Understanding the Use of Psychometric Testing by Maltese Organisations for the Purpose of Recruitment and Selection

Bethany Magro, Martina Cristina Vella*
Corresponding Author: Martina.Cristina.Vella@mcast.edu.mt
*Institute of Business Management & Commerce, MCAST

Abstract: This qualitative research applies a grounded theory methodology to understand the use of psychometric testing by Maltese organisations for the purpose of recruitment and selection. In-depth interviews were conducted with five local organisations to obtain their perception and expertise in the administration and interpretation of psychometric tests in Malta. Data collected was analysed using MAXQDA and coded and analysed using Strauss and Corbin (2008) paradigms of Contextual Conditions, Actions and Reactions and Consequences and Outcomes to assess interrelationships in the information obtained. The study identifies a number of factors that affect the use of psychometric testing by local organisations, and recommends ways on how to increase and effectively use psychometric testing in the recruitment and selection process in Malta.

Keywords: Psychometric testing; Maltese organisations, recruitment and selection, grounded theory, recommendations, qualitative study.

Background to Study

Rust and Golombok (2009), describe the term psychometrics as the science of psychology and psychological assessments. Such assessments were originally used for the purpose of educational, clinical and occupational psychology. Sreenidhi et al. (2013) recognise that the evolution of psychometrics contributes to a whole new holistic dimension through which one can comprehend individuals’ attitudes, skills, values, beliefs and personality traits. Furthermore, Jacobs (2018) stated that a recent definition of psychometric tests has been broadened to include personality, motivational and aptitude factors.

People, as explained in a report by KPMG (2018) and other studies by Wolf and Jenkins (2006) and Carless (2009), are today the most valuable resource in companies. This is due to the changing markets and increasing competitive industries, that encourage companies to maintain their competitive position by being well informed on recent business and technological advances as well as by maximizing and enhancing their human capacity. To this end, O’Leary et al. (2002) suggest that the key for remaining competitive is for companies to achieve business performance goals which can be made easier by adopting effective and practical human resource (HR) strategies. These dynamic changes in today’s business and competitive markets, bring about high demand for specialization and skilled labour, and as a result, companies face many challenges to find appropriate talent (Jenkins 2001; Singh 2001). Increasingly, many international companies have adopted different processes in attracting, screening, recruiting and retaining skilful employees, among which is the use of psychometric tests. In fact, recent studies by Dullu (2017) and Jacobs (2018), state that psychometric tests have become so popular that over 80% of Fortune 500 companies in America and more than 75% of the Top 100 companies in the UK incorporate psychometric testing in their recruitment systems.
According to Wolf and Jenkins (2006), the increasing use of such tests has resulted in the significant contribution of Human Resource Management (HRM) in organisations’ strategic decision-making. The authors Batey, Walker and Hughes (2012) explain that psychometric testing is also used to assess mental capabilities, and results will ultimately anticipate job performance in specific roles that require intellectual capabilities rather than physical labour. Likewise, Cooper (2010), makes a positive case akin to Batey, Walker and Hughes (2012), and adds there is less research on the specific abilities matched with performance when compared to general intelligence. The author (Cooper 2010), emphasises that in fact specific cognitive abilities, do predict role performance. Batey, Walker & Hughes (2012) add that due to today's complex working environment, candidates’ psychometric assessment is significant to also assess how applicants will adapt to the complexity and flexibility of current work roles, specifically, personality assessments, which are psychometric tools to assess: candidates’ motivations, opinions, performance, commitment and absenteeism.

**Significance of the Study**

The interest in this area of study stems from preliminary research obtained from a local recruitment agency, whereby it was discovered that the use of psychometric testing in Malta is low. This study also aims to fill the research gap regarding the scarcity of literature on psychometric testing in Malta, and as such the researcher sought the opportunity to conduct this research and understand its use in the local context. Thus, the main aim of this study was to understand the use of psychometric testing by Maltese organisations in the recruitment and selection process. In doing so, the researcher built the research study upon three objectives:

- To discover the perception of local organisations towards the use of psychometric testing.
- To assess the different tests used in the recruitment and selection process
- To identify the limitations and recommendations when adopting psychometric testing in local recruitment and selection processes.

**Research Methodology**

Crossman (2019) describes qualitative research as a method of recording and analysing information with the aim to uncover a deeper meaning and understanding of human behaviour, meaning that data collected mainly through in-depth interviews, is subject to the opinion of the participants in this study. A qualitative research method allowed the researcher to obtain insightful information about psychometric testing in Malta and identify patterns by gaining a rich understanding of participants' experience. In-depth insights were necessary for this research due to the lack of literature in Malta on the research topic.

Creswell (2014) explains that grounded theory is a research design by which the researcher could derive new theories with the information obtained from the data collection process. This process involved reviewing research findings and identifying interrelationships in the information obtained, using coding and themes for data analysis. Therefore, the grounded theory methodology was selected as it was ideal to help the researcher to obtain an inductive reasoned approach, aimed towards developing a theory (Crossman 2019).
Sampling and Data Collection

Sampling was carried out at two different stages, convenience sampling followed by purposive sampling. The sampling frame consisted of all local businesses, from which one psychometric test provider was chosen, along with four organisations selected based on their usage of psychometric testing. The researcher identified research participants using letters, A, B, C, and D. Participants A and B represent two local organisations that use psychometric tests, while Participants C and D represent two local organisations that do not use psychometric tests. The psychometric test provider is identified by its name as Test Provider. According to a study conducted by Lund Research Ltd (2012), purposive sampling allows the selection of participants based on specific characteristics that are of interest to the researcher, as they help to answer the research question. The researcher selected local organisations and a test provider based on the information obtained, relevant to their expertise and use of psychometric testing. Hence, the research participants were chosen based on the knowledge obtained when the researcher contacted them.

Interviews with the identified sample were carried out using a semi-structured approach, allowing the researcher to identify key findings through follow-up questioning, therefore allowing flexibility and further elaboration on specific areas and experiences, and the discovery of new insights. Semi-structured interviews were ideal since this study required an improved and detailed understanding of the research topic, due to the lack of information about psychometric testing currently present in Malta. The interviews carried out were held in a structured approach. Interviews were first held with Participants A and B in order to gain insights on the usage of psychometric tests in Malta followed by an interview with the Test Provider, to further enhance findings from the first two interviews, and to gain additional insights. The last two interviews were held with Participants C and D in order to obtain insights on why psychometric tests were not being used, and to obtain their perception as non-users of these tests.

Analysis of Data

Interviews were digitally recorded and transcribed after each interview, using pseudonyms to protect the respondents' identity. Interview questions were then revised to cater for new insights found from the interviews. MAXQDA, a qualitative data analysis software was then used for coding purposes to help the researcher analyse the research findings and identify patterns. Coding was done by using Strauss and Corbin's (2008) paradigms of: Contextual Conditions, Actions and Reactions and Consequences and Outcomes. Findings were further divided into categories and subcategories.

Analysis of Results and Discussion

This research used grounded theory analysis to understand the use of psychometric testing by local organisations specifically in the recruitment and selection process. According to Corbin and Strauss (1990), grounded theory analysis uses categories and subcategories to identify relationships in data, using a coding paradigm of: contextual conditions; actions and reactions; and consequences and outcomes.

Figure 1 shows the three main categories that are then further developed into thirty-five subcategories (Figure 2). The main focus is the research question – Understanding the use of psychometric testing by Maltese organisations for the purpose of recruitment and
selection – from which the constructs and categories emerged, since it determines the use of psychometric testing by organisations in Malta.

![Figure 1: The interrelationships between the three emerging constructs and their categories](image)

The contextual conditions represent the categories that serve as basis to the use of psychometric testing, in terms of research participants; which are further divided into two subcategories: individuals and company, knowledge of psychometric testing in Malta, changes in the local HR function and perception of psychometric testing. These categories under the contextual conditions, are the basis of psychometric testing, since they reflect the actions of local organisations, thereby demonstrating the outcomes of these actions. The second construct, actions and reactions, is divided into two main categories: appropriate and inappropriate use of psychometric testing. These categories and their subsections lead to consequences and outcomes. The research participants are one of the four main categories that emerged from contextual conditions, with two subcategories: individuals and the company. These two subcategories emerged from the findings since they set separate grounds to the usage of psychometric testing. Research participants as one of the main categories as a contextual condition includes job role, that is: skills and abilities gained and personal experience with psychometric testing related to the individual; while senior management, company culture, recruitment needs, previous use of psychometric tests and results obtained from previous tests are all related to the company.
Figure 2: Understanding the use of Psychometric Testing by Maltese organisations for the purpose of recruitment and selection
Research Participants as individuals

Participants A and B, represent two local organisations that use psychometric testing in their recruitment and selection process, and together with the Test Provider, all three participants have gained relevant skills in relation to their role, in fact the Test Provider is the business director, therefore as a business owner and entrepreneur, the participant developed skills which include leadership, management and flexibility to change. As core competences, skills include recruitment, training and occupational psychology. The Test Provider has had personal experience with psychometric tests as it formed part of their training and education, and the results obtained match the skills the participant has.

In addition, as explained by Participant A, work has helped the participant in being calm, flexible and understand clients’ needs, while Participant B adds that skills such as listening; understanding customer needs; being able to provide good advice and consultancy; and remaining focused – are all important aspects in HR. The tests that both participants sat for did represent and reflect their personality, and this resulted in a direct relationship with the repetitive use as a consequence, due to having a positive experience in using psychometric testing. Participant A sat for a personal development test and the participant stated that, “in terms of personality, the results were very close”. Indeed, Participant B agreed that the test did represent their personality:

in terms of preferences, for example I enjoy meeting people, driven by targets and deadlines, and gives me energy to have something to work for. I also care for people, therefore I am a people's person. These are all traits that came out in the report from the psychometric test.

On the other hand, Participants C and D, represent local companies that do not use psychometric tests. Participant C explains that this is a result of a negative personal experience in using psychometric tests. The participant stated:

I did cognitive tests and psychometric assessments myself. I did the same test one month apart and I had different results. My opinion is biased as they did not work for me.

As a result, the way in which the participant experienced psychometric testing has a direct relationship with the actions relevant to the inappropriate use of the tests. Since the participant sat for the same test previously, they had an idea of the questions they would be asked. Therefore, the conditions in which the tests were conducted resulted in bias from the participant. On the contrary to Participant C, Participant D had never used psychometric tests since the participant prefers to, “rely more on the less scientific processes” and arrive at a conclusion with the results obtained in the selection process of candidates who present themselves.

The Company As a Research Participant

The senior management and company culture both refer to the local organisations that research participants represent individually, in terms of the company’s experience in operations and industry and culture referring to the internal environment. Recruitment needs refer to the company’s situation in requiring talent and skills, while previous use of psychometric tests refers to the company’s overall use of these tests for recruitment and selection. Finally, the last subsection refers to the results obtained by the company after using psychometric tests.
The Test Provider, who has been trained in occupational and applied psychology from a young age, and due to the passion in dealing in recruitment, training, human resources and business psychology, has led the participant to set up a private company, with the aim to be, “at the forefront of promoting and using proper psychometrics here in Malta”. As a result, the research participant directly influences the action of appropriate use of psychometric testing, by setting up training in accordance with the British Psychological Society, to promote best practice in terms of psychometric assessments. The participant stresses that users do not necessarily have to be psychologists, but they should have the necessary training in administering and interpreting psychometric tests.

On the other hand, senior management does not always influence the use of psychometric tests in a positive way, and this is agreed by Participant D, who explains that the company has been in operation for 60 years, “we have been around since the 1960s,” thus psychometric tests were not a part of the family-owned business's philosophy. In fact, Participant D explains that the company is, “a bit old-school” having held on to traditional recruitment and selection strategies since its inception. Moreover, the use of psychometric testing is affected by culture due to resistance to change. Participant D argues that the Maltese tend to lend themselves to the traditional process, as they are known to be resistant to change. Psychometric testing is a valid tool, and therefore its use can be justified (made worth the cost) when weighed against the importance of the job/role/employee within the company.

Similarly, Participant C adds that the cultural use of psychometric tests is mostly related to the roles for which the tests are used. The participant suggests that if and when used, psychometric tests should be applied for any role depending on the organisation, its company culture, and the cost of testing can be balanced and justified by the value attributed to various or specific roles within companies. Should psychometric tests be used by the organisation, Participant C argues that the tests would be applied to every role, from front office and operators that require diligence, to managers. One may argue that this argument is in line with Gardner’s theory of intelligence, as the use of psychometric tests is based on the importance of the skills and abilities of different roles to specific cultures.

Moreover, the Test Provider adds that for fair and equal recruitment and selection practices, results should be discussed with the applicants, since “the part of giving feedback, should always be a standard part of it”. The importance of standardisation of tests is also influenced by the test-publisher, and when the company has a policy about giving feedback on the test results, the company must give feedback to everyone, as a matter of best practice. The company may opt to give generic feedback rather than specific, and if so, this process should be consistent towards all employees. After educating themselves about the use of psychometric tests in recruitment and development of employees, Participant A argues that the company has adopted psychometric testing to enhance the quality of their services to clients by recruiting the right persons to join their team. As a result, the company has been using psychometric testing for at least 13 years, and these, “have been used for so long because they never failed us.” The use depends on the company’s need to recruit candidates with a set of competencies required for a job. Through these tests the company acquires an understanding of how the candidates’ personality fits within the particular position.

Similarly to Participant A, the Test Provider describes their process to be, “good enough as the candidates can complete the psychometric tests in the comfort of their home and then the company receives the results for further discussion with the candidates.” The
company always shares the results as it believes that candidates benefit from knowing, on paper, details about their personality traits. If the results show a different side of the candidate, then there is a possibility that the individual may be in denial of some of their personality traits. This may potentially lead to further personal development for the candidate, given personality is innate, and only characters change. Although life presents us with different situations, personality does not change, the person may change the priorities and character, however the personality remains the same. As a result, Participant A states that the implementation of these tests requires an in-depth understanding of how to administer and interpret the results. If not, results may backfire, as one may depict a wrong side of a candidate. Therefore, they must be used by a person who is experienced in the field of psychometrics. The decision should be based on both the interview and psychometric assessment, to ensure that each and every candidate is assessed in a fair and equal process.

Indeed, all participants acknowledge that the person responsible for psychometric testing needs to be trained on how to interpret results for an appropriate use. From Participant C’s point of view, the person must:

- have work experience in recruitment and HR or people management. I think to conduct these tests one needs to have some level of experience in managing people and then possibly something in recruitment.

Unfortunately, there is a lot of abuse, no matter how good the report generator is, as nowadays psychometric tests can be done online. The Test Provider stresses that once the report is generated, the interpretation and feedback, especially on personality, should be done with a qualified person who does not necessarily have to be a psychologist, but should have qualifications relevant to psychometrics, because the results can be open to interpretation and they can be misleading if not done properly.

Participants A and B use psychometric assessments in the second and third interview stage, where two or three candidates are short-listed, and perform a test which takes between 45 to 60 minutes. At this stage the results will determine the selection based on the closest match possible from a behaviour point of view, not just qualifications and experience. Unlike sources cited in this study (Batey, Walker and Hughes 2012; Cooper 2010) primary research from this study, uncovered that the results of psychometric testing can have a direct relationship with a poor prediction of candidates’ performance. This is mostly because, four out of the five research participants argued that psychometric testing results help to determine how an applicant fits within the dynamics of the company, rather than demonstrating how an applicant would perform in their role.

Participant A adds that:

- psychometric tests help the company to see the unseen, because usually what happens is that during the interviews, candidates tend to show their best, therefore these tests tend to give more accurate details which were not shown during the interview.

However, both users believe that to be used appropriately, these tests should not be used as the only tool, but they should serve as an extra tool to help make informed decisions. One of the likely benefits of these tests is that they help to confirm or challenge the perception interviewers may make about candidates during the interview. Similarly, the Test Provider started using psychometric tests for clients after studying their applications in psychology and, “soon enough I realised the power they have.”
Knowledge of Psychometric Testing in Malta

The types of psychometric tests available, refer to the different psychometric tests used by local organisations and the knowledge research participants have about them. Lack of technical knowledge and relevant certification relate to the levels of knowledge and certification on psychometric testing in Malta. The Test Provider defines psychometric testing to be a measurement of psyche, personality or aptitude, depending on different scenarios. Similarly, participants A, C and D, argue that psychometric testing is a measurement or assessment to identify the personality, ability, character and competences. Participant A adds that these are assessments where one gets to know how a personality scores in line with a set of competences needed for a particular job. However, as previously mentioned Participants B and D agree that being a scientific process, psychometric testing should not be the ultimate tool to base judgement, decisions and assumptions solely on the profile obtained from these tests.

Unlike secondary information gathered, primary research discovered different types of psychometric tests used by local organisations. Participants A and B use a similar type of psychometric test, which is the 360 Feedback assessment. Participant A describes the organisation’s selection assessment used in the selection process to understand which candidate is best for the position. The selection assessment of Participant A includes a personal development assessment and the 360 feedback. The 360 assessment focuses on understanding how an employee thinks of themself, and how other employees of the company think about that particular person. Therefore, this test involves everyone’s perception, and it is effective as sometimes the results show how an employee can think highly of themself, while other employees describe the person differently. Therefore the results do not match the description of the employee.

On the contrary, Participant B uses Performance of Routine Information System Management (PRISM), a technology based in neuroscience, which involves various psychometric tests, such as 360 Feedback or reviews, job benchmark and career analysis.

Similarly to Participant A, Participant B describes the 360 Feedback as an assessment that involves an employee carrying out a test on how they perceive themself, which is normally carried out when filling internal vacancies. However, the 360 feedback is not only used for recruitment, but also for the development of employees and to benchmark skills and abilities required for a job, for example, leadership and managerial skills. Job benchmarking allows an analysis of the job from a PRISM perspective. One would know the ideal traits a person occupying a specific role would need. Then personality tests can be done for different candidates, to benchmark the outcome of the tests with what the job requires, and one can see the best match and fit between the candidates and the job itself.

Furthermore, Participant B described career analysis as a process that provides insights on the occupational fields which are of interest to applicants. This is how Edenborough (2005) and Carless (2009), also explain career analysis and add that such process provides guidance to applicants about work, and hence, their career. The Test Provider makes use of assessment centres which incorporate a variety of psychometric tests: from aptitude tests, ability tests, and personality assessments to a combination of all of these; which are used for recruitment and selection, as well as for training and development.

Being a representative from a local organisation that does not use psychometric testing, Participant C explained that should the company decide to incorporate psychometric tests in the recruitment and selection process, the company would use cognitive
assessments, since during an interview cognitive ability, intelligence and IQ are difficult for the interviewer to assess by just asking questions. This argument is in line with Cooper (2010), who described that specific cognitive abilities predict role performance, as Participant C emphasised that the company would use these tests to recruit people who will succeed in their role, develop and grow within the company.

Participant C aims to recruit candidates who will eventually become department managers, therefore candidates who are committed and perform their job well, and as a result of which, the company would enjoy high employee retention. This is also stated by Edenborough (2005), as the author highlighted that companies making use of psychometric tests will help to match applicants with jobs they will most likely succeed in, and should Participant C use cognitive ability tests, the company will avoid repeating situations where the company recruited employees for jobs beyond their cognitive ability. The use of psychometric testing is dependent on the knowledge and certifications available in the field. All participants pointed out that unfortunately the lack of awareness and knowledge of psychometric testing is one of the main reasons, why they are not being widely used locally. Consequentially, this results in the lack of knowledge and certification, having a direct relationship with the low use of psychometric testing in Malta. Participant C claimed that in terms of studies, research is not present, and in fact, the participant thinks that this research study is the first piece of information about psychometric testing in Malta.

In addition to this problem, the lack of knowledge and certification impacts the inappropriate use of psychometric testing, as the Test Provider emphasises that:

> the question is whether people or organisations give psychometric testing enough importance, as in whether people are caring enough about best practices. So, our aim is to increase its use by applying organisational psychology to work properly and help companies to achieve best practice in psychometrics while getting the word out there.

This shows the importance of best practices in psychometric testing, especially as described by Participant D, nowadays HR tends to use online-based tests, without being trained in administering and interpreting psychometric tests, allowing for the possibilities of skewed and incorrect assessments. Participants A and B add that there is no knowledge readily available in Malta that explains the benefits and technical aspects of psychometric testing. Participant A describes that sharing and educating people, are among the top priorities and values of the company. By sharing their knowledge, the company sees it as motivating, therefore:

> it is more about companies like us to share the knowledge. We are lucky to have the understanding and know-how, and we do our best to provide the same knowledge and advantage about their benefits.
Changes In the Local Human Resources Function

Traditional vs. modern recruitment practices refers to the differences between past and modern recruitment, while the demand for psychometric tests refers to the demand by local organisations. Few applicants for vacancies refer to the situation local organisations are currently facing, while the emergence of artificial intelligence refers to the technological advancement that affects the use of psychometric testing. All subcategories relate to the changes in the local HR function. It is noted that psychometric tests have changed the recruitment and selection process to be more scientific, as Participants A, B and C claim that rather than relying on face-to-face interviews, which can be influenced by bias, the use of psychometric tests gives a scientific base to the process, and allows for more information to be obtained about the candidates. As Participants A and B noted, the tests did not so much change the recruitment process, as they enhanced it!

Participant A explains that prior to psychometric assessments the company made use of traditional interviewing, then focused on conducting behavioural based interview questions, where the company challenged the candidate. This was done based on a set of criteria. The company never tried to assess the personality and abilities of a candidate. Therefore, psychometric tests enhanced the interviewing process by giving a clear picture of a candidate, which could not have been exclusively achieved by conducting a 30-minute or 1-hour interview. Notwithstanding this, all participants agree that the demand for psychometric tests in Malta is very low, and this may be due to the current high demand for vacancies versus a low supply of applicants. In fact, companies shortlist few applicants, and according to the Test Provider, “if they are lucky, they have more than two people.” In these circumstances, they question the additional measures like psychometric tests, to help them make decisions when they only have one person, hence the situation of having few applicants for vacancies, leads to a direct relationship with the low use of psychometric testing in Malta, as a consequence. Participant D explains that the company does not use psychometric tests, and there is no immediate intention to use them, mainly because nowadays, it is very difficult to find employees with the right set of skills. Most applications they receive are foreign and many hold a PHD for technical low-level roles. It is also difficult to retain employees, and due to the lack of candidates to fit the company’s vacancies, the company is in a position whereby few or no applications are received. Besides these factors, the Test Provider adds that the emergence of artificial intelligence raised an issue for psychometric testing, since companies question the relevance of psychometric tools, and rather than using these tests, they often “up-tech their game” instead, and use predictive analytics to draw conclusions on applicants.

Perception of Psychometric Testing

The perception of the research participants is analysed through the effectiveness of psychometric testing for different roles, their validity, cost efficiency and time. Candidates’ reactions towards psychometric tests, refers to their initial perceptions towards the tests.

Participant B describes personality tests as very helpful for the recruitment and selection process and explains that with psychometric tests the company seeks long term commitment to a position, in line with the job requirements. For example, a sales position requires a person who is an extrovert, therefore someone who enjoys meeting people. During an interview a person may act or be perceived as introverted, therefore the interviewer may deduce that the candidate enjoys working in isolation, for example at the backend and not desiring much interaction with others, when in fact the
candidate is actually extroverted and enjoys the social aspects of a workplace. In this case, there is a preference mismatch between the natural personality of the person and the characteristics of the job. Similarly, in their study, the authors Allworth & Passmore (2012), add that psychometric tests reveal the behaviour and personality of applicants and how these are matched with the requirements of a job, to be able to make decisions on how they would behave in different situations.

All participants rate high validity levels in terms of psychometric tests, because as Participant B explains “they are very accurate.” As a representative of a company that does not use psychometric tests, Participant D says that as a conclusive opinion, they would be interested to start using them, as they can see the benefits of their use. The effectiveness of psychometric tests in different roles is also explained by the Test Provider, and adds that for tests to be effective one needs to understand their face validity, in other words, is this test or assessment doing what it is supposed to do? Is it relevant to the job in question? For example, if a company is recruiting an accountant, an aptitude test or numerical reasoning test are ideal, since the role concerns accounting and bookkeeping. This argument is very much in line with Pulakos (2005), as in her book the author emphasizes that the validity depends on the measures taken to match the test with the job. Therefore, tests must be suitable to the job in question, and used for specific recruitment needs, for an appropriate use. It is very bad practice to use clinical psychometric assessments for selecting people for work-related situations or work development situations. This can happen where there is a lack of structure and result with bad design and incorrect use of assessments.

Participant A highlighted that psychometric tests can be applied for every role, however, they are mostly used for senior and engineering positions, to assess if the candidate fits within the dynamics of the company. In practice, psychometric tests may show that a candidate is not ambitious or motivated, and the company can explore this result further and find out that the candidate may not be self-motivated, so in order for the candidate to be motivated they would require an external force from a colleague or an incentive to motivate them. Interviewers are thus challenged to get more answers, rather than relying solely on the personality of the candidates. Candidates can fake their conscientiousness or assertiveness, therefore tests and assessments offer more accurate insights on personality.

The validity, cost, applicants’ reactions and time, are factors highlighted by research participants, all of which affect the use of psychometric testing by local organisations. The validity, cost and applicants’ reactions are factors in line with the limitations that emerged in studies by Jenkins (2001), Pulakos (2005) and Nikolaou et al. (2015). According to Participants A and B and the Test Provider, psychometric tests come with a cost, and as a result they may be perceived as a stumbling block for the recruitment process. However, the participants agree that if the wrong applicants are employed, the company has to go through the recruitment process again, which is already costly due to advertising and time required to do this once. Adding psychometric tests into the mix, adds on further expenses. The Test Provider claims that applicants form negative reactions in situations where questionnaires are badly designed and used inaccurately. Therefore, applicants’ reactions towards psychometric testing have a direct relationship with the actions of how psychometric tests are used in promoting best practices. It is important that when using psychometric tests, that companies follow the recommendations of the test-publisher and stick to a standardised process. The Test Provider adds that for positive reactions to be fortified, more awareness of the benefits of adopting psychometric tools is needed. Despite these factors, Participants A and B and the Test Provider believe that psychometric
tests are worth the use and very beneficial for the recruitment and selection process. In fact, they consider them to be an investment rather a cost. As a result, a number of factors stemmed from the data collection that affect the use of psychometric testing by local organisations. Table 1 summarises how each factor is relevant towards the use of psychometric testing by Maltese organisations, and their relationship with emerging constructs.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Relevance of factors towards the use of Psychometric Testing and their relationships</th>
</tr>
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<tbody>
<tr>
<td>Respondents' Personal Experience</td>
<td>Positive experience resulting in repetitive use, while negative experience resulting in a negative bias. Positive experience has a direct relationship with the repetitive use, while negative experience reflects the inappropriate use of psychometric testing.</td>
</tr>
<tr>
<td>Senior Management</td>
<td>An organisation which has been established for many years, tends to more frequently rely on traditional recruitment and selection practices. Senior management has a direct impact on the low use of psychometric testing.</td>
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<tr>
<td>Company culture</td>
<td>A company which maintains ‘old-school’ practices, is likely to include persons who are resistant to change, therefore they prefer traditional recruitment. Company culture has a direct impact on the use of psychometric testing.</td>
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<tr>
<td>Online-based tests</td>
<td>The use of psychometric tests is affected by the vast number of tests available online. Unfortunately, there is a lot of abuse due to the availability of online-based tests, which are not all designed according to testing standards. This factor may lead to the improper use of psychometric testing.</td>
</tr>
<tr>
<td>Recruitment needs and psychometric testing results</td>
<td>The use depends on the company's need to recruit candidates with a set of competences required for a job, and on how important different roles are to specific companies. For example, for a sales position, the requirements for the ideal person to fulfil the job include someone who is predominantly extrovert, hence who enjoys meeting people. The tests indicate whether a candidate is predominantly introvert (likely prefers working in isolation), or someone who is predominantly extrovert (enjoys many social interactions with others). Psychometric testing results have a direct impact on predicting personality and behaviour rather than predicting candidates’ performance. In addition, recruitment needs require appropriate use of psychometric testing as specialised testing tools are used for specific roles to understand how a candidate fits within a particular position. As Participant B explained, psychometric tests, “are very accurate”. Research participants rate high validity levels, and thus high validity levels impact the repetitive use of psychometric tests.</td>
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Lack of awareness and technical knowledge

A lack of awareness and knowledge of psychometric testing is one of the main reasons why they are not being widely used locally. In terms of studies, research is not present. As a consequence, the lack of knowledge and certification have a direct relationship with the low use of psychometric testing in Malta.

Lack of certification

There is low access to education and training for HR to administer and interpret psychometric tests. Lack of certification impacts the inappropriate use of psychometric testing, as this discourages best practices.

Gap between talent supply and demand

Local organisations are facing a challenge as they receive few applications. The demand to fill vacancies is high in comparison to the availability of workers. A high demand for candidates to fill these positions, leads to the low use of psychometric testing in Malta, as local organisations question the application of psychometric tools for a small number of applicants.

Artificial intelligence

The emergence of artificial intelligence led companies to up-tech their game, and use predictive analytics to draw conclusions about applicants, rather than use psychometric tests. The technological advancement in AI, directly impacts the low use of psychometric testing.

Cost and time

Psychometric tests are time-consuming, and costly, and as a result they may be perceived as a stumbling block for the recruitment process. Cost and time factors have a direct impact on the low use of psychometric tests.

Applicants’ reactions

Applicants form negative reactions in situations where questionnaires are badly designed and used incorrectly. Applicants’ reactions towards psychometric testing have a direct relationship with the actions of how psychometric tests are used in promoting best practices, as it is important that when using psychometric tests, companies should follow the recommendations of the test-publisher and stick to a standardised process.

Positive reactions are formed when there is more awareness of the benefits of psychometric tools. On the other hand, negative reactions correlate to the lack of knowledge surrounding psychometric testing, and awareness of its existence in Malta.

| Table 1: Factors influencing the use of Psychometric Testing and their relationships |

Limitations of Psychometric Testing in Malta

In terms of limitations, studies (Jenkins 2001; Nikolaou et al. 2015; Pulakos 2005), highlight similar factors to those identified through primary research. Such factors pose challenges to the use of psychometric testing by local organisations. The cost, time, and applicants’ reactions are factors highlighted by the research participants, which are considered as
limitations on the usage of psychometric testing. This is since, psychometric tests come at a cost, and as a result, may be perceived as a stumbling block for the recruitment process. However, the participants agree that if the wrong applicants are employed, the company would have to start the recruitment process again. The recruitment process, done once, is already expensive due to advertising, HR time, and adding in the cost of psychometric tests, increases recruitment costs. In addition, psychometric tests are time consuming since one test takes between 45 to 60 minutes to be completed. The next factor to account for when using testing, is the time it takes for organisations to analyse the psychometric requirements for the job and interpret the results of the tests.

Moreover, the lack of knowledge and availability in Malta, of qualified individuals to carry out and interpret the tests, is another major limitation in the local use of psychometric testing. Especially, since the lack of knowledge and awareness affect the demand of psychometric testing. According to the research participants interviewed, the local demand for psychometric testing is low. Unfortunately, studies on psychometric testing in Malta are not present, and this was also supported by Participant C. In fact, this research is the first piece of information found locally on psychometric testing specifically in the HR domain. The lack of knowledge and awareness, plus improper use of testing locally, also leads to another limitation for psychometric testing in Malta; in that applicants form negative reactions when inappropriate questionnaires are used. Indeed, the Test Provider added that for positive reactions of applicants to be formed, more awareness of the benefits of using psychometric tools is required.

How to Appropriately Use Psychometric Testing

Psychometric tests should be implemented by first gaining an in-depth understanding of how to administer and interpret the results. This entails identifying the right person or test-publisher to use. In the case that a test-publisher is used, it is important for the organisation to stick religiously to the process. For example, if the HR department is developing a test, HR staff must ensure that the instructions of the test-publisher are followed. The administration of these tests should follow a standardised process. The person responsible for administering and interpreting results should be experienced and knowledgeable, to avoid delivering undeserved depictions of candidates. Additionally, the person should have relevant qualifications and achieve recognised training in the use of psychometrics. The Test Provider suggests that Level A and Level B provided by the British Psychological Society are ideal, as they are set according to European standards.

In terms of work experience, the ideal person assigned to conduct and interpret psychometric tests, should have experience in a broad range of human resources interventions, recruitment and assessment, purely in the occupational sector, and should have experience in a variety of psychometric instruments from aptitude tests, to ability tests, personality assessments and a combination of all of these for recruitment and selection. Soft skills, providing and receiving feedback are among the key attributes essential in administering and interpreting results. It is also imperative for organisations to keep in mind the need for data protection, fairness, validity, reliability and the statistics behind the psychometrics. Organisations making use of psychometric instruments must not do so without accredited training. It would be unethical to do so, even though, presently, there is no legislation regarding psychometric testing in Malta. In addition, psychometric testing should not be the only tool used in recruitment and selection, therefore the decision on whether to recruit or not recruit a candidate should be based on both the interview and the results derived from the psychometric assessment. This
ensures that each and every candidate is assessed using fair and equal recruitment and selection processes.

Therefore, for psychometric testing to be used appropriately, they should serve as an extra tool that aids in the decision-making process whereby, they help to confirm or challenge the interviewers’ perceptions of candidates which may be formed during the interview. For fair and equal recruitment and selection practices, psychometric testing results should be discussed with the applicants, by providing feedback in a standardised manner. Feedback may be given through face-to-face interpretation sessions. Finally, organisations can ensure standardisation of tests by creating and maintaining a policy about distributing feedback to every person who undertook the test. This would be in line with best practice.

The Important Role of Stakeholders to Increase the Use of Psychometric Testing in Malta

Awareness can be spread by contacting local authorities having direct relations with employers, such as the Malta Employers’ Association, and the Department of Industrial and Employment Relations. In today’s competitive world, the success of organisations depends on the performance, attitude, behaviour and skills of employees (Carless 2009; KPMG 2018; Wolf and Jenkins 2006). As a result, and to improve local recruitment processes in hiring the right employees, more awareness and knowledge is definitely required. Thus, it is recommended that academic institutions such as MCAST, offer certifiable training programs for psychometric testing and analysis interpretation to persons working in the HR sector and students wanting to learn about psychometric testing, and students who are already studying to work in the HR sector.

Recommendations for Future Research

To further support the significance of this study and enhance awareness on the use of psychometric testing in Malta, it is recommended that a study on how psychometric testing is used in training and development, can be conducted. The fact that local organisations are currently operating in a fast-paced, strong economy, would be interesting to study and investigate how organisations can put psychometric testing to good use in training and development, and the extent to which these tests can add value, both to organisations and for candidates’ own personal development. Further research may also seek to understand the application of psychometric testing relevant to technological advancements, such as the emergence of artificial intelligence in HR. It would also provide more detail on the impact of AI on current psychometric tools and determine to which extent the evolution of AI technology is linked to the use of psychometric testing.

Conclusion

Unfortunately, psychometric testing is still a niche subject, as much of the knowledge and awareness on the matter are not available in Malta; and very few persons are actually certified and qualified to carry out psychometric testing. Therefore, sharing and educating relevant segments of the population, and local organisations about the benefits and technical aspects of psychometric testing, will further raise their profile and the benefits
of testing. Seminars and online campaigns can also be organised to promote relevant material and share experiences of using psychometric tests. The benefits of standardised tests go beyond those gained only within occupational settings. Psychometric tests can also determine the emotional and intellectual abilities of individuals for their own personal self-awareness. Individuals who have used these tests for their own personal knowledge may uncover information about their personality traits, IQ level, preferences, and career ambitions, therefore allowing them to gain deeper insights for their own self-awareness and personal growth.

References


