

SUMMARY

Measurement, defined as the process of using rules to assign numbers to objects to represent quantities of an attribute of the objects, is an integral part of the foundation of staffing activities. Standardization of the measurement process is sought. This applies to each of the four levels of measurement: nominal, ordinal, interval, and ratio. Standardization is also sought for both objective and subjective measures.

Measures yield scores that represent the amount of the attribute being measured. Scores are manipulated in various ways to aid in their interpretation. Typical manipulations involve central tendency and variability, percentiles, and standard scores. Scores are also correlated to learn about the strength and direction of the relationship between two attributes. The significance of the resultant correlation coefficient is then assessed.

The quality of measures involves issues of reliability and validity. Reliability refers to consistency of measurement, both at a moment in time and between time periods. Various procedures are used to estimate reliability, including coefficient alpha, interrater and intrarater agreement, and test-retest. Reliability places an upper limit on the validity of a measure.

Validity refers to accuracy of measurement and accuracy of prediction, as reflected by the scores obtained from a measure. Criterion-related and content validation studies are conducted to help learn about the validity of a measure. In criterion-related validation, scores on a predictor (KSAO) measure are correlated with scores on a criterion (HR outcome) measure. In content validation, there is no criterion measure, so judgments are made about the content of a predictor relative to the HR outcome it is seeking to predict. Traditionally, results of validation studies were treated as situation specific, meaning that the organization ideally should conduct a new and separate validation study for any predictor in any situation in which the predictor is to be used. Recently, however, studies have suggested that the validity of predictors may generalize across situations, meaning that the requirement of conducting costly and time-consuming validation studies in each specific situation could be relaxed. Staffing metrics such as cost per hire and benchmarks, representing how leading organizations staff positions, can be useful measures, but they are not substitutes for reliability and validity.

Various practical aspects of the collection of assessment data were described. Decisions about testing procedures and the acquisition of tests and test manuals require the attention of organizational decision makers. The collection of assessment data and the acquisition of tests and test manuals vary depending on whether paper-and-pencil or computerized selection measures are used. Finally, organizations need to attend to professional standards that govern the proper use of the collection of assessment data.

Measurement is also said to be an integral part of an organization's EEO/AA compliance activities. When adverse impact is found, changes in measurement

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