

## The Benefits of Employee Profiling – More Scientific Proof!

Do you ever question whether you are using the right assessment tools to find the right people? We are often asked to explain why the Prevue Assessments, that measure General Mental Ability, Interest/Motivation and the Big Five personality traits, are the best available measures of job fit to identify the best job applicants.

Although we provide documentation to support the validity, reliability and fairness of Prevue Assessments we can now back up our support information with a paper written by Jacob B. Hirsh) from the University of Toronto entitled “Choosing the Right Tools to Find the Right People”.

This succinct but detailed paper confirms that using measures of General Mental Ability and the Big Five personality traits to identify “the Right People” is supported by scientific research. The paper was recently printed In the September 2009 “The Psychologist” the publication of the British Psychological Society.

As we cannot make the case for the use of these types of assessments better than Mr. Hirsh, we have quoted liberally from Mr. Hirsch’s paper in this article. Mr. Hirsh first reviews the need to hire the right people by highlighting the scientific support for the conclusion that only a very small part of the population are highly productive. This is what is known as Price’s Law – the square root of the number of employees produce 50% of your productivity – For example, if you have 100 employees, the square root is 10 – so, 10 of your best workers will produce the same as the remaining 90!

Mr. Hirsh then goes on to advance the proposition that “to hire the right people you need to use the right tools” and he concludes that scientific research confirms the following:

1. “While selecting the best people is an important goal in itself, a parallel goal of no less importance is screening out undesirable candidates. The consequences of choosing the wrong people are substantial, as they lead to increased turnover rates, recruitment costs, and training expenses, along with

lost productivity and decreases in morale. The high costs associated with replacing poorly performing individuals make it all the more important to identify and select the best performers in the first place.”

2. “.... there are in fact many widespread selection techniques that provide little more than chance estimates of who will succeed in a given position. Some examples include education level, training and experience ratings, and academic achievement, which are all common selection methods that nonetheless provide minimal predictive utility. Other popular selection methods, such as unstructured interviews, vary considerably in their effectiveness and are far from optimal.”

3. “Why, then, are ineffective selection techniques so popular, when there is a large body of scientific literature detailing best practices for performance prediction? ... one of the most common reasons for not employing optimal selection methods is that many human resource practitioners and top managers simply do not believe in the real-world effectiveness of empirically validated selection tools. ... Despite the many studies that examine the utility and validity of different selection procedures, the results of this research have not fully permeated the awareness of managers and decision makers.”

4. “In order to take advantage of the large individual differences in productivity, it is first necessary to identify the top candidates. In this respect, it is clear that hiring the best people requires the use of the best selection procedures. Based on meta-analyses of numerous validation studies ... the most effective and efficient method for selecting the top performers involves psychometric testing for both cognitive ability and personality (Schmidt & Hunter, 1998).” The paper then examines these two domains in more depth:

**Cognitive ability:** “... also known as general mental ability, intelligence, or simply IQ, is one of the best predictors of performance across many different domains. Broadly speaking, it reflects an individual’s ability to plan, reason, process information, and control his or her behaviour. Some would argue that it is in fact the best-validated construct in all of psychology, as its ability to predict

performance has been repeatedly demonstrated in thousands of studies carried out across 100 years of research (Schmidt & Hunter, 2004).

Across all job categories, individual differences in cognitive ability account for approximately 25 per cent of the variability in performance. The general factor of cognitive ability predicts performance outcomes even better than aptitude tests claiming to assess the specific skills needed for a given job. If only one variable could be assessed to predict performance across multiple domains, cognitive ability would certainly be the most useful.

While there has been some concern that such tests are culturally biased, there are also non-verbal tests of cognitive ability that do not discriminate against respondents from different cultural and linguistic backgrounds.”

**Personality Factors:** “The second most important variable in performance prediction is personality: While researchers have long used a variety of trait dimensions to predict real-world outcomes, the field of performance prediction has benefited greatly from the five-factor model of personality.

The five-factor framework, or ‘Big Five’ model, is a taxonomy that describes personality differences across five broad dimensions of variation (Goldberg, 1993). The five dimensions are extraversion, agreeableness, conscientiousness, emotional stability, and openness. These dimensions demonstrate good cross-cultural reliability, are relatively stable across the lifetime, and incorporate the variance captured by most other personality taxonomies.

Conscientiousness, which describes individuals who are reliable, hard-working, and self-disciplined, is the best personality predictor of workplace performance and academic success. Conscientious individuals have a strong work ethic, and tend to be more effective at pursuing their goals. An individual who is low in conscientiousness will be more easily distracted, less organised, and less productive.

Following conscientiousness, the most important personality trait for predicting success across multiple domains is emotional stability. Individuals who score highly on this trait experience less negative emotion and generally handle stress better. In contrast, less emotionally stable individuals will have higher levels of chronic stress and anxiety. This trait is particularly important for predicting performance in highly demanding positions, and is also associated with increased health, job satisfaction, and lower rates of job burnout.

Certain positions can benefit from the examination of other traits as well. In particular, the outgoing, assertive, and talkative nature of extraverts gives them an advantage in domains that require extensive social interaction. Extraversion therefore appears to be a good predictor of success in sales and management positions.

Finally, Openness, is a good predictor of performance in domains requiring innovation and creativity.

In conclusion, Mr. Hirsh notes that “Across a broad number of domains, there are large individual differences in performance and productivity outcomes. In order to capitalise on these differences, however, it is necessary to use the most effective selection methods. Even small improvements in the predictive validity of selection processes can lead to substantial economic benefits.

A large body of research now indicates that measures of cognitive ability and personality are powerful and efficient tools for predicting performance. While some form of selection is inevitable for any competitive position, psychological assessment remains an invaluable tool for identifying the top performers and making an informed decision.”

*If you'd like a copy of Mr Hirsh's paper, email [rob@assess](mailto:rob@assess)*

*For more details on the Big 5 based Prevue and PeopleCLUES psychometric assessments - to help you avoid hiring a “horror story”, talk to Rob McKay or Brent Lawrence on +64 414 6030*