

## Introduction to Psychological Tests and Testing

Psychological tests are used to assess ability, personality, attitudes, emotions and other aspects of behaviour. A test can be used for a variety of purposes. They may be used to confirm suitability (e.g. for a training course, to hold a gun licence) to support diagnoses (e.g. of mental health conditions, specific learning disability such as dyslexia or loss of functioning after a stroke or accident) to support decision making (e.g. in a career counselling session, identifying the best candidate for a job) or to help design appropriate interventions (e.g. how best to support a child's learning or help an offender in developing better anger management skills).

"Tests" come in many forms and it is difficult to find a definition that would have broad agreement among experts. Psychological Tests are sometimes called Psychometric Tests. Typical tests consist of sets of questions to answer or series of tasks to be performed. Tests may be administered via a computer or other electronic device as well as those which are paper and pencil exercises. Tests may also take other forms such as playing a computer game, manipulating specially designed apparatus, or perhaps being observed operating machinery, in a simulation or in a role play. Usually the individual being tested is the one who does the activity or responds to the questions but sometimes others might provide the answers (for example the parents of a young child or employees rating their managers' performance).

Tests can be designed to assess people within normal ranges of thinking or behaving or for identifying abnormal or dysfunctional behaviour. Psychometric tests differ from an informal assessment in a number of ways. They work by generating carefully chosen samples of behaviour specifically designed to provide evidence of the qualities to be measured. They contain an exact specification of the manner of administration so that everyone who takes the test has the same information about the task. This standardisation of procedures supports the accuracy and interpretation of results and makes test use fairer. Complex technical and statistical (psychometric) procedures are used in developing tests to ensure that they are accurate and actually measure what they are designed to measure.

The outcome of a test may be a score or series of scores which can be interpreted to provide the desired information about the test taker. Often there are simple rules for determining scores, for example in a multiple choice test each correct answer may receive one point but sometimes complex algorithms are used. In other cases the test user will be trained to judge how many points to allocate to a response following set rules.

The outcome of a test may show how much of something the person has (e.g. intelligence, anxiety) or assign people to a particular category or type e.g. Extrovert or Introvert. Other measures may provide an ordering of different qualities – e.g. interest in different career areas. Often interpretation of test results is based on how the person's responses compare to results of a large group of test takers – known as a "norm group".

Two broad categories of psychological tests are those of "maximal" performance and "typical" performance. Tests of maximal performance are designed to assess the limits of a person's ability or potential. Examples include tests of ability, aptitude or attainment. The questions in them have right and wrong answers and they often have a fixed time limit.

Measures of typical performance are designed to assess personal qualities, such as personality, beliefs, values, motivation or 'drive', learning styles and interests as well as phenomena such as anxiety, depression, ADHD, etc. Many people feel the word "test" is less appropriate for these kind of measures. There are no "right" or "wrong" answers to questions and they tend not to have time limits. The answers reflect how the person taking the test would usually or typically feel, what they believe, or what they think about things. Similar to measures of typical performance are measures of the current state of changeable characteristics such as alertness or mood.

Because of the effort and technical skill used to develop tests they can be very efficient and effective tools to gain accurate information about a person, their behaviour or conditions that affect them. Most tests can only be accessed by trained professionals who will know when it is appropriate to use the test and how the process of using the test should be managed – e.g. what information to provide to the test taker, how to interpret the results in the context of other information. It is almost always best practice to use tests as part of a broader assessment process. More recently many tests have been made freely available over the internet. However such tests are of variable quality and may not have been developed to proper psychometric standards. This means they may provide misleading results, be difficult to interpret or fail to identify issues which could impact the results or their interpretation.

In the hands of a trained professional, tests are very powerful tools which can help in the understanding of people and their behaviour, but they need to be used appropriately by those with a proper understanding and skill in the area. In many countries the use of psychometric tests is highly regulated, and reserved for specialised professionals. The European Federation of Psychologists' Associations (EFPA) has developed a series of standards and qualification to promote high standards in the design and use of psychological tests. The "EuroTest" is an accreditation for test users recognising a level of competence in using tests. The EFPA test review model is widely used in evaluating the quality of psychological tests.

If you would like to know more about tests and testing the following resources may be useful.

The International Test Commission [www.intestcom.org](http://www.intestcom.org)  
Publishes a range of guidelines for best practice in using tests.

The Psychological Testing Centre [www.ptc.bps.org.uk](http://www.ptc.bps.org.uk)  
Run by the British Psychological Society this website has introductions and guidelines to many aspects of testing as well as reviews of many of the tests widely used in the UK.

The National Council on Measurement in Education [www.ncme.org](http://www.ncme.org)  
A US organisation for measurement specialists which contains learning modules on many aspects of testing and measurement.

Education Testing Service [www.ets.org](http://www.ets.org)  
As well as being responsible for developing a range of tests widely used in education in the USA this website has reports and documents of general interest about many testing topics.