



TECHNICAL PROFILE 1: PSYCHOMETRIC TESTING

6.1 Technical Profile 1: Psychometric Testing

For many organisations, people are the most important business resource and developing a talent pool or talent management strategy using an appropriate talent diagnostic tool can ensure the organisation has a sustainable future. This profile is designed to provide an in-depth guide to the use of psychometric testing as a talent diagnostic tool.

6.1.1 Introduction

According to the British Psychological Society, a psychometric test is “any procedure on the basis of which inferences are made concerning a person’s capacity, propensity or liability to act, react, experience or to structure or order thought or behaviour in particular ways.”

Psychometric tests therefore provide in-depth information about the mind-set of individuals with the potential talent, identifying their strengths and weaknesses so these can be improved to ensure they reach their full potential in the future (Van Der Merwe, 2002).

According to the University of Cambridge (2008), approximately 70 per cent of UK companies with over 50 employees use psychometric tests to recruit new staff, identify people with the potential to be promoted and developed, counsel staff that are under-performing, build teams, identify stress factors within an organisation and create incentive programmes.

Davis (2007) argues that psychometric tests can cover three distinctive aspects of people’s future behaviour:

- **Aptitude Tests:** explore an individual’s ability to perform or carry out different tasks. These tests tend to have a formal, structured approach where candidate’s answer multiple choice questions under exam conditions so that it can be administered and scored to ensure results can be compared.
- **Personality Assessments:** focus on an individual’s style or manner of doing things, as well as how they interact with their environment and other people. These assessments come in a variety of different formats and provide a personality profile rather than a score (because there are no right or wrong answers).
- **Attitude Tests:** examine individual’s preferences for different types of work, as well as their opinions, attitudes and behaviour towards others. These characteristics are usually assessed using a questionnaire without a time limit. The results are then interpreted by an assessor trained to ensure interpretation and feedback is accurate.

To ensure successful talent diagnosis using psychometric testing, Davis (2007) suggests that employers need to select the most appropriate test for the task, so they gain actionable insight into their staff. Anastasi and Urbina (1997) argue that the growing popularity of this type of talent diagnostic tool means that there are a variety of psychometric tests available for jobs from assembly line operator to senior manager to support issues like recruitment, job assignment, promotion or transfer.

Employers must also ensure that the psychometric test that they select will provide reliable and valid results so that the attributes are measured accurately, while the results will meet the organisations objectives (Davis, 2007; Asset Skills, 2012). Organisations that produce these tests will be able to provide extensive evidence of the reliability and validity of these tests because they are required to ensure standardisation through extensive trials using a wide population sample.

6.1.2 The Benefits of Using Psychometric Testing as a Talent Diagnostic Tool

International as well as local research has demonstrated the benefits of using psychometric testing as a talent diagnostic tool.

For example, psychometric testing is objective so there is no possibility of interviewer bias or prejudice on the basis of age, sex or religion (Davis, 2007; University of Cambridge, 2008). In addition, these tests are also consistent, so all candidates get the same questions, in the same order and during the same time period to allow comparative scoring (Davis, 2007).

Psychometric can also benefit organisations by effectively predicting performance levels within the workforce, identifying those employees that are at most risk of underperforming (Davis, 2007). This can contribute to improved team effectiveness and individual self-awareness by providing staff with a better understanding of their work styles, strengths and weaknesses so they can continue to learn and develop so that they feel motivated in the future.

Another benefit of this talent diagnostic tool is that it is relatively cost effective as the market has expanded to incorporate the provision of different tests, many of which are available online (Davis, 2007). According to the University of Cambridge (2008), a good psychometric test may appear to be quite expensive to have administered and interpreted, but it is significantly more cost effective than recruiting the wrong person for a role or maintaining an underperforming workforce.

6.1.3 Example Talent Diagnostic Tool: Mental Toughness (MTQ48)

Rationale

AQR is a psychometric test publisher and business consultancy that aims to develop tools and measures that employers can use to improve performance, well-being and behaviour amongst individuals or across a whole organisation.

In 2002, they published the concept of mental toughness defined as “a quality which determines, in some part, how effectively individuals perform when exposed to stressors, pressure and challenge... irrespective of the prevailing situation” (Clough and Strycharczyk, 2006). AQR also published the MTQ48 questionnaire designed to answer some key questions asked by senior managers, including (AQR, 2010):

- Why it is some people handle stress, pressure and challenge in the workplace well and others don't?
- Can we measure where people have strengths and weaknesses in these matters?
- Can we do something to improve “mental toughness” in people to improve overall performance?
- Can we evaluate the effectiveness of interventions which are all claimed to be effective?

Identifying talented individuals with a high level of mental toughness, while developing this quality in other staff can significantly **improve organisational performance** as individuals are more capable of producing a greater volume of high-quality work (AQR, 2010).

It also highlights those individuals that demonstrate **positive behaviours** such as those willing to engage with activities by volunteering to carry out tasks (AQR, 2010).

This recognition can result in **greater wellbeing** which can contribute to improved staff attendance, reduced stress levels, reduced bullying and ensures individuals can recover more quickly from setbacks (AQR, 2010).

Higher levels of mental toughness are also thought to contribute to **increased career aspirations** and **employability** as individuals are more competitive, as well as more likely to stick with a programme of study or work (AQR, 2010).

Design

The MTQ48 questionnaire is a 48-item questionnaire which takes 10 minutes to complete. It uses a five-point Likert scale to capture responses and is available in an online or paper format. The questions focus on four key attributes:

- **Control:** indicates whether individuals feel in control of their work and establishes if they have the potential to exert more influence over their working environment.
- **Challenge:** describes the extent to which individuals see problems as threats or opportunities to continue their personal development so this questionnaire identifies those people that thrive in a changing environment, as well as those people that prefer to work in stable environments.
- **Commitment:** the ability for an individual to carry out tasks successfully despite any problems or obstacles that arise.
- **Confidence:** individuals that are high in confidence have the self-belief to successfully complete tasks that may be considered too difficult by similar abilities but lower confidence.

Results

Test results are processed immediately, and reports are made available so that individuals can use the information to build on their strengths and mitigate their weaknesses through skills development or gaining new experiences to improve overall job performance.

This test can effectively predict those that are most likely to underperform and can provide talented individuals with greater self-awareness that can lead to increased motivation as well as a willingness to undertake development activities in the future.

The results for individuals are also compared to test results for a relevant norm group that represents the population as a whole. This ensures that results can be used to measure progress and establish what training programmes are most successful at facilitating the development of targeted talent development initiatives.

6.1.4 Talent Diagnostics in Practice: Rising Stars Project

The Chartered Institute of Housing set up regional forums and the leaders of the Northwest group decided to base their forum on the identification and development of tomorrow's leaders.

The project was designed to get candidates to think differently about how to create an organisation, how to develop their personal skills and what leadership skills they might need in the future.

Social housing organisations were asked to nominate candidates that they believed were 'Rising Stars' with the potential to become future leaders and provide a mentor for the duration of the project.

This ensured that candidates had additional support while under significant pressure to continue with their day job and attend the sessions in their own time. These challenging circumstances demonstrated the commitment and resilience of those individual that participated in the project as of the 18 candidates that started the project, 12 candidates finished.

The Rising Stars Project started in January 2012 and required the candidates to attend six sessions designed to focus on different aspects of leadership and management practice. The third session focused on the personal attributes of candidates and required them to complete the MTQ48 mental toughness assessment provided by AQR.

At the end of the project, candidates were reassessed using the MTQ48 mental toughness assessment and those candidates scoring a level 3 are showing considerable improvement by scoring a level 6.

The Rising Stars Project has also received positive feedback from candidates and employers with many indicating that they had learnt a lot through the process.

"Psychometric testing is a big asset for organisations – for example, if you are finding people in your organisation are wobbling for one reason or another you can very quickly assess it through the use of a questionnaire to identify what the issues might be."

(Doug Strycharczyk, AQR)



6.1.5 Critical Analysis

Research indicates that issues associated with psychometric testing often occur when the talent diagnostic tool is used incorrectly – Cegos Group (2010) argue that only a few organisations have the expertise to use talent diagnostic tools to identify their talent pool and suggests that subjective, perception-based 360-degree appraisals and psychometric testing can be inaccurate if used without a clear focus on performance, skills, knowledge and behaviour.

Inaccuracy can also arise through poor interpretation of psychometric test results which can disadvantage individuals undertaking the test by disguising their potential talent (Stone, 2011). To

overcome this issue, organisations can use professional psychometric testing centres that have established scoring system (often computer based) to reduce the risk of human error and ensure the results are presented accurately.

Stone (2011) argues that some organisations can become too reliant on psychometric testing, even when they use it correctly, and should try to combine this talent diagnostic method with other techniques such as structured interviewing or mentoring. Stone (2011) also highlights the discrimination risks associated with the use of tests to identify talent as some individuals may be disadvantaged due to sight problems or literacy skills.

To avoid these issues employers should make an informed decision about which talent diagnostic tools are most important for their organisation's needs. They must then decide how they will use it effectively and ethically to improve the long-term sustainability of their business.