

# TAKING THE MYSTERY OUT OF PSYCHOLOGICAL TESTING

By James Anderson

Finding a means to accurately predict employee behaviour and job performance has continued to be a major focus for businesses, particularly given the high impact and cost of an employee promotion or poor recruitment decision. Behavioural-based interviewing techniques and in-depth reference checking are useful, however tools such as psychological testing can assist in the development of a more accurate assessment.

## Psychological Reporting -Testing & Evaluation

Psychological reporting is used to assist in making predictions with respect to job performance and career potential. Through the interpretation of responses to psychological tests and inventories, a more accurate prediction of an individual's likely future behaviour can be made.

## What Is Psychological Reporting & Why Conduct It?

Psychological tests evaluate and assess mental abilities, behaviour, personality or cognitive processes, aptitudes, interests, attitudes, emotions, motivation and personality characteristics. They are objective, scientifically based assessment measures that reduce the amount of "guess work" which is inevitably involved in the recruitment process. Reports based on these tests can help verify claims in résumés regarding personality, skills or abilities, as well as check "hunches" from interviews in regard to these factors. However, psychological reporting should support the findings of well conducted interviews and reference checks. It is not a stand alone decision making tool.

## So Does Psychological Reporting Predict Job Success? Are There Limitations?

Due to the complex nature of both individuals and work situations, it is not possible to predict with absolute accuracy how successful a candidate will be in a job role. While psychological reporting may assist in making and improving predictions, how an individual actually performs in the work situation will be dependent on a variety of other factors, most notably:

- **Specific work skills** gained from training or previous work performance
- **Company support** and infrastructure provided to complete tasks
- **Personal motivation** to use skills and abilities

## Who Can Conduct A Psychological Test?

Registered psychologists are trained to select and conduct appropriate tests on the basis of their validity, reliability and utility in improving predictions of likely behaviour in the employment setting. A trained person may administer tests on behalf of the psychologist, however the psychologist usually interprets the results.

As with the entire recruiting process, the confidentiality and privacy of a candidate's test information is a priority. There are complex issues involved in this process in regard to confidentiality, privacy and ethics, including the question of who owns the results of the testing. By properly explaining the process and always obtaining the candidate's consent to release the information generated by the psychological report to the employer, many of these issues are avoided or resolved.

## Why Would A Psychometrically Valid Test Be Better For Predicting Behaviour Than A Test I Undertake Myself?

Psychometric tests are scientifically standardised tests of performance related directly to cognitive or mental capacities or styles, such as intelligence or personality. They are "normed" (statistically compared to known reference groups) against large samples of relevant populations, to ensure that they measure what they are supposed to. This validity can be critically important, as unstandardised tests can be open to extensive error, prejudice, or biases and may require "inferential leaps" (making judgements when there is not sufficient information available to do so legitimately) which contravene employment laws.

A photograph of a row of trees with vibrant autumn foliage in shades of orange, yellow, and red. The ground is covered in fallen leaves.

“building  
long -  
standing  
partnerships”

## Testing Categories

Psychological tests or inventories for recruitment purposes generally fall into three different categories:

- General Aptitude/ Intelligence tests
- Personality Profiles or Inventories
- Skills Testing

### General Aptitude/ Intelligence Tests

General aptitude or intelligence tests are devised to measure the cognitive aptitudes and intellectual capacities we commonly refer to as “intelligence”. The measurement may take the form of an intelligence score or intelligence quotient (IQ), which is a scaled score often derived from the results of several subtests requiring different cognitive abilities.

Comparison of the individual’s test performance to relevant populations, as well as comparison of the individual’s results between different subtests, can highlight likely areas of strength or weakness.

Decades of research have shown that general mental ability is the most valid predictor of both future performance and job related learning for an individual without relevant experience. This validity increases from unskilled through to professional or managerial level roles. Predictive validity of future performance further increases when intelligence testing is coupled with a structured interview. *Schmidt, F.L and Hunter, J.E.(1998) <sup>1</sup>.*

- Intelligence testing predicts future performance better than structured interviewing alone
- Intelligence testing plus structured interviewing predicts future performance better than intelligence testing alone
- The higher the level of job, the more reliably intelligence tests can predict future performance

### Personality Profiles / Inventories

From an individual’s personality profile, inferences may be drawn regarding tendencies to react, given particular situations within the job environment.

Instruments measuring personality usually take the form of a self-report inventory, whereby the candidate responds to a series of statements or questions relating to the individual’s preferred behavioural response style - usually without “right” or “wrong” answers. For example, true or false responses to statements such as, “I always tell the truth,” or, “I like working with my hands.”

The patterns of the candidate’s responses are compared to established patterns of responses consistent within particular personality styles or elements of personality. This comparison therefore provides a means of predicting likely future behavioural response preferences; the tendencies for the candidate to react in certain ways within job situations, consistent with the personality style exhibited by the individual.

### Skills Tests

Tests of aptitudes and skills such as clerical speed and accuracy, decision making, reasoning ability, computer commands, customer service and sales comprehension provide a stronger understanding of likely behavioural responses in situations commonly found in the job role.


### Reports & Further Investigation

At the conclusion of testing, the employer is provided a report of the findings of the psychological testing and assessment, with evaluative feedback indicating the relevance of the information to the particular needs of the job role.

To supplement the testing, the psychologist may also conduct a basic interview assessment either before, during or after the testing process, to formulate and test hypotheses (educated guesses) as to how the individual might react in job situations. In doing this, the psychologist can more thoroughly understand and convey the results obtained from the testing process, providing the

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<sup>1</sup> Schmidt, F.L and Hunter, J.E.(1998). *The validity and utility of selection methods in personnel psychology - Practical and theoretical Implications of 85 years of research findings. Psychological Bulletin. September 1998 Vol. 124, No. 2, 262-274.*

A photograph of a small, clear stream flowing over rocks in a lush green forest. The water is bright and reflects the surrounding foliage.

“flow with a positive approach”

employer with a good idea of what to expect from the candidate in the work environment. Similarly, the psychologist can also provide advice on what areas may need more thorough probing by the employer before a hiring decision is made.

## Using Psychological Testing As A Management Tool

Understanding an employee's behaviour, strengths, weaknesses and team fit can greatly enhance a manager's ability to bring out the best in an individual. Psychometric testing can aid in the prediction of how an employee might respond to various challenges.

### Psychological Testing & Assessment As A Tool For Staff Promotion

Psychological testing and assessment is not only a valuable tool for external recruitment, but can also be utilised in the selection of internal candidates for executive ranks. Decisions on promotion often disregard issues arising from the change in working roles, for example the need for "people skills" in technical managers promoted to general management positions.

### Executive Responsibilities & Capabilities

Executives are responsible for the control of significant financial, material and human resources. Therefore, when recruiting for these roles, due diligence needs to be paid towards ensuring the selection of individuals who possess the ability to make decisions and implement actions that maintain a duty of care towards the organisation and its people.

Sound decision making and the ability to reason at an advanced level are key criteria contributing to the success of executives in their roles. With acknowledgement that the higher the level of job the more reliably intelligence tests can predict performance comes the advantage that through psychological reporting, accurate assessments of cognitive abilities and performance expectations at executive level may be made.

### The Impact Of Personality At Executive Level: Role, Team & Organisational "Fit"

The styles, personality and interpersonal behaviour of the executive and the team being managed also contribute to the effective management ability of an executive.

Assessments can identify natural tendencies within the individual that are likely to be congruent, neutral or incongruent with the demands of the role. The candidate's "fit" should be considered not just in regard to the role, but also in regard to the team and organisation.

### A Conduit To Coaching

Psychological testing and assessment can provide a great starting point for identifying,

understanding and guiding behavioural responses of the individual in executive situations. Coaching employees to strengthen areas of deficiency and properly utilising identified strengths can prove not only beneficial to the individual's productivity, but also to working relationships and the entire organisational environment. The executive can also be coached to recognise personality styles and how they affect the performance of the leader and the team, as well as interpersonal relationships in the workplace. This has obvious implications for organisational imperatives such as the facilitation of effective performance management, goal setting, conflict resolution strategies and team cohesiveness.

### What Does That Psychological Term Mean?

**Abstract Reasoning:** The ability to make sense out of complex or conceptual problems, through the perception of meanings, patterns or intentions that may not be overtly apparent.

**Average:** Commonly refers to a measurement level, score, or range that is most frequently found in the population, as distinct from the colloquial meaning of "not so good".

**Battery:** a "battery of tests" is a collection of tests which, when interpreted together, can provide information on a common theme.

**Intelligence:** A broad term used to define one's ability to demonstrate general mental aptitude, for example, through rational thought or the recognition of conceptual relationships. Aside from general intelligence, specific domains of intelligence are also sometimes looked at, for example, spatial intelligence, abstract reasoning or emotional intelligence.

**IQ:** Intelligence Quotient. A score measuring general intelligence. Originally IQ was defined as an individual's mental age divided by their chronological age and multiplied by 100. Today, IQ commonly refers to a standardised score in general intelligence tests derived by comparing the individual's raw score to the distribution of raw scores of that individual's age group on the same test.

**Numerical Reasoning:** Numerical reasoning tests measure one's ability to apply mathematical skills and numerical aptitude towards solving problems involving numbers and their relationships.



"pathways to future growth"

**Percentile:** A percentile rank is the percentage of scores in the relevant population falling below an individual's score. At the 95<sup>th</sup> percentile, the individual's score is better than 95% of the population.

**Psychiatrists:** Medically trained practitioners able to prescribe psychiatric medicines, counsel and assist people but commonly dealing with mental illness issues among individuals.

**Psychologists:** Scientifically trained human behaviour experts, who assist individuals or organisations to improve their functioning, as well as being capable of assisting individuals with mental health issues if specially trained, for example, clinical psychologists.

**Psychological Assessment:** The act of comparison, interpretation and prediction of

behaviour, personality, mental abilities or similar attributes derived from the information gained from psychological tests, interviews or observations with reference to the individual's personal history.

**Psychometric Testing:** Psychometric testing is the scientific measuring of performance related directly to cognitive or mental capacities or styles, such as intelligence or personality.

**Verbal Reasoning:** Verbal reasoning tests measure one's ability to comprehend relationships between words or concepts stated in words and employ these appropriately.

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