

Psychological Tests in Counselling

Rosemary Ogbodo-Adoga, Ph.D
National Open University of Nigeria (NOUN)
Ugbokolo Study Centre, Ugbokolo
Benue State, Nigeria
[*rosemaryogbodoadoga@gmail.com*](mailto:rosemaryogbodoadoga@gmail.com)

Abstract

Psychological tests are carried out like any other form of test but normally on carefully selected sample of an individual's behaviour. Essentially, the function of psychological test is to measure differences between individuals or between reactions of the same individual on different occasions. It is important in standardized psychological tests to create room for uniformity in the procedure of their administration and scoring. Psychological tests must be tested for validity and reliability to get the desired result. Psychological test has assumed an important position in the field of counselling, psychology and others. Hence this paper focuses on the meaning of psychological tests; classification of tests; characteristics of psychological tests; the uses of psychological tests in counselling; examples of tests used in counselling. The paper also focuses on non-tests techniques used in counselling, among others. The article recommends, among others, that counsellor should assess the outcome of guidance and counselling using psychological test.

Keywords: Psychological, standardized, test, counselling, characteristics, classification

Introduction

Counselling has been used to denote a wide range of procedures including advice giving, support in times of trouble or need, encouragement, information giving, and test interpretation. Psychological tests have an important position in the field of guidance and counselling and psychology. Psychological test have been used by various agencies and individuals to gather valid and reliable information on individuals. Because of the valuable information expected from such tests, it is essential for psychological tests to be standardized. Many counsellors, psychologists and other professionals have used psychological tests in their discipline. Hence, before going further we should know the meaning of psychological test.

The concepts of psychological test

Psychological tests are expected to deal with human behaviour because psychology is conceptualized as the study of human behaviour. This is why Akibvouro (1986) in Kolo (2001) explained that psychology is the science of “mental life” and objective behaviour

and that “psychological knowledge may be interpreted as knowledge of the individual and of the social group.” Based on this background the various definition of psychological test can be reviewed. According to Anastasi (1976), cited in Okobiah and Okorodudu (2006), psychological test is “essentially on objective and standardized measure of a sample of behaviour.” The essential words here are objective and standardized measure which are terms used to define a test also. However, the difference is on the sample of behaviour which psychological tests try to measure. Behaviour connotes what the actions of the individual are or what he or she can do under a given situation. On his part, Ipaye (1983) explained psychological test to mean a structured exercise or situation by means of which a person's behaviour, way of thinking is assessed with a view of making a generalized conclusion. Psychological tests therefore are the same as other tests because they are standard instruments for measuring but differ from other test because the focal point of measurement is human behaviour. Such behaviour could be thinking behaviour, or a doing behaviour.

Kolo (2001) explained psychological testing as the process through which the psychological test labelled as the instrument or stimulus is administered on the individual and the responses scored, interpreted and communicated to that individual. The behaviour sampled and the estimate to which the individual has that behaviour or otherwise is determined and communicated during the process of psychological testing. In psychological testing therefore, the individual is given the psychological test under the prescribed conditions in the manual. These prescribed conditions which ought to be followed during the process of administering the test, in addition to the prescribed format of scoring and interpretations are what make psychological tests objective and standardized instruments. Psychological testing should then be construed to mean giving the test, scoring it and communicating the result to the testee.

Kerlinger, in Okobiah and Okorodudu (2006), regarded test as a presentation of questions to be answered. Tests are presentation of several questions which the subject will respond to; it is an instrument used in measuring learners' level of knowledge. Test can be used to measure the following: Intelligence, other mental traits, job suitability, measure of a subject's cognitive ability and knowledge, psychomotor ability and other valuable traits.

The word measurement refers to the grading or scoring of a given test from a value of performance of each participant in the test as shown in the results obtained. It can also be regarded as quantification of behaviour of subjects. Unlike other related terms, measurement deals only with quantitative descriptions. It is shown in numerical values.

Classification of tests in counselling

Test can be classified by mode of response, purpose of testing, mode of interpretation and method of administration. It can also be classified according to types. So,

specifically, we have the following types of tests which are commonly used in the area of guidance and counselling and in psychological testing. These are:

1. **Paper and pencil tests:** Paper and Pencil Test focuses on evaluating a learner's ability through the instrumentality of writing material notably: paper and pen. This is to say that learners' knowledge is measured through a written instrument unlike oral or practical tests. Paper and Pencil Tests comprises of Objective and Essay tests

2. **The objective and essay tests:** The objective Test is the most popular type of test used in Nigeria since education became liberalised and school enrolments started to experience explosion. In Objective Test, learners are expected to choose from multiple answer options. This method is not only limited to academic examinations but is commonly adopted in employment, aptitude tests, entrance examination etc.

Essay test are tests in which the testee has to organize his ideas and write sentences, sometimes running into several pages to answer each question. The questions to be answered are therefore, usually few, ranging from one to about ten according to the time available and the quantity of the answers considered as adequate for each question. Most school tests and some papers of the Senior School Certificate Examination are essay type tests. It also requires the testee to create an answer instead of selecting an answer from given alternatives. It is a free-response type of test in which the testee organizes his response to specific question or issue (Itsuokor, 1995, cited in Okobiah & Okorodudu, 2006).

3. **Standardized and non-standardized tests:** Standardized test has the same contents or items for everybody taking that test. Such content or items have been predetermined for the people the test is designed for. In other words, any standardised test is not likely to change at the time when the testees are taking the tests. Whatever has been inserted into the test is there for everybody and no option of choice of the items to answer except the choice of option is uniform (Kolo, 2001). On the other hand, Ughomadu, in Okobiah and Okorodudu (2006) regards standardized tests as those designed by test specialists or experts and administered, scored and interpreted under standard conditions. Non-standardized tests are tests in which the items or the contents, the format of administration, scoring, and interpretation are not pre-determined. These indices are mostly left with the tester to use his or her discretion to suit the testees and the circumstances. Non-standardized tests in most cases do not have the psychometric properties. Examples of non-standardized tests are the individual teacher made tests in the class. For example two or more teachers may teach the same subject using the same scheme of work but in testing, each decides to set his or her own test. Such a test is not standardized. A counsellor may also decide to draw up some questions for the client to collect certain information. Such questionnaire may not have the characteristics above, so it is a non-standardized test (Kolo, 2001). These tests are formed and constructed by classroom teachers for the evaluation of their students. They are achievement tests designed for a class or group of students that have been taught the contents of a particular unit, course or subject.

4. **Individual and group tests:** Individual test is a test in which only one person is tested at a time and the tester has to observe and record the response of the testee or his judgment of those responses. Tests for young children and illiterates adults usually take this pattern. The Neale Analysis of Reading Ability, TAT, Koh's Block Design Tests, Embedded Figures Test (EFT) and the Wechsler Intelligence Scale for Children (WISC) are examples of individual tests. They are not widely used because they tend to be time consuming. There are situations when tests can be prepared and administered specifically for an individual in order to identify certain traits. Group tests has to do with two or more people having some relationship, or common characteristics, forming a group for the purpose of counselling or testing/teaching. Most of these tests, except those meant for young children and illiterates adults, are group tests. They usually require written responses. The questions themselves or the materials to be responded to, may be in written form or projected on a screen or spoken by the tester or reproduced from sound recording equipment. They may also be presented practically or pictorially to the testees. The essence is that these tests can be administered by one tester to a group of testees simultaneously. The West African Examinations Council uses mainly group tests except for some oral language tests. This test saves time since several testees record their own responses within the same period for scoring by the tester later.

5. **Verbal or non-verbal tests:** Verbal tests are tests in which direct vocalized responses are involved. They are used in the assessment of some language skills or other forms of knowledge, and they usually constitute a significant part of some degree examinations. Verbal tests can be individual or group in nature. In verbal tests, the test administrators have a face to face relationship with the subject, or subjects. Non-verbal tests are tests in which the testee is not expected to vocalize his/her answers. Such answers are not spoken but written. It can be in form of an objective or essay test.

6. **Personality tests:** Personality tests are instruments for measuring the affective or non-intellectual aspects of behaviour. They can be used to measure such aspects of personality as emotional stability, friendliness, motivation, dominance, interests, attitudes, leadership, sociability and introversion/extroversion. There are several approaches to personality assessment in counselling. Also, these are tests administered to find out what type of personality trait an individual is likely to portray in actual life situation. There are pseudo-scientific methods of doing this, like interview method, behavioural test method, rating scale device, personality inventory and projective techniques.

7. **The interest inventory:** Interest tests are sometimes used to get a measure of an individual's feeling of like or dislike, concern or curiosity toward an activity. Measurements of interest include self-estimates, interviews, checklist, and other inventories. Here the subject responds to activities presumably related to different interests particularly in areas of vocations, like music, arts, athletics, and so on. His responses are then compared to the responses of members of the various vocations.

8. **Aptitude tests:** Aptitude may be defined as a trait that characterizes an individual's ability to perform in a given area or to acquire the learning necessary for performance in a given area. It presumes an inherent ability that can be developed to its maximum through learning or other experience. Aptitude is a condition of a person's fitness, of which one essential aspect is his readiness to acquire proficiency, his potential ability and his readiness to develop an interest in exercising his ability (Chauhan, 1981). An aptitude test is a test which measures a person's potential ability in an activity of a specialised kind and within a restricted range. Aptitude tests are generally used in guidance of students, especially in selection of jobs, and also in admission into schools and colleges. There are aptitude tests for clerical jobs, music, arts, military and so on.

9. **Achievement tests:** As the name indicates, an achievement test is designed to assess the level of achievement in a particular subject area such as reading, Mathematics, French, Chemistry, Typing and Shorthand, Technical Drawing etc. Most school tests are achievement tests. They are tests which are administered to measure how much proficiency an individual has acquired in a particular area of knowledge or skill. It is intended to test the performance ability of a person, usually after undergoing a course of study. They are mainly teacher made tests. Examples are class tests, end of term tests, WAEC examinations and so on.

10. **Intelligence tests:** These are tests designed to measure intellectual ability. Such tests were first designed by Alfred Binet in France and later further developed by E. L. Terman of Stanford University in the U.S.A. who originated the use of the Intelligence Quotient (I.Q.), which is a percentage ratio of mental age to chronological age. Examples of existing intelligence tests include the Binet Intelligence Scale, the Stanford Binet Scale of Intelligence, the Raven's Progressive Matrices, Vernon Intelligence Scale, and the Wechsler Intelligence Scales. They usually include items on one or more of the following: logical reasoning, numerical ability, word fluency (vocabulary), verbal comprehension, spatial perception etc (Duntoye & Abdulkadir, 2009).

11. **Vocational inventories:** The term vocation has to do with trade or occupation. They are those works in which an individual is engaged for economic existence. The word vocation is interchangeably used with such other terms as career or occupation. Vocational tests are like aptitude tests in nature. They are meant to test person's interest or aptitude in a given vocation. They help in selection of people into different jobs.

Characteristics of psychological tests

Psychological tests have certain characteristics. These characteristics must be adhered to and seen to be present. Some of such characteristics are discussed below:

1) **Validity:** Validity is the extent to which a test measures the quality it purports to measure. In other words, validity refers to the degree to which a test does the job for which it is used. Validity answers the question, how truthful is the test? This is a very important aspect or characteristic of a good psychological test. To test for validity, one will want to find out if the items are measuring what they claim to measure, as sometimes a test may not measure what the tester expects it to measure. This is the degree to which the test has tried to measure what it is expected to measure. It helps to provide an answer to the question, whether the test has fulfilled its pre-conceived functions. There are different types of validity. These include content validity, construct validity, face validity and criterion validity.

2) **Reliability:** Reliability is the consistency with which a test measures whatever it does measure. It refers to the dependability, stability and relative freedom of a test from errors of measurement. The educator may want to know if the test he is administering is reliable. If the test is administered by two different persons, will the result be similar? Other words for reliability are dependability, stability, consistency, predictability and accuracy. It is the accuracy or precision of a measuring instrument. It refers to the extent or degree of consistency between two measures of the same things. If two measures are taken of a trait, the result is expected to be similar if the measuring instrument is reliable. When an instrument is consistent in the measurement of the subjects on whom it is administered, the instrument is said to be reliable. Reliability of a test has a lot of values. First, it makes a test interpretable; it also helps to establish a relationship between two or more variables with some degree of confidence. There can be no good scientific result of a test without reliability.

The use of psychological test in counselling

The general uses of psychological tests in guidance and counselling as described by some authors such as Cronbach (1970), Oladele (2004), Okobiah and Okorodudu (2006) are discussed here:

a) **For selection:** Tests are used by institutions and organisations (such as colleges, employers) to accept some individuals and to reject others. The decision to employ an individual or to admit a student is a selection decision. Sometimes different establishments, institutions, schools and colleges want to select people to do one type of job or the other. Those who show interests on these jobs are expected to be tested to ascertain their suitability for these jobs. Tests are therefore administered to ascertain their interests, potentialities, their aptitude in these jobs. Scores recorded from such tests are used for the final selection.

b) **Placement:** Placement is assigning people to different types of work based on the available data and in terms of providing more individualised descriptions. These could be placement in schools, in the army, in different sections of an industry and so on. For example, psychological tests can help in placement of exceptionally intelligent pupils in special classes; they can help in placement of soldiers into its different sections like the infantry, education corps, for example.

c) **To test for achievement:** A course of study requires that at the end of it all, learners are expected to have achieved a certain level of proficiency in the required knowledge or skill. Achievement tests are therefore given to establish how much has been achieved. They are also used to see if a set of applicants for higher institutions have attained an entering requirement expected of them. The JAMB examination is designed for this purpose.

d) **For classification:** Classification is an arrangement for assigning or streaming students into classes, according to their ability or educational background of the group. Psychological tests can be used to classify people according to age, level of intelligence, range of mental retardation, categories of behavioural deviation etc. Results got from these will help policy makers in education and educational administration in no small ways.

e) **For prediction:** Tests are given to obtain a measure of ability, aptitude, achievement and other characteristics which will give the tester the rationale upon which he can make decisions. In prediction, the tester will be able to forecast how well an individual will perform in future tasks and their chances of success in various courses or vocation. Through psychological testing, predictions are made to various degrees of accuracy. The teacher can say with a limited error margin if a child is a university material or not. One can know if an individual will be a good primary school teacher, or whether he is suitable to work in nursery schools. They help the test administrator to make inferences and so predict.

f) **Diagnostic test:** These tests are aimed at analyzing the testee's strengths and weaknesses in a particular area of learning, from which the cause of failure or learning problems can be inferred, so that appropriate remedial measures can be applied. Examples of tests used for diagnostic purposes are the Neale Analysis of Reading Ability, Gates Reading Diagnosis Tests, and the Campbell Diagnostic Arithmetic Tests. Tests are also used to diagnose problems of students in the area of language, numbers, social adjustment, parental relationship and related situation. The counsellor can get to know which of these problems that a particular student has through psychological testing.

Test Techniques

Some of the test techniques used in counselling include:

1) **Projective tests:** This instrument is used in accessing personality. Projective tests are psychological procedures specially designed to evoke from the subject, response that involves expression of his inner thoughts, fantasies, wishes and perceptions of himself and the world around him. Here the person taking the test is unaware of what his answers mean to the test administrator. It eliminates the tendency to give false answers. If a child has a conflict for example, this method can make him reveal unconscious thoughts and drives that cause the conflict. The strength, degree and causes of the conflict can be reached. Two types of projective tests are discussed hereunder:

a) **The Rorschach Inkblot Personality Test:** This test was invented by Harman Rorschach. He was the first to use ink blot for the study of personality. There were ten inkblots with different colours. The child is asked to look at each ink-blot and tell what he sees. The response and time spent on the test is recorded. It is assumed that longer response time reflect stronger emotional conflict blocking, so those cards which take a long time response are studied most carefully to uncover the child's fears and conflicts. Munsinger (1975) says that from these categories, response times, and in relation to theory of personality, a picture of the child's unconscious motives and conflicts is obtained. The method is generally criticized for its subjectivity; but clinical psychologists value its use, and use it extensively.

b) **The Cat Method (Children's Apperception Test):** Here facial pictures of two persons are presented at a time and the testee is asked to describe what is happening, how the people in the picture feel, and what the outcome of the situation is. From what the child says about the picture, the personality of the child and the conflict on his mind can be assessed (Munsinger, 1975).

2) **Interview:** Ughomadu (1991) states that interview is a method generally used in selection of people into positions in established institutions. It is a face to face verbal exchange of ideas usually initiated by the interviewer and followed by responses from the person being interviewed. It is a simple method to use, and widely used also as a tool for personality assessment. Performance in the interview can easily show an individual's personality. There are different types of interview. They include:

a) **Free Interview:** Here, there is no limit to areas where questions can be drawn from. The aim is to know how widely read the individual is, his disposition to issues, and his language ability.

b) **Non-Directive Interview:** It is a technique popularised by Carl Rogers. A method intended to get at deep rooted feelings of an individual on an issue. The interviewee is left to express himself freely in an atmosphere that is free. It is usually applied by clinical psychologists.

c) **Standardized Interview:** The intension is to reduce the unreliability and bias of the interviewer. It has been found to yield higher agreement between interviewers when they are used independently. But the only problem is that the method does not allow free exchange of ideas between the interviewer and the subject being interviewed.

3) **Non-Test Techniques:** Ughomadu (1991) states that there are various non-test techniques used in counselling. This includes interview, as earlier discussed, observation technique, case study, and checklist technique. Observation is one of the most important non-test techniques used in gathering information or data about a student for counselling. This is a method that has been used for a long time. The counsellor uses it to find out certain traits in an individual. For example, one may want to know the degree of aggression in an individual. Most observations are carried out without the person being observed knowing it. If one wants to observe the degree of aggressiveness, he can stay aside watching the child at play with other children, and observing how often, and frequent the child shows aggressive behaviour. What is observed should be recorded immediately, or almost immediately after the exercise. There are two types of observations. These are natural observation and participant observation. In natural observation, the counsellor stays aside and observe, but in participant observation, the counsellor participates in the activities in which the trait is to be observed (Ogbebor, 1990). This method has some disadvantages, including:

- i. It is useful only when overt behaviour is being studied.
- ii. The interpretation of what is observed is very subjective.
- iii. It is subject to both sampling error, and observer's error.

Case Study implies intensive investigation of a case unit or individual child, or person or an event for the purpose of obtaining an in-depth information about the case unit, e.g, a child that exhibits a problem. The counsellor might want to use a case study method to get to the root of the problem. Ughomadu states that case study as a method is used in areas or problems of learning difficulties, emotional disturbances, delinquency, and such other behavioural problems (Engelkes & Vandergoot, 1982, cited in Okobiah and Okorodudu, 2006). Here information or data is collected, and analyzed to find out the causes of the problem. The past and present of the individual is studied. These may be gathered from the family or/and friends of the person. The information to be collected may be under the following headings:

- a) Physical condition as got from medical tests or observations.
- b) Relationship with people at home, school, community, and other social relationship.
- c) Emotional state of the person including anxiety, fear, anger etc.
- d) Likes and dislikes of the person.
- e) Achievement at school.

4) **Autobiography:** Autobiography is writing the story or a report on one's own life. It provides the individual an opportunity to understand himself/herself better in terms of his or her experiences and knowledge. It also reveals his strengths and weaknesses. This method can serve as a good tool for the counsellor to collect vital information about the client for the purposes of counselling. It is the study of what the person has recorded about himself in various aspects of his life, such as school, experiences, relationship with friends, and parents, likes and dislike. The individual being studied is asked to write on these areas, depending on what is being studied. There are two types of autobiography. These are structured and non-structured. In structured, the subject is asked to write along certain lines on specific issues. But in non-structured autobiography, the subject is free to direct his writing by himself.

Psychological testing in the school system

Psychological testing has some classroom functions. These classroom functions, as discussed in Egbule (2002), including being used in the process of diagnosis especially for children who need some remedial instruction. These tests can also be very useful in grouping students within a class for the purpose of knowing how well a child is for a particular learning topic. They are useful for the purpose of individual instruction. Through the tests, the teacher will know how much the handicapped child has and thus the teacher will know how to plan individual instruction. Psychological testing has been found to be useful also in identifying the intellectual ability of the students.

Psychological testing is useful in school administration; for example they have been found to be useful in placing new students in class, eligibility for special group, knowing when treatment should be discontinued, when a child is due for promotion, knowing the ability of a group of students in a particular school etc. They have also been found to be useful when reliable information for specialised jobs and admission are required.

Conclusion

This paper discussed the components of psychological tests, and their uses in guidance and counselling programmes. The paper also reviewed the essence of psychological testing in counselling; classification of test; characteristics of psychological test; the uses of psychological test; examples of test techniques in guidance and counselling; the objective aspects; the non-test techniques in guidance and the relevance of counselling information for specialised job placement among others.

Recommendations

Based on the discussion on the usefulness of psychological test in guidance and counselling, the following are recommended:

1. The counsellors should make use of these tests for educational planning for the betterment of Nigerian educational system.

2. The counsellors should determine the strengths and weaknesses of their students for these tests.
3. The counsellors should identify the areas where they can help students or clients from the uses of these tests.
4. The counsellors should diagnose their students or clients from the tests.
5. The counsellors should help their students or clients make educational and vocational decisions for their lives.
6. The counsellor should assess the outcome of guidance and counselling programmes from these tests.
7. The government should make provisions for all the necessary equipment to facilitate the use of these psychological tests in schools.

References

- Akibvouro, A. (1986). Oral Tradition as a Source of Psychological Knowledge. In E. B. Wilson (Ed.), *Psychology and Society Readings*. Ile-Ife: Nigerian Psychological Association Publication.
- Anastasi, A. (1976). *Psychological Testing* (4th ed.). New York: Macmillan Publishing Co.
- Chauhan, S. S. (1981). *Advanced Educational Psychology*. New-Delhi: Vikas Publishers PXT, LTD.
- Cronbach, L. J. (1970). *Essentials of Psychological Testing* (3rd ed.). New York: Harper & Row.
- Duntoye, J. A. & Abdulkadir, O. R. (2009). *Tests, Testing and Appraisal Techniques in Guidance and Counselling*. Ilorin, Kwara State: Integrity publication.
- Egbule, J. F. (2002). *Principles of Psychological Testing*. Owerri, Nigeria: Whyte and Whyte Publishers.
- Engelkes, J. R. & Vandergoot, D. (1982). *Introduction to Counselling*. Boston: Houghton Mifflin Company.
- Ipaye, T. (1983). *Guidance and counselling Practices*. Ile-Ife: University of Ife Press.
- Kerlinger, F. N. (1973). *Foundation of Behavioural Research* (2nd ed.). New York: H.R. and Winston Inc.
- Kolo, F. D. (2001). *Elements of Psychological Testing for Counsellors and Psychologists*. Zaria: Ahmadu Bello University Press.
- Itsuokor, D. E. (1995). *Essentials of tests and measurement* (2nd ed.). Ilorin: Woye and Sons Nig. Ltd.
- Munsinger, H. (1975). *Fundamentals of Child and Adolescent Psychology* (2nd ed.). New York: Holt Rinehart and Winston.
- Ogbebor, G. G. (1990). *An Introduction to Educational Psychology*. Benin: World of Books Publishers.
- Okobiah, O. C. & Okorodudu, R. I. (2006). *Issues, Concepts, Theories and Techniques of Guidance and Counselling*. Benin City, Nigeria: Ethiope Publishing Corporation.

- Oladele, J. O. (2004). *Guidance and Counselling: A Functional Approach* (rev. ed.). Yaba, Lagos: Johns-Lad Enterprises (Publishers).
- Ughomadu, K. A. (1991). *Measurement and Evaluation in Education*. Benin: World of Books Publishers.