

How Valid is your Questionnaire?

Introduction

Nothing is more important than establishing the criterion validity of employment assessments. Unless the results from a psychometric test, or any other assessment method, correlate statistically with objective measures of job performance, no value is obtained from using them and it may even do harm to individuals.

The Study

In major co-validation research completed in 2010, Saville Assessment compared the validity of the most popular personality questionnaires, using a matched sample of over 300 test-takers who completed all the tests. Their results were correlated with external ratings of job competencies. This was done on a level playing field, using the same criteria, and mapping each questionnaire to the same set of 8 universal competencies. For the competency criteria, we used SHL's Great 8 factors (Kurtz and Bartram 2002):

Analysing and Interpreting

Supporting and Cooperating

Creating and Conceptualising

Adapting and Coping

Leading and Deciding

Organising and Executing

Interacting and Presenting

Enterprising and Performing

While evidence for the validity of personality questionnaires against specific job competencies is readily available, there has been a shortage of studies

correlating test results with overall job performance. This is a well-recognised quality of aptitude testing, for example.

The ultimate test of an assessment method is overall job performance, that's what delivers organisational productivity.

Because of this, we also obtained external ratings of Total Work Performance for each test-taker, forming a comprehensive overview of what each questionnaire is capable of.

The questionnaires in the major part of the study consisted of the Professional Styles and Focus Styles versions of Wave®, OPQ®32i, Hogan Personality Inventory, NEO-PI-R®, and 16PF®5.

Three shorter tests, Thomas International DiSC®, MBTI® and Hogan Development Survey, were also included in the research. As these have a smaller number of scales and due to the nature of their construction, it was more appropriate to correlate the results with external ratings of 4 broad competencies: Solving Problems, Influencing People, Adapting Approaches, and Delivering Results.

The Results

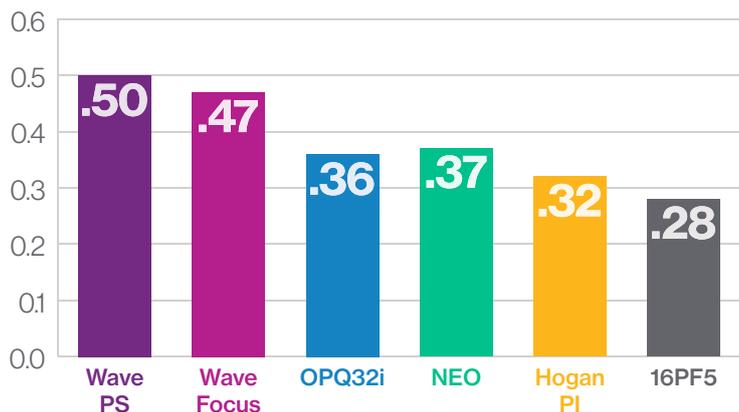
DiSC® – The study found little evidence of validity for DiSC®. Significantly, there were near zero correlations for the important area of Delivering Results. While Dominance did correlate with Influencing People, it correlated more with Problem Solving.

MBTI® – There was limited support for the validity of MBTI® scales. Some degree of support was found for questions about Extraversion accurately measuring a person's ability to influence people at work. Similarly, there was some evidence that people who were high on Judging were better at Delivering Results.

Hogan Development Survey – It is difficult to relate HDS scales to job performance. Out of 11 scales, we found little evidence that the HDS related positively or negatively to job performance. An exception was a positive correlation between Diligent and Delivering Results. Further research may be indicated using different criteria.

Wave® Professional Styles, Wave® Focus Styles, OPQ®32i, Hogan Personality Inventory, NEO-PI-R® and 16PF®5 - These are all regarded as mainstream multi-scale instruments. The following graphs show that they all have useful criterion validity, and are broadly as would be expected from available published research. The first graph shows the average correlation of each questionnaire with performance ratings on the Great 8 Competencies. The second graph outlines the results for ratings of overall job performance.

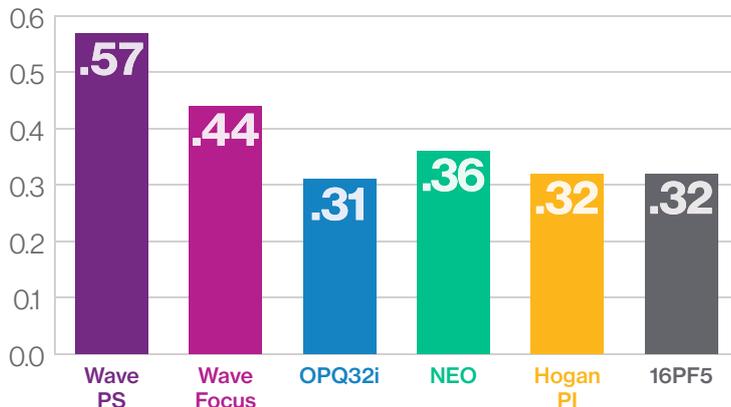
Competencies



Wave® Styles outperformed all other questionnaires, by 35% or more.

Wave® Styles again outperforms the other assessments, this time by more than 50% on overall job performance.

Total Work Performance



Validity Matters

The implications of these results are powerful. The organisational productivity gains achieved by valid assessment are in fact proportionate to the validity of the instrument used. **Moving from a test with a validity of 0.2 to one with a validity of 0.4 for selection can double the cost benefit.** The higher the validity, the more likely you will ensure the candidates selected are the highest performers. Even a seemingly small difference in validity has significant value. For example, going from a test with a validity of 0.3 to one of 0.4 represents a 33% increase, which can have a huge impact on an organisation’s productivity and return on the investment in good selection.

This study, one of the first to ever be conducted, shows that a move to Wave® Styles could be a strategically important decision.

For more details about this research or to speak with a consultant about the other unique features of the Wave® Styles call us on (02) 9954 0840 or email info@savilleassessment.com.au.

This research was led by Dr Peter Saville, BA, MPhil, Hon FBPsS, C.Psychol, FRSA, Visiting Professor at Kingston University. He was Chief Psychologist of NFER by the age of 27. He was co-founder with Roger Holdsworth and Chairman of SHL and created the OPQ®. In 2001 Peter was voted one of Britain’s top 10 psychologists. He was awarded the British Psychological Society’s Centenary Award for Distinguished Contributions to Professional Psychology. He has published over 300 papers, books, questionnaires, and keynote speeches. He has consulted to many of the FTSE and Fortune 100 companies as well as public bodies and the United Nations. Already a Fellow, the British Psychological Society awarded him an Honorary Fellowship in 2012. Their highest honour, and placing him in the ranks of Freud, Jung, Piaget, and Chomsky, the citation read “...setting the global gold standard for psychometric tests”