UNIT 6 INTRODUCTION TO PSYCHOLOGICAL TESTING⁶

Structure

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6.0 OBJECTIVES

After reading this unit, you will be able to,

- define psychological testing and discuss its nature.
- discuss the characteristics of a good psychological test.
- explain reliability and validity.
- describe standardisation and norms.
- discuss the types of tests.

6.1 INTRODUCTION

It can be said that the essence of psychology is individual differences. In psychology we try to find how individuals differ and at the same time what are some of the common aspects amongst the individuals. In psychology we mainly study behaviour systematically and scientifically. And behaviour as such is studied in terms of its manifestations. These manifestations are measured with the help of psychological tests, which will be discussed in the present unit. In this unit we will discuss about psychological testing and also describe its nature. We will also highlight the characteristics of a good psychological test. Further, reliability and validity will also be explained besides standardisation and norms. Lastly, the types of tests will also be focused on.

^{*} Prof. Suhas Shetgovekar, Discipline of Psychology, SOSS, IGNOU, New Delhi

6.2 PSYCHOLOGICAL TESTING: DEFINITION AND NATURE

Psychological testing constitutes administration of psychological tests. Here, it is important to understand what are psychological tests.

Psychological tests can be described as tools that can be used to measure psychological entities like intelligence, personality, attitude, interest, achievement motivation and so on. Let us look at some of the definitions of psychological tests.

Psychological test was defined by Gregory (2010, page 16) as "a standardised procedure for sampling behavior and describing it with categories or scores".

Psychological test can be described as measurement of sample of behaviour that is standardised and objective (Anastasi, 1969).

Kaplan and Saccuzzo (2013) explained psychological test a device or technique used in quantification of behaviour that helps in not only understanding behaviour but also to predicting it.

Cohen and Swerdlik (2010, page 2), defined psychological testing "as the process of measuring psychology-related variables by means of devices or procedures designed to obtain a sample of behavior".

Some of the main properties of psychological tests are apparent from the definitions discussed above. To highlight these properties, psychological tests are objective in nature. They also have predictive and diagnostic value. A psychological test is also standardised, meaning that the procedure followed while administering and scoring the test is uniform and the instructions and scoring are provided in the manual of the test. Besides this the manual will also provide information about the norms based on which an individual's score can be interpreted. Any psychological test measures a sample of behaviour pertaining to certain psychological entity or variable. And though there are speed tests as well, often psychological test are power tests, that is, the difficulty level of items increaser gradually in their difficulty level. Thus, it is possible to identify the potential/ability of different individuals, those having higher and those having lower potentiality/ ability. It denotes the extent of quality related to the psychological variable an individual has. A psychological test also needs to be valid and reliable, that again is stated in the manual along with details of method used to establish them (these will be discussed in details in later sections of this unit).

There are some of the assumptions in this regard, that we need to highlight as well, they are as follows:

- 1) A psychological test needs to be valid or should measure what it is supposed to measure.
- 2) It should be reliable or consistent.
- 3) It should be objective and it is assumed that the individuals taking the test, understand the test items in a similar manner.
- 4) It is assumed that the individuals taking the test will answer the test and will be able to accurately express their feeling in that regard.



- 5) It is assumed that individuals will answer the items honestly. Though there is always a possibility that individuals are answering in a certain way due to social desirability.
- 6) Error variance is assumed to occur due to administrator (bias, expectations), test taker (anxiety, fatigue) as well as testing conditions (temperature, distractions).

Psychological tests have a vast scope and application as it is used in varied set ups from clinical, counselling, industrial and organisational to forensic set up. In clinical set up it can be used for diagnosis of psychological disorders. For example, Beck's depression inventory can be helpful in diagnostic process of depression. In counselling set up, it can be used to make career decisions and also understand one's aptitude and interest. Tests like Differential Aptitude Test, Career Preference Record and Vocational Interest Inventory can be used in this context. Psychological tests can also be used in industrial and organisational set up for selection purpose as well as to understand stress related issues etc. in employees. Job Stress Scale, Organisational Citizenship Behaviour, Job Satisfaction Scale and so on can be used in this setup. In forensic psychology as well, psychological tests can be used to understand the psychological state of the individual. Psychological tests thus can be used to measure a wide range of psychological entities including intelligence, personality, creativity, interest, aptitude, attitude values and so on. There are even psychological tests that measure variables like internet addiction, resilience, mental health, psychological wellbeing, perceived parental behaviour, family environment etc.

Check Your Progress I

.)	List the properties of a psychological test.
2)	State any two assumptions of psychological tests.

6.3 CHARACTERISTICS OF A GOOD PSYCHOLOGICAL TEST

As we have now developed an idea about what is a psychological test, let us discuss the various characteristics of a good psychological test. These in a way can be related to the assumptions discussed in the earlier section. Some of the characteristics of a good psychological test are discussed as follows:

Introduction to Psychological Testing

1) Psychological tests are objective in nature: Any good psychological test needs to be objective and not subjective. There should be no place for any kind of bias. An objective psychological test also denotes that it is valid and reliable.

- 2) Validity of a psychological test: The next characteristic that a good psychological test should possess is validity. Validity can be explained as the ability of the test to measure what it is supposed to measure. A weighing machine is a valid tool to measure weight and it is not valid to measure length.
- 3) Reliability of a psychological test: A good psychological test is also reliable or consistent. For example, if you measure length of a table with a ruler on certain day and if you measure the length of the same table with same ruler after six months, the length obtained in centimetres will remain same, thus indicting that this ruler is reliable.

However, in the context of validity and reliability, it is to be remembered that in psychology what we measure are intangible entities like intelligence and personality. And thus establishing validity and reliability for psychological tests is a rigorous process.

- 4) A good psychological test will have discriminant feature: The test should be able to denote any difference between one individual from the other on a given aspect or variable. For example, if two individuals differ in their music aptitude, the the test should be able to differentiate between the two on this aptitude.
- 5) A good test will be comprehensive: This denotes that the test measures all the dimensions or aspects of the construct that it measures.

A psychological test thus needs to be constructed with utmost care and all the necessary procedures need to be followed. Special care needs to be taken when the items of a test are constructed, and they need to be clear and not ambiguous. A good test also should be quantifiable and it should be possible to score the items.

Check Your Progress II

1.	. Fill in the blanks					
	a)	An psychological test also denotes that it is valid and reliable.				
	b)	can be explained as the ability of the test to measure what it is supposed to measure.				
	c)	In psychology we measure entities.				
2) Explain the discriminant feature of a good psychological test.						





6.4 VALIDITY AND RELIABILITY

Under the characteristics of a good psychological test we briefly discussed about reliability and validity. We used an example of weighing machine and a ruler. It is comparatively easy to establish the validity and reliability of such tools because the entities that they measure are tangible. In psychology, on the other hand, the entities that are studied are intangible, like intelligence, personality, attitude and so on. Further, human beings may also change and their behaviour can fluctuate. Thus, it is complex to establish validity and reliability of psychlogical tests.

In the present section of this unit we will discuss validity and reliability, that are two significant aspects of any psychological test.

Let us start with discussion on validity. As unless the test is established to be valid computing its reliability will not be meaningful.

6.4.1 Validity

Validity can be described as the characteristics of a psychological test that states whether the test measures what it is supposed to or purports to measure. Thus, a test on adjustment needs to measure adjustment and a test on self esteem needs to measure self esteem. A ruler, that measures length, is not a valid instrument to measure weight and a weighing machine is not a valid instrument to measure length. Similarly, a good psychological test needs to be valid and should measure the entity (or the sample of behaviour) that it was developed to measure.

There are various methods of validity, these are discussed as follows:

Face validity

As the name suggests the focus here is on the face value of the test. If the test seems to measure what it is supposed to measure then it can be said to have face validity. This is basically based on judgement (Veeraraghavan and Shetgovekar, 2016). Such a validity may be helpful when deciding whether the items in the test are suitable in certain situations. Though this can be considered as initial step in the process of testing the items rather than in drawing conclusions about the validity of the test.

Content validity

In this validity the focus is on the content of the psychological test. Content validity is established by comparing the items in the test with the behavioural manifestations. In content validity, whether the construct that the test is supposed to measure is represented in the test or not is focused on. Content validity can be differentiated from face validity as the former includes an examinations of the items that is comprehensive in nature. Further, quantitative data is also used. Correlation between the items and total score is computed that provides an idea about the content validity of the test. Thus, a clear idea about how each item represents the variable measured by the psychological test can be sought. In order to obtain content validity, both, the items that relate to the variables measured by psychological test and the items that do not relate to the variables measured by the test need to be included. A psychological test can be first measured for content validity during the test construction stage.

Introduction to Psychological Testing

Construct validity: As was discussed in the first unit, a construct can be termed as a concept that is adopted for empirical purpose (Kerlinger, 1995). Thus, when adjustment or creativity is adopted in a research for empirical purpose, it will be termed as a construct. Construct validity involves looking for evidences that the behaviours reflected by the test to some extent indicates the construct. In this validity, hypotheses are formulated based on theory related to the construct and then attempts are made to accept or reject the hypotheses based on data collection. Based on the data then it is concluded whether the tresults obtained are explained by the theory or not. If not then the theory is modified and the process is repeated.

Criterion related validity

This is related to the predictive feature of the psychological test and is scientific in nature (Veeraraghavan and Shetgovekar, 2016). This can be explained as the extent to which a psychological test covaries with another valid psychological test measuring the same variable or with the help of gold standard assessment strategies (Haynes et al., 1999). Gold standard assessment strategies are nothing but a different and accurate criterion or behavioural evaluation that is carried out by experts using valid psychological tests, observation and interview (Zolotor & and Mayer, 2004; Rich and Eyberg, 2001),

Criterion validity constitutes the following three categorises

- a) Discriminative validity: This can be determined based on whether a test is able to categorise the individuals in to groups, based on the construct that it measures. This type of validity is relevant when we need to make a decision that is categorical, for example, whether the individual displays maladjustment or not. Though such a validity may not be relevant when the test developed is a continuous scale. For exaple a test that measures adjustment over a period of time, say during the counselling process.
- b) Concurrent validity: In psychology, there could be multiple tests that are developed that measure dissimilar or similar entities. In concurrent validity, a validity of a test is established by comparing its scores with that of another valid test that measures dissimilar or similar entity. This can be done by administering the two tests on same group of individuals at same time. The validity of the developed test is determined based on whether it has a significant positive correlationship with another valid test measuring the same construct or has no significant correlationship with a valid test that measures a different construct.
- Convergent validity: This validity measures the extent to which two tests that measure similar or same construct overlap. Thus, a correlation is established between two tests that measure similar or same entity and if there is significant positive correlation then we can now that the test developed is valid. For example, a test developed to measure occupational stress has significant positive correlationship with another valid test that also measures occupational stress.
- **Discriminant validity:** This is also known as divergent validity. In this validity, an attempt is made to discriminate the test from the tests that measure an entity that the test is not developed to measure. Thus, the test developed



needs to display no correlation with such a test. Thus, there will be no correlationship between the test developed and the test that measures a different construct. For example, there will not be any correlationship between occupational stress and job anxiety. With the help of such a validity, we can come to know that the test developed measures the construct that it is developed for and does not measure another unrelated construct or a construct that could overlap with the construct measured by the test developed.

c) Predictive validity: This validity can be explained as relationship between performance on the psychological test developed at a certain time and performance on a criterion measure at some other point of time (Kazdin, 1998). This validity is established with the help of correlation between the scores that are obtained from two different tests. Thus, it is similar to concurrent validity. But the only difference is that the tests are administered at two different points in time and not at the same time.

Incremental validity

This is mainly used to establish whether the present psychological test will provide more information about the psychological entity that it is developed to measure than the tests that are already available.

6.4.2 Reliability

Reliability denotes consistency of the psychological test over a period of time. For example, when a length of a table is measured with the help a ruler on a certain day and then after six months, the length obtained will be same. Thus, the ruler can be termed as consistent instrument to measure the length. This is comparatively easy as table is a tangible entity and as such its length will not vary, unless it is broken or subjected to some other modification, in which case as well, such a modification or change will be easily visible. However, in case of psychological entities that are intangible, establishing reliability or consistency is a difficult task. Therefore, if a psychological test on adjustment is developed and it is administered on a group of adolescents, the scores obtained at a certain point and some time later, say after six months need to be more or less same or similar. Reliability can be denoted with the help of reliability coefficient, that can be statistically computed.

There are various methods to test reliability of a test, these are discussed as follows:

Test-Retest Method

In this method, a correlation is computed between the test scores and retest scores of a particular test. The correlation obtained needs to be obviously positive and lower the correlation, lower the reliability. Thus, the test is administered to a certain group of individuals at a particular point in time and then re-administered after a time gap to establish its consistency. Though, error could occur in test-retest reliability due to issues like practice effect, maturation, learning and memorisation of items by the participants.

Alternate or equivalent forms method

To overcome some of the issues faced in test-retest reliability, alternate form method can be used. In this method an alternate form of the test is developed. The two forms are then administered one after the other on same group of individuals and the scores obtained are correlated to establish consistency or reliability. One of the major challenges in this regard is creating two equivalent forms of the test.

Split- half method

This method mainly focuses on internal consistency. This can help counter the disadvantage of the alternate forms method as only one test is developed and administered. The test is then split in to half as the name suggests. One important question that may arise is how the test can be split. One way that it can be split is in to half, with the above 50% items and the below 50% items. Though this will not work when the test is a power test with increasing level of difficulty. A better way is to split on the basis of alternate items, that is even numbered items in one lot and odd numbered items in another. As the scores are obtained, correlation can then be computed between the two lots to obtain internal consistency. The Spearman–Brown prophecy formula can be used for computation of correction as reliability is otherwise obtained only for half the test. This method can be effectively used with tests that have large number of items that measure same psychological entity.

Kuder-Richardson Reliability and Coefficient Alpha (á)

The Kuder–Richardson Reliability indicates inter-item consistency and is mainly used for psychological tests that have items with multiple choice, items with fill in the blanks, items seeking short answer and so on. There is just one form of the psychological test and it is administered in one sitting. As the focus of this method is on inter-item consistency, it is important that the test item are homogeneous in nature. When the items are heterogeneous, the reliability coefficient obtained will be low.

Coefficient Alpha, also known as Cronbach's Alpha can be termed as an extension of Kuder–Richardson Reliability (Veeraraghavan and Shetgovekar, 2016). This can be used for tests that have more than two answers and thus can also be used for Likert scale. This also focuses on internal consistency.

Scorer Reliability

In psychological testing it is also relevant to obtain a scorer reliability as error variance can also occur due to the test administrator and scorer. Scorer reliability can be established by having two test scorers score the items for a same test and then, by computing correlation coefficient between the scores given by the two scorers.

Check Your progress III

l)	What is discriminant validity?

Quantitative	and	Qualitative
Research		

	How many forms of test are there is alternate forms method of reliability?			
3)	What is the relevance of scorer reliability?			
6.5	STANDARDISATION AND NORMS			
how psyc such	stated in the manual that comes along with the test. Psychological tests denote individuals are different from each other with reference to various chological entities. And in order to adequately measure presence and level of entities in an individual, uniformity in procedure, administration and scoring ne test is required. This is termed as standardisation.			
interand again ensurant admiration for num norm	ther, it is also important to have a norm that can be referred to, to suitably repret the scores obtained by the individuals. Often after a test is administered scored, a raw score is obtained which is meaningless, unless it is compared not a standard or norms. Standardisation and norms are established after it is used that the test is reliable and valid. To obtain the norms, the test is sinistered to a large number of individuals. For instance, we can obtain norms weights of newly born infants in India, by measuring the weight of a large ober of newly born infants in a given period of time. Then based on this, ms can be created. An average score will also be obtained. Thus, weight of			
In Paspeto co And the	new born infant can then be compared with the norms to understand where a fall and make interpretations accordingly. Sychology, when norms are created for various psychological tests, various exts like gender, culture, geographical location and so on need to be taken in consideration and thus separate norms can be created for different groups. I these details need to reflect clearly in the test manual. For instance, taking			
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In P aspecto c And the diffe	new born infant can then be compared with the norms to understand where a fall and make interpretations accordingly. Sychology, when norms are created for various psychological tests, various exts like gender, culture, geographical location and so on need to be taken in consideration and thus separate norms can be created for different groups. I these details need to reflect clearly in the test manual. For instance, taking earlier example, the norms for weight of newly born infants in India will ter from that of newly born infants in Germany or USA. Seck Your Progress IV			

6.6 TYPES OF TESTS

There are various types of psychological tests. These are discussed as follows:

Individual test: Tests that are administered on a single individual. For example, Wechsler Adult Intelligence Scale (WAIS), Stanford-Binet Intelligence Scale (SB), Bhatia battery.

Group test: Such tests can be administered to a group of individuals at the same time. For example, NEO PI and Minnesota Multiphasic Personality Inventory

Speed test: A speed test constitutes items that are of same difficulty level, however a certain time period is provided to complete the test.

Power test: A power test constitutes items that increase gradually in terms of their difficult level. Though there is no time limit to complete the test.

Verbal test: A paper pencil test can be termed as a verbal test where the items are mentioned using language. For example: 16 PF and Eysenck's Personality Inventory.

Non-verbal test: In this type of test certain figures and symbols are used. For example, Raven's Progressive Matrices. In this the language may be used only to provide instructions to the individual taking the test.

Performance test: In performance test, the individual taking the test has to perform certain tasks. For example: Alexander's passalong test and Koh's block design test.

Objective tests: In objective tests, the individual will choose from certain correct answers that are decided in advance. This avoids any subjectivity on behalf of the scorer. The responses could be in terms of true or false or multiple choices or even a rating scale like Likert scale or Thurston's scale may be used. For example: NEO PI.

Projective Tests: These are subjective in nature. Here, the test taker may be asked to respond to certain semi-structured or unstructured stimuli. The responses are then to be interpreted by the administrator, where subjectivity may creep in. Examples of projective tests are Rorschach Inkblot test, Somatic Inkblot Series, Sentence Completion Test, Thematic Apperception Test and Children's Apperception Test.

Besides the above, psychological tests can also be categorised as follows:

Intelligence tests: There are various intelligence tests that are used to measure intelligence of individuals. Intelligence can be described as one's ability to adjust and cope with the environment. Binet and Simon (1960) defined intelligence as an individual's capacity to make adequate judgements, carry out reasoning and ability to comprehend. Wechsler (1944, page 3) defined intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment". These tests are often used in educational and clinical set ups. Examples of intelligence test are Wechsler Intelligence Scale for Children (WISC), Stanford-Binet Intelligence Scale (SB), Bhatia battery.



Personality tests: These are used to measure personality of individuals. Larsen and Buss (2018) defined personality as a collection of psychological traits and mechanisms that are stable and organised and that have an influence an individual's interaction and also has an impact on how he/she modifies his/ her physical, social and psychological environment. It can also be explained as differences amongst individuals with regard to their patterns of thinking, feeling and the way they behave (American Psychological Association, 2019). Personality tests are used widely in varied setups including clinical, educational, counselling, industrial and organisational setup and so on. Examples of personality test are Eysenck's Personality Inventory, Thematic Apperception Test (TAT), Somatic Inkblot Series (SIS).

Aptitude tests: There are tests that measure the potential/abilities possessed by an individual in certain area. These find their application in schools and even in industrial set up for selection purpose. They denote whether a person will be able to perform effectively if he/ she is given training in that area. For instance, a person with aptitude for dance or music will do well in the area if given training. Examples of aptitude tests are Differential Aptitude Test, Seashore Musical Aptitude Test.

Interest inventories: These measure interests of individuals. Interest is important as aptitude in making career decisions and thus these tests are also used often in educational setup. Example of interest inventory is Vocational Interest Inventory.

Attitude tests: These tests measure attitude of an individual towards events, other individuals, objects and so on. Often in attitude tests, Thurston and Likert scales are used. These could measure attitude towards women, health and so on.

Achievement tests: There are also tests that measure achievement of individuals. They mainly test an individual's learning in certain academic area. Such tests are often used in educational setup. Academic achievement test and Mathematics Achievement Test are examples of achievement tests.

Check Your Progress V

Give example of the following:			
Group Test:			
Nonverbal test:			
Intelligence Test:			
Personality Inventory:			
AptitudeTest:			

BOX 6.1 ADMINISTRATION AND SCORING OF A TEST

As a student of psychology and especially when we are learning about psychological testing, we need to not only understand what is psychological testing and psychological tests and the relevant concepts like reliability, validity, standardisation and norms, but we also need to have an idea about how to administer a test and score it.

Introduction to Psychological Testing

The administration of a test will differ based on whether it is administered to an individual or a group. When it is administered to an individual, it will be given to a single individual and accordingly preparations need to be made. And if it is administered to a group, then adequate sitting arrangement is required and necessary preparations in that direction are required.

Either ways it is to be remembered that the test is administered in a systematic and standardised manner. Same instructions (as specified in the manual) are to be given to the test taker(s).

Before the test is administered, whether to an individual or a group, ensure that all the material required for the test administration is ready. Also ensure that the environmental conditions in which the test will be administered are conducive and free from any distractions. It is also important that you throughly read the test manual and also have good idea about the concept that the test measures.

The following points need to be considered while administering a test:

- Focus on the purpose for which the test is administered. Tests are administered in order to measure an individual on certain variable. And based on what exactly is to be measured, a test needs to be selected. For instance, personality can be measured with the help of 16 PF as well as NEO- PI. You need to select a test based on what you want to measure. It is important that a psychological test is administered by a person who possesses necessary qualification, expertise and skills to do so (with regard to the practical component of this course, the variables to be measured have already been specified and you will learn how to administer and score a test measuring one of the specified variables).
- It is important that you throughly read the manual of the test and are familiar with the instructions, procedure, duration of the whole test administration process and any other relevant information in that regard. Typically the manual will have background information about the variable that the test measures, besides information about the instructions, reliability, validity. Also details with regard to how to score the test and norms will also be provided.
- Ensure that all the material required for test administration is kept ready before administration.
- Ensure that the room where the test will be administered is adequate in terms of temperature and illumination. Also ensure that it is free from any distractions. There needs to be comfortable sitting arrangement for the test taker (s).
- Also focus on the ethical issues to be followed during test administration like confidentiality, privacy and so on. We discussed briefly about ethics in the first unit and same are also relevant in this context.
- While administering the test, the instructions need to be provided clearly to the test taker(s). Also if there are any doubts or questions, then suitable clarification/ answers have to be given.



- Keep in mind the individual characteristics while administering the test. Your approach may differ when you administer a test to children, elderly, people with disability and so on. Also language and culture need to be focused on.
- Most important thing while administering a test is also creating a rapport
 with the test takers so that their test anxiety is reduced and they extend
 their full cooperation during the test administration process.
- After the test is administered, if required debriefing is to be carried out, where any information that was not revealed before the test was administered, needs to be informed to the test taker(s). Introspective report can also be taken from the test taker(s).
- The test responses can then be scored as per the instructions and scoring key given in the test manual and interpretations can be made based on the norms provided.
- After the interpretation is carried out the test results are to be informed to the test taker(s) in suitable manner.

6.7 LET US SUM UP

In the present unit we discussed about the definition and nature of psychological testing. Psychological testing constitutes administration of psychological test Psychological tests can be described as tools that can be used to measure psychological entities like intelligence, personality, attitude, interest, achievement motivation and so on. They can be described as measurement of sample of behaviour that is standardised and objective (Anastasi, 1969). Psychological tests are mainly objective in nature. They also have predictive and diagnostic value. A psychological test is also a standardised, meaning that the procedure followed while administering and scoring the test is uniform. There are various assumptions with regard to psychological tests. A psychological test needs to be valid or should measure what it is supposed to measure. It should also be reliable or consistent. It should be objective and it is assumed that the individuals taking the test, understand the test items in a similar manner. It is also assumed that the individuals taking the test will be able to accurately express their feeling in that regard. Further, it is assumed that individuals will answer the items honestly. Though there is always a possibility of social desirability creeping in. Error variance is assumed to occur due to administrator (bias, expectations), test taker (anxiety, fatigue) as well as testing conditions (temperature, distractions). Psychological tests have a vast scope and application as it is used in varied set ups from clinical, counselling, industrial and organisational to forensic set up. The characteristics of a good psychological test were also discussed in this unit, that include objectivity, validity, reliability, discriminant and comprehensive feature. We further discussed in detail about the terms validity and reliability. Validity can be described as the characteristics of a psychological test that states whether the test measures what it is supposed to or purports to measure. There are various methods of validity including face validity, content validity, construct validity, criterion validity and incremental validity. Reliability, on the other hand, denotes consistency of the psychological test over a period of time. Various methods to test reliability are test-retest method, alternate or equivalent forms method, splithalf method, Kuder- Richardson reliability and Coefficient alpha and scorer reliability. Standardisation and norms were also discussed in the unit.

Psychological tests denote how individuals are different from each other with reference to various psychological entities. And in order to adequately measure presence and level of such entities in an individual, uniformity in procedure, administration and scoring of the test is required. This is termed as standardisation. it is also important to have a norm that can be referred to suitably interpret the scores obtained by the individuals. Often after a test is administered and scored, a raw score is obtained which is meaningless, unless it is compared against a standard or norms. Lastly, various types of psychological tests were discussed in the unit.

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6.9 KEY WORDS

Psychological testing: Psychological tests is a device or technique used in quantification of behaviour that helps in nor only understanding behaviour but also to predict it (Kaplan and Saccuzzo, 2013).

Reliability: Reliability denotes consistency of the psychological test over a period of time.

Standardisation: Standardisation denotes uniformity in procedure, administration and scoring of the test.

Validity: Validity can be described as the characteristics of a psychological test that states whether the test measures what it is supposed to or purports to measure.

6.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) List the properties of a psychological test.
 - Psychological tests are objective in nature.
 - They have predictive and diagnostic value.
 - It is also a standardised, meaning that the procedure followed while administering and scoring the test is uniform.
 - It measures a sample of behaviour pertaining to certain psychological entity or variable.
 - A psychological test needs to be valid and reliable,

2) State any two assumptions of psychological tests.

The two assumptions of psychological tests are:

- It is assumed that the individuals taking the test will answer the test will be able to accurately express their feeling in that regard.
- It is assumed that individuals will answer the items honestly. Though there is always a possibility of social desirability creeping in.

Check Your Progress II

- 1) Fill in the blanks
 - a) An <u>objective</u> psychological test also denotes that it is valid and reliable.
 - b) <u>Validity</u> can be explained as the ability of the test to measure what it is supposed to measure.
 - c) In psychology we measure intangible entities.
- 2) Explain the discriminant feature of a good psychological test.
- 3) Discriminant feature of a test implies that the test is able to denote any difference between one individual from the other on a given aspect or variable.

Check Your progress III

1) What is discriminant validity?

In discriminant validity, an attempt is made to discriminate the test from the tests that measure an entity that the test is not developed to measure.

2) How many forms of test are there is alternate forms method of reliability?

Two forms

3) What is the relevance of scorer reliability?

In psychological testing it is relevant to obtain a scorer reliability as error variance can also occur due to the test administrator and scorer.

Check Your Progress IV

1) What is standardisation?

Standardisation denotes uniformity in procedure, administration and scoring of the test

Check Your Progress V

1) Give example of the following

Group Test: 16 Personality factors test

Nonverbal test: Coloured Progressive Matrices

Intelligence Test: Wechsler Adult Intelligence Scale (WAIS)

Personality tests: The Myer-Briggs Type Indicator (MBTI)

Aptitude Test: David Battery of Differential Abilities (DBDA)

6.11 UNIT END QUESTIONS

- 1) Define psychological tests and discuss its nature.
- 2) Highlight the characteristics of a psychological test.
- 3) Define validity and discuss its types.
- 4) Elucidate reliability with a focus on its methods.
- 5) Explain various types of psychological tests.

