Continuing Innovations in CPS Staff Recruitment and Selection: Results of a Statewide Test Validation Study

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Research conducted across a variety of jobs clearly demonstrates that effective recruitment and selection is essential to successful training outcomes, high levels of staff performance, and increased retention (Schmidt & Hunter, 1998). In fact, a recent study of nearly 1,000 national firms demonstrated that the use of what the authors termed "high performance work practices" (including job analysis, selection testing, employee training, quality of work life programs, and performance appraisals) had an economically and statistically significant impact on employee turnover, productivity, and corporate financial performance (Huselid, 1995). The industrial/organizational (I/O) psychologist's "toolbox" includes an array of strategies that can be used to assist both public and private sector organizations to achieve these high performance work practices.

Our objective as I/O psychologists working with a child welfare agency is to develop strategies for optimizing the fit between the needs of child welfare job applicants and the organization; that is, to identify candidates most likely to be satisfactory job performers and least likely to leave the organization. This workshop provided an overview of our approach, with illustrations from our work with the Nebraska Health and Human Services System (NHHSS), starting from the essential first step of job analysis through the development and validation of a variety of competency assessments designed to predict job performance and retention.

Job Analysis

The foundation for the selection and training system used in Nebraska is a fundamental human resource practice known as job analysis. As the name implies, job analysis is a process for analyzing or dissecting a job. This detailed analysis provides a wealth of information about the job, including a list of the tasks the job entails, and the associated knowledge, skills, and abilities required to successfully perform such tasks. Job analysis creates a foundation for a variety of personnel practices. For example, it can help an agency discover the best applicants, identify their training needs, and evaluate employee performance.

Realistic Recruitment

In an effort to manage some of the preventable instances and subsequent costs of turnover, a "Realistic Job Preview" was developed (RJP; Wanous, 1992). The goal of an RJP is to reduce unnecessary costs incurred by hiring ill-informed applicants who quit when the reality of the job hits. Applicants are presented with the realistic demands of the job and allowed to self-select out of the hiring process at an early stage, limiting both applicant and agency investment.

In this case, a 25-minute RJP videotape was developed to present the realistic demands and benefits of CPS work in Nebraska. Extensive research with current CPS workers and supervisors helped to identify a balanced sample of positive, negative, and neutral incidents that frequently occur on the job. These incidents are illustrated through unscripted, but guided, interviews with

staff and actors portraying typical CPS activities. Preliminary research has revealed that watching the video significantly increases applicants' understanding of the job. Moreover, interested people become more interested in the job and disinterested people become less interested in the job. All applicants for CPS positions in Nebraska are now required to view this video early in the selection process, prior to the employment interview. The video has been distributed widely across the state (e.g., Nebraska Job Services offices, local job fairs, all schools of social work, public libraries), and agency staff regularly use the video when giving community relations talks.

Selection of New Staff

The use of effective methods to guide hiring decisions is critical, particularly for jobs such as CPS, which involve high stakes decisions impacting human safety. The job analysis revealed over 50 knowledge, skills, and abilities (KSAs) that subject matter experts deemed important for CPS employees. The KSAs reflected the need for various types of knowledge; communication, decision making, organization, and interpersonal skills; cognitive ability; and certain personality traits. A test plan was developed to outline the general measurement methods as well as the specific tests that could be used to accurately and feasibly assess each KSA dimension. For example, some of these KSAs are knowledge based and thus appropriate for assessment with written paper and pencil (or computer-based) testing, whereas others are primarily skill based (such as oral communication skills or time management skills) and are more appropriately assessed via alternative methods. The resulting potential selection test battery includes measures of applicant experience, communication skills, personality, general cognitive abilities, situational judgment, critical thinking skills, and fundamental job knowledge. Two of these tools are currently being implemented statewide: an applicant self-assessment questionnaire and a structured hiring interview; the remainder are in the process of development or validation. This section briefly describes the tools currently being implemented, and the following section describes the measures included in the validation study.

Human resource managers from the Nebraska Health and Human Services System helped us develop an applicant self-assessment questionnaire, called the "Supplemental Application Form." This form is used for application screening following the initial screening for minimum qualifications required by the state. The process documents areas of training and experience in an applicant's background in relation to important job-related task areas, rather than on specific degrees or job titles. Applicants who meet established guidelines on this assessment may be invited to participate in an interview. Interestingly, some applicants self-select out of the process at this point due to the perceived burden of completing this rather short form.

The standardized, structured hiring interview assesses an applicant's level of competence, using behavior description and situational question formats. Applicant responses are scored using behavioral rating forms. Trained interviewing teams consisting of CPS supervisors and human resource managers conduct these interviews. In order to ensure consistency and standardization across interviews, the training program utilizes a variety of interactive, experiential activities such as discussion, and viewing and rating videotapes of simulated applicants.

Test Validation Study

Our test plan included a validation study of several highly innovative measures of a subset of the KSAs: measures of personality, general cognitive abilities, and critical thinking skills. Each of these tools and the method for establishing the validity of using these tests for selection decisions is briefly described below.

Personality constructs have been the target of renewed attention in the context of personnel selection for about the last twelve years. Recent reviews have documented that personality measures can be valid predictors of outcomes such as job performance and retention (e.g., Barrick & Mount, 1991). We analyzed the usefulness of personality measures for CPS selection using a standardized, commercially available measure to assess core dimensions of normal personality that may be predictive of future work behavior. Examples of these dimensions include adjustment and sociability. We also investigated the personality construct known as conscientiousness, as past research on other occupational groups has shown it is a successful predictor of job performance and turnover.

Cognitive ability was also investigated for selection purposes because a number of studies have shown that cognitive ability tests predict future job performance, and some evidence suggests that they are even better predictors for jobs that are high in complexity (see Schmidt & Hunter, 1998). In consultation with the agency, we selected a written, standardized measure of verbal aptitude that can be administered to a group and is quickly and objectively scored. The instrument assesses several dimensions of verbal aptitude, including comprehension, which is defined briefly as the ability to evaluate social situations and recognize socially desirable behaviors.

Critical thinking skills, a related but distinct set of cognitive skills, were also evaluated for CPS selection. The job analysis revealed the need for such skills as thinking rationally and objectively, making difficult decisions based on accurate gathering of information, and sorting irrelevant information from relevant information. In an attempt to capture these types of skills, we chose a written, standardized measure of critical thinking that assesses various aspects of critical thinking, such as inference and deduction.

We conducted a validation study to evaluate the usefulness of these instruments. The goal of the validation study was to assess the effectiveness of each of these tools for predicting CPS worker job performance, turnover, and length of tenure with the agency. This study used a predictive criterion-related validity design, which allowed us to measure the statistical relationship between test performance at the time of hire and later measures of job performance and tenure.

All new CPS hires during a two-year period were asked to participate in the study and completed the battery of tests described above. These new hires then completed an intensive pre-service training program of up to 15 weeks duration. Following the completion of training, new hires began a new six-month probationary period, during which their supervisor provided performance ratings, using the agency's performance planning and evaluation tool known as the "Competency Development Tool" (CDT). The CDT utilizes supervisory ratings of 43 representative tasks, based upon the results of the job analysis. The tasks are grouped into 17 dimensions, such as Arranging Services, Composing Reports, and Testifying. The evaluations are conducted at 3 and 6 months after completion of pre-service training, during the new worker's probationary period.

Results of the study showed that each of the dimensions of supervisory performance ratings could be predicted by at least one of the personality or cognitive skills measures. In addition, the length of CPS staff tenure with the agency was predicted by cognitive ability. However, neither the personality nor cognitive skills measures used in this study were predictive of turnover. Interestingly, a comparison of staff that stayed with the agency to those who left (57/208, or 27%) yielded no significant differences in job performance or educational background. In addition, comparison of those staff with social work degrees (BSW or MSW) to those without specialized social work degrees showed no statistically significant differences in job performance, length of tenure with the agency, or turnover.

This validation study sought to assess the effectiveness of each of these tools for predicting CPS worker job performance, turnover, and length of tenure with the agency. We will now consider assessments shown to be valid for this purpose for inclusion in a final selection battery, taking into account the balance between the costs of the various components of the selection system with usefulness of information each produces.

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