

The following summary of the *Principles for the Validation and Use of Personnel Selection Procedures* has been prepared by the State Personnel Board's Test Validation and Construction Unit.

### **Introduction**

This summary of the *Principles for the Validation and Use of Personnel Selection Procedures* is intended to provide a brief overview of the provisions contained in the *Principles*. This summary should be used in conjunction with the full text of the *Principles* to address specific selection-related queries.

The *Principles* were adopted by the Society for Industrial and Organizational Psychology (SIOP), a division of the American Psychological Association (APA). These principles provide assessment professionals with guidelines for the evaluation, development, and use of testing instruments.

The *Principles* are not in and of themselves legislation or law; however, through their reference in a number of judicial decisions, they have been identified by the courts as a source of technical information and have been given deference in litigation concerning employment issues.

### **History and Purpose of the *Principles for the Validation and Use of Personnel Selection Procedures***

The third, and latest, edition of the *Principles* was published in August of 1987. A committee of SIOP members (primarily industrial/organizational psychologists), with various levels of testing experience, participated in the review and development of this edition. The purpose of the *Principles* is to provide professional standards for the proper use of personnel selection procedures.

**1. What do the *Principles* cover?**

The *Principles* provide standards for the proper selection, evaluation, development, and use of personnel assessment procedures. The *Principles* pertain to any and all selection procedures that are used as the basis for any employment decision, including hiring, promotion, demotion, referral, retention, licensing and certification, training, and transfer. Examples of such selection procedures include: cognitive ability tests, biodata instruments, assessment center evaluations, personality inventories, and structured interviews. Specifically, three validation strategies (content, construct, and criterion) are defined, and important issues regarding the use of each of these validation strategies are described. Additionally, the concept of validity generalization is reviewed and recommendations for documentation are provided.

**2. How should job analysis information be used in the development of personnel selection procedures?**

Job analysis data should be used as the foundation for the development of any selection procedure. A comprehensive job analysis is also one of the best defenses against litigation. Job analysis data reveals the critical tasks for a job, and the relevant knowledge, skills, and abilities (KSAs) that correspond to those critical tasks.

Critical tasks and their corresponding KSAs should be used when developing or selecting relevant criteria and predictors of job performance. Predictors, which are used to select employees, might include such instruments as cognitive ability tests, personality inventories, biodata instruments, or structured interviews. Criteria are measures of job performance such as performance appraisals or peer reviews. The job analysis data should provide enough information to make hypotheses about the relationship between selected criteria and predictors.

**3. What is criterion-related strategy toward validation and what should be considered when selection criteria and predictors?**

The criterion-related validation strategy involves the demonstration of a statistical relationship between the predictor and criterion measure through the use of predictive or concurrent validity studies. The *Principles* provide guidelines that should be used when selecting criteria and predictors. Criteria should measure relevant job activities or behaviors; ideally this information would be gathered through a comprehensive job analysis. Criterion measures should not be chosen on the basis of convenience; instead, criteria that are reliable and free from contamination should be used. It is also advised that the reasons for the use of specific criteria be documented. Also, criteria should be examined for possible contamination such as bias. Furthermore, when combining criteria it is often necessary to weight each criterion according to its relevance, and it is recommended that the determination of these weights be recorded.

The procedures for the proper administration and scoring of predictor measures should be clearly documented and followed. Ideally, predictors should be validated before they are put into use. It is also important that predictor and criterion measures be independent of each other. Therefore, individuals who collect predictor scores should not be aware of criterion scores and vice versa. It is also crucial that the proper statistical data analysis be conducted.

**4. What is the construct-oriented strategy toward validation?**

The construct-oriented validation strategy involves the demonstration of a relationship between a psychological construct (predictor) and job behavior (criterion). A significant validity coefficient demonstrates that a specific psychological construct is a good predictor of job behavior. It is also important to document evidence supporting the relationship between the psychological construct and the job behavior. Furthermore, it is crucial that the instrument used to measure a psychological construct be a valid measure of that construct.

**5. What is the content-oriented approach to validity and what should be considered when using this technique?**

The content-oriented approach to validity requires evidence that the predictors used in personnel selection are linked to KSAs required for the job. This linkage of KSAs to successful job performance is usually demonstrated through the use of a job analysis. It is important to test KSAs at the level required by a new employee for entry to the job; this level can be determined from job analysis data. It is also important to restrict the testing of KSAs required for irrelevant tasks that are performed infrequently or are unimportant to successful performance on the job. Likewise, the reading level of selection instruments should be assessed to determine if it is appropriate for the candidate pool, thus eliminating the unintentional testing of reading ability. In addition, the rationale used for selecting the critical KSAs used in the selection procedure should be documented.

**6. When using the content-oriented approach to validity, what measurement properties should a test possess?**

Ideally, test items should be pretested before they are used in any personnel selection procedure, and the selection of items for future selection procedures should be based on item statistics. Items should be eliminated from the test if they do not differentiate between candidates who could successfully perform the job and those who could not. Items or content domains that are so intercorrelated that they result in redundancy should also be eliminated. Therefore, items that differentiate between the better candidates and the less qualified candidates, and items that are reliable but not highly intercorrelated should be chosen for inclusion in a selection procedure.

**7. What is validity generalization and how is it established?**

Validity generalization exists when a selection procedure can be appropriately used across different jobs or different work settings. A similar validity coefficient across different job situations or job classifications is an indication of validity generalization. Even though the presence of validity generalization can be used as support for the use of a selection procedure, this is seldom done due to the complexity of the process.

**8. What documentation is needed regarding the development or choice of a personnel selection procedure?**

The full text of the *Principles* should be consulted for a detailed list of recommended information to document in research reports and procedure manuals. In general, research reports should include enough information to allow replication of the study. Procedure manuals should include enough information to ensure the proper administration and use of the selection instrument.

**Requirements of the Content-Oriented Approach to Validity**

The use of the content-oriented approach to validity requires the description of the job content domain. A job content domain defines KSAs that are required for acceptable performance on the job. The following are guidelines for using the content-oriented approach to validity:

- A job content domain should describe the critical functions of the job.
- Consideration should be given to special circumstances when defining the job content domain (e.g., seldom-used symbols on the keyboard should not be included).
- Job analysis should be used to define the job content domain.
- A job content domain should only include KSAs required at entry to the job.
- Trivial and/or irrelevant tasks or KSAs should not be included in the job content domain.
- Subject matter experts (SMEs) used to develop the job content domain should be representative of those in the job category.
- Selection procedures should have appropriate measurement properties.
- SMEs should be clearly qualified.