



Factors affecting the effectiveness and acceptance of electronic selection systems

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ABSTRACT

There has been a rise in the use of electronic selection (e-selection) systems in organizations. Given the widespread use of these systems, this article reviews the factors that affect their effectiveness and acceptance by job applicants (applicant acceptance), and offers directions for future research on the topic. In particular, we examine the effectiveness and acceptance of these systems at each stage of the selection process including (a) job analysis, (b) job application, (c) pre-employment testing, (d) interviewing, (e) selection decision-making, and (f) evaluation and validation. We also consider their potential for adverse impact and invasion of privacy. Finally, we present some implications for e-selection system design and implementation.

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1. Introduction

Organizations use a number of strategies for improving their operations, one of which is the development and use of human resource management (HRM) systems. Two key components of such systems are employee recruitment and selection. The overall purpose of recruitment is to provide the organization with a large pool of job applicants (applicants hereinafter) who are well-suited for existing openings in terms of their knowledge, skills, abilities, and other attributes (KSAOs hereinafter). And the overall objective of selection is to maximize the quality of individuals who are hired from among the set of applicants in terms of their potential to contribute to organizational goals and objectives through their job performance.

In the typical selection system (traditional system hereinafter) applicants complete an application blank, take one or more pre-employment tests (e.g., cognitive ability, job-related knowledge, work sample), and sit for a face-to-face interview with a personnel specialist. The information derived from these measures is used to estimate their job performance and job offers are made to the top applicant or applicants (dependent on the number of individuals that are to be hired).

In recent years, however, there has been a rise in the use of technology as a means of facilitating the selection process. More specifically, electronic selection (e-selection) is being used increasingly by organizations. It typically refers to the use of various forms of technology (e.g., web-based job applications, web-based tests, videoconference interviews) to help organizations with such tasks as conducting job analyses, gathering applicant data, assessing individuals' KSAOs, and making selection decisions. Interestingly, results of one survey showed that 74% of large organizations now use electronic technology for recruiting and selection (CedarCrestone, 2010).

Traditional selection systems typically require applicants to visit an organization to complete paper applications and pre-selection measures. However, technology has changed this process dramatically (Kehoe, Dickter, Russell, & Sacco, 2005). For instance, with the advent of computers, organizations began using mainframes and dumb terminals to allow applicants to submit job applications (Kavanagh, Gueutal, & Tannenbaum, 1990). However, as microcomputers (PCs) became more readily available, organizations began using client server systems run over wide or local area networks (WANs and LANs, respectively). Although these systems provide applicants with access to an organization's central server, they are somewhat limited because individuals often need a code to use them. However, with modern e-selection applicants have improved access to an organization's resources. For example, they can log onto recruiting or selection websites anytime of the day or night, and perform such tasks as completing application blanks and taking online tests. (See Kehoe et al., 2005, for a detailed review of the evolution of technology in the selection process.)

E-selection systems are thought to offer a number of important advantages over traditional systems (e.g., Kehoe et al., 2005; Reynolds & Dickter, 2010; Tippins, 2009). For instance, they (a) provide organizations with large numbers of recruits, (b) simplify the job analysis process, (c) accelerate the development and assessment of selection procedures, (d) reduce administrative

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