

The Use of Personality Tests for Selection

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Why use a personality test?

Personality tests are standardized tools that measure traits related to important workplace behaviors. They are a type of employment test that can be used for **selection** or **development** purposes.

Research shows that personality is an important predictor of job performance and, therefore, a valuable addition to a selection or succession testing program.

The use of personality tests for selection has dramatically increased over the past 20 years. **The demonstrated utility of personality assessment** and the convenience of online administration offers a quick, cost-effective strategy for testing applicants.

Do personality tests predict job performance?

Several research studies have demonstrated that personality tests can predict various workplace behaviors (Barrick and Mount, 1991; Tett, Jackson, and Rothstein, 1991; Rothstein and Goffin, 2006), such as:

- **Managerial performance**
- **Team communication**
- **Employee development**
- **Overall job performance**

What makes a good personality test?

There are numerous personality tests on the market. It can be difficult to identify which product is best suited to a given selection context. The following pages describe key features that should be present in any scientifically-validated personality test, such as:

1. **Test development information** on the theories, samples, and processes used to develop the test
2. **Reliability estimates** that demonstrate the test measures personality traits that are stable across time
3. **Validation studies** that support the use of the test for selection purposes

Personality Tests for Selection

Key Feature:

Test development information

Before purchasing a personality test it is important to become familiar with some basic information about how the test was developed. For example:

- **Why was it created?** Any scientific assessment should be based, in part, on an **empirically-supported theory**. Several theories and models of personality exist, the most popular of which is the Five-Factor Model (see Spotlight).
- **How was it created?** The sample that was used to develop the test is very important. Tests should be developed with large, diverse samples. The age, gender, and vocational composition of this test-sample should roughly match the composition of your applicants. The more similarity between these groups, the more easily you can compare your applicants' scores to the test-sample's scores. The test-sample's scores are also called **norms** and should be reported in the test's manual.
- **Who created it?** The development of a scientifically-validated personality test is a complex endeavor. It is highly recommended that tests be purchased from reputable organizations that employ **qualified test developers**. Look for those with formal training in advanced statistics and psychometric techniques.

Spotlight: The Five-Factor Model

The FFM describes five broad personality traits. They include:

Extraversion	Talkative, sociable, confident, assertive
Agreeableness	Compassionate, cooperative, even-tempered
Conscientiousness	Self-disciplined, organized, dependable
Emotional Stability (Neuroticism)	Secure, calm, composed, less emotionally reactive
Openness to Experience	Curious, creative, preference for novelty and variety

Researchers have found that the FFM tends to be stable across age, gender, and cultures. It has been used to study a wide variety of topics, some of which include: motivation, vocational interests, mental health, morality, and goal orientation.

In addition, each of these traits has been linked to important workplace behaviors, including performance, satisfaction, deviance, leadership, and workplace safety. The FFM offers a simple yet comprehensive framework for studying the influence of personality in the workplace.

Interested readers can find more information on the FFM here:

Hurtz, G.M. & Donovan, J.J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, 85, 869-879.

Mount, M.K., Barrick, M.R., & Stewart, G.L. (1998). Five-Factor Model of personality and performance in jobs involving interpersonal interactions. *Human Performance*, 11, 145-165.

Personality Tests for Selection

Key Feature:

Reliability

Research suggests that personality tests most effectively predict job performance when they reliably measure traits. A test is considered reliable when it meets the following criteria:

- **Measured traits are stable across time.** If a personality trait measured today is expected to predict work behaviors in the future, it is important that an applicant's level of the trait does not change over time. Reliable tests measure **traits**, which are stable across time, not **states**, which are more likely to change based on situational contexts.
- **Test scores do not change.** If an applicant's level of a trait is stable across time, then they should receive the same score on that trait each time they take the test. This is known as **test-retest reliability** and can be measured by test developers.
- **Applicants respond consistently to items within a scale.** An applicant who is high on the measured trait should respond in the similar way to all items measuring that trait; in other words choose "5" on a 1 to 5 rating scale for most items. Similarly, an applicant who is low on the trait should respond "1" to all or most items. If an applicant responds high to some items and low to others this can be problematic. This is referred to as **internal consistency reliability**.

Personality Tests for Selection

Key Feature: Validation

The usefulness of a personality test for personnel selection will depend on how well the test predicts job-relevant outcomes. The following steps may help to maximize the predictive ability of a test:

- **Choose an accurate test.** There are several sources of evidence that can be used to support the accuracy or validity of a test. One of the most critical in a selection context is **criterion validity**. Criterion validity describes the predictive power of a test. When using a test for selection, the test should be able to predict outcomes that are relevant for job performance.
- **Measure traits that are relevant to the job.** Studies show that tests are better predictors of workplace behaviors when they only include those traits that are relevant to successful performance on the job (e.g., measure Extraversion for positions that require giving engaging and entertaining presentations). Don't measure everything and hope for high scores on everything. High scores are not always better. For example, you may not need an extraverted computer programmer. In fact, this trait could be a detriment for this position. Be sure you can justify why and how the traits are related to the job.

Other things to consider....

Further properties that may impact effectiveness of a personality test include:

1. **Incremental validity** to establish a test's ability to provide unique prediction over other measures
2. **Faking** by candidates, which may contaminate test results
3. **Adverse impact** that may result in the differential performance of protected groups

1: Incremental Validity

When determining which tests to include in a selection procedure it is important to know that each test is a significant predictor of desired workplace behaviors. If you include multiple tests, each test should have **unique prediction**.

A test that is able to enhance prediction, over and above other selection techniques, is said to have **incremental validity**. If a test does not offer incremental prediction over existing procedures, then the test is redundant; including it does not give you any new information about an applicant.

For example, the questions you ask in an interview may tell you whether or not an applicant has the necessary skills and experience to successfully do the job, whereas a personality test may give you information on the applicant's character and their potential to be an influential leader in your organization.

Personality tests and incremental prediction

Empirical studies have found that personality tests can add incremental prediction over common personnel selection techniques (Goffin, Rothstein, and Johnston, 1996; Mc Manus and Kelly, 1999; Schmidt and Hunter, 1998), including:

- **Unstructured interviews**
- **Assessment center evaluations**
- **Cognitive ability**

These studies help to support the use of personality testing in the context of selection. In addition, research demonstrates that personality tests are most effective when used in conjunction with other selection procedures.

2: Faking

A challenge with using personality tests for selection purposes is the tendency for applicants to distort their responses in an effort to present themselves as more desirable. This is known as **faking** in the research literature.

Some researchers estimate that as many as **30-50%** of applicants fake on pre-employment tests (Griffith, Chmieloski, and Yoshita, 2007).

Although this statistic might seem troubling, researchers have developed a number of techniques to minimize the impact of faking on selection procedures.

How to reduce faking

- **Avoid** administering items that have obvious “right” or “wrong” answers.
- Administer “**social desirability**” scales that detect whether applicants are presenting themselves in an overly positive manner. Scores on these scales can be used to perform statistical corrections that minimize the impact of faking.
- Consider using tests that employ a forced-choice scale. Ask applicants to select between two or three equally desirable options. This will let you compare applicants’ scores on a trait relative to other traits, without being contaminated by desirability.
- Include instructions which state that applicants’ responses will be **verified with additional tests**.
- Add real-time **warning messages** that alert applicants when they fail a specified number of faking checks. Then, allow them the opportunity to re-take the failed items.

3: Adverse Impact

Studies have found that personality tests demonstrate **little or no adverse impact** (Hough and Oswald, 2000), whereas cognitive ability tests can.

Adverse impact provides evidence that the selection procedures used by an organization discriminate against members of a protected group. This includes discrimination based on race, color, religion, sex, national origin, age, disability, or marital status.

If a selection procedure is found to discriminate against members of a protected group, the employer must show that that the test is a "**reasonable and bona fide**" method of assessing an applicant's ability to successfully do the job.

Best practices to avoid adverse impact

- **Administer tests to all applicants**, without regard to race, color, national origin, sex, religion, age, or disability
- Only use tests that have been **properly validated** for the intended position
- If a procedure disproportionately favors one group over another, **search for an alternative test** that predicts the outcome as well as the biased test, but that does not exclude the protected group
- **Review your selection procedures** and familiarize yourself with updated validation studies
- Use tests correctly to maximize their effectiveness – **consult with a qualified professional** before implementing new selection procedures

Final thoughts...

Personality tests can be a powerful addition to selection procedures. They:

- Are relatively **quick and simple** to administer
- Can provide **incremental prediction** of desired workplace behaviors over conventional pre-employment testing techniques
- Have been shown to result in **little to no adverse impact** when compared to other popular assessments, such as cognitive ability tests

How SIGMA Can Help

Our Philosophy

We believe that a rigorous, statistically-oriented approach to test development is critically important to the construction of high quality assessments. Through the integration of classical testing procedures and advanced psychometric techniques, SIGMA Assessment Systems offers clients strategic, yet simplified assessments that are supported by science.

Our Approach

We employ effective techniques and strategies to facilitate test development. Our process involves:

1. **Defining** relevant traits in consultation with clients and the most up-to-date literature.
2. **Developing** original item content with our team of qualified test creators.
3. **Collecting** data using large-scale heterogeneous samples.
4. **Refining** item content based on rigorous statistical procedures.
5. **Continually validating** assessments across various industries and samples.

Contact Us

For more information on the various personality tests we offer, please contact us.

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