#### **CHAPTER 2**

## e-Recruiting Online Strategies for Attracting Talent

Dianna L. Stone Kimberly M. Lukaszewski Linda C. Isenhour

Organizations have long been concerned with attracting and retaining highly talented employees. The primary reason for this is that they depend on the skills and talents of their workforce to compete in an ever-changing global environment. In order to facilitate the recruitment process, organizations are increasingly using electronic human resources (eHR) systems, including web-based job sites, portals, and kiosks to attract job applicants (Stone, Stone-Romero, & Lukaszewski, 2003). For example, the most common practices used for online recruitment involve (a) adding recruitment pages to existing organizational websites, (b) using specialized recruitment websites (for example, job portals, online job boards), (c) developing interactive tools for processing applications (for example, online applications, email auto responding), and (d) using online screening techniques (for example, keyword systems, online interviews, or personality assessment) (Galanaki, 2002). Hereafter we refer to these practices as e-recruiting or online recruiting. Although estimates vary, surveys show that between 70 and 90 percent of large firms now use e-recruiting systems, and it is anticipated that over 95 percent of organizations plan to use them in the near

5

future (Cappelli, 2001; Cedar, 2003). Similarly, reports indicate that many large firms now use intranet systems to post job openings, which provides current employees with greater advancement opportunities and may enhance their satisfaction and commitment levels (Cedar, 2002; Stone, Stone-Romero, & Lukaszewski, 2003).

Interestingly, some high-technology firms (Cisco Systems, for example) recruit employees only through the Internet; and estimates indicate that 20 percent of all hires now come from online systems (cf. Cascio, 1998). Furthermore, firms such as Walt Disney World and Cisco are using e-recruiting websites or web-based portals to help establish "brand identities" that distinguish them from their competitors (Stone, Stone-Romero, & Lukaszewski, 2003; Ulrich, 2001). For example, the Disney World brand identity involves high levels of customer satisfaction and a quality entertainment experience for all. This identity is fostered in the organizational culture, becomes part of a company's website, and plays a pivotal role in attracting new employees to the firm. Thus, applicants can review unique information about the firm's "brand identity" on the company's website to determine whether their personal goals and values fit with the organization's culture. Then they can apply for jobs when they perceive there is an overlap between the company's goals and their own value systems.

In addition to the communication of brand identity, surveys show that 38 percent of organizations are now using online systems to increase employee retention levels by identifying and resolving employee salary inequities before employees search for other jobs (Cedar, 2003). It is clear that these firms are aware that it may be much easier to retain and develop existing talent than to acquire new or unproven talent (Cedar, 2003). Furthermore, it is evident that eHR systems have become important means of helping organizations establish a brand identity, attract talented workers, and retain valuable employees.

Apart from the reasons for using online recruiting noted above, these systems may also increase the effectiveness of the recruitment process by (a) reaching large numbers of qualified applicants, including those in international labor markets (Cappelli, 2001; Galanaki, 2002), (b) reducing recruitment costs (Cappelli, 2001), (c) decreasing cycle time (Cardy & Miller, 2003; Cober, Brown, Levy, Keeping, & Cober, 2003), (d) streamlining burdensome administrative processes (Stone, Stone-Romero, & Lukaszewski, 2003), and (e) enabling the organization to evaluate the success of its recruitment strategy (Stone, Stone-Romero, & Lukaszewski, 2003). For instance, online systems helped Cisco Systems attract more than 500,000 individuals in one month and enabled them to hire 1,200 people in three months' time (Cober, Brown, Blumental, Doverspike, & Levy, 2000). In addition, some reports indicate that online recruiting costs 95 percent less than traditional recruiting. For example, some estimates indicate that the cost of online recruitment is \$900 as compared to \$8,000 to \$10,000 for traditional systems (Cober, Brown, Blumental, Doverspike, & Levy, 2000). In the same way, research shows that firms can reduce hiring cycle times by 25 percent when using online recruitment (Cober, Brown, Blumental, Doverspike, & Levy, 2000), and can use these systems to provide easy and inexpensive realistic "virtual" previews to job applicants (Stone, Stone-Romero, & Lukaszewski, 2003). Finally, these systems enable organizations to evaluate the effectiveness of the recruitment process and examine the validity of assessment techniques (Mohamed, Orife, & Wibowo, 2002; Stone, Stone-Romero, & Lukaszewski, 2003).

Although there are certainly numerous benefits of using online recruitment systems in organizations, some analysts have argued that there may also be a number of dysfunctional or unintended consequences of using such systems (cf. Bloom, 2001; Stone, Stone-Romero, & Lukaszewski, 2003). For example, replacing traditional recruiters with computerized systems may make the recruitment process much more impersonal and inflexible and, therefore, have a negative impact on applicants' attraction and retention rates (Bloom, 2001; Stone, Stone-Romero, & Lukaszewski, 2003). Likewise, the use of online recruitment may have an adverse impact on members of some minority groups because these individuals may not have access to computerized systems or possess the skills needed to use them (Hogler, Henle, & Bemus, 2001). In addition, applicants may perceive that online systems are more likely to invade personal privacy than other recruitment sources. As a result, applicants may be less willing to use e-recruiting systems than traditional systems to apply for jobs (Harris, Van Hoye, & Lievens, 2003; Stone, Stone-Romero, & Lukaszewski, 2003).

## **Purpose of the Chapter**

Despite the widespread use of online recruiting, relatively little research has been done to examine the effectiveness of these systems or consider their impact on job applicants. We believe this is problematic because technology has dramatically changed recruitment practices, and organizations have invested substantial resources in these new systems without the benefit of research. Thus, organizations may be able to use the knowledge gained from research to increase the acceptance and enhance the effectiveness of these new recruiting systems. Therefore, the primary purposes of this chapter are to (a) consider the effects of e-recruiting practices on applicants' attraction to organizations, (b) review the findings of recent research on the topic, and (c) offer guidelines for human resources (HR) professionals concerned with developing and implementing e-recruiting systems. In order to accomplish these goals, we first provide a framework for understanding the recruitment process (Rynes, 1991) and consider the degree to which online systems facilitate each element in this process.

## **Model of the Recruitment Process**

One of the key goals of this chapter is to consider the effects of online recruitment practices on individuals' attraction to an organization and motivation to apply for a job. In order to understand this process, we first provide a framework for understanding the antecedents and outcomes of recruitment. In particular, we consider the model of recruitment presented by Rynes in 1991.

Quite simply, Rynes's (1991) model of recruitment suggests that applicants gather information about organizations to assess the types of rewards offered by the organization and to determine whether or not they meet the requirements of the job. In addition, they attend to signals that cue them about the culture and climate of the organization (for example, poor administrative practices may signal that the organization is inefficient or not well managed). Furthermore, this model suggests that four key factors affect applicants' attraction to organizations, including (a) recruiter characteristics, (b) source characteristics, (c) administrative policies and practices, and (d) vacancy characteristics. Finally, the model

applicable copyright law.

indicates that when applicants are attracted to organizations they are more likely to apply for jobs, accept job offers, and remain with the organization over time. Given that recruiters are not often part of online recruiting systems, we do not consider recruiter characteristics in our review. However, we do discuss online recruitment as a source of applicants, as an administrative practice, and as a means of communicating vacancy characteristics in sections below. In addition, we consider the effectiveness of an e-recruiting strategy as a means of supporting an organization's mission and goals.

### **Online Recruitment as a Source of Applicants**

Online recruitment can be viewed as just one of the many sources used by organizations to attract job applicants. Other alternatives include direct applications, employee referrals, newspaper advertising, employment agencies, and executive search firms. Given that firms often use a variety of recruitment sources to attract applicants, we believe that HR professionals may want to know how e-recruiting compares to other sources in terms of its acceptance and effectiveness. Thus, we review the results of research on e-recruiting as a source of applicants.

#### **Applicant Preferences for Online Recruitment**

It is clear that many job applicants are now using online systems to search for jobs and gather information about employment opportunities in organizations. Furthermore, organizations often use online systems to attract passive job seekers who are currently employed, but secretly searching for new or better employment opportunities. Although e-recruiting is widely used, there is still a great deal of uncertainty about its acceptance among job applicants (Galanaki, 2002; Zusman & Landis, 2002). For example, research shows most applicants continue to prefer newspaper advertisements to e-recruiting; and surveys consistently indicate that the Internet is not the number one source of jobs for most candidates (Galanaki, 2002; Zusman & Landis, 2002). In addition, many applicants still rate employee referrals and personal recruitment more favorably than the Internet because they can gather realistic information about the company from current employees (McManus & Ferguson, 2003). However, studies show that *students* often view online recruitment more favorably than other recruitment sources. One potential reason for this is that they have grown up with computers and are accustomed to seeking a wide array of information on the Internet (Zusman & Landis, 2002). Furthermore, surveys indicate that e-recruiting may be particularly effective when firms are searching for applicants in information in the marketplace (Galanaki, 2002).

### **Yield Rates from Online Recruitment**

Organizations often adopt online systems because they believe e-recruiting is more likely than traditional recruitment sources to uncover individuals with unique talents and skills. The logic here is that e-recruiting systems permit firms to cast a wide net across a broad labor market and, therefore, may be more likely to reach high-quality applicants than other sources. Although this argument seems quite plausible, research does not provide support for it. In fact, research shows that companies do not attract higherquality candidates, but do attract greater numbers of candidates with e-recruiting than traditional sources (Chapman & Webster, 2003; Galanaki, 2002). One explanation for the increased volume of applicants is that individuals often spend more time searching for jobs online because the process is much simpler and faster than traditional systems (Chapman & Webster, 2003). However, increasing the volume of applicants may also increase the administrative burden in an organization and increase overall transaction costs over time.

Furthermore, some analysts have argued that online systems allow employers to tailor their recruitment to specific labor markets (for example, black engineers or bilingual applicants) through the use of specialized websites or job boards that target applicants with distinctive skills and backgrounds (for example, Asian-net.com. or nsbe.com for black engineers). However, research on the use of these specialized job boards indicates they do not always produce higher-quality candidates, but do yield candidates with higher levels of education than general job boards (Jattuso & Sinar, 2003). Furthermore, research shows that general job boards do produce candidates with more work experience than other sources do (Jattuso & Sinar, 2003).

#### Types of Candidates Attracted by Online Recruitment

Although online systems generate a large number of job applicants, it is also clear that some candidates may be more receptive to e-recruiting and more likely to use these systems than others. One explanation for this is that online recruiting requires that candidates have access to computers and have the skills needed to use this technology. As a result, e-recruiting systems are likely to attract individuals who are well educated, have the ability to navigate the Internet, and are searching for relatively high-level jobs. Not surprisingly, research supports these arguments and has indicated that online systems attract candidates with higher achievement, drive, and persistence levels than traditional recruitment sources (McManus & Ferguson, 2003). However, results of this research also revealed that candidates recruited through online systems have a less favorable background than those recruited by personal sources and may be more likely to be job hoppers than those recruited from other sources (McManus & Ferguson, 2003). For instance, 35 percent of those recruited by the Internet had three or more jobs in a five-year period (McManus & Ferguson, 2003). Furthermore, McManus and Ferguson (2003) found that online recruiting was less likely to attract members of diverse groups than impersonal recruitment sources (such as newspaper ads), suggesting that e-recruiting may not help firms increase the diversity of their workforces. Given that some types of candidates may be more likely to use e-recruiting than others, the use of these systems may affect the characteristics of new hires in organizations and influence the overall composition of the workforce. These issues will be discussed in more detail in the section below on strategic issues.

In summary, it appears that, despite the widespread use of online recruiting, many candidates still prefer traditional sources such as newspaper ads and employee referrals to online sources. Furthermore, online recruitment may not always increase the quality of job candidates, but is likely to increase the number of candidates who apply for jobs. In addition, applicants who use e-recruiting systems may be likely to have higher achievement and persistence levels, but may also have less favorable backgrounds or switch jobs more frequently than those recruited from more traditional sources. Furthermore, online recruiting may be less likely to attract candidates from diverse backgrounds and affect the overall composition of the workforce. In light of these research findings, the following guidelines are suggested for HR professionals:

- *Guideline 1:* Organizations that are well-known or have prominent reputations may benefit more from online recruiting than those that are not well-known.
- *Guideline 2:* Organizations should use e-recruiting as one source of applicants, but should not use it as the only source for recruiting applicants.
- *Guideline 3:* Organizations should capitalize on the strengths of erecruiting and use it when large numbers of candidates are needed or when they are searching for individuals in high-level jobs requiring fairly high education levels. In addition, they should use e-recruiting to target candidates in specific labor markets, including those in high-technology jobs and students who are searching for part-time employment or full-time jobs right out of college.
- *Guideline 4:* Organizations should recognize that e-recruiting may not be the preferred source for most job applicants and may not always reach the types of applicants that can help the organization meet its goals. Thus, organizations should be aware that e-recruiting may not attract the most qualified job applicants, may not be particularly effective for reaching minority candidates, and may actually be more attractive to individuals with unfavorable rather than favorable backgrounds (those who switch jobs frequently).

# Administrative Issues Associated with Online Recruitment

Organizations have long recognized that their administrative practices influence applicants' attraction to an organization because these practices provide candidates with cues about (a) the nature of the company (for example, efficiency, ability to pay, co-workers, how well they are managed) and (b) their chances of receiving job offers (cf. Rynes, 1991). For example, some evidence suggests that applicant perceptions of the timeliness of firm responses to recruitment inquiries, company reimbursement policies, and realistic recruitment messages influence their attraction to organizations (Rynes, 1991). Therefore, we consider some of the administrative issues associated with the use of online recruitment in the sections below, including (a) the attributes of the website (that is, attractiveness, ease of use, and orientation), (b) the reliability and validity of screening systems, and (c) the use of these systems for providing realistic job previews.

#### Attributes of the Website

Organizations often invest considerable resources in website development because they believe that the attractiveness, quality, and ease of use of the website will influence applicants' attraction to the organization (Zusman & Landis, 2002). However, research suggests that although some attributes of the website may affect applicants' motivation to apply for jobs, others do not (Zusman & Landis, 2002). For example, research has examined the degree to which the attractiveness of the website influences job seekers; however, the findings of this research have been quite mixed. In particular, research has found that individuals prefer companies with high-quality websites (Zusman & Landis, 2002) and that website designs influence applicants' impressions of the organization (Scheu, Ryan, & Nona, 1999). However, other research has indicated that the attractiveness of the website has little or no influence on applicant attraction to organizations (Cober, Brown, Levy, Keeping, & Cober, 2003). As a result, these researchers argue that vacancy characteristics (for example, pay, benefits, or advancement opportunities) are much more important determinants of applicants' attraction to organizations than the attractiveness of the website.

Although research does not show that the attractiveness of the website influences job applicants, research does suggest that the speed with which websites can be navigated and ease-of-use of the website affect applicants' attitudes toward the organization (Cober, Brown, Levy, Keeping, & Cober, 2003). In fact, studies have consistently shown that applicants are more likely to apply for jobs when the website is easy to navigate than when it is not (Sinar, Paquet, & Reynolds, 2003; Williamson, Lepak, & King, 2003). Furthermore, this research indicates that candidates react more positively to online selection systems when they feel the website is efficient and user-friendly than when it is difficult to use (Sinar, Paquet, & Reynolds, 2003). It merits noting, however, that research also shows that inexperienced job candidates are more likely to be influenced by the attributes of the website than applicants with job experience (Sinar, Paquet, & Reynolds, 2003).

Another attribute that may affect applicants' reactions to online recruiting is the orientation of the website. Even though most websites are designed with a recruiting orientation, many new websites are designed to include online screening and assessment systems (Jones & Dages, 2003). As a result, it is important for organizations to determine whether the orientation of the website influences its acceptance and effectiveness. Not surprisingly, research has indicated that individuals are more likely to be attracted to organizations that use a recruiting-oriented website than a screening-oriented website (Williamson, Lepak, & King, 2003). One potential explanation for this is that organizational screening systems may be more likely to increase applicants' evaluation apprehension than simple recruiting systems and, therefore, decrease their willingness to apply for jobs. In addition, this research revealed that applicants who preferred e-recruiting systems were more likely to use the website as a cue about the organization's quality than those who did not prefer these systems (Williamson, Lepak, & King, 2003). As a result, these findings support the arguments noted above that suggested some individuals are more likely to be influenced by the attributes of the website than others.

In summary, it appears that the orientation of the website and its ease of use are likely to influence applicants' attraction to organizations, but the attractiveness of the website may have little or no effect on their willingness to apply for jobs. Furthermore, candidates with little job experience and those who favor online recruiting may pay more attention to website characteristics than others. Thus, we offer the following guideline for HR practitioners: *Guideline 5:* Organizations should ensure that their websites are designed to be easy to use, simple to navigate, and focus on attracting candidates rather than screening them for jobs.

#### **Effectiveness of Online Assessment Techniques**

Organizations use online recruiting systems for multiple purposes, including attracting candidates, communicating benefits about the organization, and assessing applicants' knowledge, skills, abilities, and other requirements (such as personalities). For example, some firms now use software (for example, Resumix) to scan applicant résumés for key words and provide them with immediate feedback about whether they are qualified for jobs. Other organizations use online aptitude tests, personality inventories, or simulations to assess candidates' critical thinking and decision-making skills (for example, Price Waterhouse Coopers, JPMorgan Chase) (Cappelli, 2001). Still other firms conduct online interviews or allow candidates to submit video clips as part of the application process (Cappelli, 2001). Interestingly, a recent survey indicated that 12 percent of organizations now use e-recruiting systems to test or assess applicants' knowledge, skills, and abilities because these systems allow a large number of applicants to be screened quickly and efficiently (Recruitsoft/iLogos, cited in Cappelli, 2001).

Given the growing use of online screening systems, analysts have argued that there are a number of advantages and some potentially dysfunctional consequences of using these systems. For example, Stone, Stone-Romero, and Lukaszewski (2003) contend that online assessment techniques may be much more objective and, therefore, less biased by non-job-related factors (race, gender, or age, for example) than more subjective selection techniques (for example, interviews). In the same way, the use of key word systems to screen résumés may quickly distinguish whether applicants meet the job requirements, and often provide applicants immediate feedback about the status of their application (Stone, Stone-Romero, & Lukaszewski, 2003). As a result, members of some protected groups (racial minorities, people with disabilities) may perceive they have a better chance of being selected for jobs when online screening systems are used rather than traditional selection systems (Stone, Stone-Romero, & Lukaszewski, 2003). Interestingly, some recent research by McManus and Ferguson (2003) supports this argument and found that many African American applicants preferred online application systems to traditional systems. Also, some research suggests that people with disabilities may be more receptive to online screening systems than to traditional systems because they can be easily modified to fit their special needs (for example, use of larger font sizes) (Stone & Williams, 1997).

In spite of the advantages of using online systems to screen applicants, other researchers have noted a number of potential dysfunctional consequences of using e-recruiting systems (Stone, Stone-Romero, & Lukaszewski, 2003). In particular, Mohamed, Orife, and Wibowo (2002) have questioned whether these systems actually help organizations make accurate predictions about the performance of job applicants. Other researchers have expressed concern that online systems have the potential to result in a large number of misclassification errors, which means that the organization may eliminate qualified candidates in favor of those who are not qualified (Stone, Stone-Romero, & Lukaszewski, 2003). Moreover, researchers have argued that online screening systems may not always produce reliable or valid results (Jones & Dages, 2003; Mohamed, Orife, & Wibowo, 2002). In particular, Mohamed, Orife, and Wibowo (2002) maintained that the criteria used in key word systems may not always be based on job analyses and, therefore, may not be job related. In addition, these authors contend that an applicant's résumé writing skills or choice of words may bias the screening process so that applicants who use words listed in the job posting often have a better chance of getting the job than those who do not. As a result, organizations may select candidates who use the right words, rather than the ones most qualified for jobs.

Similarly, we believe, as do others, that online ability tests and personality assessments may be less reliable and valid than traditional systems because applicants complete the tests without being monitored (Chapman & Webster, 2003). Thus, there is often no way of ensuring that applicants completed the tests honestly or without assistance from others. There is also no way to be certain that applicants do not copy tests online, research the answers, and share them with others (Chapman & Webster, 2003). In an effort to resolve these problems, some organizations are using very creative means of screening job applicants, including computer adaptive testing, which varies the test items and length of the test based on the examinee's responses (Jones & Dages, 2003). Despite the use of these methods, there is still a great deal of uncertainty about the effectiveness of online screening systems, and organizations must ensure that these systems produce reliable and valid results before using them to select applicants.

#### **Realistic Previews**

One of the potential advantages of online recruiting systems is that organizations can provide applicants with unique information about their company and give them a more realistic preview of what it is like to work for the organization. For example, some companies allow applicants to observe the firm's activities through virtual systems, and others use highly creative means of providing applicants with realistic job previews. Cisco Systems offers online applicants a chance to "Make a Friend at Cisco," helping them establish a relationship with someone inside Cisco who can describe what it is like to work for the organization (Cascio, 1998). It is clear that organizations believe using online systems to provide realistic previews will enhance applicants' subsequent satisfaction levels and retention rates (Rynes, 1991).

Interestingly, some research supports these arguments and has consistently found that online systems may be a useful means for providing realistic previews to job applicants (Rozelle & Landis, 2002). In particular, this research indicated that applicants felt they had more of a chance of collecting realistic information from websites than from traditional sources because websites allowed some flexibility in gathering data that were relevant to them. Thus, the use of online recruiting may be a particularly useful means of conveying the unique characteristics of the organization and/or providing realistic previews to applicants.

Apart from the realistic information provided by online recruiting, HR professionals know that applicants choose jobs and organizations that fit with their personal values, beliefs, and attitudes. As a result, many organizations emphasize information about their strategic goals and culture on their websites so that applicants can make informed decisions about whether they will be satisfied with the organization. This phenomenon has been labeled person-

organization fit; and research has suggested that communicating information about an organization's culture does affect employees' retention rates. In particular, Sheridan (1992) found that firms emphasizing interpersonal-relationship value systems had a higher employee retention rate than organizations that emphasized worktask values. Furthermore, Dineen, Ash, and Noe (2002) indicated that feedback about applicants' fit with an organization's culture influenced their attraction to organizations. Thus, organizations might be able to increase employee satisfaction and retention rates by conveying information about the organization's culture on the website and by providing applicants with immediate feedback about the degree to which their values and goals fit with the organization's culture. It merits noting, however, that the use of this strategy alone may not always be effective because highly talented applicants who do not feel they fit with the organization's culture may self-select themselves out of the application process. Thus, we believe, as do others (Cascio, 1998), that organizations may want to use websites to promote values that are attractive to most new employees rather than just select candidates who fit with the traditional value system in the organization. Given these research results, we offer the following guidelines for HR professionals:

- *Guideline 6:* Organizations should develop online screening systems based on job analyses and ensure that the inferences made from these systems are reliable and valid.
- *Guideline 7:* Organizations should develop e-recruiting systems that provide applicants with information about the unique characteristics of the organization and ensure they are given a realistic preview of the firm.
- *Guideline 8:* Organizations should use websites to promote values that will be attractive to most new employees rather than just select those that fit with the traditional culture.

## **Communication of Vacancy Characteristics**

Another potential benefit of online recruitment systems is that websites can easily be used to communicate vacancy characteristics (for example, pay, benefits, perquisites, and advantages of working for the organization) and enhance applicants' attraction to the organization (Rynes, 1991). Furthermore, online systems can highlight unique aspects of the corporate culture and provide important signals about the nature and benefits of working for the organization (Cober, Brown, Blumental, Doverspike, & Levy, 2000). For example, the Shell Oil Company website provides information about the types of knowledge, skills, and attitudes they are looking for in potential employees; and many other firms convey the benefits of working for their organizations on their websites (McCourt-Mooney, 2000). Not surprisingly, some research has shown that using a website to convey vacancy characteristics may be a particularly effective means of attracting job candidates. For instance, research by Cober, Brown, Levy, Keeping, and Cober (2003) found that communicating information about pay levels and developmental opportunities on a job site had a positive effect on applicants' attraction to organizations. Other research has shown that displaying job descriptions and salary levels may also be effective strategies for attracting potential job candidates (Mohamed, Orife, & Wibowo, 2002).

In view of these arguments, we conducted a simple review of the types of data posted on the websites of the Fortune 100 companies between July 15 and August 15, 2004. The results of our review revealed that 66 of the Fortune 100 companies highlighted the advantages of working for the organization on their websites. Some notable exceptions included Wal-Mart, General Motors, Exxon, Ford Motor Company, Citigroup, Home Depot, and Bank of America. Given that many of these organizations have established reputations, they may not perceive the need to promote the benefits of working for the organization on their websites. In addition, most of the companies did post job descriptions on their websites, and only Exxon-Mobil, Altria Group, Bank of America, Berkshire Hathaway, Sears, and Costco Wholesale did not provide this information. Furthermore, most of the Fortune 100 websites did provide information on employee benefits (e.g., medical insurance, retirement benefits) or allowed applicants to create a benefits profile on their websites. However, only a few companies included salary levels on their websites, including Sprint, Prudential Financial, Cigna, Aetna, Verizon Communications, and MetLife. Some

other companies (UPS and American International Group) provided salary levels for only part-time positions.

Thus, it appears that most large firms communicate vacancy characteristics on their web pages and use that information to attract applicants, including passive job seekers who are currently employed and not actively looking for jobs. Interestingly, however, firms may not post salary information because they do not want to share salary data that might create internal inequities or deter potential candidates from applying for jobs.

Although it is clear that organizations use online systems to convey information about the benefits of working for their companies, employers also use websites to communicate a particular image to potential job candidates (Galanaki, 2002). In fact, Galanaki contends that companies often adopt online recruitment systems because they fear falling behind in the labor market, and "jump on the e-recruiting bandwagon" in order to keep up with other organizations. Others, however, suggest that some types of organizations use online recruiting to project their image or create a specific brand identity in the labor market (Chapman & Webster, 2003; Ulrich, 2001). In support of this argument, research by Chapman and Webster (2003) found that organizations wanting to project a people-oriented image were less likely to invest in e-recruiting systems than those wanting to project an aggressive or innovative image. Similarly, analysts have suggested that online recruiting systems may serve as a symbol that the company is up-to-date, innovative, and flexible (Galanaki, 2002).

Despite these arguments, others contend that online systems may not always project a positive image for the firm and may signal that the organization is rigid, inflexible, or impersonal in its management style (Gutek, 1995; Stone, Stone-Romero, & Lukaszewski, 2003). In particular, Stone and her co-authors maintain that online systems may be viewed as rigid because they are often incapable of dealing with the inevitable exceptions that arise when applicants submit data online. For example, online applications may not allow candidates to enter a complete description of their background or abilities because the data entry fields may be too narrow or small. Thus, applicants may perceive that the use of online applications will decrease their chances of being selected for jobs. Similarly, research on customer satisfaction suggests that the use of online recruitment may negatively affect applicants' satisfaction levels because these systems lead to impersonal encounters with machines and eliminate personal relationships with recruiters (Gutek, 1995). As a result, some applicants may feel that e-recruiting systems are unfair because these systems do not allow them to fully convey their qualifications for the job and may not permit them to display their interpersonal or communication skills. In view of these arguments, we offer the following guideline for HR professionals:

*Guideline 9*: Employers should ensure that e-recruiting systems are not adopted as a fad, but are used to enhance applicants' attraction to organizations or increase the number of successful placements made.

# The Alignment of e-Recruiting Systems with an Organization's Strategic Goals

It is clear from our review that online recruiting systems are often adopted to increase the efficiency of the recruitment process and decrease the overall costs of recruiting. Although these reasons are laudable, we believe that the principal goal of recruitment should be to attract talented individuals who can help the firm meet its strategic goals. However, despite this important goal there is still a great deal of uncertainty about whether e-recruiting always helps a firm enhance applicants' attraction to organizations. For example, given that online recruiting requires that applicants have technical skills in order to use the systems, some individuals may be more likely to use e-recruiting than others. As a result, if organizations use e-recruiting systems as their primary source for staffing, then these systems will certainly influence the types of individuals who are attracted to and join organizations. Furthermore, these systems will indirectly influence the overall composition of the company's workforce and may decrease the level of diversity.

Therefore, it is essential that HR professionals determine whether online recruiting systems support their overall staffing goals and enable them to hire individuals who can help them meet their firms' strategic objectives. For example, if a firm has an innovation strategy that focuses on developing new information technologies, then e-recruiting systems are likely to identify individuals who have the skills that can help them meet these goals. The logic here is that applicants with highly technical skills may be more likely to use online recruiting than other recruitment sources because computer technology is a key element of their jobs. However, if an organization has adopted a quality enhancement strategy and requires a diverse workforce to help them meet the needs of a diverse customer base, e-recruiting may not always allow them to achieve these goals. One reason for this is that minority applicants or those with diverse backgrounds may be less likely to use online recruiting systems than traditional systems, and, therefore, these systems may not uncover applicants with the characteristics organizations need to be successful. In addition, quality enhancement strategies often require that employees have good interpersonal skills and can work effectively in teams. However, online screening systems (key word systems) may not be capable of assessing these characteristics and, therefore, may not help support the organization's strategic goals. Thus, in order for e-recruiting to be effective it must be accepted and used by applicants who have the types of skills and abilities the organization needs to meet its objectives. In view of these arguments, we briefly review the results of research on the types of individuals who are most likely to accept and use online recruitment systems to search for jobs.

#### Age, Gender, and Ethnic Differences in Use of Online Recruitment

It has often been argued that there are age, gender, and ethnic differences in reactions to and usage of online recruitment sources (Galanaki, 2002; McManus & Ferguson, 2003; Zusman & Landis, 2002). In particular, research shows that online recruitment is likely to attract young, computer literate, and well-educated individuals (Galanaki, 2002). Furthermore, research has found that employed men are more likely to search for jobs on the Internet than employed women (Kuhn & Skuterud, 2000). Similarly, surveys show that white candidates are more likely to use online recruitment than minority candidates (McManus & Ferguson, 2003). For example, a review of usage rates revealed that only 7

percent of Hispanics use online recruitment, compared to 9 percent of blacks and 16 percent of whites (Kuhn & Skuterud, 2000). Furthermore, some research shows that candidates who are 55 years of age and older are less likely to use the Internet as a source for jobs than younger candidates (McManus & Ferguson, 2003). As a result, research suggests that online systems are more likely to attract young, white male applicants than those who are older, female, or members of ethnic minority groups. Thus, the use of online recruitment may limit the types of applicants who apply for jobs and ultimately affect the heterogeneity of the organization's workforce. Accordingly, online recruitment may not be aligned with all types of business strategies and may be far less useful for firms that focus more on quality enhancement or diversity strategies than other types of firms. Therefore, HR professionals must consider whether online recruitment systems enable them to attract the types of candidates they need to meet their strategic goals.

Interestingly, although we argued above that ethnic minorities may be less likely to use online systems than traditional systems, some recent studies show that African American candidates may be more likely to use e-recruiting than personal recruitment sources (McManus & Ferguson, 2003). In addition, other research shows that racial minorities often react quite favorably to online recruiting and use it to self-select themselves out of the application process (Sinar & Reynolds, 2001). One possible explanation for this is that African Americans may perceive that online recruiting is less likely to be discriminatory than other recruitment sources; however, it may also be the case that online systems signal minorities that they are less likely to be comfortable in the organization. Thus, online recruitment may signal applicants that the organization has a potentially chilly climate because there are few minorities or women employed by the organization. For example, many high-tech firms are dominated by white males, and researchers argue that women and minorities are less likely to pursue jobs in these organizations because they may not feel welcome (Johnson, Stone, Phillips, & Stone-Romero, 2004).

Although research shows that in some cases African Americans are more likely to use online systems than other recruitment sources, research consistently shows that Hispanic Americans are less likely than members of other ethnic groups to use e-recruiting systems. The reasons for the low usage rates among Hispanics are not clear,

but some researchers suggest that poverty and lack of access to computers are key sources of the problem (Kuhn & Skuterud, 2000). However, other researchers suggest that the low usage rate among Hispanics may be much more complex and argue that cultural values or low computer self-efficacy levels may affect Hispanics' acceptance of these systems (Johnson, Stone, Phillips, & Stone-Romero, 2004). In support of this argument, some recent research revealed that individuals from other cultures (for example, the Chinese) are often less satisfied with web portals developed in the United States and find them harder to use than do individuals from the American culture (Fang & Pei-Luen, 2003). This research indicated that individuals from China often have different cognitive styles and thought processes, and websites developed in the United States may not fit the Chinese style or be useful for individuals from that culture. Given these arguments, we offer the following guidelines for HR professionals:

- *Guideline 10:* Organizations should ensure that e-recruiting systems are aligned with the strategic goals of the firm and allow them to attract the types of individuals who can help them meet their strategic objectives.
- *Guideline 11:* Organizations should regularly collect feedback from job applicants about the types of implicit or explicit messages that are conveyed about the climate of the organization on the company's website.
- *Guideline 12:* Organizations should develop e-recruiting systems that are culturally sensitive and include special features (for example, use of multiple languages, alternative system designs) for attracting applicants from diverse cultural backgrounds.

## Educational, Skill Level, and Personality Differences in Use of Online Recruiting

Apart from age, gender, and ethnic differences in the use of online recruitment, applicants' educational background and personality characteristics may also affect their use of these systems. For intance, research by McManus & Ferguson (2003) revealed that the Internet is more likely to attract candidates with high levels of computer skills and four-year degrees than traditional recruitment sources. Furthermore, research shows that individuals with high levels of computer anxiety or low levels of computer self-efficacy may be less likely to use computers than others (Marakas, Yi, & Johnson, 1998). However, some other research shows that applicants who are not especially computer savvy may still be able to find jobs on the Internet (Van Rooy, Alonso, & Fairchild, 2003).

In summary, we have argued that in order for online recruitment to be effective, it should be aligned with the goals of the organization and attract individuals with the requisite characteristics needed by the organization to meet its strategic objectives. Despite these arguments, it appears that online recruiting may not reach all job applicants, especially those who are older, women, ethnic minorities, and individuals who have low levels of education or computer self-efficacy. As a consequence, the use of e-recruiting may affect the overall composition and heterogeneity of the workforce. Therefore, we offer the following guideline for HR professionals concerned with developing and implementing e-recruiting systems:

*Guideline 13:* Organizations should develop simple e-recruiting systems that can easily be used by individuals with all educational levels and that are sensitive to those who have high levels of computer anxiety or low levels of computer self-efficacy.

### Some Potentially Dysfunctional Consequences

Although we have highlighted a number of benefits of using e-recruiting throughout this chapter, we believe that such systems may also produce some unintended or dysfunctional consequences for organizations and job applicants. Therefore, we consider two of these unintended consequences (potential for adverse impact and invasion of privacy) in the sections that follow.

#### **Potential for Adverse Impact**

Despite the fact that e-recruiting is thought to have a number of advantages for organizations, it has been argued that these systems may have an adverse impact on members of several ethnic minority groups (for example, African Americans, Hispanic Americans, Native Americans) (Hogler, Henle, & Bemus, 2001; Stone, Stone-Romero, & Lukaszewski, 2003). The basis for this argument is that there is a "racial or digital divide" in access to and use of computers, and Anglo Americans are more likely to own and use computers than are African Americans or other ethnic minorities. For example, research shows that 33 percent of African American households in the United States own computers; and 24 percent have access to the Internet (U.S. Bureau of Census, 2001). In contrast, 56 percent of Anglo American households have computers and more than 46 percent have Internet access (U.S. Bureau of Census, 2001). As a result, African Americans may have fewer opportunities to gain access to jobs online than majority group members. In addition, some evidence shows that women are less likely to use computers than men (Johnson, Stone, Phillips, & Stone-Romero, 2004).

In addition, those applicants who come from low socioeconomic status backgrounds (that is, those in rural areas, inner cities, or on Native American reservations) often have less access to computers than those who are more economically advantaged (Stone, Stone-Romero, & Lukaszewski, 2003). Furthermore, some reports indicate that there are fewer computers in schools or libraries that serve a large percentage of ethnic minorities as compared to those in primarily white areas (Hogler, Henle, & Bemus, 2001). Also, some research shows that women have less experience with computers, have lower levels of computer self-efficacy, and are less likely to use computers than are men (Ogletree & Williams, 1990). As a result, the use of e-recruiting systems may place some individuals at a considerable disadvantage in the job market and may have an adverse impact on women and members of some protected groups. Thus, organizations that use *only* online recruiting may be subject to charges of unfair discrimination in the recruiting process. Consequently, organizations should ensure that online recruitment systems do not have a disproportionately negative impact on minority group members. Thus, we offer the following guideline for HR practitioners:

*Guideline 14:* Organizations should recognize that online recruitment systems may have an adverse impact on members of some protected groups and regularly assess the degree to which these systems are in compliance with civil rights laws.

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 12/11/2017 5:00 PM via AMERICAN PUBLIC

#### 44 THE BRAVE NEW WORLD OF EHR

Although the use of online recruiting may have the potential for adverse impact for members of some minority groups, analysts have argued that e-recruiting may actually increase the number of applications organizations receive from people with disabilities (Stone & Williams, 1997). One reason for this is that applicants with disabilities may find it much easier to apply for jobs online than in person. In addition, online systems may make it much easier for organizations to reach applicants with disabilities and help remove potential barriers that disabled individuals might experience in the application process (Employers' Forum on Disabilities, 2003). For example, employers can use technology to facilitate the application process by (a) making websites more accessible (for example, larger font sizes), (b) enhancing applicants' abilities to communicate with organizations, (c) conveying employment policies and procedures relevant to people with disabilities, and (d) modifying assessment methods to accommodate people with disabilities (Employers' Forum on Disabilities, 2003). In view of the potential advantages of using e-recruiting to attract candidates with disabilities, we offer the following guideline for employers:

*Guideline 15:* Organizations should design e-recruiting systems so that they attract and accommodate the needs of ethnic minorities and individuals with disabilities.

#### **Potential to Invade Privacy**

Another potentially dysfunctional consequence of using e-recruiting is that applicants may perceive that these systems have the potential to invade their personal privacy (Stone, Stone-Romero, & Lukaszewski, 2003). In fact, previous research has shown that there is growing concern among job applicants about using online application systems (Linowes, 1989; Pillar, 1993; Stone & Stone, 1990). One explanation for this is that data in computerized systems can easily be merged or networked with other systems, and individuals can be permanently stigmatized in the process. For example, when an applicant applies for a job online, the data from the résumé can be used to gather additional data about his or her credit, lifestyle, or medical history. As a result, an applicant who had a credit prob-

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 12/11/2017 5:00 PM via AMERICAN PUBLIC

lem very early in life may have difficulty purging various computerized systems of the negative information. Thus, data that have no bearing on the person's current job performance may prevent the individual from being hired by organizations.

Furthermore, we believe that perceptions of invasion of privacy are important because they affect applicants' attraction to organizations and willingness to use online systems to apply for jobs (Harris, Van Hoye, & Lievens, 2003; Stone & Stone-Romero, 1998). In addition, applicants' perceptions of invasion of privacy may negatively affect their test performance and increase the likelihood they will take legal action against the organization (Harris, Van Hoye, & Lievens, 2003). Therefore, three key privacy issues are considered below: (a) unauthorized access to data, (b) unauthorized disclosure of data, and (c) lack of privacy protection policies.

#### **Unauthorized Access to Data**

Job applicants are often concerned about the use of e-recruiting systems because these systems permit others inside or outside of the organization to gain access to their personal information (for example, Social Security number, address, personality data, credit reports, medical data). For example, in 2002 a person posing as a recruiter downloaded 2,400 résumés from a job site used by biotechnical professionals and developed his own job board with the data (Brotherton, 2004). Not surprisingly, applicants were upset when they learned that their information had been stolen and used for unauthorized purposes. In response, the owners of the original job site took legal action against the thief. Similarly, reports indicate that over 80,000 individuals experience identity theft per year in the United States, and this number is expected to rise with the increased use of Internet-based business transactions (Dixon, 2003). As a result, many applicants fear that if their personal data or Social Security numbers are accessed by others, they are likely to experience a number of negative outcomes (such as denial of a job, loss of money or credit). Given these concerns, research shows that applicants in the United States are often reluctant to submit their applications online because they worry that their personal data will fall into the wrong hands (Harris, Van Hoye, & Lievens, 2003).

#### **Unauthorized Disclosure of Data**

Apart from unauthorized access to data, applicants are also concerned that personal data collected and stored in online systems can be released to others without their approval (Stone, Stone-Romero, & Lukaszewski, 2003). In fact, analysts have argued that applicant data often have a market value; and some firms sell these data to marketing firms or spammers (Dixon, 2003). For example, one report indicated that Hotresumes.com recently sold over 4,900 résumés and email addresses to other companies for 33 cents each (Dixon, 2003). Furthermore, previous research (Linowes, 1989) revealed that 70 percent of organizations regularly disclose employment data to creditors, 47 percent release it to landlords, and 19 percent disseminate it to charitable organizations. In addition, 60 percent of employers do not inform applicants or employees when their data are disclosed to others (Society for Human Resources Management and West Group, 2000). Thus, the use of online recruiting systems may allow organizations to disseminate or sell personal data without applicants' knowledge. At present, there are no legal restrictions in the United States that prevent the disclosure of these data, leaving some applicants reluctant to use online recruiting systems.

#### **Lack of Privacy Policies**

Despite the widespread use of online recruiting systems and growing concerns about privacy, many companies have not established policies that protect the privacy of job applicants or employees (Linowes, 1989). Indeed, only 10 percent have policies that conform to federal standards for fair information practices (Dixon, 2003). However, results of recent surveys revealed that most Americans (76 percent) are concerned about the use and dissemination of personal information via computerized networks and that 62 percent want increased legislation that protects their personal privacy (Pew Internet & American Life, 2001). Nevertheless, there are currently no federal restrictions on the collection, storage, or release of employment data by private-sector organizations. Although there are no legal restrictions on privacy in the United States, the European Union passed legislation in 1998 that restricts the transmission and unauthorized disclosure of employment data. As a result, some recent research shows that applicants in European countries (Belgium, for example) may be much less reluctant to apply for jobs online than are U.S. applicants (Harris, Van Hoye, & Lievens, 2003). Thus, U.S. employers may want to develop privacy policies and practices that decrease applicants' concerns about privacy and reluctance to submit on-line applications.

Given the growing concerns about privacy and its potential impact on applicants' attraction to organizations and use of online recruiting systems, we offer the following guideline for HR professionals:

*Guideline 16:* Organizations should recognize that online recruitment systems have the potential to invade applicants' privacy, and therefore should develop privacy protection policies that (a) restrict access to data, (b) restrict disclosure of data, and (c) ensure that only job-relevant data are collected for decisionmaking purposes.

### Conclusion

Given the increased use of e-recruiting systems in organizations, in this chapter we considered the impact of online recruiting systems on applicants' attraction to organizations and reviewed the existing research on the effectiveness of these systems. In addition, we offered a number of research-based guidelines that may help HR professionals enhance the acceptance of e-recruiting systems, ensure they are ethical, and increase the extent to which they support the firm's strategic goals. It merits noting we provide a summary of our guidelines in Exhibit 2.1. It is clear from our review that HR professionals should be actively involved in decisions regarding the purchase and development of e-recruiting systems so that these systems will meet their intended objectives.

#### Exhibit 2.1. Guidelines for Developing e-Recruiting Systems.

*Guideline 1:* Organizations that are well-known or have prominent reputations may benefit more from online recruiting than those that are not well-known.

*Guideline 2:* Organizations should use e-recruiting as one source of applicants, but should not use it as the only source for recruiting applicants.

*Guideline 3:* Organizations should capitalize on the strengths of e-recruiting and use it when large numbers of candidates are needed or when they are searching for individuals in high-level jobs requiring fairly high-education levels. In addition, they should use e-recruiting to target candidates in specific labor markets, including those in high technology jobs and students who are searching for part-time employment or full-time jobs right out of college.

*Guideline 4:* Organizations should recognize that e-recruiting may not be the preferred source for most job applicants and may not always reach the types of applicants that can help them meet their strategic goals. Thus, organizations should be aware that e-recruiting may not attract the most qualified job applicants, may not be particularly effective for reaching minority candidates, and may actually be more attractive to individuals with unfavorable rather than favorable backgrounds (those who switch jobs frequently).

*Guideline 5:* Organizations should ensure that their websites are designed to be easy to use, simple to navigate, and focus on attracting candidates rather than screening them for jobs.

*Guideline 6:* Organizations should develop online screening systems based on job analyses and ensure that the inferences made from these systems are reliable and valid.

*Guideline 7:* Organizations should develop e-recruiting systems that provide applicants with information about the unique characteristics of the organization and ensure they are given a realistic preview of the firm.

*Guideline 8:* Organizations should use websites to promote values that will be attractive to most new employees rather than just select those that fit with the traditional culture.

#### Exhibit 2.1. Guidelines for Developing e-Recruiting Systems, Cont'd.

*Guideline 9*: Employers should ensure that e-recruiting systems are not adopted as a fad, but are used to enhance applicants' attraction to organizations and increase the number of successful placements made.

*Guideline 10:* Organizations should ensure that e-recruiting systems are aligned with the strategic goals of the firm and allow them to attract the types of individuals who can help them meet their strategic objectives.

*Guideline 11:* Organizations should regularly collect feedback from job applicants about the types of implicit or explicit messages that are conveyed about the climate of the organization on the company's website.

*Guideline 12:* Organizations should develop e-recruiting systems that are culturally sensitive and include special features (for example, use of multiple languages, alternative system designs) for attracting applicants from diverse cultural backgrounds.

*Guideline 13:* Organizations should develop simple e-recruiting systems that can easily be used by individuals with all educational levels and that are sensitive to those who have high levels of computer anxiety or low levels of computer self-efficacy.

*Guideline 14:* Organizations should recognize that online recruitment systems may have an adverse impact on members of some protected groups and regularly assess the degree to which these systems are in compliance with civil rights legislation.

*Guideline 15:* Organizations should design e-recruiting systems so that they attract and accommodate the needs of ethnic minorities and individuals with disabilities (for example, larger font sizes, easier communication, firm disability and accommodation policies, assessment policies).

*Guideline 16:* Organizations should recognize that online recruitment systems have the potential to invade applicants' privacy, and therefore should develop privacy protection policies that (a) restrict access to data, (b) restrict disclosure of data, and (c) ensure that only job-relevant data are collected for decision-making purposes.

5

It is also evident from our review that the proliferation of erecruiting systems is likely to accelerate as organizations face increasing pressures to attract and retain talented employees in a highly competitive marketplace. We hope that our chapter provided important information that can help HR professionals design and develop systems that meet the needs not only of the organization, but of job applicants as well. Furthermore, we hope that our chapter provides a step forward in nurturing the linkage between HR research and practice in the "Brave New World of eHR."

#### References

- Bloom, N. (2001). In search of intelligent self-service. International Human Resources Information Management Journal, 5, 53–61.
- Brotherton, P. (2004). Protect applicant privacy to be safe. Available at www.shrm.org/hrtx/library\_published/nonIC/CMS\_006617.asp. [Retrieved June 30, 2004]
- Cappelli, P. (2001). Making the most of on-line recruiting. Harvard Business Review, 79, 139–146.
- Cardy, R. L., & Miller, J. S. (2003) Technology: Implications for HRM. In D. L. Stone (Ed.), Advances in human performance and cognitive engineering research (pp. 99–118). Greenwich, CT: JAI Press.
- Cascio, W. F. (1998). Managing human resources: Productivity, quality of work life, & profits (5th ed.) New York: Irwin, McGraw-Hill.
- Cedar. (2002). Cedar 2002 human resources self services/portal survey. Available at www.cedar.com/800/index.asp?lang=usa. [Retrieved June 2002]
- Cedar. (2003). Cedar 2003 human resources self services/portal survey. Available at www.cedar.com/800/index.asp?lang=usa. [Retrieved January 2004]
- Chapman, D. S., & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. *International Journal of Selection and Assessment*, 11, 113–120.
- Cober, R. T., Brown, D. J., Blumental, A. J., Doverspike, D., & Levy, P. (2000). The quest for the qualified job surfer: It's time the public sector catches the wave. *Public Personnel Management*, 29(4), 479–494.
- Cober, R. T., Brown, D. J., Levy, P. E., Keeping, L. M., & Cober, A. L. (2003). Organizational websites: Website content and style as determinants of organizational attraction. *International Journal of Selection* and Assessment, 11, 158–169.
- Dineen, B. R., Ash, S. R., & Noe, R. A. (2002). A web of applicant attraction: Person-organization fit in the context of web-based recruitment. *Journal of Applied Psychology*, 87, 723–734.

- Dixon, P. (2003) Resume database nightmare: Job seeker privacy at risk. Available at www.privacyroghts.org. [Retrieved June 30, 2004]
- Employers' Forum on Disability (2003). *Making e-recruitment barrier-free for people with disabilities*. Available at www.employers-forum.co.uk/ www/csr/er/. [Retrieved June 30, 2004]
- Fang, X., & Pei-Luen, P. R. (2003). Culture differences in design of portal sites. *Ergonomics*, 46, 242–254.
- Galanaki, E. (2002). The decision to recruit online: A descriptive study. *Career Development International*, pp. 243–251.
- Gutek, B. A. (1995). The dynamics of service: Reflections on the changing nature of customer/provider interactions. San Francisco: Jossey-Bass.
- Harris, M. M., Van Hoye, G., & Lievens, F. (2003). Privacy and attitudes toward internet-based selection systems: A cross-cultural comparison. *International Journal of Selection and Assessment*, 11, 230–236.
- Hogler, R., Henle, C., & Bemus, C. (2001). Internet recruiting and employment discrimination: A legal perspective. Available at www.biz.colostate.edu/ faculty/rayh/netantrev.html. [Retrieved February 25, 2001]
- Jattuso, J. I., & Sinar, E. F. (2003). Source effect in internet-based screening procedures. *International Journal of Selection and Assessment*, 11, 137–140.
- Johnson, R., Stone, D. L., Phillips, T. N., & Stone-Romero, E. F. (2004). African-American and Anglo-Americans' beliefs, attitudes, and intentions to pursue careers in information technology. Unpublished manuscript, University of Central Florida, Orlando.
- Jones, J. W., & Dages, K. D. (2003). Technology trends in staffing and assessment: A practice note. International Journal of Selection and Assessment, 11, 247–52.
- Kuhn, P., & Skuterud, M. (2000). Job search methods: Internet versus traditional. *Monthly Labor Review*, 123, 3–11.
- Linowes, D. F. (1989). Privacy in America: Is your private life in the public eye? Urbana: University of Illinois Press.
- Marakas, G., Yi, M., & Johnson, R. (1998). The multilevel and multifaced character of computer self-efficacy: Toward clarification of the construct and an integrative framework for research. *Information Systems Research*, 9, 126–163.
- McCourt-Mooney, M. (2000). Internet briefing: Recruitment and selection—R&D using the Internet—Part III. *Journal of Managerial Psychology*, 15, 737–740.
- McManus, M. A., & Ferguson, M. W. (2003). Biodata, personality, and demographic differences of recruits from threes sources. *International Journal of Selection and Assessment*, 11, 175–183.
- Mohamed, A. A., Orife, J. N., & Wibowo, K. (2002). The legality of key word search as a personnel selection tool. *Employee Relations, 24*, 516–522.

- Ogletree, S. M., & Williams, S. W. (1990). Sex and sex-typing effects on computer attitudes and aptitude. *Sex Roles*, *23*, 703–712.
- Pew Internet & American Life Project, (2001). Fear on online crime. Available at www.pewinternet.org/PPF/r/32/report\_display.asp. [Retrieved June 1, 2004]
- Pillar, C. (1993). Privacy in peril. MacWorld, 10, 124-130.
- Rozelle, A. L., & Landis, R. S. (2002). An examination of the relationship between use of the internet as a recruitment source and student attitudes. *Computers in Human Behavior*, 18, 593–604.
- Rynes, S. L. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., pp. 399–444). Palo Alto, CA: Consulting Psychologists Press.
- Scheu, C., Ryan, A. M., & Nona, F. (1999). Company web-sites as a recruiting mechanism: What influences applicant impressions? Paper presented at the 14th Annual Conference of the Society of Industrial and Organizational Psychology, Atlanta, Georgia.
- Sheridan, J. E. (1992). Organizational culture and employee retention. Academy of Management Journal, 35, 1036–1056.
- Sinar, E. F., Paquet, S. L., & Reynolds, D. H. (2003). Nothing but net? Corporate image and web-based testing. *International Journal of Selection* and Assessment, 11, 150–157.
- Sinar, E. F., & Reynolds, D. H. (2001). Candidate reactions to internet-based selection techniques. In F. L. Oswald (Chair), Computers = Good? How test-user and test-taker perceptions affect technology-based employment testing. Symposium conducted at the annual meeting of the Society of Industrial and Organizational Psychology, San Diego, California.
- Society for Human Resources Management (SHRM) and West Group (2000). *Workplace privacy survey*. Available at www.shrm.org/surveys. [Retrieved May 3, 2004]
- Stone, D. L., & Stone-Romero, E. F. (1998). A multiple stakeholder model of privacy organizations. In M. Schminke (Ed.), *Managerial ethics: Morally managing people and processes* (pp. 35–59). Mahwah, NJ: Lawrence Erlbaum.
- Stone, D. L., Stone-Romero, E. F., & Lukaszewski K. (2003). The functional and dysfunctional consequences of human resource information technology for organizations and their employees. In D. L. Stone (Ed.), Advances in human performance and cognitive engineering research (pp. 37–68). Greenwich, CT: JAI Press.
- Stone, D. L., & Williams, K. J. (1997). The impact of ADA on the selection process: Applicant and organizational issues. *Human Resources Management Review*, 7(2), 203–231.

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 12/11/2017 5:00 PM via AMERICAN PUBLIC

- Stone, E. F., & Stone, D. L. (1990). Privacy in organizations: Theoretical issues, research findings, and protection mechanisms. In K. Rowland & G. R. Ferris (Eds.), *Research in personnel/human resources management* (pp. 349–471). Greenwich, CT: JAI Press.
- Ulrich, D. (2001). From e-business to eHR. International Human Resources Information Management Journal, 5, 90–97.
- U.S. Bureau of Census (2001). *Home computers and internet use in the United States.* Available at www.usbureauofcensus.gov. [Retrieved August 10, 2003]
- Van Rooy, D. L., Alonso, A., & Fairchild, Z. (2003). In with the new, out with the old: Has the technological revolution eliminated the traditional job search process? *International Journal of Selection and* Assessment, 11, 170–174.
- Williamson, I. O., Lepak, D. P., & King, J. (2003). The effect of company recruitment website orientation on individuals' perceptions of organizational attractiveness. *Journal of Vocational Behavior*, 63, 242–263.
- Zusman, R. R., & Landis, R. S. (2002). Applicant preferences for webbased versus traditional job postings. *Computer in Human Behavior*, 18, 285–296.