

# **Psychological Tests: Are They Useful in Selecting Students for Work Placements?**

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## **Abstract**

The advantages associated with various types of tests used are discussed together with the problems which could be encountered, both with the perception of the skills and characteristics that are claimed to be measured, and threats to their validity due to misperception, and the testing process itself. Should these tests be used for the purpose of placing students at all? Is there any benefit to the student? Who administers the tests and who has access to the results? These are all questions which need to be explored. Students often do not have the full range of skills necessary to do the job where they are placed; they are there to gain that skill or knowledge. It would therefore be unacceptable to test for those factors, however, if tests are to be used when they are ready to seek permanent employment it could be beneficial to allow them to gain the experience of the tests. The aim of this paper is not to provide definitive answers to the above questions, but more to highlight the issues and provide a variety of viewpoints based on current literature. The business associated with the production of the various tests may involve large amounts of money as well as having an impact on the reputation and success of the companies which use them; this means that the validity of these methods needs to be proven.

## **Introduction**

A large number of employers currently rely on the results of psychological testing to help them make decisions about suitable employees. In theory this approach saves time and money by weeding out the applicants who do not possess the skills or temperament for a particular position. What impact does this trend have for academic institutes when placing students into suitable employment based work placements?

Employers no longer feel obliged to hire people from the immediate geographical area, which makes face to face interviews of all applicants often impractical. The Internet has made the employment market global, so some method of screening the multitude of applicants needs to be found. With this globalization comes the awareness that not all peoples are the same, or even similar, and the issue of making any method used to screen applicants equally sensitive to culture, race or religion even more important.

## **What are Psychological Tests?**

The term psychological test has been adopted as a description of any test which is given to a person to evaluate either their suitability for a particular role, or their ability to perform set tasks. According to Anastasi and Urbina (1997) a psychological test is a scientific test to measure a sample of behavior. The first tests were recorded in Europe in the late nineteenth century when teachers were faced with large classes of students from very diverse backgrounds, although there is some indication that the Chinese society used tests in some form extensively from around 2200 BCE (Geisinger, 2000).

## **Types of Tests**

Types of tests include tests for cognitive ability, personality and assessment of on the job skills. A common form is domain referenced testing, which allows the person who is testing to compare the results with other participants taking the same or similar test, and highlights the knowledge of skills which the participants know, or do not know. The most common examples of these are the literacy and numeracy tests used by the school system to assess a child's age in these areas. For these to be a good indication of the levels of achievement, they need to go through a rigorous validity testing regime. The other common forms are personality testing to test for suitability to work in a given

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environment, and mastery testing, where the participant is tested on their ability to perform certain well defined tasks, with the result being success or failure.

Tests tend to be designed to test a particular skill set, or a set of personality traits. The more reputable tests have undergone a great deal of testing to ensure that they measure these as accurately as possible, this is why the tests used by industry for a serious purpose tend to be quite expensive and not freely available. There are free ones, available both online and in print, for example the types used in magazines, these are usually for personal use, or as fun, where a person's career does not depend on the results.

### **Employment Testing**

With large companies with numerous employers supervised by different managers, these tests may remove some of the subjectivity from employee selection by setting measurable criteria. With the onset of the 'global company' often prospective employees reside outside the local area of the position which they are applying for psychological tests administered online could help with the initial selection of possible candidates; however they should not be the sole reason for employing a particular person. Some firms use computer based tests as a tool to select a short list for jobs. Computer based testing highlights the anonymity of the person taking the test, and also allows possible fraud, how do you guarantee that the person taking the test is in fact the person you think they are? They could be someone else, or even be more than one person, as there is no easy method for confirming the identity of a test taker. According to (Stanley, 2004, p. 1): "Research studies strongly suggest there is a direct link between cognitive ability and overall job performance," as they test a person's problem solving skills. According to Schwartz, "A good test score is an indicator that an applicant has the skills, aptitude and personality characteristics required for the job, but test results need to be combined with other factors – interviews, background checks, reference checks and so forth" (Schwartz, 2004, p. 1).

### **Issues of Validity**

Anastasi and Urbina (1997) believe that in order to interpret the results of these tests, the administrator needs to understand the test, test conditions and the test taker, as well as what the test is designed to measure and how it has been validated. 'Practice makes perfect' is an old saying, which may equally well apply to the issue of psychological testing. It is possible for a person to increase their score in a particular type of test by sitting multiple practice tests. While this may be not be a disadvantage in some types of tests, it could jeopardize the validity of the results in others, as the increase in score may not accurately reflect the ability of the person to do the required job, or even their suitability. If a candidate has an idea of the requirements of a particular position, or work environment, they may attempt to answer the questions in accordance with their perception of these requirements, instead of truthfully. In order to counter this issue, tests often ask for the same, or similar information in a number of different ways, making the test longer and more complicated than is necessary, but hopefully, more accurate.

Awareness of cultural and educational differences has to be incorporated into any test which is likely to be administered to multi-ethnic groups. This applies mainly to tests containing elements of general knowledge or language. Instructions also need to be checked to ensure that they do not differentiate between the different groups. Rupert et al. (1999) looked at how the subject of testing was taught, and discovered some disturbing facts. There did not appear to be much attention given to the use, administration or interpretation of psychological testing within the training of students who would eventually be expected to perform these tasks.

### **How Widely Are They Used?**

"According to the most recent study by the Society for Human Resources Management, more than 40 percent of Fortune 100 companies include some form of psychological testing in their employment selection systems for frontline workers to chief executive officers" (Erickson, 2004, p. 1).

Employment agencies regularly use these tests to screen applications, and to aid in the matching these potential employees to appropriate jobs within the most suitable companies. Psychological testing is not only restricted to employment into a new job in a new company, they are also used to assess career development within a company, for example, they were given to current staff at a government department within New Zealand to assess their suitability to train as computer programmers in the 1980's.

### **Work Placement**

As psychological tests are becoming more widely used in industry for assessing how suitable a particular person is both for initial employment and movement within a firm, is there a place for them in the work placement environment? This question raises a number of vital issues, particularly in the areas of appropriateness and privacy among others. Ethical and practical consideration also needs to be addressed prior to the decision to include psychological testing as part of the work placement regime.

### **Appropriateness**

How appropriate is it to use these tests for students who are still in the process of being trained. The results could have very distinct and opposite impact on the student's perception of their current ability or their future aspirations. For example, if they scored particularly highly they may become over confident, or, conversely if they scored low, the chance is that they may become discouraged and give up trying thus abandoning a valid future career. Often students lack confidence which could be made worse by a bad test result, also in the case of young adolescents their personality is not completely formed making the possibility of false interpretation of results more likely.

Toohar (2005) declares that personality test may be risky as they are "not terribly predictive of success on the job" (p. 2) . This is particularly true when considering student performance in these prior to commencing work placement, as they are in fact applying for possible training or practice in a set scenario and are not professing to be experts in a particular area, or have all the pre-requisites for employment in this area. For people who suffer from test anxiety, taking tests during a work placement scenario could prove an advantage, as it could provide the opportunity to experience the process in a non critical safe environment, thus easing the anxiety for the future. Important feedback could also be gained from the interpretation of test results, highlighting areas where the student could benefit from extra practice or learning. From the employers perspective the results could indicate which area within the company would be the most suitable for placement of the student, and, if there is an opportunity of employment at a later date, when the training has been completed, could help with a decision as to whether a particular student should be considered for that position.

### **Privacy**

The questions who administers the test and who owns the results have a huge impact in the area of privacy. While very few, if any academic institutes have the expertise or budget to buy, and administer psychological tests, they do provide a uniform base for assessment of all the students involved in work placement, as compared to the industry sites which are often very varied. To protect a person's privacy, the purpose of the test must be explained together with a detailed explanation of how the results are to be used. When a job applicant takes a test they often presume this is part of the selection process, but what about students? How these results are to be used must be explained together with details on who sees the results, the host, the institute representative? New Zealand has very strict privacy laws, but this is not the case in other countries, so if a test is administered from overseas what safeguards are there that the results will not be seen by unauthorized personnel. The American Psychological Society in their report of 1996 recommended that student's test data should only be made available to faculty members within the supervising faculty, and should be stored in such a way as to prevent access by unauthorized personnel. They also warn that exposure to tests may make that particular test invalid for future use with the same students (Camara et al., 1996).

### **Other Issues**

The popularity of personality testing, in particular may produce false indications especially if the questions are not well researched. For example, questions regarding habits surrounding the drinking of alcohol. The question ‘do you drink alone?’, could be answered by someone who occasionally has one drink at night as ‘yes’, and could later be interpreted as an indication of an alcohol problem.

### **Conclusions**

There is no correct universal answer to the questions raised in this paper; each situation should be assessed individually, taking into account the issues of privacy and appropriateness. The rights of the student should be protected, as inappropriate testing and distribution of results could jeopardize the future of an otherwise rewarding career. However, psychological tests in some form are here to stay, so some consideration must be made as to their place within our education environment, especially in the area of work placement.

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