CHAPTER 2

PERSONALITY AND ITS MEASUREMENT

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There is a growing realization of the fact that personality is of great significance in all areas of the present day complex society. So much social value is attached to it that good personality is believed to be a guarantee of happiness and success in any sphere of life.¹

The term personality has been defined in numerous ways yet there seems to be a lack of universal and internally consistent conceptual language for adequate personality description in contemporary psychology. In fact, each major personality theorist has attempted to develop his own conceptual system which has little integration with any other system. The great diversity of viewpoints in the area thus creates considerable difficulty for any one who attempts to survey the field.

Still, however, one would like to mention the definitions of personality given by three main factor theorists Cattell, Guilford and Eysenck.

DEFINITIONS OF PERSONALITY

According to Cattell², "Personality is that which permits a prediction of what a person will do in a given situation". He then adds, "the goal of psychological research in personality
is thus to establish laces about what different people will do in all kinds of social and general environmental situation. Personality is concerned with all the behaviour of the individual both over and under the skin.

Guilford defines personality as "An individual's personality is his unique pattern of traits." This definition emphasizes the individual differences. That means one can best know personalities by comparing them with one another.

According to Eysenck, "Personality is the more or less stable and enduring organization of a person's character, temperament, intellect, and physique, which determines his unique adjustment to the environment." Character denotes a person's more or less stable and enduring system of conative behaviour; temperament, his more or less stable and enduring system of affective behaviour; intellect, his more or less stable and enduring system of cognitive behaviour; physique, his more or less stable and enduring system of bodily configuration and neuro-endocrine endowment.

A more detailed account of personality theories given by these psychologists is as under:
THEORIES OF PERSONALITY

personality Theory of Cattell

Trait

The trait is by far the most important of Cattell's concepts. For him a trait is a "mental structure", an inference that is made from observed behaviour to account for regularity or consistency in this behaviour.

Central to Cattell's point of view is the distinction between surface traits which represent clusters of manifest or over variables that seem to go together and source traits which represent underlying variables that enter into the determination of multiple surface manifestations. Thus if one finds a number of behavioural events that seem to go together one may prefer to consider them as one variable. Source traits are identified only by means of factor analysis which permits the investigator to estimate the variables or factor that are the bases of this surface behaviour.

Cattell considers source traits more important than surface traits because, "the source traits promise to be the real structure influences underlying personality, which it is necessary for one to deal with in developmental problems, psychosomatics, and problems of dynamic integration."
Surface traits are produced by the interaction of source traits and generally can be expected to be less stable than factors. Cattell admits that surface traits are likely to appeal to the common sense observer as more valid and meaningful than source traits, because they correspond to the kinds of generalisations that can be made on the bases of simple observation. However, in the long run, it is the source traits that prove to have the most utility in accounting for behaviour.

The traits that result from the operation of environmental conditions are called environmental mold traits; those that reflect hereditary factors are called constitutional traits.

Traits are generally divided into three modalities: abilities, temperament and dynamic traits.

As Cattell remarks:

An ability to shown in the manner of response to the complexity of a situation, when the individual is clear on what goals he wants to achieve in that situation. A temperament trait is usually stylistic, in the sense that it deals with tempo, form, persistence etc, covering a large variety of specific responses. A dynamic trait has to do with motivations and interests.

Specification Equations:

One may describe the personality in terms of ability, temperament and other kinds of traits. But how is one to put this information back together in a particular case to predict
the response of an individual in some particular situation. Cattell suggests that one can do this by means of specification equation:

\[ R = S_1 T_1 + S_2 T_2 + S_3 T_3 + \cdots + S_n T_n \]

This simply means that the given response may be predicted from the characteristics of the given person (the traits \( T_1 \) to \( T_n \)) each weighted by its relevance in the present situation (the situational indices \( S_1 \) to \( S_n \)). If a particular trait is highly relevant to a given response, the corresponding \( S \) will be large; if the trait is totally irrelevant, the \( S \) will be zero; if the trait detracts from or inhibits the response, the sign of \( S \) will negative. The form of the equation implies that each trait has an independent and additive effect on the response. The specification equation implies both a multidimensional representation of the person and of the psychological situation.

Ergs

In the simplest term, an erg is a constitutional, dynamic source trait. Cattell defines erg as:

An innate psycho-physical disposition which permits its possessor to acquire reactivity (attention, recognition) to certain classes of objects more readily than others, to experience a specific emotion in regard to them and to start on a course of action which ceases more completely at a certain specific goal activity than at any other.8
He indicates that this definition has four major parts: perceptual response, emotional response, instrumental acts leading the goal and the goal satisfaction itself. Cattell has established ten ergs by his factor analysis researches. They are hunger, sex, gregariousness, parental protectiveness, curiosity, escape (fear), pugnacity, acquisitiveness, self-assertion and narcissistic sex.

Sentiments:

A sentiment is a environmental mold, dynamic source trait. It is parallel to the erg, except that it is the result of socio-cultural factors not constitutional determinants. In Cattell's words, "Sentiments are major acquired dynamic trait structures which cause their possessor to pay attention to certain objects or classes of objects and feel and react in a certain way with regard to them."9

Self:

The self is one of the sentiments but an especially important one, since nearly all attitudes tend to reflect the self sentiment in greater or lesser degree. In any event, the sentiment or system of sentiments focussed around the self is considered by Cattell to play a crucial role in the integration of personality.

Thus trait, erg, sentiment, self and specification equation give complete picture of Cattell's personality theory.
Personality Theory of Guilford:

Guilford is perhaps best known among psychologists for his work on intelligence and creativity and for his texts on statistics and psychometric methods.

He has summarized his views on personality in the book 'Personality' in which he strongly emphasizes factor analytic studies this way, "as a single, logical model for unifying the facts of individual differences, there is at present no rival to the model provided by factor theory. Factor analysis has far revealed a multitude of basic variables of individual differences."¹⁰

Guilford views personality as a hierarchical structure of traits, from broad types at the top, through primary traits to hexes (specific dispositions like habits) and at the lowest level, specific actions. Guilford also recognizes major sub areas within the personality. Three of these: ability dimensions, temperament dimensions and somatic dimensions correspond roughly to Cattell's ability, temperament and dynamic traits. In addition Guilford adds a class of somatic dimensions and additional category of dimensions of pathology to cover personality disturbances. Guilford likes to organize the dimensions in any one of these areas into two or three dimensional rectangular tables or matrix in which a particular factor is seen as a more general
function or quality being expressed in a certain area of behaviour. It should be noted that these organizing principles are not themselves discovered by factor analysis, but represent interpretations or schemes into which already discovered factors can be ordered and which can direct the search for new factors.

**Personality Theory of Eysenck:**

Eysenck views personality as organized in a hierarchy. At the most general level are broad dimensions or types which means an "observed constellation or syndrome of traits". The type is a more generalized and inclusive variety of organization and includes the trait as a component part. At the next level are traits which means an "observed constellation of individual action tendencies", below this is a level of habitual responses and at the bottom of the hierarchy are specific responses, the behaviour actually observed.

Eysenck analyzes personality into three broad dimensions. **Neuroticism:**

Eysenck indicates his belief that hereditary factors probably play some role in the development of this type, but is frank to confess that the experimental findings from this set of studies do not lead to any firm inferences in this area. He considers
neuroticism a general factor in the area of motivation or striving. Thus he believes that at least in part, neuroticism may be considered to represent a defect of the will or of the capacity of the individual to persist in motivated behaviour.

Extroversion - Introversion:

The extroverts show a tendency to develop hysterical conversion symptoms and a hysterical attitude to their symptoms. They show little energy, narrow interests, have a bad work history and are hypochondriacal. Their intelligence is comparatively low, vocabulary poor. They appreciate sex jokes, their handwriting is distinctive.

On the other hand, introverts show a tendency to develop anxiety and depression symptoms. They are characterized by obsesssional tendencies, irritability, apathy. Their feelings are easily hurt, they are self-conscious, moody, daydream easily, suffer from sleeplessness. Their intelligence is comparatively high and have excellent vocabulary.

Psychoticism:

The new variable found out by Eysenck was psychoticism. He describes the individual on this dimension as following:

"Psychotics are less fluent, perform poorly in mirror drawing, show slower oscillation on the reversal of perspective test, are slower in tracing with a stylus, are more undecided with respect
to social attitudes, show a poor concentration.... so on.  

He points out that these differences between psychotics and normals can not be attributed simply to the tendency on the part of the psychotics to be poorer in performance than normals in all areas, as there were many tests where there was no difference in the performance of the normal and psychotics group.

MORE ABOUT CATTELL'S THEORY:

After discussing different personality theories, one would like to mention certain distinctive aspects of Cattell’s views concerning personality research because among all other psychologists, he seems to be very different in his personality theory.

Two mutually different approaches have been largely adopted by psychologists in the study of personality - the ideographic approach which stresses the organization of characteristics within any given individual and at the same time emphasizes the study of the total personality. The second approach is 'nomothetic approach' which involves the search for dimensions that are common to all men. Cattell was the chief exponent of this approach.

Cattell was convinced that large scale research would produce the most significant advances of the future in research area. He believed that most psychologists had unwisely shunned the necessity of careful description of personality in favour of moving toward impressive generalization and the study of developmental phenomena. Much of Cattell’s work particularly that concerned with
identifying source and surface traits, can be considered simply on attempt to fulfill this task of description and provide a firm base upon which future investigation and generalization can build.

One of the most novel features of Cattell's writing has been his consistent emphasis upon the different types of correlational studies:

1. **R-technique** studies which represent the customary approach of the psychologist. Here a large number of individuals are compared in terms of their performance on two or more tests.

2. **P-technique** where scores for the same individual on a number of measures are compared at different times.

3. **Q-technique** where two individuals are correlated on a large number of different measures.

Cattell had shown a steady interest in the role of hereditary determinants of behaviour and this theoretical concern is mirrored in research activity.

Cattell had shown a ready inclination to convert his theoretical ideas into empirical steps. In contrast to other personality theories, there was no tendency for the theory to develop as an armchair abstraction while the empirical appraisal
lingered far behind. In fact, there was scarcely any clear separation of theory and experiment.

Where many personality theorists had been content to elaborate concepts and assumptions to a point where the investigator was trapped in a morass of conflicting and unclear implications, Cattell was inclined to put forward his faith in terms of a simple and lucid set of dimensions. Thus, simplicity and explicitness are cardinal virtues of his theory.

Not only he was economical and explicit in his formulations but also he was operational. More than almost any other brand of psychological theory, this position has included a detailed concern for clear and unambiguous empirical definition.

Whereas most personality theorists had carried at their conception of the crucial personality variables through a process that was largely intuitive and unspecified, Cattell and Eysenck provided an objective and replicable procedure for the determination of underlying variables.

PRINCIPLES OF PERSONALITY MEASUREMENT

To some people the idea of measuring personality seems faintly sacrilegious and they are inclined to deny its possibility along with its desirability. Certainly, there are problems faced by psychologists in measuring personality but the idea of measuring it can not be denied.

Some principles of personality measurement can be laid down as under:

(1) The measurements will not be couched in units of conceptual simplicity as those of the physical world.
(2) The measurements will not have the stolid fixity as one expects in dimensions of inanimate objects.

(3) For using the measurements meaningfully, it is going to be necessary to know something about the way in which functional unities grow and change.

(4) Absolutely basic necessity is that the measurements should refer to the degree of the individual's possession of traits that have been definitely established as functional unities.

TECHNIQUES OF PERSONALITY MEASUREMENT:

"One can understand personality assessment better if one recognises in it the influence of phenomenological psychology. Phenomenological psychology is concerned with the way the world appears to the individual, with his so-called private world. Such expressions as self-concept, feelings of hostility and hostile attitude toward authority refer to perceptions and reactions that occur within the individual.

The first personality questionnaires were developed in an attempt to study the inner world of perception and feeling. Galton devised the technique in the 1880s when he needed a standard procedure for studies of mental imagery. Use of questionnaires again for research purposes, was extended later in the 19th century by G. Stanley Hall in his studies of adolescent development
He used information given by large samples of adults to delineate normal trends in development.

**Personality Inventories (Self Reports)**

The first inventory primarily concerned with the individual was the Woodworth Personal Data Sheet. At the beginning of the World War II, the U.S. Army wanted to detect soldiers likely to break down in combat. Woodworth made a list of symptoms such as psychiatrists and touch upon in a screening interview. The test had appreciable power to detect maladjusted soldiers. The Woodworth scale was a forerunner of a number of 'adjustment inventories' that list problems, symptoms etc. to be checked. Bell Adjustment Inventory scores for home adjustment, health adjustment, submissiveness, emotionality and hostility based on transparent items.

Adjustment inventories are screening instruments. They single out persons who freely back symptoms and self criticisms. They are not focused measures of any clearly defined trait. The inventories may be used to identify persons who should be offered counseling. While "problem cases" who cause trouble are easily recognized.

During the period from 1920 to 1945, most psychologists were behaviouristic in outlook. The inventory was thought of as
primarily a substitute for observation and the questions placed more emphasis on what the individual did than upon how he felt or what he thought. The questionnaire was broadened to describe separate aspects of behaviour in a trait profile. Personality was conceived during this period as a bundle of pervasive habits. The individual was described by the strength of his friendliness, confidence, persistence etc. by the frequency with which he makes such responses.

Dozens of instruments were produced, each taking items from his predecessors, adding a few new ones and scoring them in new combinations. The best known instrument of that period was the Bernreuter Personality Inventory, scored for neurotic tendency, self-sufficiency, introversion and dominance.

Flanagan attempted to define key dimensions of this scale by factor analysis. He adopted the principle that to deserve separate names, traits must have low correlations. He inter-correlated Bernreuter scores of 305 adolescent boys and found much overlap. "Introversion" as these measured, is little different from "neurotic tendency", since items on social isolation and day dreaming carry weight in both scales. Flanagan concluded that confidence and sociability factors could account for the information carried by the four original keys and he developed scoring keys for these traits. The two scores correlate negligibly and thus do represent independent aspects of the self report.
There followed a period when personality theory was wholly subordinated to a statistical search for dimensions. Guilford divided introversion into social introversion, thinking introversion, depression, cycloid tendencies or frequent shifts of mood and restraint. Later he added eight more scales. Other investigators rearranged them into patterns that they regarded as more efficient. Thurstone accounted for much of the information in Guilford's thirteen scores, by seven factors.

Minnesota Multiphasic Personality Inventory holds a place among personality questionnaires comparable to that of the strong among interest measures. It was originally constructed by starks Hathaway and J. C. McKinley to aid in diagnosis of psychiatric patients. A collection of 550 items was prepared by borrowing from older inventories and rephrasing diagnostic clues used by psychiatrists. Some items refer to observable behaviour, some ask about feelings that could not be observed from outside and some ask about beliefs. Some items frankly ask about abnormalities, whereas others appear to have no favourable or unfavourable connotations. Items are to be answered 'T', 'F' or '?'.

MMPI is rather unsuitable for normal groups, particularly for younger ones. The California Psychological Inventory (CPI) and Minnesota Counseling Inventory (MCI) are descendants of MMPI that are designed for relatively normal high school and college students.
Disadvantages of Personality Inventories:

The question of taking and malingering is far more acute in personality measurement than in aptitude testing. The behaviour measured by personality tests is also more changeable than that measured by tests of ability.

Another problem is presented by the greater specificity of responses in the sphere of personality. For example, an individual might be quite sociable and extroverted at the office but rather shy and introverted at the formal social receptions. Or a student who cheats on examinations might be scrupulously honest in money matters.

The search for adequate criterion data for the establishment of validity has generally proved less successful in personality tests.

Personality inventories have been vigorously attacked on the ground that their responses are necessarily ambiguous.

But the acknowledged deficiencies of current personality inventories may be met in at least two ways. First, personality inventories may be recognized as intrinsically crude instruments and their application restricted accordingly. Second, various procedures for improving the inventories may be explored.

Efforts have been exercised to improve self-report inventories by the application of factor analysis as a means of arriving
at more systematic trait categories, the keying of individual items against highly specific criteria, the use of a forced-choice technique, the development of verification and correction scales and the preparation of 'subtle' items whose diagnostic significance is less apparent to the respondent.

A self-report inventory is indubitably a series of standardized verbal stimuli. When proper test construction procedures have been followed, the responses elicited by these stimuli are scored in terms of their empirically established behaviour correlates. They are thus treated like any other psychological test responses.

The frequency of ambiguous or equivocal responses may be reduced by formulating items more specifically and clearly.

The vagueness of the questions can be determined only by empirical correlation with appropriate criteria and by other experimental procedures.

Thus, though personality inventories have disadvantages, they can be detected by different advantageous means.

There are also other personality measurement techniques e.g., projective techniques, objective performance test, situational test, interview, ratings, biographical inventories etc.
BASIC PROBLEMS IN MEASURING PERSONALITY:

After stating various personality assessment techniques, one would like to mention some basic problems that occur in personality measurement.

The first problem is should methods agree? Evidence show that two methods evaluating the same trait concur with one another. Yet it is not uncommon to find disagreement when two procedures purport to measure the same construct. Similarly, when one tries to match self reports across instruments or with reports of observers one may find gratifying consistency, but that is not a universal finding.14

Broad characteristics such as adaptiveness and moral should appear under many circumstances and should be reported by various methods. Each method views the person from its own angle and filters the information in a particular way. In the personality domain, however, what is an error for one purpose may be a significant fact for another purpose. Raters disagree because they have sampled different aspects of the person's behaviour and because they feel differently about him.

Evidences show that generalization in case of consistency is risky. One investigator's tests will differ in only a few respects. Someone with a new theory, introducing a new twist may demonstrate inconsistency. Thus "persistence is strongly dependent on the perceived difficulty of a problem."15
Validation of information on personality suffers from the tendency to compile evidence on scores singly. Some research hypotheses do consider one personality variable apart from the rest of the personality. But to understand personality development in general one has to look at many dimensions together.

Ethical Issues:

An American Senate once voted that, "no guidance program shall provide for the conduct of any test ........ to elicit information dealing with the personality, environment, home life, parental or family relationships, economic status, or sociological and psychological problems of the pupil tested."16

The central question is whether it is objectionable to assess personality directly when data are interpreted as well as possible.

Some major issues are:

(a) Has an employer the right to question an applicant about matters not directly related to the work? Has a teacher right to ask children about their emotions, friendships and homelife? As with any testing, the school's justification must be that the information will lead to better educational services. The public has repeatedly urged schools to develop character and promote mental health. The test developer can remove a good many objections simply by discarding items objectionable to the public.
Objections are reduced when the respondent understands that interpretation is based on consistent responses running through many items and that the conclusion will not be from a single response.

(b) "The client who is not ready to trust the psychologist may refuse to take disguised tests." This is an issue regarding the acceptability of disguising the purpose of a test or of particular questions. The psychologist should introduce procedures with as frank an account as the situation allows. So that the person seeking therapeutic help can readily understand the aim of diagnosis and that transparent diagnostic questions would invite him to choose his own diagnosis.

(c) The third issue is freedom of research - social psychologists and scientists are puzzled by the public objections to some of their probings. The public know that in keeping records of a subject their intentions are pure, they still ask for their right to inquire. In such cases psychologists must patiently explain the subject and other people that the records will be properly and secretly kept and that no one would know about it. Proper devices for keeping the record up-to-date should be used by the psychologists. Only the required information should go in research file.
REFERENCES


