

VALIDATION SUMMARY



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INTRODUCTION



The most crucial concept underlying the use of pre-employment assessments is validity. The question is never just "Is this test valid?" Rather, the question is, "Is this test valid for this intended purpose; does it support the decisions that are going to be made?"

What is validity? Validity refers to the appropriateness, meaningfulness, and usefulness of the inferences that can be drawn from the evaluation, consideration and application of test scores in employment decisions. Validity measures how appropriate a test is for a specific purpose. A test may be considered valid for one use and invalid for another. Validity is the degree to which evidence and theory support specific interpretations and uses of test scores.

Why do pre-employment tests need to be validated? In 1978, the Equal Employment Opportunities Commission (EEOC) created guidelines in order to protect minority applicants from discriminatory employment procedures as well as to provide uniform standards for the use of testing in such areas as hiring, promotion, demotion, membership, licensing and certification.^[1] TBS is committed to applying and upholding these guidelines to ensure that the tests that you administer are developed in compliance with the EEOC Guidelines.

This report addresses the standards put forth by the EEOC as well as the means by which those standards are upheld and fulfilled by TBS's particular methodologies of compliance.

TYPES OF VALIDATION

The EEOC, in Title 29, Volume 4 of the Code of Federal Regulations provided for three means by which validation may be conducted in compliance with and enforcement of Title VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972.^[2] These means, or studies, are hereafter referred to as Criterion Validation, Construct Validation and Content Validation. The EEOC provided these various means in large part due to the diversity of testing used in today's market. The guidelines do not, therefore, state whether one means of validation is better than another. Rather the guidelines provide these differing methodologies in order to fit the myriad of testing strategies.

CRITERION VALIDITY

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.”^[3] The study, then, must indicate a significant probability that the testing mechanism utilized in employment decisions results in accurate evaluation of applicants abilities based within the framework of the particular job criteria, ultimately leading to an indication of the individual's potential job performance.

A criterion related test may be developed for an office manager position, for example. Perhaps the position description includes handling employee benefits, payroll and meeting scheduling. A single test that covers a sampling of each of these skills must be validated by employing a criterion related study. The methodologies inherent in such a study include an analysis of the job, a determination of criterion measures, considerations of fairness as well as an exploration of representativeness of the samples employed.

Because of the nature of such a study, a study of this sort is best conducted with access to the particularities of the position for which the test in consideration as well as a structured knowledge base of the criterion of such a position. Studies such as these, then, are generally carried out by the employer or a consultant in direct communication with the employer.

Because each job description for each organization is unique, rather than developing tests for each position that you may have, Kenexa Prove It! crafts assessments that will pin-point desired skills. 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 skills testing and, hence, is not applied to Kenexa Prove It!'s assessments.

CONSTRUCT VALIDITY

The term construct is a technical term for personality traits such as intelligence, leadership, or creativity. Construct validity is demonstrated if a test measures traits that have been found to influence successful performance of a job. Construct validity studies measure the extent to which a test may be said to measure a theoretical construct, such as aptitude or capacity to learn a subject or task. That is, 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”^[4] 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.

Methodologies to perform such a study include those employed in both criterion validity and content validity. Among the particular analyses that must be conducted are the relationships of the construct under consideration to the job, criterion-related evidence and standards for use, as well as the determination of common work behaviors.

TBS assessments are skills focused, not personality traits does not participate in construct-related validity studies.

CONTENT VALIDITY

Content validity studies must result in an elaboration and explanation of the particular test content in relation to the skill it attempts to assess. It must demonstrate that the content contained within a particular test is a representative sample of the target skill. Here the skill is operationally defined and, as such, must be operationally demonstrated.

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 (yield a representative indication of the knowledge base of the skill tested), test validity may be compromised if administered under adverse conditions. Such conditions include, but are not limited to, administering a skill test to an applicant for which the position does not require that skill, administering a test to an applicant that feasibly could learn the skill in a brief orientation/training period, and administering a test to an applicant that does not now need that skill to perform the job in question, but may in the future.

TBS Validation

TBS tests are content validated and focus on real-life scenarios and knowledge-based actions to assess the skill level of a ***particular skill set***. For example, TBS currently has many tests applicable for an Administrative Assistant. Unlike criterion-based studies, we do not have one test that covers every aspect of the job position, but offer you several tests that cover the diversity of skills for your particular hiring needs. We also do not determine whether an applicant has the right demeanor or personality (construct validity) to be an Administrative Assistant, for example. You get to pick and choose those tests that cover the facets of the job description that are important to you. The important thing to note is that each of these must be actual skills used on the job.

TBS is committed to ensuring internal content validity. It is the responsibility of the test administrator to ensure external validity. Please refer to page 6 for more information on customer responsibility in validation.

CUSTOMER RESPONSIBILITY IN MAINTAINING CONTENT VALIDITY

While the customer may rely wholly on TBS assurance of internal content validity, as mentioned above, the situational concerns of test administration may eradicate the validity of our tests. It is important to understand that test administrators have responsibilities to conduct any of our tests in compliance with the EEOC guidelines. It is our aim in this section to give you the knowledge that you need to maintain test validity. Please spend some time on this section and feel free to contact TBS if you have any questions about test administration and validity.

THE FIRST STEP OF CUSTOMER COMPLIANCE

Administer skills test to only those applicants that will be employing those skills on the job. For example, you may administer our Java 2 test to a candidate that will be expected to conduct programming in Java 2. Conversely, you ought not administer our Java 2 test to a candidate applying for a position, such as a Payroll Manager, that will not be programming in Java 2. Not only will you maintain content validity by administering tests only to those applicants for which the test reflects a facet of their job position, but you will also gain valuable information through only administering those tests which are applicable, saving time and money.

You will need, then, to conduct a study on the skills required for each position and administer only those tests that apply to those skills. This process will ensure that you remain in compliance with the EEOC Guidelines for test administration.

THE SECOND STEP OF CUSTOMER COMPLIANCE

Review the content of each test before administering. The content of the test must fit the skills required for the position. If, upon review, you find that a segment of the content of a test falls outside of the core responsibilities of the job, contact us. We will be happy to discuss customization of test content for your needs. Taking advantage of our customization opportunities will also ensure compliance with the EEOC Guidelines for test administration.

THE THIRD STEP OF CUSTOMER COMPLIANCE

Review the skills that are job applicable and which you would like to test. Can the skill that you would like to test feasibly be taught in a brief on the job training period? 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.

HIGHLIGHTS OF THE EEOC LAW REGARDING VALIDATION



The following is a brief overview of those items covered within the EEOC Law regarding validation that we believe you may find helpful.

Scope, Section 1607.2

Part B

"These guidelines apply to tests and other selection procedures which are used as a basis for any employment decision. Employment decisions include but are not limited to hiring, promotion, demotion, membership...referral, retention, licensing and certification."

Part C

"Nothing in these guidelines is intended or should be interpreted as discouraging the use of selection procedure from the purpose of determining qualifications or for the purpose of selection on the basis of relative qualifications, if the selection procedure had been validated in accord with these guidelines for each such purpose for which it is to be used."

Discrimination Defined, Section 1607.3

Part B

"Where two or more selection procedures are available which serve the user's legitimate interest in efficient and trustworthy workmanship, and which are substantially equally valid for a given purpose, the user should use the procedure which has been demonstrated to have the lesser adverse impact."

Information on Impact, Section 1607.4

Part A

"Each user should maintain and have available for inspection records or other information which will disclose the impact which its tests and other selection procedures have upon employment opportunities by persons of identifiable race, sex or ethnic group..."

Part B

"...Blacks (Negros), American Indians (including Alaskan Natives), Asians (including Pacific Islanders), Hispanics (including persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish origin or culture regardless of race), whites (Caucasians) other than Hispanic and totals."

Part C

"If this (selection) information shows that the total selection process does not have an adverse impact, the Federal enforcement agencies...will not expect a user to evaluate the individual components for adverse impact, or to validate such individual components."

Part D

"A selection rate for any race, sex or ethnic group which is less than four-fifths (4/5) or (eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact."

"Greater differences in selection rate may not constitute adverse impact where the differences are based on small numbers and are not statistically significant, or where special recruiting or other programs cause the pool of minority or female candidates to be atypical of the normal pool of applicants from that group."

General Standards for Validity Studies, Section 1607.5

Part A

"For the purposes of satisfying these guidelines, users may rely upon criterion-related validity studies, content validity studies or construct validity studies."

Part C

"The provisions of these guidelines...are intended to be consistent with generally accepted professional standards for evaluating standardized tests and other selection procedures, such as those described in the Standards for Educational and Psychological Tests prepared by a joint committee of the American Psychological Association, and the National Council on Measurement in Education...and standard textbooks and journals in the field of personnel selection."

Part E

"Validity studies should be carried out under conditions which assure insofar as possible the adequacy and accuracy of the research and the report."

Part F

"In general, users should avoid making employment decisions on the basis of measures of knowledge, skills or abilities which are normally learned in a brief orientation period, and which have adverse impact."

Part H

"Where cutoff scores are used, they should normally be set so as to be reasonable and consistent with normal expectations of acceptable proficiency within the work force."

Part J

"Users may continue the use of a selection procedure which is not at the moment fully supported by the required evidence of validity, provided: (1) The user has available substantial evidence of validity, and (2) the user has in progress, when technically feasible, a study which is designed to produce the additional evidence required by these guidelines within a reasonable time."

Use of Other Validity Studies, Section 1607.7

"Users may, under certain circumstances, support the use of selection procedures by validity studies conducted by other users or conducted by test publishers or distributors and described in test manuals...users are cautioned that they are responsible for compliance with these guidelines."

Employment Agencies and Services, Section 1607.10

Part A

"An employment agency is not relieved of its obligation herein because the user did not request such validation or has requested the use of some lesser standard of validation than is provided by these guidelines."

Retesting of Applicants, Section 1607.12

"Users should provide a reasonable opportunity for retesting and reconsideration."

Technical Standards for Validity Studies, Section 1607.14

Part C, Technical Standards for Content Validity Studies

"Selection procedures which purport to measure knowledge, skills or abilities may in certain circumstances be justified by content validity...content strategy is not appropriate for demonstrating the validity of selection procedures which purport to measure traits or constructs, such as intelligence, aptitude, personality, commonsense, judgment, leadership or spatial ability. Content validity is also not an appropriate strategy when the selection procedure involves knowledge, skills, or abilities which an employee will be expected to learn on the job."

"To demonstrate the content validity of a selection procedure, a user should show that the behavior(s) demonstrated in the selection procedure are a representative sample of the behavior(s) of the job in question or that the selection procedure provides a representative sample of the work product of the job."

TBS'S CONTENT MISSION

TBS is committed to creating tests that are in compliance with the standards set for the by the EEOC for content validity. TBS's subject matter experts, authors and reviewers, in conjunction with our internal validation experts, ensure that our tests reflect a representative sample of the skill tested, are non-biased and meaningful, and are appropriate and useful to our customers.

The process of validation is a complex one and will be discussed step by step in order to assure you that the tests that you administer as an aid for employment decisions are not only in compliance with the EEOC but, also, are ethically driven. Our aim is to produce tests that help create a good fit for both employees and employers. It imperative that our tests serve not only the employer in gaining valuable information but result in an accurate and bias-free accounting of the applicant's knowledge base.

Methodologies for content validity will be discussed at greater length but as a base, content validity studies require documentation that a test offers a balanced, representative and bias-free assessment of the test takers knowledge base of a particular skill. Such documentation is derived from content analysis, evaluation of the target skill, and a bias examination. All of which are systematically conducted and reported by TBS.

TEST DEVELOPMENT

METHODOLOGIES AND VALIDATION

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. These 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 prepares a validation document, referred to as an Individual Question Documentation Report, that explains each question, justifies its inclusion and elucidates the particular task addressed by the question in relation to the overall skill tested.

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

This process of writing and reviewing results in a test that is meaningful, appropriate, and useful in assessing the knowledge of the test taker in a particular skill. The criteria of content sampling is thus fulfilled and documented.

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 compliance and documenting such compliance.

ISSUES OF BIAS

Our validation team examines each question within each test for bias. For each question, the following is considered:

1. Is there any language within this question that excludes any member or segment of the population?
2. Is the language of this question slanted toward any member or segment of the population?
3. Will this question result in an adverse impact for any member or segment of the population?
4. Does the methodology employed by this question lean toward a biased benefiting of any member or segment of the population?
5. Does the methodology employed by this question lean toward adversely impacting any member or segment of the population?

If any of these questions are answer in the affirmative, the question is reworked or pulled from the test.

We also consider the test at large.

6. May the test result in an adverse impact to any member or segment of the population?
7. May 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.

ISSUES OF BALANCE

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 Individual Question Documentation Report as well as the reviewers' insights.

The accuracy of the skill level is necessary to produce, not only useful evaluations for our customers, but to accurately reveal the test takers level of knowledge. This ensures that each question is representative of both the skill being test as well as the level of knowledge required by the task.

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.

CONCLUSION OF INTERNAL CONTENT VALIDITY

TBS ensures that all of its test content is in compliance with the EEOC Guidelines of 1978. Each step of the test development process is documented and reported in order for you, the customer, to feel confident that the tests that you receive from TBS are internally valid.

TBS is committed to ensuring internal content validity. It is the responsibility of the test administrator to ensure external validity. Please refer to p. 6 for more information on customer responsibility in validation.

SCORING

CUTOFF RATES

A common misconception is that validation can be employed to create cutoff rates for pre-employment decision-making. Although our experts define common levels of proficiency, it is the test administrator's responsibility to define acceptable scores based on insight into the job requirements as well as situational concerns.

TBS attempts to provide the test administrator with enough data to interpret the skill level of the test taker. The test administrator, then, should be informed regarding the job position and the relative knowledge required to work within their particular work environment. An evaluation of test results from other test takers in their company is a good place to start in considering results, relative to environment.

SCORING

An important item to remember when interpreting test scores is that TBS scoring methodologies are vastly different than those employed in academic institutions. For example, a 58% 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. Consider a case in which a test taker received a 58% score but answered every question on, say, mail merging correctly, including those of advanced level. If mail merging is a pivotal aspect of the particular job description, this may be a superior score. Please, then, take advantage of the myriad of information supplied with each scoring report and consider it in the context of the particular job position.

^[1] EEOC Code of Federal Regulations. Title 29: Volume 4, Section 160.2, pg. 201, Revised July 1, 2001. [29CFR1607.1]

^[2] Note: The guidelines addressed herein do not apply to responsibilities as required by the Age Discrimination in Employment Act of 1967, nor the Rehabilitation Act of 1973 aimed at preventing discrimination on the basis of handicap.

^[3] EEOC Code of Federal Regulations. Title 29: Volume 4, Section 1607.5, pg. 204, Revised July 1, 2001. [29CFR1607.5]

^[4] Ibid. Section 1607.14, pg. 213. [29CFR1607.14]