

# Test Validation Introduction

Testing for selection purposes were first used by the ancient Chinese. Modern practice of scientifically evaluating the validity of selection assessments did not begin until the early 1900s. As selection research proliferated throughout the 20<sup>th</sup> century, several key developments influenced test validation. The following points are worth noting:

1. The *Civil Rights Act* of 1964 outlined the need for fair selection practices (*amended Act in Title VII*)
2. This established the *Equal Employment Opportunity Commission (EEOC)*.
3. The *EEOC* and other enforcement agencies issued the *Uniform Guidelines on Employee Selection Procedures* in 1978.
4. The *Uniform Guidelines* remain the defining legal guidelines in personnel selection to the present day.
5. The *Uniform Guidelines* served to solidify the fundamental role of test validation in personnel selection from a legal perspective.
6. The *Society for Industrial and Organizational Psychology (SIOP)* published the first edition of the *Principles for the Validation and Use of Personnel Selection Procedures* in 1975 in order to outline best professional practices in this area.
7. The *SIOP* published the fourth edition of the *Principles* in 2003, which now serves as the definitive set of professional guidelines in this area.

## General Validation FAQs

### What is *Reliability* for HireLabs?

HireLabs approaches the reliability of a test from the context of the extent to which the variation in test scores is due to true differences between people on the characteristic being measured (e.g. abstract reasoning ability, extraversion, etc.) or to random measurement error

The fact that a test is reliable only means that the test is consistently measuring a construct, it does not indicate *what* construct the test is consistently measuring. The concept of validity addresses this issue. As Kline (1993) notes “a test is said to be valid if it measures what it claims to measure”.

### How is *Reliability* assessed at HireLabs?

At HireLabs, *Reliability* is generally assessed using one of two different methods; one assesses the stability of the test’s scores over time, and the other assesses the internal consistency, or uniformity, of the test’s items.

It would be important to note that a test’s reliability sets an upper bound for its validity. That is to say, a test cannot be more valid than it is reliable because if it is not consistently measuring a construct it cannot be consistently measuring *the* construct it was developed to assess. Therefore, when evaluating the psychometric properties of a test, its reliability is usually assessed before addressing the question of its validity.

### What is the HireLabs *Test-Retest Reliability*?

This method for assessing a test’s reliability at HireLabs involves determining the extent to which a group of people obtain similar scores on the test when it is administered at two points in time

### What is the HireLabs *Internal Consistency Reliability*?

Also known as uniformity of items, this method for assessing a test’s reliability at HireLabs involves determining the extent to which, if people score well on one item, they also score well on the other test items

### Why do pre-employment tests need to be validated?

In 1978, the *Equal Employment Opportunities Commission (EEOC)* created guidelines to ensure that the knowledge gained from testing is applied with impartiality to protect minority applicants from discriminatory employment procedures. Therefore, HireLabs adheres to these guidelines to ensure that the tests that you, the customer, administer are fair and balanced.

### What’s the best method of validation?

The *Equal Employment Opportunities Commission (EEOC)* guidelines do not state that one method is better than another; the method used must fit the needs of the business or organization.

### What are the validation methods set forth by the *Equal Employment Opportunities Commission (EEOC)*?

There are three means of validation set forth by the *EEOC*:

- Construct
- Criterion (Concurrent Predictive)
- Content

### What does **Construct Validity** mean at HireLabs?

The term construct is a technical term for personality traits like intelligence and creativity. Construct validity is demonstrated if a test measures traits that have been found to influence successful performance of a job. That is, construct validity studies such as these demonstrate the “*identification of construct(s) believed to underlie successful performance or those critical or important work behaviors in the job or jobs in question*”<sup>[1]</sup> and their manifestations in the applicant.

An example of a construct, in this context, may be the ability to clearly communicate, such as communicate goals, project parameters or motivate. Such a test would be suitable to administer to an applicant for a project management position.

---

*HireLabs ProfileSense™ assessments participates in construct related validity studies as and when required to improve assessment validity.*

---

### What does **Criterion Validity** mean at HireLabs?

If data demonstrates that a test is significantly correlated with a vital measure of job performance, the test is said to demonstrate criterion validity. If all the current managers that scored highly on a selected test to measure project management skills completed their projects on time and under-budget, the test would demonstrate criterion validity.

A criterion related test may be developed for a [sales position](#), if, for example, it is determined through the HireLabs OccupationDNA that the position description could include monitoring, critical thinking, and persuasion.

---

*Criterion-related studies of validity must document that the empirical data gained by employment selection procedures are “predictive of, or significantly correlated with important elements of job performance”<sup>[2]</sup>*

---

*Because each job description for each organization is unique, rather than developing tests for each position that you may have, HireLabs ProfileSense™ crafts objective assessments based on it's ODNA talent profiling methodology that will aim to target specific desired skills. Of course, with the [HireLabs ODNA](#), YOU get to pick and chose those skills that you would like to test. Criterion related validity does not fit the type of information gained from HireLabs testing and, hence, is not applied to HireLabs assessments.*

*Clients may, however, request HireLabs for help with specific validation of critical-to-job-success information based on their established norms and benchmarks.*

---

### What does **Content Validity** mean at HireLabs?

Content validity is demonstrated if the questions that make up an assessment are representative of content that is required to perform a particular activity or task. A test made up of algebra questions given to an applicant for a math teacher's position would demonstrate content validity.

*It is important to note that content validity is situational.* While the internal content of a test may be valid, test validity may be compromised if administered under adverse conditions.

---

*HireLabs is committed to adherence to [EEOC Guidelines](#). It is the responsibility of the test administrator to ensure external validity. Please refer to page 5 below for more information on customer responsibility in validation.*

---

### When does HireLabs allow the use of non-validated selection procedures? (*Events where validation studies can be overlooked*)

Where validity studies *cannot* or *need not* be performed, in such circumstances, the test administrator should utilize selection procedures which are as job related as possible and which will minimize or eliminate adverse impact.



**How does HireLabs accomplish the *Employment Test Validation Process*?**

The *Employment Test Validation Process* is usually accomplished through the use of a *Rating Committee*. The *Rating Committee*'s role is to determine if a pre-employment test being used as job selection criteria is a valid measure of the knowledge, skills, or abilities (KSAs) and that it is being used to measure without creating an *adverse impact* against any protected group in the candidate population.

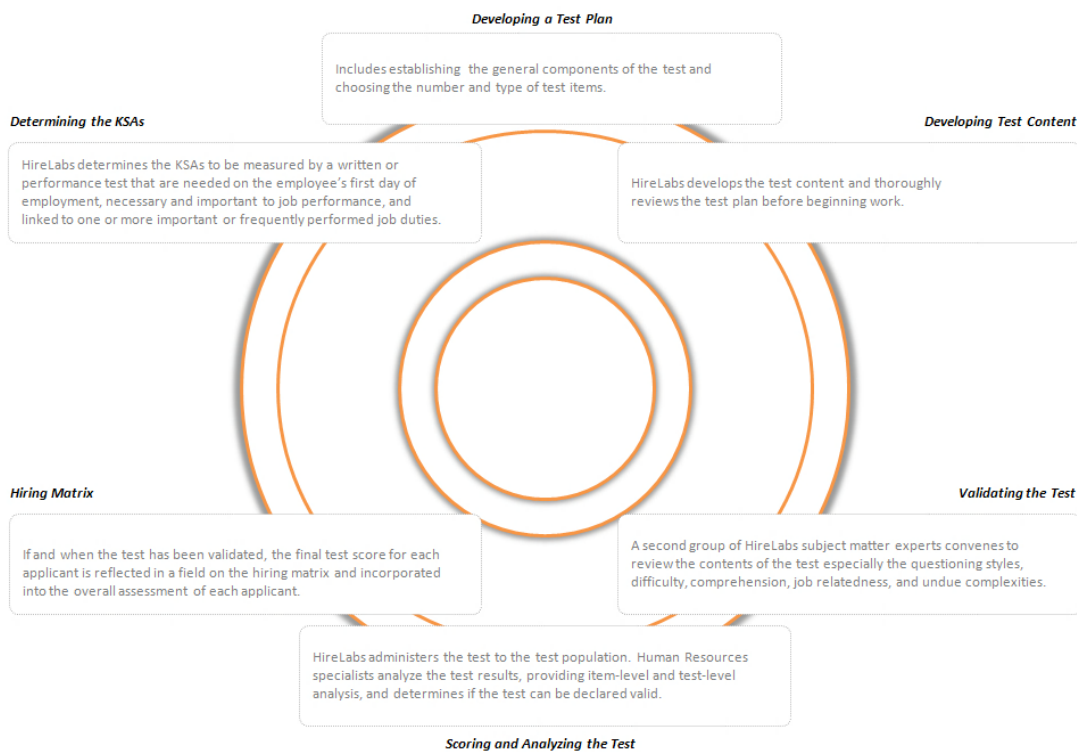
**Who is involved in the *Rating Committee*?**

Rating Committees are composed of *Subject Matter Experts* experienced and familiar with the job for which a pre-employment test is to be validated. The *Test Validation Steps* are observed and the meetings and findings are documented.

**What do the *Test Validation Steps* involve?**

Test Validation Steps involve the following:

1. *Determining the KSAs* – HireLabs determines the KSAs to be measured by a written or performance test that are needed on the employee's first day of employment, necessary and important to job performance, and linked to one or more important or frequently performed job duties.
2. *Developing a Test Plan for Measuring the Selected KSAs* – this includes establishing the general components of the test and choosing the number and type of test items.
3. *Developing Test Content* – HireLabs develops the test content and thoroughly reviews the test plan before beginning work.
4. *Validating the Test* – A second group of HireLabs subject matter experts convenes to review the contents of the test especially the questioning styles, difficulty, comprehension, job-relatedness, and undue complexities.
5. *Scoring and Analyzing the Test* – HireLabs administers the test to the test population. Human Resources specialists analyze the test results, providing item-level and test-level analysis, and determines if the test can be declared valid.
6. If and when the test has been validated, the final test score for each applicant is reflected in a field on the hiring matrix and incorporated into the overall assessment of each applicant.



# Validation at HireLabs Inc.

## Hirelabs test development

HireLabs was born out of Stanford University while researching talent distribution and workforce behavior concepts in California. Our background in the field of science and our access to years of information regarding knowledge-driven talent helped us establish a strong understanding of the needs of today's competitive and highly focused industries.

HireLabs has been employing this understanding towards serving the needs of our customers through developing tests that are aimed at procuring the best and most ideal talent to effect a significant increase in knowledgeable and competent workforce across industries. Our success in crossing the boundaries of industries through drawing on *Subject Matter Experts*, have resulted in a myriad of skills assessments tailored to fulfill your employment decision-making needs.

Most importantly, we have developed our test validation framework in such a manner that we are equipped to provide tests in multiple languages. Active corporate cultural factors are also taken into account with our validation process.

Our tests target such areas as computer-oriented knowledge (from software to databases), call center, accounting and finance, office skills, management and industrial, among others.

HireLabs tests are **mostly** content validated and focus on real-life scenarios and knowledge-based actions to assess the skill level of a particular skill set. For example, HireLabs currently has many tests applicable for the Management professional. Unlike other assessments in the market, HireLabs offers you several tests that cover the diversity of skills for your particular hiring needs.

HireLabs maintains an active and flexible approach to customer requests. This means that you, our customers, have the leverage to pick and choose whether an applicant has the right demeanor or personality (*construct validity*) to be a Manager, for example.

---

*The revolutionary changes in the nature of industries and economies requires in-depth and hands-on approach to Talent Competency modeling and assessment. These competencies and assessments MUST compliment cross-boundaries work-methodologies, not only in the established business management models of present, but also in the soon-to-come cloud business formations.*

*To keep abreast with the rapid and dynamic changes in occupational demands and strategic HCM strategies in developing, assessing, and maintaining required talent competencies, HireLabs consistently uses ongoing client feedback from around the world to continuously improve our tests, in order to reflect adaptation to the (very often) critical changes across roles, disciplines, and industries.*

---

# FAQs

## What is the first step of client compliance?

HireLabs expects that the test administrator only administers assessments that test skills that will be employed on the job. For example, do not administer a publishing platform test to someone that will not be working on publishing tasks and activities. By conducting a study on the skills required for each position (JAQ, PAQ, etc.), you will gain greater knowledge of your applicants' abilities as well as ensure that your testing is in compliance with the [EEOC Guidelines](#).

## What is the next step of client compliance?

Review the content of each test before administering. The content of the test must fit the skills required for the position.

## What does HireLabs recommend in case the test content is not job-related?

If, upon review, you find that the content falls outside of the core responsibilities of the job, reassess your initial choice of tests, or edit\* existing ProfileSense™ tests to craft the perfect assessment to meet your needs.

\*Call customer services to get help with editing tests

## What HireLabs expects the clients' responsibilities to be in maintaining Content Validity?

Content validity is situational. While HireLabs is committed to ensuring best practices, it is also the responsibility of the test administrator to ensure external validity. Internal content of a test may be valid, but can become invalid if administered improperly. *Test administrators are responsible to conduct any testing in compliance with the [EEOC Guidelines](#).*

## What else must the customer comply with?

Review the skills that are job applicable and which you would like to test.

## What if the skill being tested can be taught on the job?

The [EEOC Guidelines](#) specifically state that a pre-employment test should **NOT** cover skills that conceivably could be learned in a brief on-the-job orientation.

## Can HireLabs tests be used to establish Cutoff Rates?

The HireLabs validation methodology works in participation with our customer's business outcomes needs. HireLabs experts will define common levels of proficiency in accordance with the customer's established performance and situational concerns.

## How can data provided by HireLabs test results help?

Based on the data provided by HireLabs's test results, the test administrator should be able to interpret the skill level of the test taker and have a great basis for conducting further analysis or validation studies.

## Does a low score in any of the tests reflect a test taker's failure in the test?

No. An important item to remember when interpreting test scores is that HireLabs's scoring methodologies are different from those employed in academic institutions or certifications. For example, a 49% score does **NOT** reflect *failure*. Rather, it reflects the percentage of questions within a skill level, skill type, and task that the test taker answered successfully.

## How can the tests be maximized for more accurate data?

ProfileSense™ tests are created to provide well balanced tests; if the position does not require all of the skills, or does not require advanced knowledge, that the test included, a seemingly 'low score' may be acceptable. Taking the time to edit\* your selected tests to the position's needs will result in more accurate data and higher scores.

\*Call customer services to get help with editing tests

If you have any questions regarding score interpretation or test validation at your end, please feel free to contact HireLabs at [support@hirelabs.com](mailto:support@hirelabs.com). We will be happy to discuss at length those procedures that are conducted to ensure content validity as well as your responsibilities towards [EEOC compliance](#).

---

*HireLabs is also always open to suggestions for test content. If you have an idea for a test title that we do not currently have available, please let us know. We'd love to hear your ideas!*

*The majority of our tests are developed in direct response to our customers' suggestions! If you are also interested in other types of assessments, please contact us, as HireLabs may have other pre-screening assessments to compliment your hiring process.*

---

**What is the HireLabs content mission?**

HireLabs is committed to creating tests that adhere to the standards set forth by the [EEOC](#). HireLabs subject matter experts ensure that tests are non-biased and meaningful, and are appropriate and useful to our customers.

**What content methodology is reflected at HireLabs?**

For a skills test to be valid, it must contain content that reflects a representative sample of the target skill. To that end, we work with some of the best, well-known and respected experts in each field and rely upon their expertise in determining our test content.

**How do *Subject Matter Experts* add value to HireLabs' internal test development?**

The industry experts have demonstrable and highly specialized knowledge in the subject matter and are best equipped to determine those particular tasks that will demonstrate the overall skill level of the test taker. As well as composing the test with these issues in mind, the *Subject Matter Expert* utilizes their proprietary tools to justify an item's inclusion in the test and clarifies the particular task addressed by the question in relation to the overall skill tested.

**Does HireLabs involve external evaluators?**

In order to ensure that the content developed is representative, when necessary, we enlist the help of additional *Subject Matter Experts* to review the contents of the test as well as to make suggestions for inclusions that may have been overlooked.

**What happens post-SME content analysis?**

Once the test has gone through this process, our internal validation team examines the test for *bias* and *balance* in order to ensure fairness. While examining the test, the validation team employs the *EEOC Guidelines*, assuring each test's adherence and documenting any deviations.

**What are the issues of bias addressed in the EEOC Guidelines?**

The validation team at HireLabs examines each question within each test for bias. For each question, the following factors are considered:

1. Is there any language within the question that excludes any member or segment of the population?
  2. Is the language of the question slanted toward any member or segment of the population?
  3. Will the question result in an adverse impact for any member or segment of the population?
  4. Does the methodology employed by the question lean toward a biased benefiting of any member or segment of the population?
  5. Does the methodology employed by the question lean toward adversely impacting any member or segment of the population?
- If any of these questions are answered in the affirmative, the question is either reworked or pulled from the test.*

HireLabs also considers the test at large:

6. Will the test result in an adverse impact to any member or segment of the population?
  7. Will the test result in a biased benefiting of any member or segment of the population?
- If either of these questions is answered in the affirmative, the test is reworked or rewritten.*

**What are the issues of balance in the EEOC Guidelines?**

Each of the test questions is assigned a skill level; basic, intermediate or advanced. Our validation team goes to great lengths to determine that the skill level assigned to each question is accurate, utilizing the aforementioned SME's proprietary tools, as well as the reviewers' insights.

**What is the skill-level distribution for HireLabs tests?**

The validation team also evaluates the percentages of levels, assuring that the test is composed of 80% basic and intermediate level questions and 20% advanced. This process results in tests that are balanced, yielding the opportunity for test takers to reveal their level of knowledge and preventing a too difficult test from resulting in skewed low scores that are not useful to the customer, nor test taker.



## Feedback to Candidates

HireLabs regards the ethical requirements of testing very seriously, including timely feedback to candidates.

Included as part of feedback is providing appropriate information to candidates prior to assessment; obtaining their informed consent to the assessment process; adhering to rigorous procedures and protocols for test administration; providing candidates with feedback on their results; and ensuring that assessment information is used appropriately in selection decision-making.

---

*It is the responsibility of clients to provide feedback to candidates where the system does not provide direct reporting to a candidate after completion of their assessments.*

---

## Conclusion of Internal Content Validity

HireLabs ensures that all of its test content adheres to the [EEOC Guidelines](#) of 1978. Our strong commitment enables you, the customer, to feel confident that the tests that you receive from HireLabs are internally valid.

HireLabs is committed to internal test validity. It is the responsibility of the test administrator to ensure external validity.

*Please refer to p.5 above for more information on customer responsibility in validation.*

w w w . h i r e l a b s . c o m



+1.650.492.5007 U.S

+1.650.492.5088 International



[support@hirelabs.com](mailto:support@hirelabs.com)

[www.hirelabs.com](http://www.hirelabs.com)

HireLabs Inc. is an assessment company. We provide specialized technologies to leverage organizational Human Capital Management capabilities. Our iHR™ system is based on our proprietary ODNA™ model. The HireLabs Sense™ System forms the core of our SaaS offering.

We operate globally through our satellite offices in four regions covering Europe, Asia, U.S and the Pan-Asian Pacific and a trusted international network of licensed distributor operations.

1. Ibid. Section 1607.14, pg. 213. [29CFR1607.14]

2. EEOC Code of Federal Regulations. Title 29: Volume 4, Section 1607.5, pg. 204, Revised July 1, 2001. [29CFR1607.5]