigators to be a response set or characteristic of the responding subject (e.g., Byrne, Barry & Nelson, 1963; Edwards, 1957; Feder, 1967). However, interpersonal behaviors can be scaled in terms of SD, and others can be assigned SD values much as they can be assigned values on Dom and Lov; thus SD may also be an objective characteristic of others. In the male group data, SD was a significant characteristic of others described, although SD functioned primarily as a J characteristic or response set. In the family data, where there was greater interjudge agreement and hence greater accuracy, SD was much more a characteristic of the person described than it was a response set characteristic of the J. Hence, it appears to be incorrect to consider SD to be merely a response set; SD also appears to be a significant characteristic of interpersonal behavior, probably positively related to mental health.

Differential Intergroup Accuracy

Differences between the families and the male groups in accuracy in favor of the former were not explained by greater accuracy of person perception by female subjects, as in the family data there were no significant differences between male Js and female Js in accuracy of person perception. Neither were these differences accounted for by the use of non-normal subjects in the male groups, as non-normal males seemed to be no less accurate than normal males.

It is logical to consider the differences in accuracy between families and between male groups along with the differences between the families and the male groups. That is, if families as one type of group

are different in accuracy from male groups, then perhaps some of the characteristics that differentiate families from male groups might also differentiate accurate from inaccurate families and accurate from inaccurate male groups.

The findings as to variabilities within groups (family and male) as related to accuracy of person perception in the groups provided one type of explanation that was fairly consistent across families and male groups. These results were somewhat questionable in that there were no significant differences between groups in variability on Dom and SD, although on the other hand differences in mean variability on Dom and SD accounted for about 37% of the variance in accuracy over the 22 groups used. Further, it was not entirely clear as to how much these differences in variability or spread were a function of within J response sets of spread and how much they represented actual differences between Os on the traits, although the general trend of the results argues that the latter component was the larger.

Accepting the limitations of the results, then, it seems that if a group is more variable in their interpersonal traits, then the persons in the group are likely to be able to describe these interpersonal traits more accurately. Perhaps the existence of sharp contrasts makes the group members more perceptive of each other. Another possibility is that with greater variation on the Dom dimension the clearer the dominance heirarchy in the group; in general, a group with a clear dominance heirarchy is likely to be better organized, more cohesive and have better morale (Sherif & Sherif, 1956), and such a group might well be more accurate in perceiving others. Indeed, there might be a reciprocal relation-

ship between accuracy of person perception and the dominance heirarchy, such that each enhances the other. These speculations are similar to the conclusions of Bronfenbrenner, Harding and Gallwey (1958), who found that in groups with competition between men and women where roles and dominance were in doubt that perceptual accuracy was low.

The implications of the finding of greater accuracy in a group that had greater variability on SD among group members are unclear, as the meaning of SD as an objective trait is unclear. To the extent that SD relates to like-dislike, then more intense involvement in a group may make for greater accuracy of person perception. To the extent that SD relates to mental health or to Repression-Sensitization, then variability within a group on these dimensions may affect the accuracy of person perception.

Another possibility in explaining these findings is that greater variability is perceived in some groups as the members of the groups are more expressive and open in the sense of revealing a wider range of their thoughts, feelings and behavior to each other.

Families were found to be more accurate than male groups, and expected differences between families and male groups would seem to be congruent with some of the above speculations: families probably have a clearer dominance heirarchy, families probably have more intense involvements, and there is probably more openness among family members than among male groups members.

Conceptual Components of ICL Scores

It is of some interest to speculate as to what the scores of error variances in the analysis of variances of the raw factor sources

in the male groups and families might be (42% and 26%, respectively). Part of this error variance can be attributed to limitations of the ICL, such as semantic ambiguities of items (for example, several subjects interpreted "self-seeking" as meaning searching after one's true self), non-equivalence of items within octants, differential correlations between octants similar distances apart on the interpersonal circle, etc. Some of this error variance probably reflects unique interpersonal behavior of the O specific to the particular J; for example, it is likely that a teenage girl would have a different relationship with her teenage sister than with her mother. Some of this error variance probably reflects misperceptions specific to the behavior of the particular O, such as distortions of the behavior of O based upon the needs, wishes and fears of J. (The response sets also reflect misperceptions, but these are misperceptions common to all others perceived, and not misperceptions specific to particular individuals.)

Hence this analysis suggests that there are five conceptual components in ICL scores: the actual interpersonal behavior of the O, the characteristic ways that the J misperceives all Os, the unique behavior of the O towards the particular J, the misperceptions by the J specific to the particular O, and residual errors relating to the structure of the ICL. In the present study, the last three components were not isolated from each other.

Implications for Use of the ICL

1. Clinicians may profitably use the ICL to have clients describe themselves and family members, as the factor scores are likely to reflect at least fair approximations to the actual interpersonal

behaviors of self and of family members. Additionally, distortions in perceiving people in general can be detected by noting the consistent response sets in describing non-family members.

2. Studies of families might well use the ICL to assess actual interpersonal behavior, as there is a large accuracy component in such descriptions, especially when consensual scores are used.

3. SD is a useful third factor in addition to Dom and Lov.

4. ICL research that uses discrepancy scores (such as self-ideal self or self-parent) should take into account the consistencies of level and apread by the perceivers before measuring such discrepancies, particularly if some of the scores relate to persons not intimately known.

5. The ICL is virtually useless in assessing pathological interpersonal behavior, such as in distinguishing normals from neurotics or psychotics.

6. Accuracy of person perception as a consistent ability is sufficiently subtle to measure that some instrument or instruments with far more variables than the ICL provides is necessary to detect individual differences in accuracy.

7. Disparity of person perception within a family or group should be used with caution as a criterion of a malfunctioning group. In the present data, a maximum of 54% of the common variance for families and 27% of the variance for male groups reflected accurate person perception, and to demonstrate disparity of person perception one should use these figures or some similar figures to determine a baseline as to how accurate normal families or groups are.

Suggestions for Further Research

Some of the present results were ambiguous as only normals described normals, only disturbed subjects described disturbed subjects, etc. If groups could be found that had both normals and disturbed, both normals and psychotics, then some of the ambiguities in the present study could be clarified. For example, such data might show differences between normals and psychotics in Dom and in Lov, and in accuracy of perception of self and of others.

In the present study, the differences between accurate and inaccurate groups were not thoroughly explored. It would be of considerable theoretical and practical interest to relate the accuracy of person perception characteristic of groups to other group characteristics, such as observed group interaction patterns, patterns of communication, cohesiveness, dominance heirarchies, intensity of mutual involvement, group structure as revealed by sociograms, etc.

How O behaves uniquely towards a given J and how J misperceives a particular O could be important clincial data in understanding a person, especially in working with a family or a marital pair. The present analysis did not unravel these two components, and a methodology and analysis that could isolate and measure these two components might be very useful in enlarging our understanding of interpersonal relationships.

CHAPTER VI

SUMMARY

The purpose of this study was to explicate the effectiveness of the Interpersonal Check List in assessing interpersonal behavior and perceptions of interpersonal behavior by applying some of the methodologies developed in the literature of person perception literature to the ICL. A major aim was to isolate and measure two components of ICL scores: that component relating to the others' actual interpersonal behavior and that component relating to the consistent biases or response sets of the judges in perceiving all others. Subsidiary aims were to explore the accuracy of perception of interpersonal behavior and its correlates, the influence of Social Desirability on ICL scores, and to relate these and other measures to the dimension of mental health.

Forty two beginning graduate students described themselves and two to four peers on the ICL and they were each described by two "experts." These data were used to determine to what extent agreement among peers constituted accurate person perception. Ten families, comprised of six members each, described themselves and the other family members on the ICL; consensual descriptions of family members were taken as the criterion of accurate person perception. Twelve groups of eight males each were also used, with the groups being equated as to mean age, mean education, mean socioeconomic status, and mean length of acquaintance. Four of the groups were of normal men, four groups were of disturbed

men living in the community, and four groups were moderately well functioning hospitalized mental patients.

Although there was only a moderate agreement between peer scores by students and the expert criterion, several reasons were advanced to suggest that the consensual scores in the families and in the male groups probably reflected quite substantial accuracy.

A substantial portion of ICL score variance was found to consist of agreement among subjects as to characteristics of others' behavior. Response sets, both in levels of traits used and in spreads of scores used by individual judges, were significant for the male groups but equivocal for the families. Apparently response sets are more likely to be significant for less intimate relationships between persons.

Individual judges were not consistently more or less accurate in perceiving others nor in describing their own interpersonal behavior. The families were more accurate than the male groups, some families were more accurate than others, and some male groups were more accurate than others. Intergroup differences in accuracy were partially accounte for by greater variability in the Dom and SD dimensions in the more accurate family and male groups, and the possible implications of these findings were discussed.

Social Desirability was found to be a significant dimension of ICL data, repeatedly accounting for as much variance as Dom and Lov in analysis of variances. However, its relatively high positive correlation with Dom indicates that it cannot be regarded as a completely independent factor.

The three classes of male groups were not significantly different

on many ICL measures: mean and standard deviations on Dom and Lov self-descriptions and consensual descriptions, extreme self-descriptions on Dom and Lov, accuracy of perceiving others, and accuracy of describing self. The three classes did vary on the SD dimension, the less normal subjects describing themselves and peers as less socially desirable.

Descriptions of one family member's interpersonal behavior by another family member, and descriptions of own interpersonal behavior were fairly accurate, using consensual family descriptions as a criterion. Hence, descriptions of self and of family members appear to be good approximations to actual behavior in the family.

Some of the limitations of the present study were discussed, especially the use of only normals to describe normals, only disturbed describing disturbed, and only hospitalized patients describing hospitalized patients. Suggestions were made as to how to clarify the results relating to the mental health dimension. Other suggestions for further research included further exploration of the characteristics of accurate and inaccurate groups, the measurement of interpersonal behavior that is unique to a pair of interacting persons and the measurement of unique misperceptions of one particular person by another.

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APPENDIX A

INTERPERSONAL CHECK LIST ITEMS WITH SIXTEENTH AND INTENSITY DESIGNATIONS AND SD VALUES

	Item	Sixteenth	Intensity	SD Value
1	able to give orders	A	1	7.2
2	appreciative	K	1	7.6
3	apologetic	H	2	5.4
4	able to take care of self	C	1	7.8
5	accepts advice readily	K	2	6.6
6	able to doubt others	G	1	5.1
7	affectionate and understanding	M	2	7.6
8	acts important	P	3	2.6
9	able to criticize self	H	1	7.2
10	admires and imitates others	J	2	5.2
11	agrees with everyone	L	4	3.3
12	always ashamed of self	H	4	2.7
13	very anxious to be approved of	K	2	6.6
14	always giving advice	P	3	3.0
15	bitter	F	3	2.2
16	bighearted and unselfish	O	2	7.4
17	boastful	B	3	2.0
18	businesslike	C	2	6.8
19	bossy	A	3	2.1
20	can be frank and honest	E	1	7.8
21	clinging vine	J	4	2.8
22	can be strict if necessary	D	1	7.2
23	considerate	N	1	7.8
24	cold and unfeeling	C	4	2.4
25	can complain if necessary	F	1	6.0
26	cooperative	L	1	7.8
27	complaining	F	3	2.4
28	can be indifferent to others	C	2	4.8
29	critical of others	E	2	3.0
30	can be obedient	I	1	7.1
31	cruel and unkind	D	4	1.4
32	dependent	J	3	3.2
33	dictatorial	A	4	2.1
34	distrusts everybody	G	4	2.0
35	dominating	A	3	2.1
36	easily embarrassed	H	2	3.8
37	eager to get along with others	L	2	6.9
38	easily fooled	K	3	2.6
39	egotistical and conceited	B	4	2.1
40	easily led	I	2	3.3

	Item	Sixteenth	Intensity	SD Value
41	encourages others	N	2	7.6
42	enjoys taking care of others	O	2	6.3
43	expects everyone to admire him	P	4	3.2
44	frequently disappointed	G	2	3.3
45	firm but just	D	2	7.6
46	fond of everyone	M	3	5.6
47	forceful	A	2	5.8
48	friendly	M	1	7.6
49	forgives anything	N	3	4.6
50	frequently angry	E	3	2.6
51	friendly all the time	M	3	6.5
52	generous to a fault	O	3	4.6
53	gives freely of self	O	2	6.9
54	good leader	A	2	7.7
55	grateful	J	1	7.2
56	hard-boiled when necessary	D	2	6.4
57	helpful	O	1	7.6
58	hard-hearted	E	4	2.4
59	hard to impress	G	2	4.6
60	impatient with others' mistakes	D	3	2.7
61	independent	B	2	7.2
62	irritable	E	2	3.0
63	jealous	G	3	2.2
64	kind and reassuring	N	2	7.4
65	likes responsibility	A	2	7.4
66	lacks self-confidence	H	2	2.8
67	likes to compete with others	C	2	6.8
68	lets others make decisions	K	3	2.6
69	likes everybody	M	3	5.2
70	likes to be taken care of	K	3	3.0
71	loves everyone	M	4	6.0
72	makes a good impression	P	2	7.6
73	manages others	A	3	4.5
74	meek	I	3	3.5
75	modest	I	2	6.6
76	hardly ever talks back	J	3	3.6
77	often admired	P	2	6.9
78	obeys too willingly	I	3	3.4
79	often gloomy	F	2	2.4
80	outspoken	E	3	4.0

	Item	Sixteenth	Intensity	SD Value
81	overprotective of others	O	3	3.8
82	often unfriendly	E	3	2.7
83	oversympathetic	N	3	3.8
84	often helped by others	J	2	4.2
85	passive and unaggressive	I	3	3.2
86	proud and self-satisfied	B	3	3.2
87	always pleasant and agreeable	L	2	7.2
88	resentful	F	3	2.4
89	respected by others	P	2	7.6
90	rebels against everything	F	4	1.6
91	resents being bossed	F	2	3.9
92	self-reliant and assertive	B	2	7.2
93	sarcastic	D	3	2.4
94	self-punishing	H	3	2.8
95	self-confident	B	2	7.5
96	self-seeking	D	3	3.3
97	shrewd and calculating	C	3	3.8
98	self-respecting	B	1	7.8
99	shy	H	3	4.0
100	selfish	C	3	2.2
101	skeptical	F	2	4.4
102	sociable and neighborly	M	2	7.4
103	slow to forgive a wrong	G	3	2.5
104	somewhat snobbish	B	3	3.2
105	spineless	I	4	2.3
106	stern but fair	D	2	7.0
107	spoils people with kindness	O	4	4.2
108	straightforward and direct	E	2	7.0
109	stubborn	G	3	3.0
110	too easily influenced by friends	L	3	3.0
111	thinks only of himself	C	3	1.8
112	tender and soft hearted	N	2	5.8
113	timid	H	3	3.5
114	too lenient with others	N	3	4.2
115	touchy and easily hurt	G	2	3.0
116	too willing to give to others	O	3	4.2
117	tries to be too successful	P	3	7.0
118	trusting and eager to please	K	2	6.6
119	tries to comfort everyone	N	4	5.6
120	usually gives in	I	2	3.4

	Item	Sixteenth	Intensity	SD Value
121	very respectful to authority	J	2	6.8
122	wants everyone's love	L	3	4.0
123	well thought of	P	1	8.0
124	wants to be led	J	3	3.6
125	will confide in anyone	L	3	3.0
126	warm	M	2	7.2
127	wants everyone to like him	L	2	6.2
128	will believe anyone	K	4	3.0

APPENDIX B

THE DETERMINATION OF SOCIOECONOMIC STATUS

The determination of socioeconomic status paralleled Hollingshead and Redlich (1958), except that religious affiliation was used instead of type of residence. The relationships between religious affiliation and socioeconomic status were derived from Dynes (1955), Packard (1959) and Yinger (1957).

The socioeconomic status was determined as being 1, 2, 3, 4 or 5 (lowest) by use of these values:

Religious affiliation

Episcopalian	1	Christian	3
Presbyterian	2	Baptist	4
Congregational	2	Catholic	4
Unitarian	2	Church of Christ	4
Methodist	3	Pentecostal	5
Lutheran	3	Holiness	5

Occupation

Executives and proprietors of large concerns, and major professionals	2
Managers and proprietors of medium-sized businesses and lesser professionals	4
Administrative personnel of large concerns, owners of small independent business, and semiprofessionals	6
Owners of little businesses, clerical and sales workers, and technicians	8
Skilled workers	10
Semiskilled workers	12
Unskilled workers	14

Education

Graduate professional training	1
Standard college graduation	2
Partial college training	3
High school graduation	4
Partial high school (completion of 10th or 11th grades)	5
Junior high school (completion of 7th, 8th or 9th grades)	6
Less than seven years of school	7

The resulting sum was multiplied by five, and the class found from Hollingshead and Redlich's (1958) table:

Class	Range of Scores
I	20-31
II	32-55
III	56-86
IV	87-115
V	116-134

APPENDIX C

FORMAT OF INTERPERSONAL CHECK LIST

INTERPERSONAL CHECK LIST

Describer ..... Person described .....

1	0	able to give orders	47	0	forceful
2	0	appreciative	48	0	friendly
3	0	apologetic	49	0	forgives anything
4	0	able to take care of self	50	0	frequently angry
5	0	accepts advice readily	51	0	friendly all the time
6	0	able to doubt others	52	0	generous to a fault
7	0	affectionate and understanding	53	0	gives freely of self
8	0	acts important	54	0	good leader
9	0	able to criticize self	55	0	grateful
10	0	admires and imitates others	56	0	hard-boiled when necessary
11	0	agrees with everyone	57	0	helpful
12	0	always ashamed of self	58	0	hard-hearted
13	0	very anxious to be approved of	59	0	hard to impress
14	0	always giving advice	60	0	impatient with others' mistakes
15	0	bitter	61	0	independent
16	0	bighearted and unselfish	62	0	irritable
17	0	boastful	63	0	jealous
18	0	businesslike	64	0	kind and reassuring
19	0	bossy	65	0	likes responsibility
20	0	can be frank and honest	66	0	lacks self-confidence
21	0	clinging vine	67	0	likes to compete with others
22	0	can be strict if necessary	68	0	lets others make decisions
23	0	considerate	69	0	likes everybody
24	0	cold and unfeeling	70	0	likes to be taken care of
25	0	can complain if necessary	71	0	loves everyone
26	0	cooperative	72	0	makes a good impression
27	0	complaining	73	0	manages others
28	0	can be indifferent to others	74	0	meek
29	0	critical of others	75	0	modest
30	0	can be obedient	76	0	hardly ever talks back
31	0	cruel and unkind	77	0	often admired
32	0	dependent	78	0	obeys too willingly
33	0	dictatorial	79	0	often gloomy
34	0	distrusts everybody	80	0	outspoken
35	0	dominating	81	0	overprotective of others
36	0	easily embarrassed	82	0	often unfriendly
37	0	eager to get along with others	83	0	oversympathetic
38	0	easily fooled	84	0	often helped by others
39	0	egotistical and conceited	85	0	passive and unaggressive
40	0	easily led	86	0	proud and self-satisfied
41	0	encourages others	87	0	always pleasant and agreeable
42	0	enjoys taking care of others	88	0	resentful
43	0	expects everyone to admire him	89	0	respected by others
44	0	frequently disappointed	90	0	rebels against everything
45	0	firm but just	91	0	resents being bossed
46	0	fond of everyone	92	0	self-reliant and assertive

INTERPERSONAL CHECK LIST (continued)

Describer ..... Person described .....

93	0	sarcastic	111	0	thinks only of himself
94	0	self-punishing	112	0	tender and soft hearted
95	0	self-confident	113	0	timid
96	0	self-seeking	114	0	too lenient with others
97	0	shrewd and calculating	115	0	touchy and easily hurt
98	0	self-respecting	116	0	too willing to give to others
99	0	shy	117	0	tries to be too successful
100	0	selfish	118	0	trusting and eager to please
101	0	skeptical	119	0	tries to comfort everyone
102	0	sociable and neighborly	120	0	usually gives in
103	0	slow to forgive a wrong	121	0	very respectful to authority
104	0	somewhat snobbish	122	0	wants everyone's love
105	0	spineless	123	0	well thought of
106	0	stern but fair	124	0	wants to be led
107	0	spoils people with kindness	125	0	will confide in anyone
108	0	straightforward and direct	126	0	warm
109	0	stubborn	127	0	wants everyone to like him
110	0	too easily influenced by friends	128	0	will believe anyone

APPENDIX D

DIRECTIONS FOR INTERPERSONAL CHECK LIST

FOR PHASE I

Directions for Interpersonal Check List

Here is a list of words and phrases which describe the way people behave towards each other, with circles in front of the phrases for your answers. You are to use the list to describe yourself* and others. There is a separate page for each person you will describe.

First, go through the list and indicate all those phrases which describe yourself*. For instance, take the first phrase, "able to give orders." If you think you are generally able to give orders, fill in the circle in front of this phrase. If you think you are not generally able to give orders leave this circle blank. Go on in the same way through all 128 items on the page, describing yourself as you are. Your first impression is generally the best, so go through the list quickly.

After you have gone through all 128 items for yourself, start with another page and consider the next person you are to describe. Again, fill in the circles for every item you consider to be descriptive of him. When you have completed the page, go on to the next page and the next person you are to describe. Always complete your description of one person before marking any circles for the next person.

Work quickly and don't be concerned about contradictions, duplications or being exact. If you feel much doubt as to whether an item applies, leave it blank. If there is someone you do not know very well, indicate this on the page. (That is, say so.)

*Staff: Do not describe yourself. Describe the students you know individually.

*Consultants: Do not describe yourself. Describe the students in your Binet consulting group.

Students: Describe yourself and all of the other students in your Binet consultation group. Do not describe your consultant.

Turn in completed forms to the Clinic office by Saturday Jan. 6.

APPENDIX E

DIRECTIONS FOR INTERPERSONAL CHECK LIST

FOR PHASES II AND III

Directions for Interpersonal Check List

Identifying Information (See note at bottom)

Name ..... Age .....

Highest school grade completed (circle one)

1 2 3 4 5 6 7 8 9 10 11 12 College 1 2 3 4 5 6 7 8

Marital status: Single__ Married__ Separated__ Divorced__ Widowed__

Main occupation .....

1967 gross income (salaries, wages and business profits only) .....

Church preference (denomination) .....

Directions

Here are some lists of words and phrases which describe the way people behave towards each other, with circles in front of the phrases for your answers. You are to use the lists to describe yourself and others. There is a separate page for each person you will describe.

You are to use the words and phrases to describe yourself and all the others indicated below as you and they are when you are all together. Do not describe yourself or the others as they are when you are not present together.

First, go through the list and indicate all of those phrases which describe you as you are when with the others. For instance, take the first phrase, "able to give orders." If you think you are generally able to give orders, fill in the circle before this phrase. If you think you are not generally able to give orders leave this circle blank. Go on in the same way through all 128 items on the page, describing yourself as you are with the others. Your first impression is generally the best, so go through the list quickly.

After you have gone through the list for yourself, consider the next person you are to describe. Mark the circles on the next page for every item that you consider to be descriptive of him. When you have completed the page, start on the third page, and so forth. Always complete your description of one person before marking the next page.

Work quickly and don't be concerned about contradictions, duplications or being exact. If you feel much doubt as to whether an item applies, leave it blank.

Persons to be described:

1. Self .....
2. .....
3. .....
4. .....
5. .....
6. .....
7. .....
8. .....

NOTE: THIS INFORMATION WILL BE TREATED AS STRICTLY CONFIDENTIAL. Upon receipt of these pages the names will be translated into numerical codes, the names cut off of the pages, and the pages will then be identified only by the numerical codes.