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# UNIT 1 INTRODUCTION TO ASSESSMENT AND TESTING

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## 1.0 INTRODUCTION

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A pervasive theme in the study of personality is individual differences in people's behaviour and experience. In pursuing the study of individual differences – how are people different from one another – personologists deal with two related concerns. First, is the ways in which people are different. Personologists have used different theoretical concepts to describe the distinctiveness about an individual. Terms such as *trait*, *type*, *motive*, *value*, *temperament*, etc. have been used to depict enduring aspects of human behaviour. Second, personologists are interested in developing ways of measuring individual differences ( a process called *assessment* ).

Formal personality assessment not only makes it possible to obtain information about individual differences in a meaningful and exact manner but also makes it possible to communicate this information to others in a clear and unambiguous fashion. In this unit 1, we will be dealing with the historical perspectives of personality assessment and measurement, provide meaning and definition and description of personality assessment and follow it up by the reason for assessing personality. The assessment of personality is made through measuring social traits, motives, adjustment etc. Assessment has to be reliable and valid and in order to know how this is to be done, we will be learning in this unit how a test of personality or for that matter any psychological test is standardised, how norms

are developed and we would also learn what is reliability and validity and how these have to be calculated.

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## 1.1 OBJECTIVES

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After reading this unit, you will be able to:

- Define personality assessment;
- Describe the individual differences measured in personality assessment;
- Trace the history of personality assessment;
- Explain the meaning and purpose of personality assessment; and
- Describe the criteria for standardisation of personality assessment techniques.

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## 1.2 HISTORY OF PERSONALITY ASSESSMENT

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The ways in which people behave have always been of interest. They are of immediate interest to family, friends, and neighbours, for whom the behaviour of a certain person is likely to have direct consequence. Thus there have been many attempts by psychologists and experts to look for and devise instruments to assess personality.

As one traces the history of psychological testing it is interesting to see that as early as 1000 B.C., written tests were introduced by the Chinese in order to fill up civil service positions. In the United States around the year 1850 one finds tests for the civil services examinations starting. James Cattell in 1890 developed a mental test for assessing college students in order to measure their strength, resistance to pain and reaction time. As is well known the first scale of mental development for classifying the mentally retarded children in France was in the year 1905 and this scale originated from Binet and Simon and bears their name as Binet Simon scale of mental development. World War I required tests to quickly classify the new recruits to army and this was done through the Army Alpha and Beta tests, which were specially developed for this purpose in 1914.

It was in 1916 that the term Intelligent Quotient was introduced by Terman who developed Stanford Binet Test after which came the many personality tests and inventories. Between 1920 and 1940 using factor analysis projective tests and personality tests were devised. Between 1941-1960 many vocational interest tests were developed and between 1961 – 1980 neuropsychological testing became prominent. Between 1980 to the present date many tests have been developed which could be administered through the computer, scored and also interpreted.

In regard to personality tests, as one traces the history, one finds that the first name is of a Greek physician Hippocrates. He was a departure from the spiritual side of human behaviours. He theorised that every boy has four fluids (humors); blood, phlegm (...respiratory secretions) yellow bile and black bile. He thought that these fluids affect human body in a number of ways. In 190 AD Galen, another Greek Physician put forward a theory of four body fluids and pointed out that based on the body fluids there are four temperaments, viz., sanguine, phlegm, choleric and melancholic. The sanguine person is supposed to be warm, optimistic and confident, while the phlegmatic body brings about a temperament

which is sluggish, apathetic and indifferent. The yellow bile according to Galen causes a choleric body and thus the temperament consists of violence, anger and aggression. The last one was the black bile body which causes the person to have a melancholic body and the temperament that goes with it includes, sadness, depression and melancholy. He also believed that food, weather, life-periods and geographical conditions affect body temperaments. He was of the view that a healthy body is the direct result of a balance in the ratio of these four body temperaments.

Avicenna, a Muslim physician not only introduced four body temperaments to the Arab world but also analysed many other reasons of human illness.

It was actually Wilhelm Wundt (1879 A.D.) who founded the first psychology laboratory in Leipzig Germany, was the first to make clear the distinction between human body and personality. He theorised that the four temperaments; sanguine, phlegm, cholera and melancholy are four dimensions of the human personality. He gave the psychological touch to the personality tests.

While the history of personality tests took a psychological turn with Wilhelm Wundt, many psychologists contributed to the personality assessment methods. Given below are some of the contributors who belong to the 20<sup>th</sup> century.

In 1905, Eduard Spranger, a German Philosopher, theorised four attitudes towards ethical values. He named those value attitudes as artistic, religious, theoretic and economic.

Hugo Munsterberg, a professor of the Harvard University made a survey and asked the executives of different organisations to respond. He asked them for qualities which they want to see in their employees. He listed them and devised the first personality test. He intended to help the employers to make the best hiring decisions.

Ernest Kretchmer (1920) , a German philosopher presented a theory of four character styles, viz., hypomanic, depressive, hyperesthetic or anesthetic depending upon their character styles.

Erich Fromm, another German philosopher wrote that there are four human orientation which he termed as exploitative, hoarding, receptive and marketing.

In 1922, Carl Jung, a Swiss psychologist, was the first person to theorise that people always prefer certain identifiable behaviours if they are given a free choice. He also said that on the basis of human preferences, they can be divided in different personality types. Based on this theorisation, two women psychologists, Myers Briggs and Katherine Briggs in the year 1958, applied Jung's theory and developed types of personality which were to be decided based on the answers to four questions which are as given below:

- a) Preferred source of your energy? (Internal or external)
- b) Preferred source of perception? (Senses or Intuition)
- c) Preferred decision making system? (On logics or feelings)
- d) Preferred life style? (ordered or adaptable)

On the basis of the answers received, they identified four cognitive functions; sensory perception, sensory judgment, intuitive feeling and intuitive thinking. Their theory influenced another psychologist named Kiersey, who identified four personality temperaments. David Kiersey associated four temperaments with Myers Briggs four cognitive functions. He developed a personality assessment scale called as “Temperament sorter” which identified four personality temperaments viz., the guardian, the rational, the idealist and the artisan. A person having ‘guardian’ temperament will value responsibility and team membership. The person’s core desires are security, service and system. Such a person is not only responsible towards his job and the organisation but also to his family and the society.

On the other hand, a person having ‘rational’ temperament will value knowledge, skill and intuitive evaluation. Such persons are analytical, experimental and factual. They not only understand abstraction but also can theorise it. Such a person is a knowledge seeker.

The ‘Idealist’ temperament person follows ideals and their intuitive and feeling preferences make them perform great tasks. They desire not only develop themselves but also people around them.

If Kiersey temperaments scale sorts a person an artisan, that person is expected to be action seeker. The core needs of such a person are action and variety. These persons prefer using their five senses to understand information. They are impulsive and spontaneous, dislike routines and schedules, but love freedom of action and experiments.

One can also see how personality assessments became more and more important especially in the work situations. For instance, the German government established a program for selecting officer candidates in the 1920s. By 1936, they had 15 psychological laboratories, with 84 psychologists, evaluating over 40,000 candidates per year. Thus, the Germans invented the modern assessment center in which 4 or 5 candidates are intensively evaluated with interviews and realistic job simulations for two days. At the end, a committee judged the potential of each candidate. The German method examined the “total personality” and produced an overall evaluation of suitability.

Historically, one finds the English selecting military officers using interviews focusing on a candidate’s social class-the higher, the better. When the war started, the supply of upper class candidates was quickly exhausted. The British government then established War Office Selection Boards (WOSB)-assessment centers modeled on the German method. They compared their traditional interview with the WOSBs, and found the assessment centers were superior at identifying good leaders in combat.

### 1.2.1 The OSS

The U.S. was unprepared for World War II. To enhance its intelligence capabilities, Congress created the Office of Strategic Services (OSS) in 1942; William Donovan, a World War I hero and Wall Street banker, was the director. Donovan and Murray used the German assessment center to screen applicants for the OSS. The Assessment of Men (1948) provides evidence regarding the effectiveness of this process.

Three points about this assessment tradition should be noted.

- 1) It selected candidates based on evaluations of competence and not the absence of psychopathology.
- 2) Researchers consistently evaluated the validity of their process.
- 3) It was demonstrated by Eysenck in 1953 that the one hour of paper and pencil testing yielded results fully comparable to those obtained from the two and one half day assessment center. The same would be true today.

Thus from the above one can state that from the beginning of personality measurement in the 19th century and for the next 75 years, a large number of personality assessment scales were devised to measure a large number of personality concepts. The relatively more recent 'Five Factor Model' personality assessment scale showed that there was a surprising degree of order beneath these personality assessment tests. This predicts occupational performance as well as measures of cognitive ability. In this context, Murray Barrick and Michael Mount showed that personality measures, organised in terms of the Five-Factor Model, predict occupational performance across a wide range of jobs and industries.

### 1.2.2 Important Steps in Personality Assessment

There are two important steps in personality assessment which are given below.

*Step 1.* Stipulate the agenda for personality assessment. The agenda for personality assessment concerns forecasting individual differences in a person's potential for getting along and getting ahead.

*Step 2.* It must be decided as to which aspect of personality one wants to measure. If one wants to assess personality from the inside identity, then a measure of values is needed. This would help to evaluate how well a person will fit into the culture of a specific organisation, as opposed to trying to predict occupational performance. If, however, one wants to assess personality from the outside reputation then one should use observer ratings (e.g., a 360-degree feedback instrument). The optimal use of assessments of reputation is to forecast occupational performance, as opposed to trying to predict person/culture fit.

If the foregoing distinctions are appropriately observed, personality and personality assessment will be indispensable tools for making decisions about people in organisations.

### 1.2.3 Personality Assessment and Related Fields

Astrology, palmistry, and phrenology are considerably older than any current professional assessment techniques.

*Astrology:* This is a field in which the personality of the individual is predicted on the basis of the date of birth, place of birth and the time of birth. At the time the person is born, the planetary positions are determined and based on these the individual's personality and the future of the person are predicted. Such attempts to forecast events on earth through observation of fixed stars and other heavenly bodies, is thought to have originated twenty-five centuries ago in Mesopotamia. Their belief that the stars were powerful Gods, led the ancients to conclude that human affairs could be foretold by study of the heavens. Personality and the



course of events in each individual's life were determined by consulting a horoscope. The notion that human lives are predicted by the configuration of the stars at the moment of birth seems though extremely naïve, lots of work and teaching are continuing on in this field.

*Biorhythms:* Analogous to astrology is the technique of biorhythm, a method for personal prediction developed initially by Wilhelm Fleiss, a colleague of Sigmund Freud and promoted by George Thommen(1973). According to this theory, day-to-day effectiveness is governed by a position on three “cycles”, viz., physical, emotional, and mental – that are fixed according to the moment of birth and are not otherwise modifiable. Because each of the cycles has a different period, they can periodically combine to produce “triple low “days, on which things are likely to go badly, and “triple- high” days, when the opposite will be true.

*Palmistry* refers to the determining of an individual's character by interpreting the various irregularities and the folds of the skin of the hand. It is known to have existed as a standardised system in China as early as 3000 B.C.

*Humoural theory:* The search for clear- cut relation between the physical attributes of an individual and his/her psychological characteristics has been continual. This concern had an early expression in the *humoural theory*, that remained current through middle-ages.. This theory proposed four ‘ingredients’: blood, phlegm, yellow bile(choler), and black bile(melancholy). The particular proportion of these four ingredients in different people determine their complexions (or personality characteristics), their physical, and mental qualities and their unique dispositions. It was therefore claimed that, by reading physical signs of the relative amounts of these humours in a given individual, his/her distinctive personality can be determined.

*Somatotype theory:* The humoural theory came into disuse, with the assumption that human personality is a reflection of physical body. This has been suggested in the seminal work of Sheldon and his colleagues whose theory of *somatotypes* divides people into three major types: the ectomorph, who is thin and fragile; the mesomorph, who is powerful and muscular; and the endomorph, who is round, soft and fat. According to the theory, each of these ideal types has a specific personality that has an innate consequence of that particular body build. Because most individuals have a combination of these three body types, the personality characteristics are determined by the relative proportions of the body type factors in their individual somatotype.

### Self Assessment Questions

- 1) Define and describe personality assessment.

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2) Trace the history of personality assessment.

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3) Discuss Jung's contribution to personality testing.

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4) What is OSS? Discuss its needs and how it is used as personality assessment?

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5) Discuss how personality assessment is related to other fields such as astrology, biorhythm, humorology and somatotype theories?

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### 1.3 INFLUENCE OF PSYCHOLOGICAL ASSESSMENT

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Scientific personality assessment has its roots in the study of individual differences through psychological measurement. The study of individual differences was given considerable impetus by Darwin's work on evolution. Sir Francis Galton, A famous British scholar of the 19<sup>th</sup> century, became interested in the inheritance of differences and devoted the later portion of his life to their study.

The study of individual differences in the U.S. was pioneered by James Mckeen Cattell. Although, his interests were mainly in the area of psychophysics, perception, and reaction time, Cattell had a strong influence on the development of other psychological measurement devices, including personality tests.

At about the same time in France, Alfred Binet, who had become enthusiastic about Galton's work on individual differences, began a series of studies of eminent persons in the arts and science. Binet used a standardised series of experimental tasks, including observation on body types, head measurement, and handwriting. He also began a series of investigation into mental functioning (which includes personality), using a wide variety of tasks involving word knowledge, reasoning and numerical ability. These investigations led to the development of now famous Binet Tests of intelligence. Some of the tasks in the tests, involved telling stories about pictures and identifying inkblots, which all paved way for the emergence of 'projective' tests of personality.

Thus, prior to 1915, research on the measurement of personality was preceded by work on the measurement of skills or abilities, it grew out of the early academic interests in the measurement of human individual differences. Galton had introduced the use of direct behaviour samples in real life situations, and his work had stimulated considerable interest in both U.S. and France. Two of Galton's followers, Karl Pearson and Charles Spearman, played a major part in the development of statistical procedures that provided powerful tools for later work in assessment.

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## 1.4 MEANING AND PURPOSE OF PERSONALITY ASSESSMENT

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### 1.4.1 Meaning of Personality Assessment

The term "personality" refers to the total functions of an individual who interacts with the environment. Such definition automatically includes all traits as the main themes of the personality. The purpose of the measurement of personality is to describe a person in terms of some of the measurable factors such as the traits. Trait is nothing but the observed consistency of behaviour of a person. Traits are not directly observed but inferred from the consistent behaviour of an individual. The most general cues to traits are what and how the person does, has well how well the task is done by the individual. .

### 1.4.2 Purpose of Personality Assessment

Nunnally (1979: P.354) has opined that personality measurement aims at studying the four broad types of traits, viz., social traits, motives, personal conceptions and adjustment. These are being discussed in the following section.

#### *Social traits*

Social traits are those traits, which determine how persons interact with other persons in society. Examples of typical social traits are friendliness, honesty, dominance, responsibility, shyness, etc. Thus, within social traits are included traits related to temperament and character.

#### *Motives*

Motives here include the non-biological drives such as the need to earn money and prestige, need for the academic, achievement, need for affiliation, aggression, etc. These non- biological needs are often said to constitute what is known as *personality dynamics*.



Under the trait of personal conceptions are included those methods which determine people's attitude toward self and others, a person's values, interests, etc.

**Adjustment**

Adjustment in psychology refers to the establishment of a satisfactory relationship representing harmony, conformance, adaptation or the like. It is a process of finding and adopting modes of behaviour suitable to the environment or the change in the environment. Adjustment is the process by which a living organism maintains a balance between its needs and the circumstances that influences the satisfaction of these needs. Adjustment includes traits like the freedom from emotional worries or instability and other related aspects of behaviour.

One general characteristic of these four types of traits is that they are correlated with each other, that is they are not independent. For instance, a social trait, say dominance, is likely to influence motives, personal conceptions (interests, attitudes) and adjustment. Similarly, an individual's motive is likely to influence the interaction of the person with others in society (social traits). It would also include the individual's personal conceptions and adjustment. To cite an example, let us say an individual is highly prejudiced against a particular caste (personal conception). In such cases, the individual's social interaction, motives, and adjustment all would be similarly affected. Likewise, if a person has a satisfactory general adjustment, That person's social traits, motives and personal conceptions would be in congruence with social norms. On the other hand, if an individual is maladjusted, s/he would have extreme social traits, eccentric motives and personal conceptions.

**Self Assessment Questions**

- 1) How does psychological assessment influence personality assessment?

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- 2) Discuss the meaning and purpose of personality assessment.

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- 3) Discuss the four broad types of traits which can be measured.

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## 1.5 TESTING AND MEASUREMENT CONCEPTS

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Assessment techniques must meet four technical criteria before they can be considered scientifically acceptable measures of individual differences in people's enduring qualities. These criteria are standardisation, norms, reliability, and validity. Let us deal with each of these and understand what these terms mean.

### 1.5.1 Standardisation

A key concept in the measurement of personality dimensions is that of *standardisation*. This concept refers to the uniform procedures that are followed in the administration and scoring of an assessment tool. For instance, in self-report scale, the examiner must make every effort to ensure that subjects read and understand the printed instructions, respond to the same questions, and stay within any stated time limits. It also involves information (in the manual) about the conditions under which the assessment test should or should not be given, who should or should not take the test (sample group), specific procedures for scoring the test, and the interpretative significance of the scores.

### 1.5.2 Norms

The standardisation of a personality assessment test includes information concerning whether a particular "raw score" ranks low, high, or average relative to other "raw scores" on the test. Such information, called *test norms*, provides standards with which the scores of various individuals who take the test later can be compared. Usually, the raw scores on a test are converted into percentile scores, which indicate the percentage of people who score at or below a particular score. Thus, test norms permit the comparison of individual scores to a representative group so as to quantify the individual's relative rank standing to others.

### 1.5.3 Reliability

Any test whether personality or intelligence or aptitude etc., should have reliability and this should be demonstrated. Reliability means that repeated administrations of the same test or another form of test should yield reasonably the same results or scores. Thus, reliability refers to the consistency or stability of an assessment technique when given to the same group of people on two different occasions. This kind of reliability is termed as *test- retest reliability* (Anastasi, 1968) .

To determine test- retest reliability, the scores from the first administration are correlated with those of the second by a simple correlation procedure. The magnitude of resulting correlation coefficient gives us an estimate of the test's consistency over time. Although there are no fixed guidelines about acceptable levels of reliability, the reliability coefficients for most psychological tests are above +.70. The closer this statistic approaches +1.00, the more reliable the test is. In other words, when retested, people's scores should match their first scores quite closely.

A second kind of reliability is determined by splitting the test into two sets (e.g., odd-numbered items versus even- numbered items), summing people's scores for each set, and correlating the two sets of summed scores with each other. The correlation between these sets is termed *split- half reliability* and reflects the

test's internal consistency. If the composite set of test items is consistently measuring the same underlying personality dimension, then people who score high on odd items should also score high on even items, and people who score low on odd items should also score low on even items (again reflected in a high positive correlation) .

A third type of reliability is based on the correlation of two versions of the same test (made up of similar items) administered to same group of individuals. If the scores on these different forms are about the same, the test yields *reliability of parallel forms*. In such a case, the correlation of two parallel forms would indicate that the items on both tests measure the same thing.

Lastly, reliability also applies to the degree of agreement between two or more judges in scoring the same assessment test. This is called *inter scorer reliability*, and must be demonstrated whenever scoring involves subjective interpretations, such as those made by personologists examining projective data. Inter scorer reliability tends to be especially low with qualitative data in general, such as interview conversations, dream reports, and other open ended response formats that are not objectively quantified. But, agreement is increased when judges use manuals with explicit scoring rules and instructions for analysing such data (Yin, 1984).

#### 1.5.4 Validity

Whether or not a test measures what it is intended to measure or predicts what it is supposed to predict, is known as validity. It is another significant concept in personality assessment. There are three main types of validity: (1) Content validity, (2) Criterion- related validity, (3) Construct validity.

To be *content valid*, an assessment tool must include those items whose contents are representative of the entire domain or dimension it is supposed to measure. For instance, a personality test measuring shyness, should actually reflect the personal ("Is your shyness a major source of personal discomfort?"), Social ("Do you get embarrassed when speaking in front of a large group?"), and cognitive ("Do you believe that others are always judging you?") aspects of shyness. A content valid test would assess each of these components defining the construct of shyness. Content validity is almost entirely determined by agreement among experts that each item does in fact represent aspects of the variable or attribute being measured.

For *criterion related validity*, personality assessment is commonly undertaken for the purpose of making predictions about specific aspects of an individual's behaviour. For example, the behavioural criterion being predicted may include academic performance in management school, occupational success. The extent to which a test accurately forecasts some agreed- upon criterion measures determined by correlating subject's scores on the test with their scores on independently measured criterion. For instance, the criteria is success in management school as measured by management school grade point average (GPA). The Common Aptitude Test would be validated if it accurately predicted the criterion( management school GPA).

There are three types of criterion related validity.

- i) Predictive validity
- ii) Concurrent validity
- iii) Construct validity

Predictive validity involves determining the capacity of a test to predict some criterion behaviour in the future. For instance, an intelligence test has predictive validity if it accurately predicts subsequent performance in school.

Concurrent validity involves determining the extent to which a test correlates significantly with another currently derived test from a theory or existing criterion measure. For instance, if a person's scores on a test that measures paranoid tendencies is assessed by clinical psychologists, and the test also shows paranoid tendencies as was obtained in the interview, then we would say that concurrent validity exists. But the clinicians must not have prior knowledge of the patient's paranoid test scores. Otherwise, their ratings may be biased by their knowledge, a situation called criterion contamination.

**Construct Validity:** The third type of measurement validation, and the one most crucial to personality assessment as a whole, is called *construct validity*. The concept of construct validity addresses the question of how well a test measures something that, in reality, is but a useful abstract invention (Cronbach & Meehl, 1955).

The abstract nature of many psychological constructs such as self- actualisation, ego- identity, social interest, and repression, makes this approach complicated and results uncertain.

Construct validation is the process whereby evidence is gathered to demonstrate that a test measures a hypothetical construct. It is a laborious process requiring several studies that examine the correlations between test scores and measures assumed to be related to the construct in question.

### **Convergent Validity**

In order to demonstrate that a test measures a construct, we can correlate test scores of the construct in question with scores from another test that purportedly measures the same construct. This procedure is known as *convergent validation* (Campbell & Fiske, 1959).

For instance, we have a new test that we think measures the construct of self-esteem. If our new test does measure the construct of self-esteem, it should correlate positively with another established and validated measure of self- esteem.

Also, if several different self-esteem measures agree with each other and with our new test, we have some evidence for the construct validity of our new test of self- esteem.

### **Divergent validity**

Another way to demonstrate construct validity is to show the assessment tool does not correlate with measures of qualities that it was not intended to measure, particularly the qualities unrelated to the conceptual definition that the theorist

formulated. This aspect of the validation process is termed as *divergent validity* (Campbell & Fiske, 1959).

For instance, if our new self-esteem test does not correlate with measures of other, conceptually distinct qualities, we have evidence of discriminate validity (since our self-esteem measure is discriminated from non- self- esteem measures, as it should be). This is an important step in establishing the construct validity of an assessment technique.

### Self Assessment Questions

1) What is meant by standardisation?

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2) What are norms? How are they established?

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3) What is reliability?

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4) What are the different ways in which reliability could be tested?

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5) What is Validity?

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6) What are the types of validity testing?

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7) Differentiate between convergent and divergent validity.

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## 1.6 LET US SUM UP

The ways in which people behave have always been of interest to significant others, as well as for whom the behaviour is likely to have direct consequences. Personality assessment involves systematic efforts to understand and predict behaviour of an individual. It has a long history, that can be traced from astrology, palmistry, biorhythms, and the like. Personality refers to the total functions of an individual who interacts with his environment. The purpose of the measurement of personality is to describe a person in terms of traits. And traits are referred as observed consistency of behaviour in an individual. Hence, personality measurement aims at studying the four broad types of traits, namely, social traits, motives, personal conceptions, and adjustment. Lastly, an assessment technique must meet four criteria before they can be considered scientifically acceptable measures of individual differences. These are standardisation, norms, reliability, and validity.

## 1.7 UNIT END QUESTIONS

- 1) Discuss the meaning and purpose of personality assessment.
- 2) Trace the historical development of personality assessment.
- 3) What is meant by standardisation? Discuss the important aspects related to standardisation.
- 4) Describe the four technical criteria to consider assessment technique as scientifically acceptable measure.

## 1.8 GLOSSARY

- Assessment** : The measurement of individual differences having to do with various personality traits.
- Concurrent validity** : Degree to which a test correlates with an independent measure of the same characteristics or variables obtained at the same time.

<b>Construct validity</b>	: Extend to which there is evidence that a test measures a particular hypothetical construct; involves validation of both the test and theoretically related characteristic that underlies it.
<b>Content validity</b>	: Degree to which a test includes items that is relevant to the variable being measured.
<b>Convergent validity</b>	: Degree to which a test correlates with another test that supposedly measures the same characteristics or construct in question.
<b>Divergent validity</b>	: The degree to which a test does not measure qualities it was not intended to measure.
<b>Palmistry</b>	: Determining of an individual's character by interpreting the various irregularities and the folds of the skin of the hand.
<b>Predictive validity</b>	: Degree to which a test can accurately predict some criterion related measure in the future.
<b>Reliability</b>	: The measurement of consistency or stability of a test (or other kind of measurement technique). The consistency of scores when a test is administered repeatedly to the same group of people is called test – retest reliability. The consistency of scores across items within a test is called split half or internal reliability.
<b>Standardisation</b>	: The use of uniform procedures in the administration and scoring of a psychological test.
<b>Test norms</b>	: Established standards of performance for a test (e.g., mean, median, and percentile).
<b>Validity</b>	: Degree to which a test measures what it aims to measure.

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## **UNIT 2 APPROACHES TO PERSONALITY ASSESSMENT (SELF-REPORT, PROBLEMS OF RESPONSE IN PROJECTIVE AND BEHAVIOURAL ASSESSMENT)**

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### **Structure**

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Self-Report Personality Tests (Inventory)
  - 2.2.1 Single Trait Tests
  - 2.2.2 Multidimensional Tests
  - 2.2.3 Strengths and Weaknesses of Self-report Tests
  - 2.2.4 Faking in Personality Inventories
  - 2.2.5 Measures to Avoid Faking
  - 2.2.6 Methods to Overcome Weaknesses in Self-report Tests
- 2.3 Some Important Personality Inventories
  - 2.3.1 The Sixteen Personality Factors Questionnaire (16 PF)
  - 2.3.2 Neurotic/Extraversion/Openness Personality Inventory
  - 2.3.3 Myers Briggs Type Indicator (MBTI)
  - 2.3.4 Minnesota Multiphasic Personality Inventory (MMPI)
- 2.4 Projective Techniques
  - 2.4.1 Classification of Projective Techniques
  - 2.4.2 Strengths and Weaknesses of Projective Techniques
- 2.5 Behavioural Assessments
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### **2.0 INTRODUCTION**

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Variety of assessment techniques is available to personologists in gathering information about people. They include questionnaire, ink blots, personal documents, behavioural assessment procedure, peer judgments, and what people reveal when asked questions about themselves. Each has specific strength and weakness regarding the kinds of responses obtained, scoring, interpretation, reliability, and validity. In this unit you will learn all about Self-Report Personality Tests (Inventory). What they are and how they are devised and administered. This unit will also discuss the merits and demerits of these self reports and would also indicate how these weaknesses could be overcome. In this unit you will also

learn some of the important self reports available . There will be another section in this unit that would discuss the projective techniques , its importance, merits and demerits, and the available tests of projective techniques. This will be followed by another section dealing with behavioural assessments and their importance, weaknesses and strengths.

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## 2.1 OBJECTIVES

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After reading this unit, you will be able to:

- Define and describe Self-Report Personality Tests (Inventory);
- Explain the Strengths and weaknesses of self-report tests;
- Analyse factors to overcome the weaknesses in self-report tests;
- Elucidate important kinds of self-report tests;
- Define and describe Projective Techniques;
- Explain the strengths and weaknesses of projective techniques; and
- Define and describe behavioural Assessments.

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## 2.2 SELF REPORT PERSONALITY TESTS (INVENTORY)

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Self-report inventories, also known as personality inventories are self rating questionnaires, where the individual describes own feelings, environment, and reactions of others towards self. In other words, on the self-report inventories a person reports about one's own self in the light of the questions (or items) given therein.. Hence, the method is known as a self-report inventory.

Self-report inventories are classified into five types, as given below:

- 1) Inventories that attempt to measure social and certain other specifies traits such as self confidence, dominance, extroversion, etc.
- 2) Inventories that attempt to evaluate the adjustment of the person to different aspects of the environment such as school, home, health.
- 3) Inventories that attempt to evaluate pathological traits.
- 4) Inventories that attempt to screen individuals into two or three groups.
- 5) Inventories that attempt to measure attitudes, interests, and values of persons.

Let us deal with the above five self report inventories one by one.

- 1) These are tests or inventories which attempt to measure social and other specific traits including self confidence, dominance, extraversion etc. Examples of such an inventory are that of Bernreuter Personality Inventory, Eysenck Personality Questionnaire, Differential Personality Scale etc.
- 2) These are inventories that try to evaluate the level of adjustment of a person to different aspects of one's life. For instance some of the adjustments that are studied here include adjustment to self, health, home and school. Example for such an inventory is Bells Adjustment Inventory.

- 3) These are Inventories that attempt to evaluate the pathological traits in an individual. Some of these try to evaluate a large number of traits of pathological nature, while some confine to a few pathological traits. For instance the MMPI (The Minnesota Multiphasic Personality Inventory) tries to get at a very large number of pathological traits in addition to some normal traits. The 16 PF inventory attempts to evaluate 16 personality traits including 4 pathological traits. These pathological traits may include hysteria, paranoia, hypomania, depression, schizophrenia, etc.
- 4) These are inventories which attempt to screen individuals into two or three groups. The Cornell Index is the best example of such an inventory. The Cornell Index screens the persons into two groups - those having psychosomatic difficulties like asthma, peptic ulcer, migraine, etc., and those not having them that is, those who are normal.
- 5) These are Inventories that attempt to measure attitudes, interests, and values of persons. E.g., In regard to attitude we can give the example of Bogardus Social distance scale; in regard to interest inventory we can give the example of Strong Vocational Interest Blank, and in regard to values, we can give the example of Allport-Vernon Study of Values Scale.

This classification is based upon the purpose and the nature of item content. All the above self-report inventories are based upon same principle, which states that behaviour is nothing but the manifestation of trait and one can find out the presence or absence of a trait by means of assessing the behaviour. Self-report inventories are more widely used than any form of personality assessment. These are paper-and-pencil test that ask people to respond to questions concerning their traits, values, attitudes, motives, feelings, interests, abilities.

The term “self-report” refers to any information the person reveals directly about himself / herself by responding to specific questions or items with a limited number of prescribed choices (e.g. “Yes”, “No”, “Always”, “Don’t know”).

General feature of self-report test is standardisation of response alternatives. That is, people taking the tests have to select either true or false, agree or disagree, an alternative that varies from 1 (very characteristic of me) to 6, and so on.

In this manner, objectivity is achieved by restricting the degree of freedom people have in responding to test items.

Similarly standardisation of scoring procedures minimises the risk of personal bias of the persons scoring the tests.

Self-report inventories differ in regard to the number of personality dimensions they measure at one time.

### 2.2.1 Single-traits Tests

These are developed and used by researchers to measure some specific aspects of personality. They then examine whether people who score at the upper and lower end on the trait measure perform differently on the behavioural measure or differ on the self-report measure. In other words any person participating in the study may receive a high score (or may receive a medium or low score), but every person’s score is equally meaningful as a representation of that person’s personality.



Some single-dimension tests also provide separate measures of two or three traits. Examples of single-trait tests include

- a) the Locus of Control Scale (Rotter, 1966),
- b) the Sensation Seeking Scale (Zuckerman, 1978),
- c) the Self Monitoring Scale (Snyder, 1974).

The scores obtained from these tests are assumed to reflect relatively stable individual differences along specific trait dimensions. In addition to these scales, there are many self-report inventories that measure several personality dimensions simultaneously.

### 2.2.2 Multidimensional Tests

These *multi-dimensional tests* have the advantage of providing a more comprehensive overview of the person being assessed and are used extensively in clinical, counseling, and personnel settings. For instance the Sixteen Personality Factor Questionnaire (16-PF) is a 187-item test which measures 16 source traits of the normal personality identified by Raymond Cattell (1965). Scores derived from each of the source trait measures (e.g., submissive-dominant, trusting-suspicious) are plotted on a graph to provide a personality profile. This profile may be used by psychologist for counselling and to make important employment and promotion decisions about people.

### 2.2.3 Strength and Weakness of Self-report Tests

Assessment of individual differences is a significant aspect of personology. Much emphasis has been placed on self-reports as the basis for measuring the individual differences. The major advantage is that self-report tests provide more thorough, precise, and systematic information about an individual's personality than does casual information. The strengths of the self report inventories are given below:

- The objectivity of scoring minimizes personal or theoretical bias
- Also, self-report measures can be administered easily by someone with relatively little formal training.
- Self-report tests have greater reliability than do other assessment techniques.
- Finally, multi-dimensional inventories allow for measurement of several different personality traits at once.

Apart from the aforesaid, strengths, self report tests have some weaknesses.

The major limitations of self report tests are given below:

- They are susceptible to deliberate deception,
- There is considerable influence of social desirability,
- There is the influence of the response set (Kleinmuntz, 1982).
- Deliberate deception is most likely to occur when the person believes there is something to be gained from fraudulent responding (Furnham, 1990).

### 2.2.4 Faking in Personality Inventories

Let us understand how faking can occur.

A job applicant might “fake good” by intentionally agreeing with those items she/he believes will create favourable impression in an employment situation.

As well as, a person might also “fake bad” by intentionally answering items that she/he believes will create the impression of being more psychologically disturbed than is actually true.

This might occur in a situation where a person is being assessed to determine competency to face charges for a criminal offence.

Another way to fake is to respond to items in ways that make “look good”. This tendency is called *social desirability* and it is a problem that can occur in all assessment techniques, not only self-reports. In this, people who display social desirability bias may be unaware of their tendency to slant answers in a favourable direction as opposed to giving frank answers. They unintentionally present themselves in a favourable light that probably does not correspond to reality.

There are many strategies to detect or reduce the problem of social desirability response bias. For instance, MMPI includes questions intended to assess the likelihood that a respondent is giving socially desirable answers. Other tests are constructed to directly measure the extent to which people give self flattering responses. For instance, Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) is designed to measure the tendency of people to present themselves in a favourable light .

### 2.2.5 Measures to Avoid Faking

To overcome this problem, safeguards are to be built into tests to detect deliberate deception.

The MMPI, for instance, includes validity scales designed to indicate whether respondents are lying, defensive, or evasive when answering the test items.

Another option is to include filler items which can make the purpose of a test less obvious to a person. But these efforts may be only partially successful in detecting the extent to which a respondent is engaging in conscious deception. If possible, important decisions about a person should not be based on self-report data alone.

Another way to deal with the problem is to carefully evaluate the social desirability of each item before it is included in a test.

Lastly, in self- report measures, people have a tendency to respond in a particular way regardless of the content of the items. For instance, some people are more likely than others to agree with virtually every question on a test.

This *acquiescence response set* is a major problem on self-report measures that require a true- false or a yes- no answer (E.g.,MMPI).

If this response set is not counteracted in someway, the scores of highly acquiescent people will be distorted and not accurately reflect the personality traits. This problem is comparatively easy to counteract. Many test makers phrase the items so that true or false or yes or no responses are equally likely to be indicative of the trait being measured. Therefore, any bias coming from the tendency to respond “true” or “yes” is balanced when the test is scored.

### 2.2.6 Methods to Overcome Weaknesses in Self-report Tests

Distortions in the actual responses of self-report measures of personality are major problems for users of personality tests. Thus, it is essential that attempts

be made to overcome these distortions and make the self-report responses more representatives of the true responses. The following methods may be adopted for the purpose:

*Method 1. Establishment of rapport*

Distortions occur when the testees feel discomfort and find themselves in an unfriendly environment. It is essential that before actual administration of an inventory, the tester should make every effort to establish a warm and cooperative relationship called “rapport” with the testees. This relationship is dependent upon the skill of the testers skill and their ability to bring about a subtle modification of the testing situation. This will help in expressing the truth in an unhesitant way and thereby reducing the major proportion of distortion.

*Method 2. Use of forced-choice technique*

This technique has been used in controlling faking good or socially desirable response sets. In forced-choice items the subject is forced to choose between two or more than two equally desirable or undesirable terms or phrases or statements. The subject who wants to give socially desirable responses is out-witted by the forced choice between equally desirable statements.

*Method 3. Concealing the main purpose of the test:*

When the subjects do not know the real purpose of the test it becomes difficult for them to fake although in such a situation they may be more suspicious and defensive in their responses. Subjects may guess from the nature of the items, but they may be not definite that some inferences about their tendencies or traits are to be made and this will lessen the probability to fake.

There can be two ways to conceal the purpose. One method is to state such a plausible purpose of the test which is not the real purpose. For instance a personality test may be described as a test of ability, and if it appears so to the subject the faking is likely to be reduced to a great extent.

Another method of concealment is to insert information which is actually false among items of information which are actually true. For instance the subjects may be asked to endorse those titles of the book in the booklist which they have gone through. This list of titles will also contain some fictitious titles. The greater the number of endorsements of such fictitious titles, the higher the deceit.

*Method 4. Use of verification and correction keys*

Use of various kinds of correction and verification keys gives an indication whether or not the subject is projecting the true picture of the self. For instance MMPI uses four validity scores which aims at checking carelessness, evasiveness, misunderstanding and operation of other response sets.

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## 2.3 SOME IMPORTANT PERSONALITY INVENTORIES

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As mentioned earlier, the first attempt to measure personality through a questionnaire was made by Galton in 1880. He developed a questionnaire for studying mental imagery, that is inner world of perception and feeling.

Thereafter, the first systematic effort to develop a personality inventory was made by Woodworth in 1918. This inventory was known as Woodworth Personal Data Sheet and consists of 116 questions all relating to neurotic tendencies. The purpose was to screen out emotionally unfit men before they were sent overseas during the World War I. Since then a number of inventories have come into practice.

Using a statistical technique, called *factor analysis* that looks for groupings and commonalities in numerical data, Cattell discovered 16 source traits, and although he later determined there might be another seven source traits to make a total of 23 (Cattell & Kline, 1977), He developed his assessment questionnaire, namely,

### **2.3.1 The Sixteen Personality Factor Questionnaire (16 PF)**

Cattell, (1995) devised a personality inventory based on just 16 source traits. These 16 source traits are seen as trait dimensions or continuums, in which there are two opposite traits at each end with many possible degrees of the traits possible along the dimension. For example, someone scoring near the reserved end of the reserved\ outgoing dimension would be more introverted than someone scoring in the middle or at the opposite end.

### **2.3.2 Neuroticism\Extraversion\ Openness Personality Inventory (NEO- PI )**

This inventory is based on the five- factor model of personality traits that has been developed by Costa & McCrae.

### **2.3.3 Myers Briggs Type Indicator**

Another inventory in common use is the *Myers- Briggs Type Indicator (MBTI)*. This inventory is based on the ideas of Carl Jung and looks at four personality dimensions, that is (i) Sensing/ intuition, (ii) Thinking/feeling, (iii) Introversion/ Extraversion (iv) Perceiving / Judging.

The sensing\ intuition(S\I) dimension includes people who prefer to rely on what they can see, hear, and so on through their physical senses (sensing) and, on its opposite end those who look for patterns and trust their hunches(intuition).

Sensing people are considered to be detail oriented, preferring to work only with the known facts, whereas intuitive people are more willing to use metaphors, analogies, and look for possibilities.

The Thinking\feeling (T\F) dimension runs from those who prefer to use logic, analysis, and experiences that can be verified as facts (thinkers) to those who tend to make decisions based on their personal values and emotional reactions(feeling).

Introversion\extraversion (I\E) is the same classic dimension that began with Jung, and is represented in nearly all personality theories.

Perceiving\ judging (P/J) describes those who are willing to adapt and modify decisions, be spontaneous, and who are naturally curious and to put off making a final decision so that all possibilities are covered (perceiving) as well those who are the opposite : the action- oriented, decisive, get the task done and look back type (judging).

These four dimensions can differ for each individual, resulting in 16(4 x 4) possible personality types: ISTJ, ISTP, ISFP, ISFJ, and so on (Myers- Briggs) is often used to assess personality to help people know the kinds of careers for which they may best be suited.

ISTJ (Introverted, Sensing, Thinking, Judgemental). ISTP (Introversion, Sensing, Thinking and Perceiving). ISFP (Introversion, Sensing, Feeling and Perceiving). ISFJ ( Introversion, Sensing, Feeling and Judgemental).

### 2.3.4 Minnesota Multiphasic Personality Inventoryh (MMPI)

By far the most common personality inventory is the *Minnesota Multiphasic Personality Inventory, Version II, or MMPI 2*, which specifically tests abnormal behaviour patterns in personality (Butcher & Rouse, 1996; Butcher et al., 2000, 2001).

This questionnaire consists of 567 statements such as “I am very often tense”. The person taking the test must answer “true”, “false”, or “cannot say”.

The MMPI has 10 clinical scales and 8 validity scales in addition to numerous subscales. Each scale tests for a particular kind of behaviour.

The behaviour patterns include relatively mild personality problems such as excessive worrying and shyness as well as more serious disorders such as schizophrenia and depression.

Validity scales, which are built into any well designed psychological inventory, are intended to indicate whether or not a person taking the inventory is responding honestly. Responses to certain items on the test will indicate if people are trying to make themselves look better or worse than they are, for example, certain items are repeated throughout the test in a slightly different form, so that anyone trying to “fake” the test will have difficulty in responding to those items consistently (Butcher et al., 2001). For example, if one of the statements is “I am always very happy” and a person responds “true” to that statement, the suspicion would be that this person is trying to look better s/he really is. If several of the validity scale questions are answered in this way, the conclusion is that the person is not being honest.

There are also inventories in India. For example, Bengalee (1964) developed Multiphasic Personality Inventory, known as Youth Adjustment Analyser (YAA). The purpose of the inventory was to screen out maladjusted students from the college going students. Mohsin & Hussain (1981) adapted the Bell Adjustment Inventory in Hindi.

#### Self Assessment Questions

- 1) What do you mean by the term personality inventory?

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2) Describe Self Report Personality Tests

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3) What are single trait and Multidimensional tests?

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4) What are the various types of faking possible? Discuss the measures to overcome the same

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5) What are the weaknesses in self report inventories ? How are these overcome?

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6) What are the different kinds of personality inventories used to measure personality?

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7) Discuss the advantages and disadvantages of self- report measures.

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## 2.4 PROJECTIVE TECHNIQUES

Projective tests of personality are mainly designed to assist the clinical psychologist in diagnosing the nature and severity of a particular person's emotional disturbance. The rationale for these tests is based on Freud's theory that unconscious processes are important for understanding psychopathology.

The purpose of projective personality assessment is to uncover the person's unconscious conflicts, fears, and concerns. Frank (1939) coined the term *projective technique* to describe assessment methods that present people with ambiguous stimuli for which there is no obvious culturally defined to personality assessment, allow people to "project" upon ambiguous material their feelings, needs, attitudes, and ways of viewing life.

The responses elicited by the test stimuli (such as inkblots, vague pictures) reveal signs of pent up impulses, "ego defenses" and other "interior" aspects of the personality. All projective techniques have a set of common important features. They are as follows:

- They all use ambiguous or unstructured test stimuli.
- The test taker is never told the purpose of the test or how responses will be scored or interpreted.
- Instructions emphasise that there is no correct or incorrect answers and that the test taker is free to respond in any manner s/he sees fit.
- Scoring and interpretation rely heavily on subjective clinical judgements.

### 2.4.1 Classification of Projective Techniques

The classification of projective techniques has been recently provided by Lindzay (1959). Based upon the responses of the examinees, he has divided projective techniques into the following five categories, iz., (i) Association technique (ii) Construction technique (iii) Completion technique (iv) Expressive technique (v) Choice technique. These are being explained below.

#### *Association Technique*

This category includes all those situations where the examinee is required to respond with the associations which are evoked in mind after seeing or listening to stimulus materials. E.g., the Rorschach test, the Holtzman Inkblot test and the Word Association test. The reaction time (the time elapsing between the presentation of the stimulus word and the response word) and the responses are analysed for studying personality.

#### *Construction Technique*

This category includes all those situations where the examinees are required to construct a story after seeing the stimulus materials (usually the picture) within certain specified time. No record is generally kept of time but the examinee's themes and mode of responding are considered relevant. For example, Thematic Apperception test, Children's Apperception test. Rosenzweig Picture Frustration test. The Blacky Pictures, The Object Relations test, etc. In all these tests the examinee is required to construct or produce simple statement or complex statements in the form of a story.

*Completion Technique*

These techniques include those situations where the examinee is presented with some incomplete sentences with the construction to complete them in any way he desires.

E.g., My sex life is .....  
 I feel tense .....  
 My ambition in life is .....  
 I often get nervous when .....

Responses are given by the examinee are interpreted and analysed to find some aspect of the personality. But these methods lack a uniform and standard mode of analysis. E.g., Sack's Sentence Completion test, Madeline Thomas Completion Stories test.

*Expressive Technique*

This technique includes those situations where the examinee expresses his personality through some manipulative tasks, which usually involve some interaction with given materials. For example, play, drawing role- playing painting finger painting, etc. An important feature is that examiner pays much attention to the way or process by which the examinee manipulates the given materials. For example, the examiner may ask the examinee to play with a given set of dolls; he may pay attention to the process by which dolls are selected and handled during the play.

Also, in such techniques, significance is given to the process or way of handling the test materials rather than upon the end product of the process (such as the content or theme of the stories, etc.).

*Choice Technique*

Choice technique, also known as ordering technique, is not a projective in its true sense; rather may be regarded as a step towards objectifying the projective techniques (Kerlinger, 1973). The examinee is presented with some sets of pictures or items (which convey the different degrees of a trait) with the instruction to choose the most relevant and appropriate picture. Sometimes, he may be asked to order or rank those pictures in terms of his preferences, and thus, the name *ordering technique*. The choice of the items, becomes the basis for inference regarding one's personality. The Szondi test is an example of ordering technique because the examinees are required to rank set of pictures along a like-dislike dimension.

**2.4.2 Strengths and Weaknesses of Projective Techniques**

There are two unique strengths of projective tests. First, the testing stimuli are relatively ambiguous to people. As such, the person does not know how the test provides information to the examiner. This indirect method helps in disguising the real purpose of the test and it reduces the possibility that people will engage in intentional deception. Second, the indirect method used in projective tests allows circumventing conscious defenses, thus making them sensitive to aspects of personality that are hidden.

However some of the disadvantages include that projective tests are poorly standardised, in large part because there are no established methods of administration, scoring, and interpretation. In particular, the scoring of these tests often relies on the skill and clinical intuition of the examiner, thus making their reliability quite low.

Evidence suggests that extensive training in a specific scoring system leads to satisfactory levels of inter judge agreement( Goldfried, et al., 1971;Exner, 1986). A more serious problem concerns the interpretation of a person's scored responses to a projective test. Interpretation of such tests depends all too often on the personal insights and intuition of the clinician. There is also little convincing evidence to support the validity of projective tests (Aiken, 1984; Peterson, 1978). Therefore, psychologists are well advised not to base an entire diagnosis solely on projective tests. Projective tests should be considered in the context of other information obtained through interviews, case histories, and self- report tests.

Despite the aforesaid problems, many clinical psychologists continue to apply these methods as a means to explore a person's unconscious conflicts, fantasies and motives(Singer & Kolligian, 1987). They are more capable of revealing human personality in greater depth and detail than some of the personality inventories where considerable faking is possible. People have more faith in interpreting projective tests than personality inventories. A survey of the member of the Society for Personality Assessment found that Rorschach and TAT were ranked as second and fourth, respectively, in terms of usage among all psychometric instruments.

### Self Assessment Questions

1) What do you mean by a projective test? Describe the same

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2) How are Projective tests classified?

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3) What are the strengths and weaknesses of projective techniques?

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- 4) Name some of the projective tests that are commonly used.

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## 2.5 BEHAVIOURAL ASSESSMENTS

Behaviourists do not want to typically “look into the mind” of an individual, because they assume that personality is merely habitually learned responses to stimuli in the environment, the preferred method for a behaviourist would be to watch that behaviour unfold in the real world.

### 2.5.1 Observation Technique

In direct observation, the psychologist observes the client engaging in ordinary, everyday behaviour, preferably in the natural setting of home, school, or workplace, for example. A therapist who goes to the classroom and observes that tantrum behaviour only happens when a child is asked to do something involving fine motor abilities (like drawing or writing) might be able to conclude that the child has difficulty with those skills and throws a tantrum to avoid the task.

Observation is the sine qua non of any approach to personality study. In some cases, hunches for research begin unsystematic observation. Personal observations often pave the way for more refined study of people’s behaviour.

Another way to learn about behaviour is to observe and record it as it naturally occurs (in real-life settings), but in a more systematic and rigorous manner than is evident in unsystematic behaviour. This is called *observation naturalistic*. The play and friendship patterns of children, antisocial behaviour in adolescents, eating behaviours of obese and no obese people, leadership styles of effective business managers, and many clinical phenomena have been investigated through naturalistic observation. Such naturalistic observation does not explain behaviour, but they are a rich source of information about what people do in their natural environments.

Naturalistic observation has some limitations also.

- 1) The main problem is that observers are often at the mercy of unpredictable events over which they have little or no control.
- 2) There are problems of observer bias and expectations influencing those aspects and events that are attended to and remembered.
- 3) The generalisation of observation based on a few people and situations, is questionable in regard to reliability and validity.
- 4) Finally, observers may unwittingly interfere with the actual events they wish to observe or record (Kazdin, 1982). Despite this problem, the advantage of naturalistic observation is obvious.



## 2.5.2 Situational Tests

One gets a sample of how people respond to their day-to-day situations amid friends and families without the contrived atmosphere of a laboratory or interview.

A situational test is a kind of compromise between a standardised test and observational methods of assessing personality. Personality traits are measured on the basis of observations of ratings of what a person thinks and does in a given situation, which resembles a real situation of everyday life. The subject has usually no idea that he is being studied. The situation represented by such tests is a social situation having opportunities for interaction with other individuals and especially designed to emphasise those aspects of personality which are under study.

The first situational test of personality was developed by United States Office of Strategic Services (OSS) during World War II to screen out men for military several reassignments. Situational tests are more suited to the measurement of traits like leadership, dominance, responsibility, extroversion-introversion, and the like.

Sometimes these tests utilise directly observable units of behaviour as the basis of assessment of the traits. Such situational tests are called *behavioural tests* because they are directly concerned with observable behaviour. For instance, honesty, self-control, and co-operation are such traits, related to character.

One of the first attempts to study these traits was made by Hartshorne, May & Shuttleworth (1930) in their Character Educational Inquiry (CEI). In general, CEI behavioural tests utilised natural situations lying within the day to day routine of a school child such as games, class room examination, etc. Children placed in these situations were not aware of the fact that they were being studied. The CEI tests were principally designed to measure behavioural traits like, altruism, honesty, and self control.

However, most of the CEI tests were concerned with measuring honesty among children by providing opportunity for cheating. These tests utilised different modes or techniques for studying honesty.

In one such technique called the *duplicating technique* the children were administered one of the classroom tests like the arithmetical reasoning test or the vocabulary test. A set of children's responses was duplicated, unknown to them. In the subsequent administration the original test is again given with a request to score their own responses with the help of a scoring technique. A simple comparison of the responses scored with the duplicated responses revealed whether or not the children had changed their responses in scoring, that is, whether they had cheated or not. Other CEI tests intended to measure honesty provided situations in which the person had an opportunity to lie or to steal something.

Situational tests represent real-life situations and therefore, their findings can be easily generalised to natural life situations, even though they have several important limitations.

### Limitations

- 1) The situational tests are extremely time consuming, costly, and laborious techniques. They are time-consuming because ordinarily observations in

contrived situations last for several hours; they are costly because they demand the services of trained observers and they are laborious techniques because creating a real –life situation involves a good deal of labour on the part of the observers.

- 2) Subjectivity and bias may operate in the observation of a situational test. Observers, even if professionally trained, may not make a fair and objective observation because of certain bias towards the individuals to be observed. Likewise, other subjective elements may enter into the observation process. Although, an attempt is made to control such subjective elements, they cannot be completely eliminated because the observer is always a human being.
- 3) For increasing the reliability and validity of the observation made under situational tests, the experimenter gives emphasis on studying an isolated bit of behaviour. The problem arises as to what significance or meaning to such an isolated bit of behaviour can be attached.
- 4) Another limitation is concerned with ‘What to observe’. This is a problem in situational tests, which cannot be planned to study all behaviours of the individual. Only the limited behaviour should be selected for observation. In such a situation determination and selection of a meaningful set of behaviours to be observed is always an important problem.
- 5) Lastly, whether the observer should be kept visible or invisible is also a problem in most situational tests. If the group is small, the physical presence of the observer in the group may change what actually takes place in the group. How the observer can be fitted into such a setting is always a problem.

Other methods often used by behavioural therapists and other assessors are rating scale and frequency counts.

In a rating scale, a numerical rating is assigned, either by the assessor or the client, for specific behaviours (Nadeau et al., 2001). In a frequency count, the assessor literally counts the frequency of certain behaviours within a specified time limit. Educators make use of both rating scales and frequency counts to diagnose behavioural problems such as attention deficit disorder and aspects of personality such as social skill level through the various grade levels.

### **2.5.3 Weaknesses in the Behavioural Assessment Tests**

Problems with these assessments can include the observer effect (when a person’s behaviour is affected by being watched) and observer bias, which can be controlled by having multiple observers and correlating their observations with each other.

As with any kind of observational method, there is no control over the external environment.

A person observing a client for a particular behaviour may not see that behaviour occur within the observation time.

All of the above described methods convey the full meaning about the traits to be assessed only when they are followed by other standardised tests. Merely on the basis of behavioural methods it is difficult to arrive at a particular conclusion.

### Self Assessment Questions

- 1) What are the different behavioural assessment methods in assessing personality?

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- 2) Briefly discuss some of the weaknesses of behavioural assessments techniques.

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- 3) Discuss the observational tests and the situational tests.

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- 4) What are the advantages and disadvantages of observation and situation tests.

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## 2.6 LET US SUM UP

There are three most common tools or methods of personality assessment.

These tools are self-report inventories, projective techniques, and behavioural assessment method that include observation, rating scale, frequency count, and situational tests.

Personality inventories are typically developed by trait theorists and provide a detailed description of certain personality traits. They are objective tests rather than subjective tests.

The NEO-PI is based on five-factor model of personality, whereas Myers-Briggs Type Indicator is based on Jung's theory of personality types.

The MMPI- 2 is designed to detect abnormal personality.

Personality inventories include validity scales to prevent cheating, but such measures are not perfect and cheating is sometimes possible. Projective tests are based on the defense mechanism of projection and are used by psychoanalysts.

Projective tests include the Rorschach inkblot test and Thematic Apperception test. Projective tests can be helpful in finding starting points to open a dialogue between therapist and client but have been criticized for poor reliability and validity. Behavioural assessments are primarily used by behaviourists and include direct observation of behaviour rating scales of specific behaviour, and frequency counts of behaviour.

Behavioural assessments have the disadvantage of the observer effect, which causes an observed person's behaviour to change, and observer bias on the part of the person doing the assessment.

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## 2.7 UNIT END QUESTIONS

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- 1) Self-report measures are commonly used in personality assessment. Discuss some of the strengths and weaknesses accompanying self-report measures. Is it possible to overcome the weaknesses?
- 2) How do projective techniques differ from self-report test in the assessment of personality? Do projective tests have any advantage or disadvantage in comparison to self-report measures?
- 3) How can behavioural assessments be used in measuring personality?

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## 2.8 GLOSSARY

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<b>Acquiescence</b>	: A response set of tending to say "yes" or "no" to test item regardless of their content.
<b>Direct observation</b>	: Assessment in which the professional observes the client engaged in ordinary day-to-day behaviour in either a clinical or natural setting.
<b>Frequency count</b>	: Assessment in which a numerical value is assigned to specific behaviour that is listed in the scale.
<b>Multidimensional tests</b>	: Self-report personality that provide measures of several aspects of the respondents personality at once (e.g., MMPI).
<b>Naturalistic observation</b>	: Careful observation of behaviour as it occurs in real-life settings without direct intervention by the investigation.

- Projective techniques** : A class of psychological tests that ask people to respond to ambiguous stimuli in ways that may reveal their needs, feelings, and conflicts.
- Rating scale** : Assessment in which the frequency of a particular behaviour is counted.
- Self-report techniques** : Self –report tests in which the response format, administration, and scoring features are standardised.
- Single-trait tests** : Self-report tests that measure a specific trait of the respondent’s personality.
- Situational test** : Personality traits are measured on the basis of observations of ratings of what a person thinks and does in a given situation, which resembles a real situation of everyday life.
- Social desirability** : A tendency seen in some people to give socially acceptable answers to test items.

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## UNIT 3 BEHAVIOURAL ASSESSMENT

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### Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Definition of Behavioural Assessment
  - 3.2.1 The Theoretical Model Underlying the Application of Behavioural Assessment Procedures
  - 3.2.2 Common Characteristics and Assumption of Behavioural Assessment Methods
  - 3.2.3 Advantages and Limitations of Behavioural Assessment
- 3.3 Functional Behavioural Assessment
  - 3.3.1 Reliability and Validity Issues in Behavioural Assessment
  - 3.3.2 Uses of Behavioural Assessment
  - 3.3.3 Types of Behavioural Assessment
  - 3.3.4 Process of Behavioural Change: Assessment, Treatment and Evaluation
- 3.4 Case Study Method
  - 3.4.1 Purpose of Case Study Method
  - 3.4.2 Types of Case Study Method
  - 3.4.3 Strengths and Weaknesses of Case Study Method
- 3.5 Interview Method
  - 3.5.1 Meaning and Purpose of Interview Method
  - 3.5.2 Strengths and Weaknesses of Interview Method
- 3.6 Other Measures
- 3.7 Let Us Sum Up
- 3.8 Unit End Questions
- 3.9 Glossary
- 3.10 Suggested Readings and References

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### 3.0 INTRODUCTION

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In this unit we will be dealing with many methods which are behavioural in nature. This would include the case history method, followed by the interview method and other methods. As one deals with the case history method, we would also be dealing with the meaning and purpose of case history method. There are also many types of case histories which will be presented in this unit. While dealing with this method, the strengths and weaknesses of the method will also be put forward. The next method in behavioural assessment will be the interview method. Defining this method, the unit will be putting forward the meaning and purpose of this method and its use in different settings. Also the advantages and disadvantages of this interview method will also be discussed. Other measures such as the experience sampling and biological measures will also be discussed.

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### 3.1 OBJECTIVES

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After completing this unit, you will be able to:

- Define and describe behavioural assessment;
- Elucidate the categories of behavioural assessment;

- Explain what is functional behavioural assessment;
- Explain some of the advantages and disadvantages of the case history method;
- Elucidate the types of case history method;
- Define and describe interview as a method of assessment;
- Explain the meaning and purpose of the interview method;
- Elucidate the types of interviews; and
- Analyse other methods of assessment in the behavioural category.

## **3.2 DEFINITION OF BEHAVIOURAL ASSESSMENT**

Behavioral assessment refers to assessing and measuring various constituents of a behaviour that are indicative of why a certain behaviour occurs and what causes that behaviour. These would include overt behaviours, feelings, and cognitions and their controlling variables that could be both from within the individual and outside of the individual. Behavioural assessment focuses on what a person does rather than on what a person has or is. It is also said that behavioural assessment is more an exploratory activity which tries to find out the range of procedures used to understand children, adults, groups etc. This definition emphasises a hypothesis-testing problem-solving model of assessment, the goal of which is to identify appropriate intervention strategies in order to remediate specified behaviour problems.

The history of behavioural assessment cannot be separated from behaviourism as a paradigm of scientific psychology and its clinical application. Thus, behavioural assessment began when complex human behaviours were first considered as a subject for scientific study (e.g., Staats 1963, Bandura 1969). Since the 1960s, four main phases have been identified.

As for the nature of behavioural assessment, it may be stated that its main goal has been behavioural change. Therefore, all conceptual and methodological features emerge from the attempt to define and measure a particular behavioural problem and its causal or controlling conditions and design the best treatment. The following five traits could be considered the essence of behavioural assessment: functional analysis, triple response modes and multi-causality, idiographism, multimethodism, and the experimental method.

### **3.2.1 The Theoretical Model Underlying the Application of Behavioural Assessment Procedures**

The theoretical underpinnings of the above concept of behavioural assessment stem from the interaction between the person's previous learning and the external and organismic environments within which the person functions.

The setting in which the behaviour occurs is of primary importance. The biological makeup and physiological functioning help the individuals to adapt and respond to the environment. Evaluating behaviour requires assessment of the person, the setting, and the interaction between the two. Setting in this context refers to the environmental circumstances that might be influencing the occurrence and nonoccurrence of the behaviour. Environmental circumstances in turn refer to those environmental events preceding the behaviour, both immediately and distally, and those following the behaviour.

### 3.2.2 Common Characteristics and Assumptions of Behavioural Assessment Methods

While there is a wide variety of techniques available for carrying out behavioural assessment, they have certain features in common.

1) **They all focus on behaviour**

Both overt and covert behaviours are measured or evaluated as they occur in specific situations. Behaviours are observed at a specific time and in a limited location. The variables and concepts with descriptions of behaviour are taken up objectively, as assessment requires objective information, which is more useful than inferences or subjective interpretations.

2) **All behavioural assessment methods believe in Quantification**

Behavior is quantified so as to allow for reliable comparisons across time and persons and to allow for communication between persons. This leads to greater objectivity of information.

3) **All the behavioural assessment methods use trained, impartial observers**

Observers are trained in the use of the various measurement techniques of behavioural assessment, recording of the same and collecting information in an objective manner. Observers are expected to achieve a specified standard of consistency in their collecting data, recording the information and interpreting the data.

4) **All of them use empirically validated measures.**

It is important to have consistency in the measurement across situations. The measures should be empirically validated.

5) **All of them recognize errors and try to counteract the errors or minimise errors to the extent possible using statistical methods.**

All assessment involves differing degrees of error causing unreliability of the results. Hence it is important to minimize the errors and this is generally carried out through statistical techniques..

6) **All of these believe that the behaviour concerned occurs due to stimuli from the environment.**

Assessment is directed toward discovering the situational influences on behaviour. The emphasis is on public events and direct observation of behaviour in the natural environment, with behaviour being recorded at the time of its occurrence whenever possible.

7) **All these assessment techniques depend not on one but multiple sources of information.**

In addition to the behavioural assessment, a wide-range of assessment strategies are used, including behavioural interviews, checklists, rating scales, standardised instruments, self-reports, self-monitoring forms, and observations, as no single test or source could give adequate information as to why a behaviour occurs.

8) **All the behavioural assessment techniques ultimately place high emphasis on intervention.**

The primary purpose of assessment is not to categorise or label a person but to obtain information that will assist in developing effective intervention

strategies. The emphasis on intervention results in the application of the behavioural assessment model to the particular person , situation etc.

9) **All the behavioural assessment techniques use continuous assessment.**

Assessment is continuous throughout baseline, intervention, and follow up phases. The effectiveness of intervention strategies is continuously evaluated.

10) **Each of these behavioural assessment techniques emphasises on empirically based decision making process.**

Decisions about specific assessment strategies and interventions are based on empirical data available on the individual concerned from the person's self and the environment in which the person lives.

11) **Most of these behavioural assessment techniques focus on individual person rather than groups.**

Assessment focuses on the individual person rather than comparisons to a norm group. There is a recognition of individual differences in behaviour and its determinants, leading to idiosyncratic assessment and intervention.

12) **High emphasis is placed on individual differences.**

Individual differences among persons are not absolute. Differences must be seen in relative terms, with consideration given to situational and cultural differences. It must be kept in mind that a certain behaviour considered normal in one setting may be considered abnormal in another setting.

13) **All behavioural assessment techniques not only look for causes contributing to the problem but also try to solve the problem concerned, once the cause is known.**

The purpose of behavioural assessment is problem solving, and hence identification of causes is extremely important so as to devise intervention strategies to overcome the problem.

14) **All the behavioural assessment techniques focus on developing adaptive behaviour in the individual.**

The focus of behavioural assessment is on developing adaptive, positive, or desirable behaviour rather than on control and reduction of undesirable behaviours. Hence behavioural interventions should be designed and implemented with the benefit of the particular person concerned in mind.

### 3.2.3 Advantages and Limitations of Behavioral Assessment

#### *Advantages*

- Behavioral assessment provides objective data for deciding specific instructional content and strategies for intervention.
- Behavioural assessment leads directly to the formulation of intervention strategies.
- Behavioural assessment can be undertaken in the setting in which the concerned behaviour occurs or in simulated conditions resembling the natural setting.
- Behavioral assessment is tailored to the unique characteristics of the referred person and the targeted environment.



- The continuity of behavioural assessment facilitates determining the progress and evaluation of outcomes.
- Behavioural assessment has such variety of techniques that these help in multifaceted assessment.
- Most behavioural assessment techniques can be implemented by anyone with sufficient training and do not require advanced degrees.

### **Limitations of behavioural assessment**

- Much of behavioural assessment methodology is not standardised.
- Differing levels of specification of the concerned behaviours may result in inconsistent data.
- Narrow definitions of behaviour may result in less consistency in behavioural observation.
- Behavioral assessment methodology may appear rather easy to apply. However if the psychologist or behaviourist is not trained in the techniques, the assessment will be defective and consequently the intervention will be ineffective.

## **3.3 FUNCTIONAL BEHAVIOURAL ASSESSMENT**

A *Functional Behavioral Assessment (FBA)* is an attempt to look beyond the obvious interpretation of behaviour as “bad” and determine what function it may be serving for the individual. Truly understanding why the person behaves the way he or she does is the first step to developing strategies to stop the behaviour. The process usually involves documenting the individual’s behaviour in different situations, interviewing the family members and obtaining information about the behaviour of the individual, if necessary getting information from the work place regarding the behaviour of the individual and many other related sources. All these are done by a behavioural specialist, based on which the intervention plan is drawn.

Behavioural assessment provides information that typically cannot be obtained from traditional assessment but which is necessary for establishing effective remedial strategies and interventions for problems exhibited by individuals.

### **3.3.1 Reliability and Validity Issues in Behavioural Assessment**

Reliability in behavioural assessment, refers to agreement between observers viewing the same behaviour at the same time (inter rater reliability), or a single observer observing the same behavioural sequence on different occasions. On the other hand validity in behavioural assessment refers to data obtained from one measure (e.g., classroom observation) being predictive of behaviour obtained through other measures (e.g., classroom achievement scores or teacher ratings) in different settings, under different conditions, at different times, or by different observers.

Multifaceted assessment is the rule in behavioural assessment, and each of the assessment procedures utilised should provide equivalent data (**convergent validity**).

Another important consideration with respect to validity in behavioural assessment is the extent to which information gathered through a multifaceted assessment leads to beneficial treatment outcomes (**treatment validity**).

### 3.3.2 Uses of Behavioural Assessment

Behavioural assessment is used in many situations and for many purposes, as for example screening, problem identification and analysis and for selection of a good intervention programme which will be effective in resolving the problem concerned.

The assessment continues even after the intervention is completed. Assessment at this point is important to know how far the intervention had been effective in resolving the problem for which the individual was assessed. Some of the issues on which the assessment will be done are given below:

- Has the treatment been administered as planned?
- Have changes in behaviour been monitored and documented?
- If change occurred, has it been demonstrated that it is due to the treatment?
- Have treatment costs been assessed and has it been decided whether the benefits are cost effective?
- Has a decision been made about modifying the treatment or maintaining treatment gains if desired outcomes have been achieved?

### 3.3.3 Types of Behavioural Assessment

Behavioural assessment can be of different types and some of which are given below:

- 1) Direct assessment
- 2) Analogue assessment
- 3) Indirect assessment
- 4) Idiographic assessment
- 5) Contextual assessment.

Let us discuss each of these in a little detail.

*Direct assessment:* Here the recording of a behaviour is done as it occurs in the situation.

*Analogue assessment:* This involves measuring of behaviour under simulated conditions as at times the behaviour may not occur in a natural situation.(e.g. role play)

*Indirect Assessment:* Here the behaviour is not observed but inferred through retrospective analysis.

*Idiographic assessment:* This describes the behavioural characteristics of the individual concerned. For example let us say a child with a disorder called Attention Deficit Hyperactivity Disorder. Here the assessment is disorder focused.

*Contextual assessment:* The stimuli in the environment that cause the behaviour are in focus in this method of assessment.

The main tool of behavioural assessment is functional analysis.

Behavioural problems were to be defined through the triple response mode—motor, cognitive, physiological—and diverse potential causes—multicausality—were to be accepted.

For example, a person's depression should be defined through cognitive (feelings of loneliness, attention and concentration problems), physiological (sleep disturbance) and motor (low rate of social behaviours and physical activity) behaviours.

This problem can be explained functionally by several conditions of the subject, such as a reinforcement system deficit, inadequate motivational system (personal condition), or a dysfunction in biological conditions—and usually by the interaction of all of these factors.

Since behavioural problems should be described through the triple response mode, that is through motor, cognitive, physiological modes, other methods of assessment than observation of overt behaviour and other informants (than the subject) should be considered. In other words, multi methodism is one of the most important characteristics of behavioural assessment.

Behavioral assessment provides the basis for behavioural change, and behavioural change requires treatment, and treatment demands experimental manipulations and evaluation. This is why, throughout the history of behavioural assessment, the experimental method has been a constant among its basic characteristics.

### **3.3.4 Process of Behavioural Change: Assessment, Treatment, and Evaluation**

One of the most important features of behavioural assessment is its role in behaviour modification or behavioural change. In order to change the behaviour, the first step is to make an assessment as to why a behaviour occurs as it is. Once assessment is made, the cause becomes known and one can formulate the treatment intervention and evaluate as to whether the intervention brought about the desired change.

Behavioural assessment has several challenges to face, it is presently applicable only in the clinical field. It has to be made applicable to other fields also. Behavioural assessment needs measurement instruments and improved measurement devices.

Assessment involves a process of decision-making that is well known in terms of the operations undertaken. Nevertheless, this process is not prescriptive. We might expect that in future standards or guidelines for the assessment process will be developed and supported by scientific associations. Not only disorders should be assessed but we must have assessment instruments that could measure normal behaviour and propose successful living.

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## **3.4 CASE STUDY METHOD**

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The case study method is one of the important types of research method which is non-experimental or descriptive research. It is not a specific technique, but is one way of organising social data for the purpose of viewing reality. It tends to

preserve the unitary character of a social object being studied. It tends to examine a social unit as a whole. The unit may be a person, a family, a social group, a social institution or even a community (Good & Hatt, 1981; Best & Kahn, 1992).

The detailed study of a single individual's behaviour over an extended period of time is called a *case history or case study*. This approach is used frequently in clinical and medical settings in order to diagnose and treat people who have psychological problems.

As such, case histories usually deal with abnormal or troubled people whose lives are studied during psychotherapy or diagnosis (Runyan, 1982). The clinician seeks to achieve an understanding of the person's life experiences and behaviour patterns through a variety of procedures, including the person's own recollections, interviews with others who know the person, autobiographical and biographical documents, and any available information from psychological tests.

The clinician, usually searches clues in the past or present life to determine the causes of the person's difficulties. Case history provides a primary data enabling the clinician to establish effective strategies to treat emotional disorders. Fredrick le Play (1806-1882) had, for the first time, introduced case history method into social sciences research in the studies of family budgets. Herbert Spencer, an English sociologist (1820-1882) was the first to use the case materials in his ethnographic studies. William Healy, a psychiatrist, for the first time adopted the case study method in his work with juvenile delinquents.

Case histories made by clinicians working with patients have played an important role in the development of certain personality theories and clinical thinking in general. Freud's psychodynamic theory is almost entirely based on intensive study of single cases. Freud and his fellow psychoanalysts spent years probing deeply into all sorts of behaviour: early childhood recollection of dreams, fantasies, physical illnesses, love-hate relationships. Along with gaining rich insights into the uniqueness of persons, Freud used case studies to support his theoretical claims. Carl Rogers also relied heavily on case studies of psychotherapy clients in formulating his phenomenological approach to personality.

### 3.4.1 Purpose of Case Study Method

The purpose of the case study method is to understand the important aspects of the life cycle of a unit. Case study analyses deeply and interprets the interactions between the different factors that influence the change or growth of unit. Thus, it is basically a longitudinal approach which studies the units over a period of time. A review of literature in this field suggests that case studies are not confined to the study of individuals and their important behavioural characteristics, rather, case studies have been made of all types of communities and of all types of individuals. Whatever the type of individual or community is, the element of typicalness, rather than uniqueness, is the focus of attention in case study.

Though case study is a detailed description and analysis of a particular individual's personality, it is also an immensely important research strategy. A single case-study suggests a deep insight about human behaviour, but usually one case does not provide a firm basis for deriving general principles of behaviour. However, if a number of case studies are accessible for scrutiny, researchers may be able to identify threads of consistency among them and draw some general conclusions.

The case study method may also be used to study the lives of normal individuals. A group led by Henry Murray (Murray et al., 1938) at the Harvard Psychological Clinic provides a rare but compelling model for the intensive study of individual lives over a substantial period of time. The Harvard “personologists” focused on in depth assessments of a small group of college males. The objective was to learn about the basic needs, conflicts, values, attitudes, and patterns of social interaction evident among these young men. The assessment techniques included several self-report personality questionnaires and projective tests administered at different times. In addition to this, assessment of these students involved gathering extensive biographical data and autobiographical sketches, putting them into small-scale experiments, and conducting stress interviews where they were focused to answer embarrassing questions or were challenged to defend some of their deeply held values. Finally, the students were studied in small group settings so that the observers could ascertain their public styles of interpersonal interaction.

The methods used by Murray and his colleagues covered many topics and facets of each student’s life and produced a rich narrative account of each student as a whole in his natural setting. To better assess each student’s thoughts, feelings, and actions, Murray assembled a group of experienced psychologists who shared their insights of each student at a staff conference or “diagnostic council”. In this council, different researchers from different background who had studied the same student would offer their respective clinical impressions about the student. Debate followed and eventually a conclusion about how best to characterise the student’s personality was reached by majority vote.

The eclectic approach adopted by Harvard personologists to the study of personality influenced an entire generation of researchers by directing their attention to the whole person, to the importance of environment, and to the need for comprehensive assessment. Robert White’s *Lives in Progress* (1975), a longitudinal study of three relatively normal individuals, illustrates the importance of the case history as a strategy well-suited for conducting personality research.

### 3.4.2 Types of Case Study Method

Based upon the number of individuals, the case study may be of two types – the *individual case study*, and the *community case study*. In individual case study the social unit consists of one individual or person. Since there is only one individual involved, it emphasises analysis in depth. Such an individual case study is significant in developing some hypothesis to be tested but is not helpful in making broad generalisations. The community case study is one in which the social unit is not a person, rather, a family or social group. Such case study is a thorough observation and analysis of a group of people who are living together in a particular geographical territory. The community case study tries to deal with different elements of the community life such as location, prevailing economic activity, climate and natural resources, historical development, social structure, life values, health education, and the like.

On the basis of the purpose a case study may be subdivided into two categories- *deviant case analysis* and *isolated clinical case analysis*. In the former, the researcher starts with the difference already found between two people or groups of persons and his task is to read backward to deduce the condition that might have produced the difference (Warwick & Osherson, 1973).



In the latter, the emphasis is upon the individual units with respect to some analytical problem. Such study is popular in psychoanalysis. Freud's study of little Hans is a well-known case which can be cited as an example of isolated clinical case analysis. Freud's theories of psychoneurosis were formulated through accumulation of many isolated clinical case studies of the individuals.

### 3.4.3 Strengths and Weaknesses of Case Study Method

The advantage of case study method is that it provides an account of the complexities and idiosyncrasies of an individual's personality that is not possible from other strategies. If the goal is to study processes going in one or few persons and to learn how persons cope with life experiences, then case history is the most appropriate strategy. Also, case histories are the only way rare instances of a phenomenon can be studied.

But one should also keep in mind the shortcomings encountered while studying only one individual. The chief disadvantage of case studies is that the researcher can never be totally certain about cause-and-effect relationships. Researchers cannot control factors that might affect the events or outcomes that they observe; it is always possible that causes other than those they infer may be operating. Second, because a case study examines only one person, its results have limited generalisability. Just because one person behaves in a certain way does not mean all people behave that way. Third, the data obtained by the case history method may be retrospective or second-hand in nature and thus distorted by time. Lastly, even if the accuracy of such data can be verified, the conclusions drawn about the individual may reflect the personal biases of the investigator.

Despite these shortcomings, case histories can be rich source of information about a particular phenomenon. In fact, case study can be considered as a preliminary research strategy that can offer intriguing hypothesis about human personality. Researchers can then examine these hypotheses with more rigorous experimental procedures.

#### Self Assessment Questions

- 1) Define case history method.

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- 2) Give a general overview of the merits and demerits of case history method.

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## 3.5 INTERVIEW METHOD

### 3.5.1 Meaning and Purpose of Interview Method

The interview is one of the oldest and most widely used methods of collecting information about persons. In the interview, the personologist obtains information from the person being evaluated by asking relevant questions and listening to answers. The interviewer and respondent engage in a face-to-face dialogue for the purpose of achieving a specific goal. In fact, the way in which an interview is conducted depends on the particular objective or goal in question. An employment interview, for instance, seeks to assess the personality characteristics of the job applicant.

A research interview aims to gather information about a person concerning a specific research topic under investigation. A clinical interview has its goal the diagnosis of a patient's problem and the type of therapy technique that may be most appropriate for the given diagnosis. Interviews are also used to measure specific aspects of personality.

Psychoanalysis uses one type of interview to probe supposedly underlying aspects of personality. But in modern research special types of interviews, in which individuals are asked questions assumed to be related to specific traits, are often used instead. For instance, interviews are used to measure the *Type A behaviour pattern*, an important aspect of personality related to personal health. Persons high on this pattern are always in a hurry and they hate being delayed. Thus, questions asked during the interview focus on this tendency; for instance: "What do you do when you are stuck on the highway behind a slow driver?"

There is a variety in the degree to which interviews may be *structured* or *unstructured*. In the former type of interview, questions are carefully worded and skillfully presented in a prescribed order. For instance: "How long have you been married?" "How many children do you have?" "Do you believe that children should be allowed to do whatever they want?" "If you had a teenager would you allow him or her to quit school and take a part time job?" As you can see, the most personal and threatening questions appeared last.

The strategy behind asking general and innocuous questions first is that they should be at least threatening for respondents and pave the way for divulging more intimate more information once they have developed a sense of trust toward the interviewer. (White & Speisman, 1982).

In an unstructured interview, questions are framed in such a way as to allow the person considerable latitude in responding. The interviewer may say, "You feel that your spouse really lets you down," or "That must have been a very stressful experience." The respondent is free to reveal whatever information s/he desires to such questions. In turn, the interviewer may abandon a certain line of questioning if it seems to be generating no useful information and some other area of questioning. Compared to a structured interview, an unstructured interview allows the personologist more flexibility to probe the respondent's thoughts and feelings in the context of give-and-take exchange.

### 3.5.2 Strengths and Weaknesses of Interview Method

Interview method when used by a highly skilled interviewer can produce extremely valuable information regarding the individual's personality and life situations. The ability to communicate effectively with others, perceptions of self and significant others, level of anxiety, plans for future, and job satisfaction are a few examples of data that can be obtained from a well conducted interview.

A well planned interview can also be profitably used in hypothesis testing research. At the same time, issues of reliability and validity may arise in the event that respondents are free to say about their past and present life experiences. Structuring the kinds of questions asked of the person is one way to make interview information more valid and reliable. That is why the structured format tends to be preferred in the research setting, whereas the unstructured format tends to be preferred by clinical psychologists in the therapeutic setting.

The interview technique provides a rich source of personality data. But such data is highly subjective and may reflect the theoretical biases of the interviewer. Also, the impact of the of the interviewer's personality can subtly influence how truthful and disclosing the person will be in an assessment setting. This can result in the withholding or distorting of information vital to the purpose of an interview.

Lastly, an assessment interview, especially when supplemented by more objective sources of data, is one the most basic and indispensable of all assessment techniques.

#### Self Assessment Questions

- 1) Differentiate between structured interview and unstructured interview as a measure o personality assessment.

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- 2) What are some of the advantages offered by interview method?

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### 3.6 OTHER MEASURES

Apart from the above cited methods, there are also other less significant techniques existing to assess personality.

- i) **Experience sampling method:** With the advent of electronic pagers now allows researchers to beep individuals at random or pre-established times during the day in order to obtain descriptions of their behaviour at these times? This *experience sampling method* (Stone, Kessler, & Haythornthwaite, 1991) can often reveal much about stable patterns of individual behaviour; and these constitute an important aspect of personality.
- ii) **Biological measures:** In recent years several *biological measures* of personality have also been developed. Some of these use positron emission tomography (PET) scans to see if individuals show characteristic patterns of activity in their brains- patterns that are related to differences in their overt behaviour. Other measures focus on hormone levels, for instance, the question of whether highly aggressive persons have different levels of certain sex hormones than other persons. Some results suggest that this may indeed may be the case (Harris et al., 1996).

It may be concluded that there are many tools for measuring personality. None are perfect, but together they provide psychologists with many useful techniques for investigating the stable patterns of behaviour that make each of us a unique human being.

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### 3.7 LET US SUM UP

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The case study or case history method seeks to provide an in-depth account of an individual's personality. Its primary focus is to diagnose and treat a person's suffering from emotional problems. Also, case histories have played a role in the development of certain personality theories and the study of normal persons over many years.

Several assessment techniques may be used in conducting a case history, including biographical and autobiographical sketches, personality and projective tests, interviews, and information provided by others who know the person reasonably well. Although case histories are valuable source of insights about people, several shortcomings faced in studying one person at a time were noted.

Case histories do not identify factors that might cause the events observed, the results obtained are of limited generalisability, and the data collected may be subject to personal bias and difficult to verify in terms of accuracy.

Principal features of unstructured and structured interviews are that in the former, the interviewer can "dig deeper", and get a deeper understanding of the respondents questions. While in the latter, there is a systematic procedure for collecting information and hence, the reported validities of such interviews is greater than the former type of interviews.

The other measures of personality assessment that the psychologists are currently using are experience sampling and biological measures.

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### 3.8 UNIT END QUESTIONS

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Describe the case history method for assessing personality. What are some of the strengths and limitations of case history method?

How does structured interview differ from unstructured interview? Point out the major sources of error in interview.

Briefly describe the current methods being used by psychologists for personality assessment.

What other measures of personality do psychologists currently use?

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### 3.9 GLOSSARY

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- Case study method** : Research strategy whereby a particular person is studied in great detail.
- Hypothesis** : A single prediction about the relationship between two or more variables that is logically derived from a theory.
- Structured interview** : An interview that follows a set format, thus allows a person little or no freedom to digress from the information sought by the interviewer. An unstructured interview, by contrast, allows the person maximum freedom to divulge information in a more spontaneous manner.

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### 3.10 SUGGESTED READINGS AND REFERENCES

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## UNIT 4 OTHER MEASURES OF PERSONALITY

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### Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Self-Report Questionnaires and Inventories
  - 4.2.1 Minnesota Multi Phasic Personality Inventory (MMPI)
  - 4.2.2 Millon Clinical Multiaxial Inventory (MCMI)
  - 4.2.3 NEO- Personality Inventory (NEO-PI)
- 4.3 Ink Blot Tests
  - 4.3.1 Rorschach Psycho-diagnostic Test
  - 4.3.2 Holtz Ink Blot Test
- 4.4 Apperception Test (TAT)
  - 4.4.1 Thematic Apperception Test (TAT)
  - 4.4.2 Senior Apperception Test (SAT)
  - 4.4.3 Children Apperception Test (CAT)
- 4.5 Let Us Sum Up
- 4.6 Unit End Questions
- 4.7 Glossary
- 4.8 Suggested Readings and References

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### 4.0 INTRODUCTION

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In this unit we will be discussing other measures of personality assessment. Self report questions and inventories are of great importance in personality assessment. These are being taken up in terms of definition and description of such tests and inventories and also we will be presenting the three important and major tests in this field namely MMPI, MCMI and NEO-PI. Following you will learn in this unit some of the major projective tests. In fact projective tests are extremely important to understand the psychodynamics involved in the person's behaviour. Many times we cannot get the needed information through interviews because of the inhibitions on the part of the person or client. In such cases projective tests are used which help the person to project his or her feelings on to the stimulus material, picture or ambiguous stimuli. In this category of Projective tests we will be presenting the Rorschach test and the Holtzman Inkblot tests. In this category of tests you will also learn the test named Thematic Apperception Tests both for adults and children.

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### 4.1 OBJECTIVES

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After going through the following unit, you will be able to:

- Define and describe self report inventories;
- Describe the MMPI, MCMI and NEOPI;
- Define projective tests;

- Explain the Rorschach test;
- Differentiate the two ink blot tests;
- Explain apperception; and
- Describe tests related to apperception such as the TAT and CAT.

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## 4.2 SELF-REPORT QUESTIONNAIRES AND INVENTORIES

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One way of measuring personality involves asking individuals to respond to a self-report inventory or questionnaire. Such measures (also known as objective tests of personality) contain questions or statements to which individuals respond in various ways.

Now we will examine the most extensively used and researched multidimensional test, used by psychologists to evaluate the diagnostics status of clients as well as to make personnel decisions about people.

### 4.2.1 Minnesota Multi Phasic Personality Inventory (MMPI)

The most widely used multi-trait self-report test is the MMPI. It was originally devised by Hathaway and McKinley (1943) to aid clinical psychologist in the diagnosis of psychological disorders. The developers believed that this test would be useful in evaluating the effectiveness of psychotherapy. They used an empirical strategy to construct MMPI. They administered hundreds of true-false items to several groups of people in mental institutions who had been diagnosed as having certain psychological disorders. These diagnoses have been determined through psychiatric interviews with the patients. By systematically carrying out empirical procedure on patient group with different psychiatric diagnosis, the test developers established 10 separate “clinical scales”. The test also had 4 “validity scales” that assess whether the person was careless, deceptive, or misunderstood the instructions in taking the test. The “lie scale”, for instance indicates the extent to which a person response in a socially desirable but untruthful way to statement in order to be viewed in a favourable manner (“I can’t remember ever having a bad night’s sleep”).

An updated and restandardised version of MMPI was established in 1989. It is known as MMPI 2. This test has 567 items, as they were in the original inventory but is different in a number of ways. Items with sexist wordings and outmoded content have been modified, items with objectionable content have been eliminated, and national norms that are more representative of the present population have been calculated. These significant modifications have enhanced the value of MMPI 2 and make it preferable over the original version of the test.

Two general approaches are used when interpreting MMPI data and these are:

- i) clinical and
- ii) actuarial.

In *clinical interpretation* an expert inspects each of the scale scores, notes the features of the profiles (clustering of certain high scale scores), and adds a mix of personal experience about individuals of each profile type to make inferences regarding the pathological problems and traits of the person.

When an *actuarial interpretation* is made, the psychologist(or computer) merely checks MMPI atlas that provide empirically established characteristics which describes each profile, class or code type.

The process of comparing the profile of a person with a large number of previous profile yields to an interpretation based on statistical base rates and norms (without an subjective evaluation by the psychologist).

Matching the person's profile with previous MMPI test takers also enables the clinician to determine the appropriate diagnostic category and course of therapy to be undertaken.

MMPI is by no means limited in usage to the clinical setting (Kunce and Anderson, 1984). It is also used to determine whether individuals have personality attributes that are either compatible or incompatible with a demand of a job for which recruitment is being made.

The MMPI has also been used extensively in studies concerning family dynamics, eating disorders, substance abuse, suicide, and readiness to intervention for rehabilitation (Butcher and Keller, 1984). It has also been one of the main sources of item for a number of other personality tests like Taylor Manifest Anxiety Scale (Taylor, 1953), the Jackson Personality Inventory (Jackson, 1974), and the California Psychological Inventory, etc.

Finally, MMPI has been translated into 125 foreign languages is a testimony to its popularity and value as a clinical assessment technique (Butcher, 1984).

#### **4.2.2 Millon Clinical Multiaxial Inventory (MCMI)**

Another objective measure of personality is the Millon Clinical Multiaxial Inventory (MCMI) (Millon, 1987, 1997). Items of this test correspond more closely to the categories of psychological disorders currently used by psychologists than those on the MMPI. This makes the test especially useful to clinical psychologists, who must first identify individual's problems before recommending specific forms of therapy for them.

The recent third edition development of the MCMI-III adds the Grossman Facet Scales, a series of therapy guiding facet subscales, to the basic personality scales of the instrument. These facet scales identify the most salient clinical domains (e.g., interpersonal, cognitive) that characterise the patient taking the inventory. This information helps "personalise" and further "individualise" the MCMI test results by specifying those features that call for the therapist' attention in what is called "personalised therapy". But first, a few words about the basic MCMI-III and what distinguishes it as a clinical instrument.

The MCMI™ (Millon™ Clinical Multiaxial Inventory) is distinguished from other inventories primarily by its brevity, its theoretical anchoring, multiaxial format, tripartite construction and validation schema, use of base rate scores, and interpretive depth.

Each generation of the MCMI inventory has attempted to keep the total number of items small enough to encourage its use in all types of diagnostic and treatment settings, yet large enough to permit the assessment of a wide range of clinically relevant multiaxial behaviours.

At 175 items, the MCMI inventory is much shorter than comparable instruments. Terminology is geared to an eighth-grade reading level. The inventory is almost self-administering. The great majority of patients can complete the MCMI-III™ in 20 to 30 minutes, facilitating relatively simple and rapid administrations while minimizing patient resistance and fatigue.

**Description:** Based on Millon's theory of personality and psychopathology, the brief Millon Clinical Multiaxial Inventory-II (MCMI-II) instrument provides a measure of 22 personality disorders and clinical syndromes for adults undergoing psychological or psychiatric assessment or treatment. Specifically designed to help assess both Axis I and Axis II disorders, the MCMI-II instrument can assist clinicians in psychiatric diagnosis, developing a treatment approach that takes into account the patient's personality style and coping behaviour, and guiding treatment decisions based on the patient's personality pattern.

**Scoring:** The MCMI-II consists of 10 clinical personality pattern scales, 3 severe personality pathology scales, 6 clinical syndrome scales, 3 modifier indices, 1 validity index.

**Reliability:** The reliability of the MCMI II generally has been sound, with the Axis II scales showing the highest stability as predicted by Millon. Normal subjects also had noticeably higher stability coefficients than clinical subjects. Millon also tested the stability of high point and double-high-point configurations. He reports that high point codes are fairly stable over a month, with nearly two thirds of 168 subjects achieving the same scale high point. For double-high-point configurations, 25% achieve the same high scores with another 19% achieving the same two scales but in reverse order. Based on part of his normative sample, Millon reports quite high internal consistencies. The average of 22 clinical scales is .89, and the range is from .81 to .95.

**Validity:** Because of extensive item overlap, we cannot be sure of the factor structure of this instrument. But there are also overlaps based on the overlap of the constructs; that is, the personality disorders are by no means distinct entities.

**Norms:** Norms for the MCMI-II instrument are based on a national sample of 1,292 male and female clinical subjects representing a variety of DSM-III and DSM-III-R diagnoses. The subjects included inpatients and outpatients in clinics, hospitals, and private practices. The MCMI-II manual describes the distribution of gender, age, marital status, religion, and other factors within the sample.

The MCMI-II is used primarily in clinical settings with individuals who require mental health services for emotional, social, or interpersonal difficulties.

#### 4.2.3 NEO- Personality Inventory (NEO-PI)

A third objective test, the NEO-Personality Inventory (Costa & McRae, 1989), is used to measure aspects of personality that are not linked to psychological disorders. Specifically, it tends to measure the "big five" dimensions of personality, as these dimensions appear to represent basic aspects of personality.

The NEO-PI is a highly-regarded assessment of personality. Based on the Five-Factor model, the NEO PI-R measures the interpersonal, motivational, emotional, and attitudinal styles of adults and adolescents. It consists of 240 personality



items and 3 validity items, and is available in two forms. Form-S is designed for self-reports and Form-R is written in the third person for observer reports.

The NEO PI-R was designed to provide a general description of normal personality relevant to clinical, counseling and educational situations. NEO PI-R items and materials were designed to be easily read and understood. The five domains (factors) measured by the NEO PI-R provide a general description of personality, while the facet scales allow more detailed analysis. These five factors and their facet scales include:

**Neuroticism** (Anxiety, Hostility, Depression, Self-Consciousness, Impulsiveness, Vulnerability)

**Extraversion** (Warmth, Gregariousness, Assertiveness, Activity, Excitement-Seeking, Positive Emotions)

**Openness to Experience** (Fantasy, Aesthetics, Feelings, Actions, Ideas, Values)

**Agreeableness** (Trust, Modesty, Compliance, Altruism, Straightforwardness, Tender-Mindedness)

**Conscientiousness** (Competence, Self-Discipline, Achievement-Striving, Dutifulness, Order, Deliberation)

#### **Reliability and Validity**

Internal consistency coefficients range from .86 to .95 for domain scales, and from .56 to .90 for facet scales. Stability coefficients ranging from .51 to .83 have been found in three-year, six-year, and seven-year longitudinal studies of the original NEO-PI factors. The NEO PI-R has been validated against other personality inventories and projective techniques.

#### **Use of NEO PIR**

This test can be effectively used in counseling and clinical settings with adults as well as senior high school and college students. It is also very effectively used in business and industrial settings. This test is used in Psychological research, including studies in sport psychology and recreation.

#### **Self Assessment Questions**

1) Name some important personality inventories.

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2) How is MMPI-2 different from original MMPI?

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3) Briefly describe NEO-PI.

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### 4.3 INK BLOT TESTS

These are psychological tests in which a subject's interpretation of inkblots is analysed. This test is used in clinical psychology and psychiatry. The inkblots are used to determine what a person perceives in the highly ambiguous shapes.

#### 4.3.1 Rorschach Psychodiagnostic Test

Swiss psychiatrist Hermann Rorschach first published the inkblot test in 1921. Rorschach displayed interest in inkblots from a young age and eventually developed a way to use them for psychological assessment.

Hermann Rorschach was born in Zurich, Switzerland, on Nov. 8, 1884. As a child, Rorschach earned the nickname "Kleck" due to his love "klecksography," a popular game among Swiss children that involved dropping ink on a piece of paper, and then folding the paper in 1/2 to create interesting designs.

Rorschach was an excellent student and ultimately became interested in psychiatry. He graduated in Medicine and worked under notable Swiss psychiatrists, Eugen Bleuler and Carl Jung. After graduation, Rorschach worked at various psychiatric institutions in Switzerland and Russia. He continued to develop his interests in psychoanalysis and Art therapy.

By 1911, Rorschach noticed that children playing klecksography varied widely in their inkblot interpretations. He then began informally studying how the mentally ill interpreted inkblots. Although others before him, such as Leonardo da Vinci, Justinus Kerner and Alfred Binet, had also experimented with inkblots, Rorschach was the first to develop a system to make the interpretation of inkblots a useful tool for psychological analysis.

During the inkblot test, the examinee is shown a series of 10 inkblots and asked to describe what he sees. It is assumed that the examinee will project his own personality and emotions onto the ambiguous picture, providing the examiner with insight into his unconscious mind.

Rorschach's set of 10 inkblots was first published in 1921 in a book entitled "Psychodiagnostik." His peers were skeptical about the ability of inkblot interpretation to assess personality accurately. Responding to this criticism, Rorschach continued his efforts to standardise testing procedures to make his inkblot test a useful psychological tool. However he could not see the use of this test as he died in 1922.

### **Reliability and validity**

After Rorschach's death, at least 4 others attempted to standardise inkblot test administration. However, this only resulted in further confusion and inconsistency. In the late 1950s, American psychologist John Exner developed what became known as Exner's Comprehensive System, which consolidated these different approaches into one universal procedure.

### **Current Use**

The Rorschach inkblot test continues to be the most popular projective test used today. However, critics of the inkblot test argue that the interpretation of an examinee's responses is highly dependent on the examiner's own personal judgment, and therefore not likely to be reliable among examiners. Alternatively, others contend that with proper use and training, the Rorschach can be reliably interpreted and therefore remains a useful psychological instrument.

### ***The Rorschach Plates***

The stimulus materials for the Rorschach Psychodiagnostic Technique which was published originally in 1921, are ten 5 ½ by 9 ½ inch cards. Each card contains one bilaterally symmetrical, black-and-white (five cards), red-and-grey (two cards), or multicolored (three cards) ambiguous figures in ink blot against a white background. The cards are presented individually and viewed at no greater than arms length, but turning the card is permitted.

Examinees are told to report what they see in the report or what it might present. After all the cards have been presented the examiner may start over with card one and ask the examinee what features (shape, color, shading and so on) of the card determined the responses of the subject. Following this *enquiry* period, there may be a further period of *testing the limits* to discover whether the examinee can see certain things in the card.

A number of scoring methods for the Rorschach have been proposed, the most recent being Exner's (1991, 1993) comprehensive system. Every response given to a blot may be scored on several categories as given below.

**Location** : where it was seen-the whole blot(W), a common detail(B), an uncommon detail(Dd), or, if the white space on the card was used, WS, DS,or DdS.

**Determinant** : what aspect of the blot determine the response-form (F), color(C), shading-texture(T), shading-dimension(V), shading-diffuse(Y), chromatic color(C), achromatic color(C'), movement (M), or combinations of these.

**Content**: anatomy (An), blood (Bl), Clouds (Cl), Fire (Fi), Geography (Ge), Nature (Na), and so forth.

*Popularity*: whether the response is a popular (P) or an original (One).

The number of responses in each category and certain ratios computed from them guide the interpretation of the test protocol of the whole.

For example, several good “whole” (W) responses are considered indicative of integrated or organised thinking, where as color responses suggest emotionality and impulsivity; many detailed responses indicate compulsivity; white-space responses point to oppositional tendencies; and movement responses reveal imagination.

The ratio of the number of human movement responses to the number of color responses (experience balance) is said to be related to the degree to which a person is thought-minded rather than action oriented.

The ratio of the number of form responses to the number of color responses is an index of the extent to which the respondent is controlled by cognition rather than emotion.

Also important in evaluating Rorschach protocol is the accuracy of responses, that is, how well the responses fit the respective parts of the blots (good, poor, an indeterminate).

Delays in responding (Reaction Time) may be interpreted as anxiety, small number of color and movement responses as depression, and several shading responses as self-control. Many original responses having poor form and other indicators of confused thinking suggest a psychotic process.

One of the most reliable scores on the Rorschach, and a rough index of mental ability, is a simple count of the total number of responses to the ten ink blots.

Responses may also be interpreted in terms of content, but the process is very subjective. For example unreal characters such as ghosts and clowns are interpreted as indicative of an inability to identify with real people, and mask are interpreted as role playing to avoid exposure. Food is interpreted as dependency needs or emotional hunger, death as loneliness and depression, and eyes as sensitivity to criticism.

Considering the length of time required to administer and score the test, it is unsatisfactory when judged by conventional psychometric criteria. But still it remains popular among clinical psychologists and psychiatrists.

### **4.3.2 Holtz Ink Blot Technique**

#### *Holtzman Ink Blot Test (HIT)*

The Holtzman Inkblot Technique (HIT) is a projective personality assessment test for persons ages five and above. The main purpose of this test is to assess personality structure of a subject. It is also used as a diagnostic test particularly assessing schizophrenia, depression, addiction and personality disorders.

This test requires a clinically trained examiner. The HIT should be administered and interpreted by a trained psychologist, psychiatrist, or appropriately trained mental health professional.

The HIT, developed by psychologist Wayne Holtzman and colleagues, was introduced in 1961. The test was designed to overcome some of the deficiencies of the Rorschach Inkblot Test.

The Holtzman is a standardised measurement with clearly defined objective scoring criteria. The HIT consists of 45 inkblots. The test administrator, or examiner, has a stack of 47 cards with inkblots (45 test cards and 2 practice cards) face down in front of him or her. The examiner hands each card to the subject and asks the test subject what he or she sees in the inkblot. Only one response per inkblot is requested. Occasionally, the examiner may ask the test subject to clarify or elaborate on a response.

The Administration of the HIT typically takes 50-80 minutes. The HIT is then scored against 22 personality-related characteristics.

The HIT can also be administered in a group setting. In group testing, 30-45 inkblots are projected onto a screen and test subjects provide written responses to each inkblot.

Holtz Ink Blot Technique (HIT) consists of two parallel forms of HIT (A and B) and has 45 blots each, and the examinee is limited to one response per blot. Each of the blots was selected on the basis of high split half reliability and an ability to differentiate between normal and pathological responses.

The HIT blots are more varied than those on the Rorschach: some are asymmetrical, and some have colors and different visual textures. The HIT can be scored on the 22 response categories developed by computer analysis of hundreds of test protocols. The percentile norms for these 22 scores are based on eight groups of people, normal and pathological, ranging in age from 5 years to adulthood.

The procedures for constructing and standardising the HIT were more like those for a personality inventory than other projective techniques, and hence its reliability is higher than that of Rorschach.

### Self Assessment Questions

1) What is meant by ink blot tests?

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2) Describe the Rorschach Test.

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3) What is the criticism against the Rorschach Test?

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4) How is the scoring done on Rorschach cards?

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5) Describe Holtzman inkblot test. In what these are different from the Rorschach test?

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6) Describe the Holtzman Inkblot test and how is the scoring done for this test?

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## 4.4 APPERCEPTION TEST

Let us first understand what is apperception. It refers to the conscious perception with full awareness. It is the process of understanding by which newly observed qualities of an object are related to past experience. This term apperception was introduced by Leibniz, for the mind's reflective thinking and apprehension of its own states. Kant has put forward two types of apperception viz., (i) empirical apperception and (ii) transcendental apperception. While the former refers to the ordinary consciousness, changing self etc., the latter refers to consciousness that unifies experience as that of one subject and is thereby the foundation of both experience and thought.

Less structured than word associations and incomplete sentences but more structured than ink blots are pictures or other materials about which the respondent is asked to tell a story. The majority of these *Apperception Test* employ pictures of people, or animals as stimuli, but one (the hand test) is composed of pictures of hands and another (the Auditory Apperception Test) consists of auditory stimuli. Nearly all apperception test call for open ended response, but at least one (the Iowa Picture Interpretation) has a multiple choice format. Directions for the various picture-story tests are similar: the examinees are asked to tell the story about the picture, including what is going on at the moment, what led up to it, and what the outcome might be.

#### 4.4.1 Thematic Apperception Test (TAT)

The test is based on Murray's Need theory, and is developed by Morgan & Murray (1935). TAT consists of 30 black and white picture cards (four overlapping sets of nineteen cards, each for boys, girls, men, and women) depicting people in ambiguous situations, plus one blank card. The usual procedure for administering the TAT begins by asking the examinee to tell a complete story about each of the 10 or so picture cards selected as appropriate for his or her age or sex. The examinees are asked to devote approximately 5 minutes to each story, telling what is going on now, what thoughts and feelings the people in the story have, what events have led up to the situation, and how it will turn out. For example, one of the pictures shows a young woman in the foreground and a weird old woman with a shawl over her head grimacing in the background. The following story was told by a young college woman in response to this picture:

This is the woman who has been quiet troubled by memories of a mother she was resentful towards. She has feelings of sorrow for the way she treated her mother; her memories of her mother plague her. These feelings seemed to be increasing as she grows older and sees her own children treating her the same way as she treated her mother. She tries to convey the feeling to her children, but does not succeed in changing their attitudes. She is living her past in her present, because the feeling of sorrow and guilt is reinforced by the way her children are treating her.

From stories such as this, a skilled examiner obtains information about the dominant needs, emotions, sentiments, complexes, and conflicts of the story teller and the pressures to which he/she is subjected. As revealed by this story, responses to TAT pictures can be especially useful in understanding the relationships and difficulties between a person and his or her parents.

When interpreting TAT stories, it is assumed that respondents project their own needs, desires and conflicts into the stories and characters. Interpretation of the stories is a fairly subjective, impressionistic process centering on an analysis of the needs and personality of the main character (*hero/heroine*), who presumably represents the examinee, and the environmental forces (*press*) impinging on the main character.

The frequency, intensity and the duration of the story are all taken into the account in the interpretation. The following TAT responses are considered indicative of mental disorders of various kinds:

- slowness or delays in responding may indicate depression;

- stories by men that involved negative comments about women or affection for other man may point to homosexuality;
- over cautiousness and preoccupation with details are suggestive of obsessive compulsive disorder.

Although the usual methods of scoring and interpreting TAT stories are highly impressionistic, scores determined by one of the more systematic procedures are fairly reliable and can be interpreted in terms of norms based on standardisation studies (Bellack, 1993). Asking a person to tell stories about pictures would also seem to have potentially greater validity than asking for responses for ink blots. The content of TAT stories is influenced by the particular environmental context in which the test is taken, and the test does not always differentiate between normal and mentally disordered person (Eron, 1950),

The TAT has been used with a range of ethnic and chronological age groups, and various modifications have been constructed for Blacks, children, and older adults.

#### **4.4.2 Senior Apperception Technique (SAT)**

The 16 stimulus pictures on this test, which was designed specifically for older adults, reflect themes of loneliness, uselessness, illness, helplessness, and lowered self-esteem, in addition to positive and happier situations. As in the case of the Gerontological Apperception Test (Wolk and Wolk, 1971), a similar instrument, responses to the pictures on the Senior Apperception Technique reflect serious concerns over health, getting along with other people and being placed in a nursing or retirement home. Both tests have been criticized for inadequate norms and possible stereotyping of the elderly.

#### **4.4.3 Children Apperception Test (CAT)**

The Children's Apperception Test (CAT) is a projective personality test used to assess individual variations in children's responses to standardised stimuli presented in the form of pictures of animals in common social situations.

The main purpose of CAT is to assess personality, level of maturity, and, often, psychological health of the children. The theory is that a child's responses to a series of drawings of animals in familiar situations are likely to reveal significant aspects of a child's personality. Some of these dimensions of personality include level of reality testing and judgment, control and regulation of drives, defenses, conflicts, and level of autonomy.

The CAT, developed by Bellak and Bellak (1949), is based on the adult Thematic Apperception Test. The TAT, created by psychologist Henry A. Murray uses a standard series of 31 picture cards in assessing perception of interpersonal relationships. The cards, which portray humans in a variety of common situations, are used to make children tell stories about relationships or social situations. The obtained responses are analysed and the personality of the child is delineated which may consist of dominant drives, emotions, sentiments, conflicts and complexes. The examiner summarizes and interprets the stories in light of certain common psychological themes.

In creating the original CAT, animal figures were used instead of the human figures depicted in the TAT because it was assumed that children from three to ten years of age would identify more easily with drawings of animals.

The original CAT consisted of ten cards depicting animal (CAT-A) figures in human social settings. The Bellaks later developed the CAT-H, which included human figures, for use in children who, for a variety of reasons, identified more closely with human rather than animal figures. A supplement to the CAT (the CAT-S), which included pictures of children in common family situations, was created to elicit specific rather than universal responses.

Like the TAT and the Rorschach inkblot test, the CAT is a type of personality assessment instrument known as a projective test. The term projective refers to a concept originated by Sigmund Freud. In Freud's theory, unconscious motives control much of human behaviour. Projection is a psychological mechanism by which a person unconsciously projects inner feelings onto the external world, then imagines those feelings are being expressed by the external world toward him or herself.

As opposed to cognitive tests, which use intellectual and logical problems to measure what an individual knows about the world, projective assessments such as the CAT are designed to be open-ended and to encourage free expression of thoughts and feelings, thereby revealing how an individual thinks and feels.

The CAT, which takes 20–45 minutes to administer, is conducted by a trained professional, a psychologist, in a clinical, research, or educational setting. The test may be used directly in therapy or as a play technique in other settings.

#### Self Assessment Questions

1) What do you mean by apperception?

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2) Describe the Thematic Apperception Test.

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3) What theory is TAT based on?

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4) What are the other apperception tests available?

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5) Discuss the Children Apperception Test.

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6) Discuss Senior Apperception Test.

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7) On what criteria are the stories interpreted on TAT cards?

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## 4.5 LET US SUM UP

Self-report assessment techniques are of two general types: single trait tests and multidimensional tests. The former measure a particular aspect of personality, while as the latter, measures several aspects of personality at once and thus provides a more comprehensive assessment of the respondent's make-up. The MMPI, the most commonly used multi trait scale for diagnostic purpose. Self-report are objective in that people have minimal freedom in responding to test items and scoring procedures are not influenced by personal or theoretical bias. Potential problems inherent in self-report tests include deliberate deception(faking good or bad), social desirability bias, and response sets. Projective techniques, like inkblot tests and apperception tests, attempt to probe unconscious aspects of personality by having people project their feelings, needs, and values into their



interpretation of ambiguous stimuli. Such tests have less likelihood of respondent deception and are sensitive to unconscious features of personality dynamics. Apperception tests have been modified for elderly group as well as for children.

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## 4.6 UNIT END QUESTIONS

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- 1) Discuss the relevance of MMPI-2 as a diagnostic tool.
- 2) What are the modifications done on TAT?
- 3) Give a comparative account of Rorschach with TAT.
- 4) Discuss the Apperception concept and the related tests.
- 5) What are the uses of Apperception Tests.
- 6) What are the unique features of Children's Apperception Test?

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## 4.7 GLOSSARY

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<b>Millon Clinical Multiaxial Inventory :</b>	An objective test of personality specifically designed to assist psychologists in diagnosing various disorders.
<b>MMPI :</b>	A widely used objective test based on empirical keying.
<b>NEO Personality Inventory (NEO-PI) :</b>	An objective measure of personality designed to assess individual's relative standing on each of the "big five" dimensions of personality.
<b>Rorschach Test :</b>	A widely used projective of personality in which individuals are asked to describe what they see in a series of inkblots.
<b>Thematic Apperception Test (TAT) :</b>	A psychological test used to assess individual differences in several different motives (e.g., achievement motivation, power motivation).

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## 4.8 SUGGESTED READINGS AND REFERENCES

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