The Art and Science of Personnel Selection: The Use of Tests and Performance Simulations

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ABSTRACT

The objective of personnel selection is to identify competent candidates who fit the job and organization. If the right person—job fit is not made, the chosen candidate's performance may be less than satisfactory, and both the employee and the organization will suffer. Many human resource experts believe that testing is the single best selection device across jobs. The use of intelligence tests, personality tests, and interest inventories can help leaders get a better person—job fit for every vacant position. In addition, performance simulations have improved the selection of competent personnel by having them perform part of the job to determine whether they have the potential to do the job successfully.

Most experts believe that the most important human resource decision a leader makes is deciding who to hire (Noe, 2012). The objective of effective selection is to decide who the right people are, by matching individual characteristics (ability, experience, and training) with the requirements of the job (DeRue & Morgeson, 2007; Kristof-Brown, Zimmermam, & Johnson, 2005). When management fails to secure the proper match, employee performance and job satisfaction both suffer (Robbins & Judge, 2011).

How does the selection process work in most organizations? The most common procedure involves a series of steps including biographical information, reference checks, interviews, written tests, and performance simulations. The focus of this article will be on written tests and performance simulations.

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Written Tests

Written tests have a long history of use as a selection device. During the 1970s and 1980s, the use of written tests as a selection device declined. Many organizations had not validated them as job-related and some tests were considered discriminatory. However, during the past 20 years, we have witnessed a resurgence in the use of tests. A comprehensive survey of 2500 U.S. organizations revealed that more than 60 percent use testing as a device in hiring and promotion decisions (Guion, 2010).

Many human resource experts believe that testing is the single best selection device. Tests yield more information about an applicant than do biographical information and letters of recommendation, and they are less subject to bias than interviews. The primary advantages of testing include finding the right person for the job, obtaining a high degree of job satisfaction for the applicant because of a good fit between the organization and the person, and reducing absenteeism and turnover (Hunt, 2008).

Although there are many kinds of tests available for organization use, they can be classified into three major groups: (1) intelligence or cognitive ability tests, (2) personality tests, and (3) interest inventories (Edenborough, 2008).

Intelligence Tests

Intelligence tests have proven to be particularly good predictors for jobs that require incumbents to perform mental activities, such as thinking, reasoning, and problem solving (Gregory, 2007). Intelligence quotient (IQ) tests, for example, are designed to measure an individual's general intellectual abilities. Popular college admission tests, such as the SAT and ACT and graduate admission tests in medicine (MCAT), law (LSAT), business (GMAT), and education (GRE) measure such general intellectual abilities. Testing firms do not make the claim that their tests assess intelligence, but experts in the field know that they do (Bryon, 2009; Groth-Marnat, 2010).

It may interest you to know that many job applicants in business are discovering that employing organizations are requesting their SAT scores as a criterion in the selection process. A case in point is Donna Chan, a recent graduate of Wagner College in New York. Donna Chan discovered that one of the minimum requirements for many of the entry-level financial service jobs she was seeking was a combined SAT score of 1300. How competitive is a score of 1300? The maximum score on the old version of the SAT is 1600. [The new version has added a writing section, in addition to the traditional verbal and quantitative sections.] According to the College Board and Educational Testing Service, the firm that administers the exam, the average combined verbal and quantitative score of the freshman class of 2005 (the last class to take the old version of the SAT) was 1028. Donna Chan's score was in the "1200s." Although above average, Donna Chan's SAT score was not good enough to obtain any of the positions she was seeking despite her 3.9 grade-point average at Wagner College (Dunham, 2003; Foss, 2007; Robbins & Judge, 2009, p. 611).

Jobs differ in the demands required of organization members to use their intellectual abilities. The more complex a job is in terms of thinking, reasoning, and problem-solving skills, the more general intelligence will be needed to perform the job

well (Groth-Marnat, 2010). For highly routine jobs with few information-processing demands, a high IQ is not as important to performing the job successfully.

Personality Tests

The use of personality tests has increased in the past decade. Japanese car manufacturers, when staffing plants in the United States, have relied heavily on personality tests to identify candidates who will be high performers. Toyota puts candidates for entry-level, shop-floor jobs through fourteen hours of testing (Robbins & Judge, 2011). *Personality tests* attempt to measure personality characteristics that might be important on the job, such as emotional stability, introversion and extroversion, self-confidence, aggressiveness or submissiveness, neurotic tendencies, and many other characteristics and traits (Cattell, 2010). In particular, many organizations use dimensions of the "Big Five" personality traits in selection decisions (Judge, Bono, Ilies, & Gerhardt, 2002). The traits that best predict job performance are conscientiousness and emotional stability (Barrick & Mount, 2004). This makes sense, since conscientious people tend to be motivated and dependable, and people who are emotionally stable are calm, steady, cool, self-confident and persistent: the personality traits you want leaders and other supervisory personnel to possess.

Interest Inventories

Interest inventories attempt to measure an applicant's interest in performing various kinds of activities. The notion underlying the administration of interest tests to job applicants is that certain people perform jobs well because the job activities are interesting. The purpose of this type of test is to create a better "fit" between the applicant and the specific job (Hogan, 2007). Two popular interest tests are the Kuder Preference Record and the Strong Interest Inventory.

In sum, many experts contend that intelligence tests are the *single best* selection device across jobs. Personality tests and interest inventories provide additional information concerning factors such as dependability, self-confidence, persistence, and "fit" with the job. The evidence is impressive that these tests are powerful in predicting job performance and employee behavior on the job, such as discipline, problems, excessive absenteeism, and turnover (Guion, 2010).

Performance Simulations

The idea behind *performance simulations* is to have applicants perform simulations of part, or all of the job to determine whether applicants can do the job successfully. Examples include typing and Dictaphone tests for secretaries, speed and accuracy tests for computer operators, and driving tests for driver education teachers. Candidates for the space program have to perform a variety of tasks on a specially constructed simulated test station at NASA's training facility in Houston, Texas.

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Elaborate performance-simulation tests, specifically designed to evaluate a school administrator's potential, are administered in *assessment centers*. The National Association of Secondary School Principals (NASSP) Assessment Center is an approach to the selection of school principals that is rapidly gaining in popularity (National Association of Secondary School Principals, n.d.a). It is particularly good for selecting present school district employees for promotion to principal or assistant principal positions. A typical NASSP Assessment Center lasts two days, with groups of six to twelve assesses participating in a variety of administrative exercises. Most assessment centers include two in-basket tests, two leaderless-group exercises, a fact-finding exercise, and a personal interview. A panel of NAASP-trained assessors evaluate candidates individually on a number of dimensions, using a standardized scale. Later, by consensus, a profile of each candidate is devised.

Assessment centers are valid predictors of administrative success, and some business firms now use them for hiring technical workers. Assessment centers are also used to help design training and development programs for the purpose of improving the leadership skills of pre-service principals and in-service principals (National Association of Secondary School Principals, n.d.b).

Some universities use the assessment center to pinpoint some areas of strengths and weaknesses on which graduate students can then focus during their doctoral studies in educational administration. For example, The University of Texas Executive Leadership Program puts each of its doctoral candidates in educational administration through a variation of a standardized NASSP Assessment Center during their first semester of study. Faculty and students then work together to develop the latter's skills based on the results of their assessment profile.

Conclusion

The objective of personnel selection is to identify competent candidates who fit the job and organization. If the right person—job fit is not made, the chosen candidate's performance may be less than satisfactory, and both the employee and the organization will suffer. Many human resource experts believe that testing is the single best selection device across jobs. The use of intelligence tests, personality tests, and interest inventories can help to get a better person—job fit for every vacant position. In addition, performance simulations have improved the selection of competent personnel by having them perform part of the job to determine whether they have the potential to do the job successfully.

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