

## LINKING O\*NET JOB ANALYSIS INFORMATION TO JOB REQUIREMENT PREDICTORS: AN O\*NET APPLICATION

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This is an exploratory study that examined the possible application of the job component validity (JCV) model to identify potential employee selection instruments and to determine job requirement levels from O\*NET job analysis data, following a research paradigm established with the Position Analysis Questionnaire (PAQ). Job requirements were measured by mean aptitude test scores on the General Aptitude Test Battery (GATB), and the ratings on the O\*NET Generalized Work Activities (GWAs) were selected as representative O\*NET job analysis data. Multiple correlation coefficients ranging from .35 to .89 were found when predicting mean GATB test scores from GWAs. Similar to JCV research some 30 years ago, predictions were strongest for cognitive aptitudes and weakest for manual dexterity. The data were examined under both rational and cross-validated empirical models. The results have positive implications for the development of a database that would support JCV estimates derived from O\*NET job analysis data and allow practitioners to use O\*NET data to help identify useful employee selection instruments.

A well reasoned principle within the domain of industrial and organizational psychology is that job analysis information serves as the foundation for the development and/or implementation of many, if not most, personnel selection strategies. As described in the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education, 1999), job analysis information supports validity evidence for a test that has been developed under a content strategy or identifies important performance indicators in a criterion-related strategy. Similarly, the *Principles for the Validation and Use of Personnel Selection Procedures* (SIOP, 1987) state that job analysis outcomes lead to the identification of relevant worker specifications (e.g., KSAOs), the development or selection of appropriate measures (tests), and the def-

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