



# **Pre-Employment Testing: An Overview**

*Best Practices for Implementing and Maintaining an Employee Testing Program*

Criteria Corporation  
10474 Santa Monica Blvd., Suite 302  
Los Angeles, CA 90025  
[www.criteriacorp.com](http://www.criteriacorp.com)  
1-877-909-TEST

This paper describes the role that pre-employment testing can play in a company's hiring process, including the benefits of employee testing and recommendations for best practices.

## Part I: The Benefits of Pre-Employment Testing

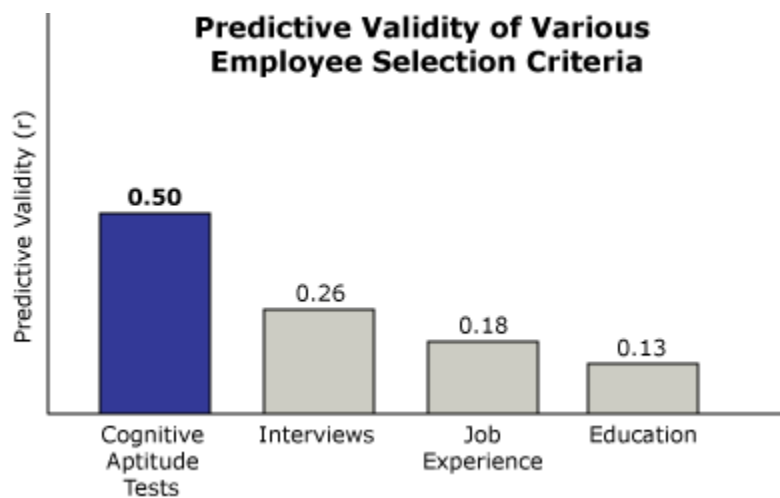
### How can employee testing help a company's hiring process?

Professionally developed and properly validated employment tests can help a company's hiring process by increasing the likelihood of hiring candidates who will perform well on the job. Pre-employment testing can help ensure alignment between the employee selection process and desired business outcomes such as lower turnover, increased sales, and higher customer satisfaction. The benefits a company may realize by implementing an effective employee testing solution include:

1. Higher productivity
2. Increased employee retention
3. Reduction in costs associated with turnover (e.g., hiring and training costs)
4. Increasing the defensibility of the hiring process by using objective data

### Why does pre-employment testing work?

When properly implemented, a pre-employment testing program can lead to higher productivity, because test results can be accurate predictors of future job performance. Tests are among the most accurate means of predicting performance because they are an objective means of determining the extent to which a candidate has the capacity to perform well at a given job. Research has shown that cognitive aptitude tests, for example, are much more accurate predictors of job performance than are other widely used employee selection techniques. For example, a comprehensive review of peer-reviewed studies of the predictive validity of various selection techniques concluded that aptitude tests are twice as predictive as job interviews, three times as predictive as experience, and four times as predictive as education level.



Source: Heneman and Judge, 4th ed. Ch 9

One reason that aptitude tests are such accurate predictors of job performance is that the qualities these tests measure – problem solving, the ability to learn and apply new information, critical thinking, and reasoning – are abilities that are important to a wide variety of jobs. Aptitude tests will be most highly predictive of performance for those jobs which call for higher levels of problem-solving and critical thinking abilities.

### **How can employee testing impact a company's bottom line?**

Because pre-employment tests are among the most accurate predictors of future job performance, incorporating employment tests into an employee selection process can lead to more successful and efficient decisions. Improving the success rate of your selection methodology will lead to higher productivity, better employee retention, and a reduction of the costs associated with turnover.

For example, consider the case of a clothing retailer that chose HireSelect™, Criteria Corp's testing solution. This company wished to improve the productivity (as measured by hourly sales volume) of its sales associates. By examining the relationship between test scores and average sales per hour, the company was able to determine that employees who received high scores on the test sold, on average, \$106.35 of goods per hour, while those who received low test scores sold only \$83.27 per hour. Incorporating pre-employment tests into its selection process resulted in a 28% increase in salesperson productivity. When correlations between test results and various desirable business outcomes – including productivity, retention rates, customer satisfaction ratings, and training expenses – can be linked to each other in a data-driven way, it is simple to demonstrate the increased Return on Investment (ROI) of employee testing.

## **Part II: Legal Defensibility**

### **Enhancing legal defensibility and objectivity in employee selection**

Besides helping a company realize improvements in various business outcomes, pre-employment testing can also help enhance the objectivity, equitability, and legal defensibility of an organization's hiring process. All organizations should strive to utilize equitable and legally compliant employee selection and promotion practices. Pre-employment tests, like other selection methodologies utilized by an employer, are governed by federal guidelines intended to ensure equitable and non-discriminatory hiring practices. Because of this, companies believe that utilizing employee testing increases a company's legal exposure. While employers should be aware of the legal compliance issues surrounding employment testing (see below), it is important to realize that employment testing can actually augment legal defensibility by enhancing the objectivity of a company's employee selection procedures. Organizations that implement testing programs in accordance with legal guidelines are therefore better prepared to defend these procedures should a legal challenge to their hiring practices ever arise.

### **Legal defensibility of selection procedures, employment tests**

Like other elements of a company's hiring process, pre-employment testing is subject to a series of federal laws governing hiring practices. The most important legal standards related to testing are contained in the Uniform Guidelines on Employee Selection Procedures (UGESP). The UGESP provides interpretive guidelines for federal agencies charged with enforcing the Civil Rights Act and is designed to ensure equitability and prevent unfair discrimination in hiring. It

also helps companies hire employees who will be a good fit for their organization. The unifying concept behind the UGESP and legal compliance is that **companies should only use selection techniques that are job-related**. The UGESP explicitly recognizes that employers may hire and promote employees on the basis of tests, so long as those tests are job-related.

### **So when is a selection procedure unlawfully discriminatory?**

Legal challenges to companies hiring practices are rare but when they do occur, they are often connected to the issue of "adverse impact." Understanding the concept of adverse impact is central to understanding all of the issues surrounding legal defensibility in testing. Adverse impact is said to occur when members of a protected group or minority (e.g., a particular race) receive unfavorable employment decisions (e.g., not being hired) more often than another nonminority group.

Aptitude testing is an example of a selection procedure that can have adverse impact, because different population groups tend to have different score averages on aptitude tests. Personality tests, on the other hand, do not generally result in adverse impact.

*It is important to note that using a test that results in adverse impact is legal if it is job-related and consistent with business necessity.* Most of the best practices for pre-employment testing described in the remainder of this paper are intended to provide details about how companies can ensure that the tests they use are job-related. In addition to ensuring a testing program is legally compliant, following the rule of job-relatedness will allow a company to be confident that its testing program will be effective, because the tests will be measuring job-related abilities, skills, and traits.

## **Part III: Best Practices for Implementing an Employee Testing Program**

This section of this paper outlines best practices that will help ensure that a company's employee testing program is both legally defensible and effective in delivering desired business outcomes.

### **Choosing the right tests: Job requirements analysis**

Implementing poorly designed assessments can do much more harm than good and in order to realize the benefits of employee testing, it is important to use professionally developed and properly validated employment tests. Tests are an effective screening tool only if they measure the knowledge, skills, and abilities (sometimes called KSAs by industrial/organizational psychologists) that will be required for a particular job. In other words—to be a valid predictor of performance, a test must measure **job-related competencies and abilities**.

Since the most important part of setting up a valid testing program is to use tests that measure KSAs that are **job-related**, the first step to ensuring validity is to know what KSAs are required for a certain job. This is why a common best practice in implementing an employee-testing program is to do a **Job Requirements Analysis (JRA)** for each position. Once you have determined the work activities, competencies, skills, and abilities that are required for successful job performance for a given position, you can select tests that measure those specific competencies. Criteria Corporation's HireSelect™ system includes an interactive Job Profiler tool that helps ensure appropriate test selection by matching a job's required skills, abilities, and

work activities to tests that measure those same competencies. The Job Profiler makes it easy for an HR manager or supervisor to perform a Job Requirements Analysis. Additionally this tool can generate an "express" Job Requirements Analysis by utilizing the U.S. Department of Labor's O\*Net database. Other ways to conduct a JRA would be to survey job experts, supervisors, and existing employees to describe the job requirements and work activities involved in a particular job and then to analyze that data to identify the most important job competencies.

### **Establishing validity of tests: Confirm job relatedness of tests**

Once a company has performed a Job Requirements Analysis and determined which test or tests should be used to help select candidates for a given position, the organization should seek to confirm the appropriateness of its test selection by establishing further validity evidence for its testing program. What does it mean to say a testing program has validity? Ultimately, a pre-employment testing program has predictive validity if there is a demonstrable relationship between test results and job performance.

There are many types of validity evidence. Criteria Corporation and other testing vendors whose tests have been professionally developed can provide evidence of both *content validity* and *validity transportability*. Content validity refers to the extent to which a test measures capabilities or skills that are required for a certain job. Validity transportability evidence refers to evidence which a testing provider such as Criteria has accumulated through using a given test for various jobs at different companies. For example, many of Criteria's customers use the same battery of tests to help select customer service representatives; therefore, the predictive validity of these cases could be relevant to other customers who wish to screen for similar positions.

#### **Employment Test Validity Measures**

**Content validity:** The extent to which a test measures capabilities or skills required by a certain job.

**Validity transportability:** The evidence a testing provider has collected by using a test for various jobs at different companies.

**Criterion-related validity:** The relationship between test scores and a desired business metric such as average sales per hour.

Ultimately, however, the most powerful way that a company can demonstrate the validity of its testing program is to establish *criterion-related validity*. Criterion-related validity (also called concrete validity because it refers to a test's correlation with concrete outcomes) refers to the relationship between two variables, in this case between test scores and a desired business metric. Typically, the business metric would be a measure of employee performance (e.g., supervisor's performance ratings or average sales per hour) or organization-wide business outcomes (such as employee retention rates). The relationship between test performance and job performance can be quantified by a correlation coefficient (ranging from -1.0 to +1.0) which serves as a measure of the extent to which test scores predict future job performance. One

drawback to this approach is that it requires large sample sizes for each position so it is difficult for companies that have only a few existing employees in a given position.

### **Best practices for implementing tests**

Test administration: In order that a pre-employment testing program be effective and fair, it needs to be consistently applied. Companies should strive to ensure that tests are administered to candidates under uniform conditions in a supervised or "semi-proctored" setting to ensure test integrity. Computer-based testing, such as that offered through HireSelect™, is best administered on a dedicated workstation for use by job candidates. Ideally the workstation should be situated in a location free from distraction, so all candidates can take the tests in a quiet, stress-free environment. This is especially important for timed tests such as aptitude and skills tests.

Use of test scores: It is recommended that test scores be only one element of a comprehensive candidate evaluation process. Although properly implemented employment testing has been shown to be one of the most highly predictive selection procedures available to companies, test results should be evaluated within the context of all the selection criteria used by an organization. Any evaluative measure used for employee selection (e.g., references, resumes, or interviews) should be designed in such a way as to conform to relevant professional standards. When used in conjunction with these other measures, pre-employment tests will yield invaluable data about a candidate's ability to perform well on the job.