A RELIABILITY STUDY

of

THE PERSONALITY ASSESSMENT REPORT

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by

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ABSTRACT

The present study was designed to test the reliability of the Personality Assessment Report, a rating scale developed for use in clinical settings. Five judges rated 15 subjects using the Personality Assessment Report and the resulting scores were tested for interjudge reliability. The results indicated very high reliability for total scores and for four out of five subscores. Results are discussed in terms of their relation to the development of the scale.

CHAPTER I

INTRODUCTION

Two methods of personality evaluation have been traditionally used in mental health settings for diagnostic evaluation and classification, and in assessment of change in therapy. They are (1) psychological testing with results presented in report form, and (2) the traditional psychiatric interview, consisting of verbal interchange in conjunction with social history (Overall & Henry, 1972). Although each of these approaches is productive in its own way, there are serious disadvantages which they share. These disadvantages are subjectivity and interviewer bias. The final product of either approach usually consists of a series of statements based on quasi-empirical norms, the personal experience of the interpreter, deductions from a hypothesized personality structure, or plain guesses (Little & Shneidman, 1959). Reports are generally written in narrative form which renders them difficult to use for purposes of quantitative comparison and frequently inhibits clear communication with others involved with the patient. So great is the effect of subjectivity on psychological assessment that it is very possible for several interviewers to assess the same client and come up with significantly different diagnoses (Sharpe, 1974). Further, the problem of interviewer bias with regard to race, sex, educational background or other features can greatly effect the clinical judgment of the interviewer (Fischer & Miller, 1973; Cooke, Pogany & Johnston, 1974).

Clearly there is a need for some means of personality diagnosis which would provide pragmatic classification of a patient for treatment purposes, and would also provide usable statistics for research and

objective assessment. A further need would be met if the results of the assessment were presented in a form which included clear, behavioral definitions of assessment terminology thereby assisting communication between professionals both within and outside the mental health field.

One response to these needs has been the development of rating scales for use in evaluation. Rating scales are mechanisms for describing the symptoms and signs upon which traditional psychiatric diagnosis has been based, but in such a way as to allow quantitative evaluation (Overall & Hollister, 1967). Such forms have been under development for the past twenty years and have been used primarily in hospital settings to determine patient response to treatment (Overall & Hollister, 1967; Lorr, McNair & Lasky, 1960). The scales vary in makeup from simple paper and pencil check lists to detailed multi-dimensional computerized scales which measure many characteristics and produce a broad profile of scale scores.

The problem which arises in the development of a scale is the definition of characteristics. Many clinical terms have no standard definitions so it is necessary to define each characteristic operationally in such a way that all judges will have the same understanding of what they are measuring. Many characteristics are easily defined in their extreme forms, but cannot be easily identified when they are present in a less extreme form or in conjunction with other characteristics. It is, therefore, important that the definition include a description of the characteristics at each point on the scale.

Another problem in rating scales is the tendency to measure toward both ends of the spectrum, so that a high score on "Anxiety" might

indicate pathology while a high score on "Depression" would be the result of healthy functioning. This approach, which has been widely used, is confusing to the reader and limits the usefulness of the scale. Those scales which have corrected this problem tend to measure primarily pathological behavior and are, therefore, still somewhat limited (Ellsworth, 1968; Spitzer and Endicott, 1968; Martin, 1969).

It is the purpose of this report to test the reliability of inter-judge ratings on a newly developed scale called the Personality Assessment Report (P.A.R.) which has been designed for use in clinical evaluation and diagnosis (Schneider, 1974). It was designed to overcome the problems of undefined terms, of scoring toward both ends and of excessive influence by the personal bias of the rater. The scale has an operational definition for each characteristic at each point on the spectrum and, in this way, attempts to eliminate some of the rater bias so common to clinical assessment. It also includes "healthy" or "normal" characteristics so that it can be used more widely than some of the available scales. The P.A.R. provides a total score, or "personality quotient," and five subscores which give a usable profile. Because of these features it promises to be a valuable addition to research as well as a diagnostic tool appropriate for many different settings.

CHAPTER II

METHOD

The Instrument

The Personality Assessment Report (P.A.R.) was developed by Dr. Thomas Schneider of the Georgia Mental Health Institute. It has been under construction for four years and has been subjected to considerable testing and adaptation. (See Appendix A for a copy of the P.A.R.) Dr. Schneider developed the instrument in order to provide a brief yet inclusive scale which could be used in out-patient settings as well as in hospitals. In order to make it more appropriate for this purpose he included in it measures of healthy functioning as well as measures of pathology. The P.A.R. is a numerical scale which provides 30 scores of individual characteristics, 5 subscores and an overall score or "Personality Quotient." The scale was set up to provide these scores so that it could be used as a means of assessing change in therapy, when used for pre-therapy and post-therapy assessment.

An investigation of the literature on writing psychological reports supplied a base for isolating the personality classifications most frequently assessed. A review of frequently used test instruments such as the W.A.I.S., W.I.S.C., M.M.P.I., and Rorschach provided additional characteristics generally assumed to describe personality functioning. Finally, a search through various psychiatric rating scales produced additional characteristics and some definitions which were used as a base for the definitions of the P.A.R. (Lorr, 1954; Lorr, Jenkins & O'Conner, 1953; Lorr, 1963, Lorr, O'Conner & Stafford, 1961; Martin, 1969; Spitzer & Endicott, 1968; Overall & Gorham, 1962).

All of the characteristics and classifications so identified were assembled and categorized by content area, and an effort was made to eliminate duplications and overlapping items. The remaining items were evaluated by Dr. Schneider on the basis of his clinical experience and judgment and a number of characteristics were eliminated, being considered not useful or necessary for the purposes of the scale (Schneider, 1976).

The original scale developed by Dr. Schneider had 32 characteristics which were divided into four subscores. These were Intellectual Aspects, Attitudes, Emotional Aspects, and Interpersonal Relationships. The scale included general definitions of each of the characteristics, but did not provide operational definitions for the various points on the scale. In early tests of the instrument it became clear that this lack of operational definitions was a serious weakness in the scale. Raters were requested to use their own understanding of such terms as "depression" and "creativity," and disagreement between judges often resulted as much from differences in understanding of the meaning of the terms as it did from differences in observation of the clients. An intermediate scale was devised to correct for this weakness and provided a definition at each point on the scale for each characteristic, or 160 definitions. This scale retained the 32 characteristics and four subscales of the original scale. Using feedback from judges and a small, unpublished study as data, Dr. Schneider further refined the scale to its present state which consists of 30 characteristics divided into five subscores. The final change provided a clearer profile from subscores and eliminated two characteristics which were considered by the judges to be inappropriate (Schneider, 1976).

In order to provide a uniform scoring procedure the scale was developed to measure characteristics from 1 to 5, with 1 representing low or unhealthy personality functioning and 5 representing high or healthy functioning. This is done by measuring the "presence" of desirable characteristics and "absence" of undesirable characteristics. In this way, low overall scores represent poor functioning and/or the presence of maladaptive behaviors while high scores indicate the presence of "healthy" or "normal" behaviors.

Scoring is accomplished in an interview setting in which raters ask direct questions about the characteristics involved. Ratings are done as the rater conducts the interview. Scores are made on the basis of the client's self report, and the rater's observations and clinical assessment. Although raters are not given a specific set of questions to ask, they are requested to solicit certain information concerning each characteristic and are given suggested questions for some of the items. This provides both the structure needed to complete the form and the flexibility to establish important rapport with the client.

In its present form the subscores and characteristics scored on the P.A.R. are as follows:

A. Intellectual Aspects
   1. Intelligence
   2. Ability to Remember
   3. Capacity for Abstract Thinking
   4. Creativity
   5. Clarity of Thought

B. Capacity for Change
   6. Ability to Adjust
   7. Insight into Own Behavior
   8. Ability to Make Appropriate Judgments
   9. Energy Level
   10. Cooperation
   11. Independence

C. Emotional Aspects
   12. Impulse Control
   13. Absence of Anxiety
   14. Absence of Agitation or Tension
   15. Absence of Manic Behavior
   16. Absence of Depression
   17. Absence of Phobias
   18. Absence of Guilt Feeling

D. Interpersonal Relationships
   19. Interest in Others
   20. Absence of Attention-Seeking Behavior
   21. Absence of Interiority Feelings
   22. Absence of Need to Dominate Others
   23. Absence of Overt Hostility
   24. Absence of Anti-social Acts

E. Maladaptive Behaviors
   25. Absence of Delusions
   26. Absence of Hallucinations
   27. Absence of Somatic Concerns
   28. Absence of Obsessive-Compulsive Behavior
   29. Absence of Suicidal Indications
   30. Absence of Sexual Deviation

A test for reliability was run at Georgia Mental Health Institute in 1973, using the intermediate form of the scale. The results of that study were not significant and led to the changes mentioned above. None of the work to date has been published and it is hoped that this study will lead to a study of the validity of the instrument and eventual publication as a diagnostic tool. The purpose of the current study is to test inter-judge reliability of the scale.

Subjects

Fifteen subjects were interviewed using the P.A.R. All subjects were volunteers and fell into one of three classifications. Five were "normals" who were not in treatment at the time of the study and were considered healthy; five were in treatment in an outpatient setting and were considered mildly disturbed; and five were either patients in a day

program or had recently been hospitalized and were considered seriously disturbed. This selection of subjects was made in order to test rater agreement at both ends of the scale as well as in the safer middle portion. Some of the subjects were known to some of the judges while others were not. In the case of out-patient subjects, all judges were familiar with the names and client status of subjects. In a few cases subjects were known personally by at least one of the judges.

Subjects ranged in age from 15 to 37. Twelve women and 3 men participated in the study. This ratio was the result of difficulty in getting male volunteers to take part in the study and of the fact that the two "in treatment" populations from which subjects were drawn were more heavily populated by females than males.

Scoring

Each of the 30 items on the P.A.R. is scored from 1 to 5, and total scores can range from 30 to 150. Although the total score may be useful, the more important scores are the subscores, from which a profile may be derived. Score ranges on the subscores are as follows: Intellectual Aspects, 5-25; Capacity for Change, 6-30; Emotional Aspects, 7-35; Interpersonal Relationships, 6-30; and Maladaptive Behaviors, 6-30. A simple scoring sheet is provided with the rating scale. Scoring must be done during the interview and not from memory.

Judges

Five judges were used in the study, each of whom had a different background in terms of training and experience. They were: a Ph.D. psychologist with ten years clinical experience, an M.A. psychologist intern, and M.A. Counselor with five years of clinical experience, an

M.A. psychiatric nurse with five years experience, and a clinical chaplaincy intern with twenty years experience in the ministry and two years of clinical training. Judges were trained in three training sessions which involved review of and discussion of each point on the scale and agreement by consensus as to the meaning of all definitions. The version of the instrument appearing in Appendix A includes modifications arrived at through consensus. Once the study had begun, no further changes were made in the scale. One of the practice sessions involved watching an interview on tape and discussing results and differences of opinions. One of the judges was not present for all of the training sessions and did not meet regularly with the other judges to view tapes during the study. The other four judges viewed tapes together on some occasions and, at that time, often discussed and compared their ratings when they had been fully completed. They did not, however, change their ratings because of these discussions or discuss ratings while the interview was in progress; therefore, ratings were independent whether done individually or in the group.

Procedure

Each interview was conducted by one of the five judges using the P.A.R. and was recorded on video tape. Only the judge conducting the interview was present at that time. Tapes of interviews were then viewed by the other judges and were rated. All judges participated in conducting interviews and became familiar with the procedure for doing so.

CHAPTER III

RESULTS

Scores obtained during the study ranged from 84 to 143. Mean scores for each of the three groups involved varied considerably. The mean for the "normal" group was 130.3, with a range from 115 to 143 and a standard deviation of 7.63. The mean for the "outpatient" group was 110.8 with a range from 93 to 132 and a standard deviation of 9.0. The mean for the "day patient" group was 94.7 with a range from 84 to 112 and a standard deviation of 6.83. (See Table I)

Two statistical methods were used in order to test the reliability of inter-judge ratings using the P.A.R. Both are measures of correlation designed to show whether there is a statistically significant relationship between the scores obtained from different judges. The first measure used is a test for reliability of ratings called the Intraclass Correlation Formula (Guilford, 1961) and the second is the Pearson Product Moment Correlation. The latter was used in order to check and substantiate the results of the Intraclass Correlation Formula and to provide more information about specific pairs of judges. The Intraclass Correlation Formula was developed by Ebel specifically for use in correlating ratings obtained from different raters (Ebel, 1951). It is based on analysis of variance and essentially provides an average intercorrelation. This formula may be used for the average correlation of any number of raters and may be used with equal or unequal numbers of ratings. In this study, one judge rated 14 subjects while four judges rated 15 subjects. Because of this difference in number of ratings, the Intraclass Correlation Formula was particularly useful.

The Intraclass Correlation Formula is based on the idea that each estimate of a trait made by a rater may be considered to consist of a true component, which is constant in all estimates for any one person, but varies from person to person, and an error component, which varies from estimate to estimate for the same person but is assumed to be substantially the same in all sets of ratings for the various persons. If A represents the variance of true components in the population of persons from which the sample has been drawn and B represents the variance of errors in the population of estimates, then the total observed variance of the estimates is A + B. The reliability of the estimates is defined as that portion of the observed variance which is true variance, or $r = \frac{A}{A+B}$. In order to compute reliability coefficients one must obtain the mean square for error, which is a direct estimate of B, the variance of the population of errors of estimate. The mean square for persons, however, is not a direct estimate of A. Rather, it represents k (number of raters) times the variance of the means of the estimate and an error component attributable to B. Each mean consists of a true component, drawn from a population with variance A, and an error component, which is the mean of k errors drawn from a population with variance B. For further discussion of the mathematical development of the formula, see Ebel (Ebel, 1951).

The Intraclass Correlation Formula as used in this study was slightly adapted by Guilford (1954) and reads:

$$r_{kk} = \frac{V_p - V_e}{V_p}$$

when r_{kk} = the reliability of the mean of k ratings

V_p = variance for persons, which is calculated by dividing the mean square for subjects by the degrees of freedom.

V_e = variance for error, which is calculated by dividing the mean square for error by the degrees of freedom.

The results of the study using the P.A.R. when this formula was applied were significant and indicate a very good measure of reliability among raters. The results obtained for each of the five subscores and for total scores were as follows:

Subscore A	- Intelligence	r_{kk} = .9675
Subscore B	- Capacity for Change	r_{kk} = .9455
Subscore C	- Emotional Aspects	r_{kk} = .9357
Subscore D	- Interpersonal Relationships	r_{kk} = .9208
Subscore E	- Maladaptive Behavior	r_{kk} = .6708
Total Score		r_{kk} = .9228

According to the table for Significant Values of r, R and t (Guilford, 1954) with five variables and 14 degrees of freedom, r is significant at the .05 level at or above .686 and at the .01 level at or above .768. All but one of the scores obtained were significant at the .01 level, with Subscore E just failing significance at the .05 level.

Because the results of the test for reliability by the Intraclass Correlation Formula were unusually high in all cases but one subtest, it was decided to use the Pearson Product Moment Correlation on total scores in order to substantiate these results and to give more information about actual pairs of judges. The results of this statistic did support the

other scores. The average correlation of all judges' scores was .9292. Scores for pairs of judges may be found in Table II. These did indicate a slightly lower correlation between judge 5 and all other judges, but all correlations were significant.

CHAPTER IV

DISCUSSION

The results of two correlational measures of judges' ratings indicate that the Personality Assessment Report is a highly reliable instrument when administered by trained judges in an out-patient setting. One subtest, Subtest E - Maladaptive Behavior, was problematic in that judges' rating failed significance at the .05 level, but all other subtests provided ratings which correlated at .90 level or above and were significant at the .01 level.

There are no clear and apparent reasons for the lower correlation of scores on the Maladaptive Behavior Subtest. Although there was considerable discussion and disagreement about these characteristics during training of the judges of maladaptive behaviors, the judges did not report difficulty in rating due to ambiguity of the definitions. Neither did they report difficulty in making decisions about ratings in this section. It may be true, however, that because of the emotional weight of the characteristics in this subscore, judges were more subjective than on other subscores. It is also possible that due to the personal nature of the information solicited, the judges interviewing were less willing to press for the information necessary to make the ratings in this subscore than in others. It is possible that the fact that one judge was somewhat deviant in correlation with other judges on total scores may in some way have contributed to the lower correlation in this subtest. This might be true if his deviation was concentrated in that subscore and should be tested as part of the continuing study of the instrument.

The correlations between pairs of judges offer possibilities for

conjecture about those background features which lead to the highest correlation between judges. The judges whose total scores correlated at the highest level, .97, were the two judges who had known each other longest and who had worked most closely together. The next highest score, .96, was between the judges who had known each other the second longest period of time and who had worked together frequently. The judge whose ratings were part of each of those correlations had been in a supervisory and training capacity with the two other judges, and probably had a considerable effect on their approach. The judge whose scores were consistently the lowest in correlating with every other judge was not only the judge who missed several training sessions and viewed tapes by himself on most occasions, but he was the person who had worked the least with other judges in the clinical setting. Although no firm conclusions can be drawn from this information, it does tend to support the assumption that people who work together in a clinical setting tend to come to share in their understanding and may unconsciously influence one another. The high correlation of scores in this study may be due, in part, to the close, clinical relationship between three of the judges.

The present study was not intended to test the validity of the P.A.R.; however, since there is an inextricable relationship between validity and reliability (Little & Shneidman, 1959), the results do indicate considerable strength for the instrument. In any case, the results do encourage further study of the instrument, particularly as to its validity. During the study the judges were sometimes aware of the background of subjects, particularly concerning their status as clients or volunteers who were not in treatment. When judges were not aware of the subject's

classification, however, their ratings still tended to place them at the appropriate end of the scale. This fact provides a small bit of information which, although not statistically useful, could support the validity of the instrument.

During the process of the study it became clear that several changes in the P.A.R. would make it more effective and easier to use. In the present form there are examples of characteristics and sample questions for some of the characteristics but not for all of them. Although it would make the scale longer and more cumbersome, it would be helpful if each characteristic had both sample questions and examples. This would lead to greater standardization of the interviews and would facilitate rater understanding of the characteristics.

Another change which would be helpful would be to use a horseshoe rather than a linear effect on those characteristics which require it. An example of this would be the characteristic "Independence" in which complete dependence is seen as unhealthy and self-reliance is seen as healthy. These definitions, as present on the current scale, fail to take into account the healthy aspects of interdependence and the potential pathology of complete independence. There are several other characteristics in which this sort of problem arises and it is recommended that the definitions be changed and enlarged before further work is done with the P.A.R.

The results of this study indicate that further study of both the reliability and validity of the P.A.R. would be worthwhile and that the instrument does have some strength. It would be helpful, however, if several methodological changes were made in any further reliability

study. The most important of these would be that judges should be blind to the background and status of all subjects. In the current study that was not the case and it is impossible to tell how much that fact effected the outcome of the study. Another change would be that judges be prohibited from communicating about the instrument once training sessions are complete. This would eliminate the possibility of changes in reliability across time, which may have occurred in this study. Finally, it is recommended that future studies involve judges who are not closely connected in background and training or in clinical and personal experience. Again, it is impossible to assess the effect of the relationship between judges in this study, but it would provide much stronger support of the reliability of the P.A.R. if judges were unfamiliar with one another and if they worked in different settings.

The present study provides positive evidence of the reliability of the P.A.R. when used under the conditions described above. It is hoped that the results of this study will stimulate further research of the reliability and validity of the instrument. Further, it is hoped that with corrections and refinements of both the instrument and the methodology for studying it, the P.A.R. will prove to be a useful clinical tool.

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TABLE I

Mean Scores for Three Groups
Based on Total Scores

	Group I	Group II	Group III
Mean Score	130.3	110.8	94.7
Standard Diviation	7.63	9.0	6.83
Range	115 - 143	93 - 132	84 - 112

TABLE II

Correlations of Total Scores by Pairs of Judges

Judges	Correlation
1 & 2	.9718
1 & 3	.9637
1 & 4	.9598
1 & 5	.8715
2 & 3	.9457
2 & 4	.9588
2 & 5	.9069
3 & 4	.9355
3 & 5	.9041
4 & 5	.8745
Average for all judges	.9292

These scores were the result of the Pearson Product Moment Correlation.

APPENDIX A

P.A.R. Instructions for Interviewing

7/23/73

Ratings should be based on the rater's observations of what he considers to be typical or characteristic behaviors displayed by the subject at the time of the assessment.

The rating scale varies from 1 to 5 (from Very Low to Very High) with desirable behaviors receiving high ratings and undesirable behaviors receiving low ratings. Note that low scores indicate the presence of undesirable behaviors so that all scoring is weighted in the same direction, i.e., the higher the scores the more desirable is the level of subject's behavioral functioning.

All ratings must be based on the definitions in Definition Form #107. Subjective interpretations of the meanings of individual characteristics are to be avoided if standardized ratings are to be achieved.

The P.A.R. contains 30 personality characteristics divided into 5 separate categories (Intellectual Aspects, Capacity for Change, Emotional Aspects, Interpersonal Relationship, and Maladaptive Behavior). The range is from 30 to 150.

PERSONALITY ASSESSMENT REPORT (P.A.R.) (Form #106 - revised 10/15/73)
Refer to the Definition Form (Form #107) For All Definitions

Name_____ Date_____ Rater_____

Age____ Sex____ Status_____ Rater's Location_____

A. INTELLECTUAL ASPECTS	VERY LOW	LOW	MEDIUM	HIGH	VERY HIGH
1. Intelligence	1	2	3	4	5
2. Ability to Remember	1	2	3	4	5
3. Capacity for Abstract Thinking	1	2	3	4	5
4. Creativity	1	2	3	4	5
5. Clarity of Thought	1	2	3	4	5
B. CAPACITY FOR CHANGE					
6. Ability to Adjust	1	2	3	4	5
7. Insight Into Own Behavior	1	2	3	4	5
8. Ability to Make Appropriate Judgments	1	2	3	4	5
9. Energy Level	1	2	3	4	5
10. Cooperation	1	2	3	4	5
11. Independence	1	2	3	4	5
C. EMOTIONAL ASPECTS					
12. Impulse Control	1	2	3	4	5
*13. Absence of Anxiety	1	2	3	4	5
*14. Absence of Agitation or Tension	1	2	3	4	5
*15. Absence of Manic Behavior	1	2	3	4	5
*16. Absence of Depression	1	2	3	4	5
*17. Absence of Phobias	1	2	3	4	5
*18. Absence of Guilt Feelings	1	2	3	4	5
D. INTERPERSONAL RELATIONSHIPS					
19. Interest in Others	1	2	3	4	5
*20. Absence of Attention-Seeking Behavior	1	2	3	4	5
*21. Absence of Inferiority Feelings (Lack of Self-Confidence)	1	2	3	4	5
*22. Absence of Need to Dominate Others	1	2	3	4	5
*23. Absence of Overt Hostility	1	2	3	4	5
*24. Absence of Anti-Social Acts	1	2	3	4	5
E. MALADAPTIVE BEHAVIORS					
*25. Absence of Delusions	1	2	3	4	5
*26. Absence of Hallucinations	1	2	3	4	5
*27. Absence of Somatic Concerns	1	2	3	4	5
*28. Absence of Obsessive-Compulsive Behavior	1	2	3	4	5
*29. Absence of Suicidal Indications	1	2	3	4	5
*30. Absence of Sexual Deviation	1	2	3	4	5
			Sub-Total		
			Grand Total		

Note: Low scores indicate presence of undesirable behaviors and high scores indicate presence of desirable behaviors.

P.A.R. Definition Form (Form #107)
Revised 10/15/73

INTELLECTUAL ASPECTS

	1	2	3	4	5
1. Intelligence	Below 70. Very slow learner. eg, defective	70-90 Slow learner eg, "D" student	90-110 Average, eg, "C" student	110-130 Bright Normal through Superior, eg, "B" student	Above 130 Very Superior eg, "A" student

How far did you go in school? What kind of grades? Be aware of vocabulary words during interview.

2.					
Ability to remember	Does not know who or where he is at present	Fugue or amnesia - impaired in memories of recent or past events	Average ability to remember eg, 5-2-8-6	Excellent recall - Clear memories of past events eg,8-1-2-9-3-7	Superior ability to recall detailed memories of past events. eg, 9-4-3-7-6-2-5

Give digit backward tests to discriminate between 3, 4, and 5.

3.					
Capacity for Abstract Thinking	Very concrete stimulus bound-literal. Can solve only the most basic or simple-minded problems.	Can go slightly beyond the stimulus materials to solve problems. Finding an alternative solution that is preferable to the obvious.	Average ability to generalize; can solve basic everyday problems; butto isolate has to strug-commonalities gle with more complex situations.	Above average ability to solve more complex problems; eg,	Superior problem solving abilities. Very flexible reasoning.

1) Add 2 + 2, 2) Fire is hot; ice is ___. 3) & 4) How are a book and a painting alike? If answer is functional, eg, "You look at them both," score 3. If answer is abstract, eg, Both are works of art," score 4. 5) How are 25 and 81 alike? Answer both have odd-numbered square roots.

4.					
Creativity	Inability to make more than functional use of	Ability to imitate but not originate eg, paint by numbers	Some degree of originality but with little artistic merit.	Productive but not professionally competitive	Professionally competitive

5.					
Clarity of Thought	Makes no sense - aimless verbalizing	Difficult to understand, eg, rambling	Understand-able but not always precise	Clear and easy to understand	Logical, penetrating, incisive verbalization

B. CAPACITY FOR CHANGE

6.					
Ability to Adjust	Generally unable to cope with any form of stress, eg, withdraws from every-day demands	Some ability to adapt to changes in circumstances but generally not effective, eg, rebels or consistently withdraws	Can handle the stresses of everyday life, but needs help in coping with them consistently. Turns to others rather than relying on his own abilities.	Somewhat effective in coping with unusual forms of stress. eg, May have emotional side effects from losing a job but can find a new one on his own. Relies on others when appropriate.	Generally able to cope with a all but the most unusual forms of stress

7.					
Insight Into Own Behavior	Unable to assume res-ponsibility for his own behavior and unable to foresee the consequences, eg, doesn't know how he got into present situation.	Denies that he may be at fault and/or blames others, Has no understanding of problem. eg, "My hus-band/wife etc got me into this mess.	Has a limit-ed under-standing of his involve-ment but sees no solu tion. eg, "I know I'm partly the cause but I don't see anything I can do about it."	Understands his own in-volvement in the outcome of his be-haviors and frequently can assume responsibility eg, "I know I'm partly the cause and I'd like to work on it."	Anticipates the consequences of his actions; and assumes the appropriate responsibility except under the most unusual cirsum-stances. eg, "If I keep on nagging, our marriage will end in divorce!"

8.					
Ability to Make Appro-priate Judgments	Repeatedly becomes in-volved in painful, self damaging sit-uations. eg, more than one criminal con-viction; re-peated unsuc-cessful love affairs.	Sometimes con-siders the future but frequently fails to learn from his mistakes. eg, in the past two years has been unable to hold a job for longer than 6 months.	Dissatisfied with present circumstances but does no-thing about it. eg, may be able to hold a job for longer than 6 months but is un-able to ad-vance in accordance with his capabilities.	Frequently can improve his behavior as a result of his experience. Makes mistakes but can profit from them. eg, if fired from a job moves on to a better position.	Evaluates his past experi-ence so as to maximize his future bene-fits. Changes his behavior before he makes mistakes. eg, would change jobs voluntarily when presented with a better opportunity.

9.					
Energy Level	Lethargic; slow to respond; apathetic about usual activities.	Interested in a few activi-ties but little enthu-siasm for tasks. Flat affect.	Maintains interest in usual activ-ities; has periodic enthusiasm for tasks.	Enjoys usual activities and consis-tently applies him-self to his tasks.	Enthusiastic-ally, and cally engages in productive work.

10.					
Cooper-ation	Rarely obeys instructions follows rules or listens to the views of others.	Obeys rules and follows instructions reluctantly. Has diffi-culty working with others.eg, answers specif-ic questions but volunteers no additional information.	Conforms to societal norms. Works adequately with others when prompted.	Obeys rules and follows instructions willingly. Works willing-ly with others.	Works enthusi-astically in harmony with others.

11. Independence	Almost totally requires others to take care of him. eg, unable to live alone; can't buy clothes or groceries	Tends to cling to other people in a childish fashion in order to get them to take care of him. eg may be able to live alone; but is constantly calling on others for advice and assistance.	Relies on others occasionally whether under stress or not. eg, seeks more than one other opinion before acting on his own.	Relies on others under stress. eg, death in family; divorce, sickness, accidents.	Self-reliant in planning and controlling his own actions.

C. EMOTIONAL ASPECTS

12. Impulse Control	Acts without thinking; unrestrained emotional displays, eg, violent temper tantrums, uncontrolled crying.	Tends to be histrionic, theatrical, or flamboyant in the display of his emotions, eg, ranting and raving whenever he cannot get his way. Tends to be unreasonably obstinate.	Tends to react without thinking when in a stressful situation. eg, yells at children when they misbehave; cries or plays the martyr when severely critidized.	May overreact at times but generally is able to restrain emotional displays. eg, withdraws, pouts, or becomes sullen when frustrated.	Displays appropriate emotional restraint except under severe stress, eg, death in family.
13. Absence of Anxiety	Daily feelings of nervousness, apprehension, or panic with accompanying physical symptoms, eg, vomiting, headaches, shortness of breath, insomnia, trembling or perspiring.	Feelings of nervousness, apprehension or panic (with accompanying physical symptoms) may come and go without specific cause.	May experience feelings of worry and tension (with or without accompanying physical symptoms without specific cause eg, stomach tension.	Seldom (less than once a month) experiences feelings of worry and tension (with or without accompanying physical symptoms) without specific causes.	Usually associates feelings of worry and tension with the appropriate cause or fear.

*Note: Interview observations only.

Suggested questions: 1) How are your nerves? 2) How do you sleep? 3) Do you take any medication?

14. *Absence of Agitation or Tension	Pacing, hand wringing. Extremely fast speech. Inability to remain in chair.	Fingernail biting, chain smoking, finger drumming, or rigid body posture. eg, gripping chair arms.	Inability to sit still fidgeting.	Moving hands restlessly, eg, fiddling with pencil.	Relaxed body posture.
15. *Absence of Manic Behaviors	Bizarre elation. eg, Laughing or giggling for no specific reason. Gives away important possessions indiscriminately.	Excessively outgoing, unjustifiably optimistic. eg excessive spending to the extent of financial difficulties.	Occasionally acts foolish or overly enthusiastic with no justification. eg, shopping spree; overly complimentary.	Expressions of elated mood are rare even when appropriate.	Realistic appraisal and expression of elevated mood.

Question: Do you have periodic mood changes?

16. *Absence of Depression	Feelings of hopelessness worthlessness excessive sadness and crying for no specific reason.	Preoccupied with unpleasant thoughts or feelings (eg loss, gloom, or guilt) with little reason.	May have feelings of inappropriate sadness, etc. but for periods only eg, 2 to 3 days at a time.	Sadness precipitated by an external event may be prolonged (more than several weeks) eg, child leaving home for school.	Feels sadness, etc. as an appropriate reaction to certain circumstances (eg, death of a loved one).
17. *Absence of Phobias	Incapacitating irrational fear of particular objects or situations.	Irrational fears which are inhibiting but not incapacitating.	Has some irrational fears which may be troublesome but not inhibiting.	Has rational fears which may be troublesome.	Handles his rational fears.

Examples:
1. refusal to leave house because of fear of lightning, dogs, etc.
2. may leave house but must have someone accompanying him.
3. may speak in public but is extremely anxious when required to do so.
4. uncomfortable in such situations as high places, confined cars, or airplanes.

18.					
*Absence of Guilt Feelings	Incapacitating feelings of sin and evil. eg, believes he is burning in hell, that nothing can help him Unable to work or provide for his family.	Can work or provide for his family but consistently punishes himself to the extent of getting minimal pleasure or satisfaction from life. eg, avoids pleasurable activities. Or denies ever feeling guilty.	Believes his feelings of unworthiness can be relieved by punishment. eg, confesses; feels he has to own up to acts of lying, cheating or steeling.	Regrets breaches of conduct and feels that he can make amends through positive action. eg, returns more than he took; cheats on income tax and then makes an added contribution to charity.	Regrets breaches of conduct but accepts the fact that there are certain behaviors for which no compensation can be made. eg, causing accidental death or injury.

D. INTERPERSONAL RELATIONSHIPS

19.					
Interest in Others	Attempts to avoid any interaction with others eg, withdrawn, isolated.	Interacts with others only when necessary eg, speaks to others to make purchases, discuss job, etc. but would not engage in idle conversations.	Seeks interactions with friends but does not go out of his way to seek new social relationships.	Occasionally seeks new social relationships and is receptive to others involvement with him.	Actively seeks interaction with others eg, joins clubs, social and political groups.

20.					
*Absence of Attention Seeking Behavior	Regularly manipulates others in attempting to seek praise. eg, Obnoxious attempts to dominate social situations. Show-off or other outlandish maneuvers. eg suicide gestures.	Attempts to become the center of social situations. eg, monopolizes conversations parties, and meetings. Narcissistic.	Seeks notice from others without monopolizing eg, uses grooming, dress, or vocabulary to show off	Seeks notice from others only through his achievements; or attempts to avoid notice.	Seldom feels the need to seek notice from others. eg, self-contained. Content with his life style.

21.					
*Absence of Inferiority Feelings (Lack of Self Confidence	Feels that he is looked down on and is unable to function adequately in the presence of anyone.	Refuses to attempt certain activities because he feels that others are more intelligent, more capable, or more attractive than he is.	Feels inadequate at times in the presence of others.	Recognizes but may not use his capabilities to their fullest extent.	Recognizes and uses his own capabilities.

Examples:
1. refuses to apply for any job that would bring him into contact with other people
2. refuses to apply for a new job because he is sure that anyone else would get it before he does.
3. takes any negative criticism of his performance as a reflection of his competence.

22.					
*Absence of Need to Dominate Others	Exhibits a monopolizing, arrogant authoritarianism.	Overbearing.	If aggravated may attempt to control and manipulate; or may remain passive and unwilling to stand up for himself.	Assert himself only if it doesn't infringe on other's rights.	Interferes in others' affairs only to protect his own rights.

Examples:
1. father who demands absolute obedience.
2. nagging housewife; insistent boss who tries to impress others with his power.
3. underpaid secretary may either threaten to quit or stay on and do nothing.
4. underpaid secretary would not ask for a pay raise if another employee would have to take a pay cut.
5. business or professional person who allows others to work independently as long as it does not interfere with his own career.

23.					
*Absence of Overt Hostility	Physically assaultive to others.	Verbally assaultive to others. eg, threats of violence.	May be evasive, sarcastic, or oppositional eg, passive-aggressive.	When provoked becomes argumentative.	When provoked attempts to determine causes rather than retaliating. eg, if criticized examines and discusses the problem.

24.					
*Absence of Anti-Social Acts	Engaging in illegal acts, eg, stealing, vandalism, assault within the last year.	Obstructs other people's goals by deliberately being inefficient or delaying. eg, lying, "conning." Or arrests resulting from negligent behavior eg, drunk driving within the last year.	May display a complacent attitude toward rule breaking. eg would not report acts of stealing or cheating which he had observed	Law-abiding eg, would follow rules even though he disagreed with them.	Actively promotes civic and legal processes. eg, campaigns for political candidates; joins civic organizations.

E. MALADAPTIVE BEHAVIORS

25.					
*Absence of Delusions	Constant belief about something which is not true. eg, persecution or grandiosity.	Often feels persecuted or has an inflated appraisal of himself.	Sometimes feels suspicious or exaggerates feelings of self-importance.	Occasionally has fleeting suspicious thoughts. May boast on occasion but sometimes follows through.	Usually has congruent beliefs about how others feel toward him. Can make relistic appraisals of his abilities.

26.					
*Absence of Hallucinations	Regularly hears voices or sounds; or sees, feels, tastes or smells something with no apparent source outside of himself. Is convinced these are "real."	Occasionally hears voices or sounds; or sees feels, smells or tastes something with no apparent source outside himself. Sometimes doubts the reality of these.	Has doubts as to the reality of vivid imagery. eg realistic dreams	Occasionally wonders about the existence of his vivid images. eg, belief in ESP, UFO, premonitions, etc.	Is able to fantasize freely while realizing that such images are fantasy.

27.					
*Absence of Somatic Concerns	Bizarre or unrealistic feelings or beliefs about his body or parts of body. Excessive seeking of medication. Constant complaining.	Excessive concern with bodily functions. Frequently seeks medication.	Sometimes has worries over bodily health which may or may not be realistic.	Infrequently complains but worries are generally related to a relistic appraisal of bodily health.	Worries over bodily health only when related to a realistic appraisal of his condition. Seldom complains.

28.					
*Absence of Obsessive--Compulsive Behavior	Has thoughts which occur repeatedly against his resistance, the content of which he regards as senseless; or performs some act or routine which he can not resist repeating excessively. eg, hand-washing.	Unduly concerned with details neatness, order, punctuality, or adherence to set procedures for doing things. eg, uncomfortable if familiar things are out of place.	May be concerned with details, neatness, order, punctuality, or adherence to set procedures for doing things. eg, gives excessive details in answering interview questions, makes lists frequently.	Becomes involved with work or getting things done, sometimes at the expense of pleasure or relaxation, occasionally makes lists.	Become involved with work or getting things done but not at the expense of pleasure or relaxation.

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29. *Absence of Suiidal Indications	Has attempted acts of either suicide or self mutilation within the past two years.	Has made serious threats of either suicide or self-mutilation	Has periodically considered the possibility of suicide or may have made plans.	Has considered the possibility of suicide but never made plans.	Has had thoughts about death but has rejected the idea of suicide.
30. *Absence of Sexual Deviation	Attempted or completed a sexual assault.	Exhibitionism Masochism Sadism Voyeurism Exclusive homosexuality.	May be uncomfortable in heterosexual relationships May have experimented with homosexuality, non-orgasmic intercourse, premature ejaculation, impotence.	Has maintained satisfying short-term (min. 1 mo.) heterosexual relationships within the past two years. And/or comfortably identifies with appropriate sex role.	Has maintained satisfactory long-term (min. 6 mo.) heterosexual relationships within the past two years and/or comfortably identifies with appropriate sex role.

APPENDIX B

Subscore A - Intellectual Aspects
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	19	21	20	21	20
#2	18	20	17	18	18
#3	20	20	19	20	19
#4	21	22	21	21	21
#5	21	23	21	20	18
Group 2 - Out-patient					
#6	14	15	17	14	15
#7	19	20	19	18	19
#8	20	21	21	20	19
#9	20	23	20	21	21
#10	22	22	21	21	20
Group 3 - Day-patient					
#11	19	19	20	18	19
#12	17	19	19	16	17
#13	11	9	13	12	
#14	18	17	19	17	17
#15	16	20	19	18	15

Subscore B - Capacity for Change
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	24	27	24	27	27
#2	22	23	24	24	23
#3	27	28	23	29	25
#4	28	29	28	29	27
#5	23	26	21	24	24
Group 2 - Out-patient					
#6	17	17	19	16	16
#7	21	22	20	20	27
#8	22	22	22	20	23
#9	22	25	22	20	25
#10	23	24	23	23	24
Group 3 - Day-patient					
#11	20	21	21	22	27
#12	18	18	20	16	21
#13	15	13	14	13	
#14	20	16	18	18	21
#15	14	14	14	11	16

Subscore C - Emotional Aspects
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	29	29	28	31	30
#2	25	30	28	29	30
#3	33	34	32	33	36
#4	35	33	31	35	34
#5	33	28	32	30	31
Group 2 - Out-patient					
#6	26	25	24	19	23
#7	24	23	22	23	27
#8	26	27	26	23	26
#9	24	26	23	19	29
#10	29	27	25	25	21
Group 3 - Day-patient					
#11	24	24	23	24	23
#12	23	17	24	24	22
#13	17	24	16	18	
#14	21	19	16	20	21
#15	16	16	15	18	19

Subscore D - Interpersonal Relationships
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	26	26	22	29	26
#2	24	23	21	27	26
#3	28	29	25	28	26
#4	28	29	29	30	25
#5	28	27	26	26	24
Group 2 - Outpatient					
#6	23	21	21	20	19
#7	16	16	18	18	16
#8	21	19	21	18	21
#9	27	22	22	27	27
#10	19	17	25	24	22
Group 3 - Daypatient					
#11	19	19	19	17	19
#12	17	17	17	14	18
#13	20	14	21	17	
#14	17	15	18	21	16
#15	22	19	19	19	17

Subscore E - Maladaptive Behavior
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	28	28	26	27	26
#2	26	28	27	25	30
#3	28	30	29	30	27
#4	26	29	26	28	28
#5	27	27	30	26	26
Group 2 - Outpatient					
#6	26	21	22	22	20
#7	22	22	24	23	25
#8	23	24	22	19	24
#9	25	25	26	27	30
#10	22	20	26	27	28
Group 3 - Daypatient					
#11	19	19	20	19	24
#12	21	23	22	22	28
#13	29	24	23	24	
#14	21	22	21	18	25
#15	22	23	20	25	21

Total Scores
Raw Scores

Subjects	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5
Group 1 - Normal					
#1	126	131	120	135	129
#2	115	124	116	123	127
#3	136	141	127	140	136
#4	138	142	135	143	135
#5	132	130	127	127	123
Group 2 - Outpatient					
#6	106	99	103	106	93
#7	102	103	103	102	114
#8	112	113	112	100	113
#9	118	121	113	115	132
#10	115	110	120	120	125
Group 3 - Daypatient					
#11	101	102	103	100	112
#12	96	94	102	92	106
#13	92	84	87	84	
#14	97	89	92	94	100
#15	90	92	87	91	88