

Test Transportability and Job Component Validity for Physical Performance Tests

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Definition

Test Transportability

A test's validity evidence is transported from one study to another job where no empirical validation has been conducted.

Test transportability extends criterion-related validity to unstudied jobs.

Can transport a single test or a test battery.

Benefits

Test transportability

Is a cost effective method to validate a test,

Does not require conducting a criterion-related validation study,

Is a legally defensible validation option.

Assumptions

Test Transportability

The two jobs (job with validation evidence, job transporting to) are similar to one another.

If similar, all components of test (e.g., entire test battery, passing scores) are transported.

Requirements

Test Transportability

The two jobs (job with validation evidence, job transporting to) are substantially similar to one another.

The test has evidence of criterion-related validity.

The validity evidence demonstrates that the test is valid.

The test is fair to protected groups.

Determine if there are other variables (e.g., performance standards, work methods) that are likely to affect validity

What is Job Similarity?

EEOC Uniform Guidelines (1978) – The two jobs perform substantially the same work behaviors as shown by appropriate job analyses.

Work behaviors - activities performed to achieve the objectives of the job.

Thus, similarity can be determined on the basis of essential tasks or measurable knowledges, skills, and abilities (KSAs).

How Much Job Similarity is Substantial?

The EEOC Uniform Guidelines (1978) does not provide a specific level of similarity.

Job Similarity Determination

A high percentage of essential task overlap (70% or greater)

For all tasks or just physical tasks?

A high correlation between job analysis ratings

Similar required physical abilities

Required in terms of importance or magnitude?

Methods to Determine Job Similarity

Overlap of essential tasks

Correlation between job analysis ratings

Distance statistics between job analysis ratings

Overlap of physical ability requirements (both importance and magnitude)

Legal Support for Test Transportability

No cases involving physical performance tests

However, the courts have supported test transportability for cognitive tests

Fried v Leidinger (1977) entry-level firefighter test was transported from one jurisdiction to another

Bernard v Gulf Oil Corporation (1986) a test validated for one craft was transported to other craft jobs

Legal Support for Test Transportability

For both cases test transportability was supported

The courts determined that:

Job similarity using essential tasks or required abilities was demonstrated using acceptable job analysis methods

The tests were properly validated and met the EEOC requirements

Conducting a Test Transportability Study

1. Determine if test transportability is the best approach

Ability to conduct local validation study

Is the job similar to other jobs?

What is the desired test or test battery (type of test, abilities to assess)?

Are source studies available for use with proper job analysis and validation data?

Conducting a Test Transportability Study

2. Find and review source studies

Does the test or test battery meet the client's needs?

Does the source study's validity evidence meet EEOC requirements?

Was the source study's job analysis conducted properly and provide data needed to determine job similarity?

How was the source study's job analysis conducted?

Conducting a Test Transportability Study

3. Conduct job analysis and determine similarity between jobs

Use proper job analysis methods

Identify essential tasks or required abilities using a method similar to the one used for the source study

Select appropriate job similarity method based on job analysis data

Determine similarity between jobs

Definitions

Job Component Validity (JCV)

Inferring a test's validity for a job without evidence of empirical validation based on the test's past validation evidence.

Used for individual tests or to generate test batteries.

Can be used to provide valid tests to jobs based on validation evidence from jobs with different tasks.

Benefits

Job Component Validity

Is a cost effective method to validate a test

Does not require conducting a criterion-related validation study

Allows for the development of tailor-made physical performance test batteries

Assumptions

The job without validation evidence requires the KSA assessed by the test.

The test of interest has consistent evidence of criterion-related validity.

If the job requires the KSA, the test is a valid assessment for the job.

Requirements

The job requires the KSA measured by the test.

The test has evidence of criterion-related validity.

The validity evidence demonstrates that the test is valid.

The test is fair to protected groups.

Requirements

Database of validation evidence for the test(s).

Job analysis data that demonstrates that the KSA is required for the job.

Support for JCV

JCV was not directly addressed as a validation strategy by the EEOC Uniform Guidelines.

However, EEOC states that new validation strategies will be evaluated when they are professionally accepted.

SIOP Principles (2003) recognizes JCV and synthetic validity as validation strategies.

Prior JCV Studies

JCV has been used to provide validation evidence for cognitive and physical performance tests.

Hoffman (1999) used JCV to provide validated physical performance tests to various jobs. In terms of tasks, these jobs were not similar.

Legal Support for JCV

There are no cases involving JCV for any type of test (cognitive or physical).

Conducting a JCV Study

1. Determine if JCV is the best approach

Ability to conduct local validation study

What is the desired test or test battery (type of test, abilities to assess)?

Are archive validation data available to conduct the study?

Conducting a JCV Study

2. Conduct job analysis

Use proper job analysis methods

Identify required abilities

Conducting a JCV Study

3. Identify test or generate test battery

Access data from database for tests of required abilities (test scores, job performance measures)

Use data to:

- Determine validity of test(s)

- Compute multiple regression to identify valid test battery

- Generate passing score(s)