

Best Practice Guide for Choosing Norm Groups in Employment Selection

Norms provide a basis for evaluating an individual's score relative to the scores of other individuals who took the same assessment. Raw scores may be used to rank examinees in order of performance, but little can be inferred from raw scores alone. It is important to relate the scores to specifically defined normative groups to make the assessment results meaningful.

Norms allow for the conversion of raw scores to more useful comparative scores, such as percentile ranks. Typically, norms are constructed from the scores of a large sample of individuals who took a assessment. This group of individuals is referred to as the *norm group*.

When using norms for your selection program, it is important to consider the following issues to determine which norm group is most appropriate for your use.

Local norms

When an assessment is used to help make human resource decisions, the most appropriate norm group is one that is representative of those who will be taking the assessment in the local situation. It is best, whenever possible, to prepare local norms by accumulating the assessment scores of applicants, trainees, or employees. Until a sufficient and representative number of cases has been collected (preferably 100 or more), published norms should be used to guide the interpretation of assessment scores.

Relevance

The characteristics of the sample used for preparing norms are critical in determining the usefulness of those norms. When selecting from among applicants to fill a particular job, normative information derived from a specific, relevant, well-defined group will be most useful. To determine the

relevance and appropriateness of using a particular norm group, consider the following questions:

- Is the job or job family represented in the norm group the same as the job for which you are making a hiring decision?
- If the job title(s) in the norm group does not match your applicant population, are the job tasks, activities, and characteristics similar?
- Were the norms collected in an industry similar to that of your organization (e.g., manufacturing, financial services, energy/utilities, etc.)?
- Is the job level (e.g., Supervisor, Manager, Director) represented in the norm group similar to the job for which you are making a hiring decision?
- If the demographic composition of the norm group is provided, do the characteristics approximate those of your applicant pool (e.g., age, sex, race/ethnicity, tenure)?

Quality of Norms

One of the factors that must be considered in preparing norms is sample size. Data from small samples tend to be unstable and the presentation of percentile ranks for all possible scores presents an unwarranted impression of precision. A sample of about 100 or more people would be reasonable. In addition to sample size, relevant assessment properties associated with the norm group should also be evaluated. These properties can include:

- Reliability – Did the assessment yield consistent results within the norm group?
- Standard Error of Measurement – How much error, and thus, how much confidence can you place in the assessment scores?

- Validity – Is there evidence to support the validity of the assessment for the chosen norm group?

Consistency

Once you choose a norm group to make your selection decisions for a particular job, it is important to use that norm group consistently. Changing the norm group midway through your selection process will alter your selection criteria and will result in unfair consequences to your applicants.

Legal/Ethical Guidelines

Fair employment regulations and their interpretation are continuously subject to changes in the legal, social, and political environments. Governmental and professional regulations cover the use of all personnel selection procedures. One such regulation to consider when using normative data is the prohibition of “race norming.” The Civil Rights Act of 1991 requires the use of combined group norms, particularly in regard to employment decision making. Title I, Section 106 of the Act reads, in part:

“It shall be an unlawful employment practice for a respondent, in connection with the selection or referral of applicants or candidates for employment or promotion, to adjust the scores of, use different cutoff scores for, or otherwise alter the results of, employment related tests on the basis of race, color, religion, sex, or national origin.”

For additional regulations and guidelines, the user may wish to consult with relevant source documents such as the *Standards for Educational and Psychological Testing* (AERA, NCME, & APA, 1999); the *Principles for the Validation and Use of Personnel Selection Procedures* (Society for Industrial and Organizational Psychology, 2003); and the federal *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission, 1978). For an overview of the statutes and types of legal proceedings which influence an organization’s equal employment opportunity obligations, the user is referred to the U.S. Department of Labor’s (2000) *Testing and Assessment: An Employer’s Guide to Good Practices*.