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GENERAL PROBLEM : On Personality.

SPECIFIC PROBLEM : To assess the personality pattern of an adult individual by using 16 Personality Factor questionnaire (Form A) developed by Cattell and his associates.

BASIC CONCEPT :

The term "personality" has been defined in various ways by the psychologists who worked on the problem of personality & the variables influencing its development. The term "personality" has been derived from the Latin word "persona" that was associated with Greek theatre in ancient times. 'Persona' refers to the masks which the Greek actors wore while performing on stage. According to the concept of mask, personality was thought to be the effect and influences which the influencing individuals, wearing a mask left on the audience.

Personality can be defined as the distinctive & characteristic pattern of thought, emotion and behaviour that make up an individual's personal style of interacting with the physical & social environment.

Personality has been defined by different people in different ways.

2. According to Allport (1961) - "Personality is the dynamic organizations within the individuals of these psychophysical systems that determine the unique adjustment to his environment."

3. According to J.P. Guilford (1959) - "Personality is an integrated ^{complex} patterns of traits." A trait that is distinguishable, relatively enduring way in which one individual differs from another.

4. According to Warren's Dictionary - "Personality is the integrated organization of all the cognitive, affective, conative & physical characteristics of an individual, it manifest itself in focal distinctions from others."

Defining Personality:-

Cattell defined personality as "that which tells what [a person] will do when placed in a given situation (Cattell, 1965 p.117-118). Consistent with this mathematical analysis of personality, Cattell then presented the definition as a function:

$$R = f(S, P)$$

In other words, the behavioural response (R) of a person is a function (f) of the situation (S) confronted & the individual personality (P). Although most trait theorists de-emphasize the role of situational parameters in influencing behaviour, Cattell expanded his theorizing to include the way in which situations, in conjunction with personality traits, influences behaviour (Cattell, 1979, 1980). To account for

situational influences, he constructed a model for classifying situations & assessing their impact on the individual. Before examining in more detail, however, we turn to Cattell's treatment of the major personality factors including ego, sentiments, attitudes, interests, emotional states & especially traits.

CLASSIFYING TRAITS

The trait is by far the most important concept of Cattell's theory. 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.

According to Cattell, traits are relatively permanent & broad reaction tendencies & serve as a building blocks of personality. He distinguishes between constitutional or hereditary and environmental traits; ability, temperament & dynamic traits; & surface and source traits. These traits are described as follows :-

1. Constitutional and environmental - world traits :
 Constitutional traits are determined by biology. The traits that result from the ~~duration~~ operation of environmental conditions are called "environmental world traits", whereas those that reflect hereditary patterns are called constitutional traits. Environmental world traits are determined by experiences, i.e. by interactions with the environment.

Cattell created a complicated statistical procedure called multiple abstract variance analysis (MAVA) to assess the degree to which various traits are determined genetically or environmentally.

2. Ability traits, temperament traits & dynamic traits:

Ability traits refers to the person's skill in dealing with the complexity of a given situation. Thus intelligence is an activity of an individual are concerned with the effectiveness with which the individual reaches the goal, they are ability traits.

If they are concerned largely with constitutional aspect of response such as energy or emotional reactivity then they are temperament traits. It refers to stylistic tendencies, for eg, chronically irritable, excitable, moody, carrying etc.

Dynamic traits refers to the person's motivation & interests. If they are concerned with setting the individual into action toward some goal, they are dynamic traits. eg: ambitious, power seeking etc.

3. Source Traits versus Surface traits :-

A source traits is the underlying factor that controls the variation in the surface cluster.

Surface traits are "simply a collection of traits elements, of greater or lesser width of representative which obviously "go together" in many different individuals and circumstances (Cattell, 1950, p: 81). The surface traits represents clusters of manifest or overt variables that seem to go together while the source traits represents underlying variables that determines multiple surface manifestations.

Source traits are identified only by means of factor-analysis, which presents the investigator to estimate the variables or factors that are the basis of this surface

behaviour. The source traits promise to be the real structural influences underlying personality. Surface traits are produced by the interaction of source traits & generally can be expected to be less stable than surface source traits.

Source traits are the building blocks of personality & are largely stable because they develop step by step.

Surface traits are caused by the interaction of source traits. These traits are somewhat unstable & observable.

→ Major Source Traits or Primary Factors :

According to Cattell, any attempt to discover the major source traits or primary factors of personality must begin with an adequate inventory of all the personality traits that can be used to describe individuals.

Cattell & his co-workers constructed a personality questionnaire on the basis of items that incorporated the surface traits, administered these questionnaires to study participants, scored them & factor analysed the results to yield the underlying source traits of personality.

Using these & other data collection techniques, they were able to identify 16 primary factors or major source traits (Cattell, 1965, p. 64).

These were initially labelled factors A, B, C, D, E and so on, but later, as more & more supportive elements eliminated, they were more clearly identified & given labels. These 16 basic traits were then used in the construction of the Sixteen Personality Factor (16PF) Questionnaire.

These traits are assumed to control a person's behaviour, starting with factor A & ending with factor Q₄. To measure the traits study participants are given hundreds, every thousands of items. Then their scores are factor analyzed. Once the factors begin to emerge, other items are added & given to additional large groups of normal study participants in order to refine the factors. The items that load most heavily on each factor, are retained; the ones that do not are eliminated.

Using this statistical procedure, individual can score low or high on the following 16 factors: warmth (A), reasoning ability (B), emotional stability (C), dominance (E), liveliness (F), rule consciousness (G), social boldness (H), sensitivity (I), vigilance (L), abstractedness (M), privateness (N), apprehension (O), openness to change (Q₁), self-reliance (Q₂), perfectionism (Q₃) & tension (Q₄).

Some of the traits predict a person's behaviour better than others; for eg, information about a person's reasoning ability (factor B) information about a person's reasoning ability, would enable an investigator to predict that person's performance on a history exam more effectively than would knowledge about the person's liveliness.

Low or high factors scores & their implication for an individual's personality functioning: low scores on a factor do not necessarily mean that the implication for an individual's personality functioning are negative.

nor do high scores necessarily mean that the implications for personality functioning are positive. Whether low or high scores have positive or negative implications for personality functioning depends on extremity of their scores on the dimensions (factors) being assessed. For example, people low in warmth may be reserved & have a strong capacity to be objective, practical, & independent in their decision making in many situations (eg in business & political settings) where such qualities may be constructive. Those extremely low on warmth, however, may have difficulty in maintaining close relationships. They may be unable to express much affection and support for their spouses & research shows they often end up in marital therapy (Cattell, ~~and~~ & Schmegeger, 2003, p. 44) in contrast, individuals high on warmth tend to have poor grades because they may continuously seek out other students for long sessions of partying; leaving them little time to study (Cattell & Schmegeger, 2003 pp. 44-47).

The following are the 16 Personality Factors proposed by Cattell's inventory :-

1. FACTOR A: Warmth
2. FACTOR B: Reasoning ability.
3. FACTOR C: Emotional stability
4. FACTOR E: Dominance.
5. FACTOR F: Liveliness.
6. FACTOR G: Rule consciousness.
7. FACTOR H: Social boldness.
- 8.

- 8. FACTOR I: Sensitivity.
- 9. FACTOR L: Vigilance.
- 10. FACTOR M: Abstractedness.
- 11. FACTOR N: Privatness.
- 12. FACTOR O: Apprehension.
- 13. FACTOR Q₁: Openness change.
- 14. FACTOR Q₂: Self-Reliance.
- 15. FACTOR Q₃: Perfectionism.
- 16. FACTOR Q₄: Tension.

The factor analytic theory as proposed by Raymond Bernard Cattell is heavily depended on the empirically method of factor analysis, as the name of the theory also suggests. The essential idea of factor analysis were introduced by Spearman (1904). Spearman proposed the Two-Factor Theory of intelligence. This theory is based on factor analysis, which is a statistical procedure. On the basis of his research, he has promoted that each individual activity involves a general factor 'g' which it shows with all intellectual activities. Apart from 'g' it also shows a specific factor 's', which belongs to a specific ability of that individual to deal with specific problems. Although Charles Spearman is credited with inventing factor analysis, L.L. Thurstone (1931) is the one who first coined the term. In addition, Thurstone is the inventor of exploratory factor analysis, a more practical variation than the confirmatory factor analysis of Spearman. Spearman's technique for isolating single factor was revised with L.L. Thurstone introduction of multiple factor analysis.

The outcome of factor analysis not only isolates the fundamental factors but also provides for each measure or set of scores of an estimate of the extent to which this measure is contributed to by each of the factors. The estimate is customarily referred to as the factor loading & is simply an indication of how much of the variation on this particular measure is to be attributed to each of the factors.

ASSESSMENTS OF PERSONALITY.

There are various methods by which personality can be assessed, they are as follows -

- i) Observation ii) Case Study iii) Interviews
- iv) Rating Scale v) Situational lists vi) Questionnaire
- vii) Self-report inventories viii) Projective techniques.

Cattell & his co-workers constructed personality questionnaire on the basis of items that incorporated the surface traits, administered these questionnaire to study participants. They were able to identify 16 primary factors. These were initially labelled factors A, B, C, E, F & so on. These 16 traits were initially labelled & then used in the construction of the Sixteen Personality Factor (16PF) Questionnaire. The traits are assumed to control a person's behaviour starting with factor A & ending with factor Q₄.

Cattell has sought to locate general traits of personality by conducting separate factor analytic studies on the

assumptions that if the same source traits emerged from different data sources, this would provide the strong perspective evidence that the source traits were true functional entities & not were artifacts of methods. The outcome of such 20 or 30 factor analyses led to the conclusion that a similar factor structure emerges from behaviour rating data & questionnaire data but rather different factors tend to emerge from objective test data.

Cattell & his associates (Cattell, Saunders, Still, 1950; Cattell, Eber and Jatsvoka, 1970) developed the 16 Personality Factor Questionnaire to find out the personality pattern of an individual with the help of factor analytic methods. 16 PF questions is an objectively scorable test devised by basic research in psychology to give the most complete coverage of personality possible in a brief time.

In case of the present test, the 16 PF questionnaire is used to find out the personality pattern as is described in the Factor Analytic Trait Theory of Cattell.