

WORK TECHNOLOGY REVIEW

The process of evaluating an individual's work potential is ever changing. New and more sophisticated tests, equipment, and software are developed so quickly that clinicians often have difficulty keeping abreast of the changes. Existing testing procedures and equipment are constantly being revised. The rapid growth and development in this area indicate that those involved in work evaluation are constantly trying to improve their testing procedures and equipment. In an effort to provide the most current information regarding work evaluation and evaluation equipment, the Work Technology Review column is being added as a regular feature of WORK. The purpose of this column is to review new and existing work evaluation procedures and equipment. The purpose and uses of each test or piece of equipment, and its purpose and use, will be described. The practical aspects of each test or piece of equipment, such as cost, space requirements, and necessary training, will also be discussed. The results of any reliability or validity studies will be reported and critiqued. Note that review of a testing procedure or piece of equipment does not indicate endorsement. Every attempt will be made to evaluate equipment and tests objectively and fairly.

This first column addresses changes in and clarification of the Polinsky Functional Capacity Assessment (FCA). The Polinsky FCA was initially reviewed in a previous issue of WORK.¹ The following information updates and clarifies that review.

The Polinsky FCA tests essentially all of the 20 physical demands of work as defined by the Dictionary of Occupational Titles, making it a comprehensive FCA. The current cost of the Polinsky is \$4995, which includes a manual, training, and some equipment. As with most FCAs, the manual cannot be purchased without the training session.

The Polinsky FCA addresses the issue of subject participation by looking for specific evidence of physical exertion on each test item and comparing consistency of performance on day 1 and day 2 of the evaluation. The subject is considered to be self-limiting if he or she stops

before evidence of maximal effort is observed. The criteria for determining maximal effort are outlined but could be more specific. Additional specificity can be provided as part of the training, but reliability may be enhanced if criteria are more specific.

Since the previous review of the Polinsky FCA appeared,¹ the Polinsky manual became available for inspection. The manual has a good description of purpose and provides very good operational definitions of terms and concepts used in the testing and reporting of results. The equipment, preparation of materials, and procedures, are described well and the scoring system is well defined. Verbal instructions to the subject have been described but are not specifically documented, which may allow for some variability between different test administrators. Whether variability in verbal instruction will influence overall test reliability has yet to be determined. Overall, the Polinsky FCA procedure manual is a well-written, clear, and concise manual with excellent illustrations.

The Polinsky FCA has been studied for criterion-related validity. The results of this study were presented at the American Physical Association meeting in Anaheim, California, in June 1990, and published in the *FCA Network Newsletter*. In this study, 153 healthy individuals were evaluated using the Polinsky FCA. The subjects were grouped by age and gender and compared with a group of injured workers randomly selected from the Polinsky data bank of 6000 injured individuals. The Polinsky FCA scores were found to be lower for injured workers on most of the FCA tasks using a t-test.

This study represents an important initial step in documenting validity of the Polinsky FCA. The results indicate that the Polinsky FCA can distinguish between a healthy and an injured worker. However, the purpose of an FCA is to predict the level of work an individual is capable of sustaining as well as to distinguish between injured and healthy workers. Comparing performance of clients at 6-month or 1-year follow-up with the FCA's prediction would be a more convincing test of validity. Furthermore, comparing individuals of similar

heights and weights is important, since successful performance of physical tasks is often related to height and weight. Discriminant analysis would be a stronger test for discriminant validity. Finally, the results of the Polinsky validity study must be published in a refereed journal before they can be accepted fully. We commend the efforts of those developing the Polinsky FCA for this initial validity testing

and consider the work an important first step in establishing the Polinsky FCA's validity.

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REFERENCE

1. Lechner D, Roth D, Straaton K: Functional capacity evaluation in work disability. *Work* 1991; 1:37-47.