# Using the Internet to recruit employees: Comparing the effects of usability expectations and objective technological characteristics on Internet recruitment outcomes

Garett N. Howardson *, Tara S. Behrend

*Department of Organizational Sciences and Communication, The George Washington University, United States*

## ARTICLE INFO

## ABSTRACT

Research shows that technological characteristics influence important outcomes of Internet recruitment, such as organizational attractiveness perceptions. This is thought to be the result of more positive perceptions about the technology. However, few studies acknowledge the role of pre-use cognitions on post-use technology perceptions and recruitment outcomes. In this study, we argue that objective technological characteristics do indeed influence organizational attractiveness perceptions by making technology perceptions more positive. However, we also argue that pre-use expectations have a *stronger* indirect effect on organizational attractiveness perceptions because they make the technology seem even more usable. Bootstrapped indirect effects results from 354 role-playing job seekers show that both objective technological characteristics and usability expectations relate to attractiveness perceptions indirectly through post-use technology perceptions. However, the indirect effect of expectations was significantly more positive than the effect of objective technological characteristics. Our results show that job seekers' expectations play a significant role in determining subsequent recruitment outcomes. These findings support contingency theories of media/technology use and suggest that organizations may want to consider the applicant pool's pre-use technology beliefs when designing recruitment strategies.

© 2013 Elsevier Ltd. All rights reserved.

## 1. Introduction

The Internet has drastically altered the way organizations present information to job seekers (Reynolds & Weiner, 2009). Whereas conventional recruitment practices rely largely on recruiters to convey organizational information (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005), more novel efforts use the Internet to initiate contact with job seekers (Cappelli, 2001). These recruitment methods present large amounts of information for relatively little expense (Allen, Mahto, & Otondo, 2007; Cober, Brown, Keeping, & Levy, 2004; Lievens & Harris, 2003), while also effectively managing large applicant pools generated during times of economic downturn. Furthermore, job seekers are given increased control over information search behaviors (Allen et al., 2007) thereby increasing the likelihood that personally relevant information will be acquired (Dineen, Ash, & Noe, 2002; Dineen, Ling, Ash, & DelVecchio, 2007).

In an attempt to maximize these benefits, some organizations are experimenting with even more advanced and highly interactive Internet recruitment methods, such as three-dimensional virtual worlds (Gonsalves, 2008; Thompson, 2009; Villano, 2008). For example, the U.S. Army recruitment website uses interactive technologies to create an animation-based virtual recruiter named Sergeant Star, who interacts with visitors and guides them through the website (U.S. Army, 2011). These interactive technologies afford the same informational control as traditional Internet media while capturing users' attention on the task at hand (Franceschi, Lee, Zanakis, & Hinds, 2009). This may serve to better engage potential applicants and generate interest in the organization. Exposure to Internet technology occurs early in the recruitment process (Cober et al., 2004) where the primary goal is to increase the attractiveness of the organization (Barber, 1998). As such, highly interactive technologies may be an effective means of influencing organizational attractiveness perceptions early in the recruitment process (Dineen et al., 2002, 2007).

The applied benefits of recruitment technology in organizations notwithstanding, technology scholars propose diverging theoretical explanations for these effects. Most Internet recruitment research to date draws from usability (Nielsen, 2000) and media richness theories (e.g., Daft & Lengel, 1986) arguing that job seeker perceptions are influenced by objective technological characteristics (e.g., usability; Thompson, Braddy, & Wuensch, 2009). In direct contrast to these perspectives, technology contingency theorists argue that the effects of technology are socially constructed from

---

* Corresponding author. Address: 600 21st NW, Washington, DC 20052, United States.

*E-mail address:* garett.howardson@gmail.com (G.N. Howardson).

contextual (Shepherd, 2006; Sonnetag, 2000) and individual (Carlson & Zmud, 1999) factors. Although extant research has examined the contextual boundaries of Internet recruitment practices (e.g., Walker, Feild, Giles, Armenakis, & Bernerth, 2009), little research has considered the individual factors that influence a potential applicant's experiences (for an exception, see Williamson, Lepak, & King, 2003).

Evidence suggests that perceptions of an event are significantly influenced by one's expectations prior to that event (Kahneman & Miller, 1986; Kunda, 1990; Olson, Roese, & Zanna, 1996; Roese & Olson, 1995). In the context of Internet recruitment, these expectations may take the form of beliefs about the recruitment technology itself. In turn, these expectations may influence subsequent technology perceptions and job seekers' overall recruitment experience. To our knowledge, however, no studies have examined the effects of situation-specific expectations on technological and organizational perceptions in Internet recruitment. This gap is problematic given the importance of technology perceptions in influencing job seeker attitudes, behaviors, and organizational perceptions (Braddy, Meade, & Kroustalis, 2008). As such, an understanding of these individual mechanisms is paramount to improving Internet recruitment practices.

The goals of the present study are threefold. First, we seek to address the gap noted above by adopting theory from the social cognition domain to examine the indirect influence of job seekers' pre-use technology expectations on organizational attractiveness through post-use usability perceptions. We focus here on expectations given the supporting evidence for their influence on human attitudes (Ajzen, 2001) and behavior (Bandura, 1986; Olson et al., 1996). Second, we seek to examine similar indirect effects on organizational attractiveness for a usability characteristic neglected in Internet recruitment – technology interactivity. Third, in line with technology contingency theories, we seek to show that usability expectations are a more positive indirect influence on organizational attractiveness than technology interactivity because of expectations' stronger effect on usability perceptions. Our hypothesized relationships are presented in Fig. 1.

## 2. Literature review and hypotheses

Past research in social psychology suggests that event-preceding cognitions explain the effects of situational stimuli on subsequent behavior and beliefs (Kunda, 1990; Olson et al., 1996; Roese & Olson, 1995; Spencer, Fein, Zanna, & Olson, 2003). Although of a number of cognitive processes precede an event and influence subsequent attitudes and behavior, expectations are the most fundamental (Olson et al., 1996). At their most basic level, expectations are subjective estimates about the likelihood of future outcomes. These estimates are formed prior to actual behavior but after exposure to situational stimuli (Olson et al., 1996). In order to define expectations in the context of Internet recruitment, it becomes important to identify situation specific outcomes that are important to Internet job seekers. Job seeker perceptions of an organization are significantly influenced by perceptions of the Internet recruitment technology (Cober et al., 2004); thus, these technology perceptions are an important focus of research. These perceptions are typically referred to as usability perceptions and defined as, "The perceived ease of acquiring information and using a [technology] to meet desired objectives" (Cober et al., 2004, p. 631). Job seekers primarily desire information that reduces uncertainty and helps make an application decision (Allen et al., 2007).

We slightly refine Cober et al.'s definition to include specific outcomes that are salient to Internet job seekers. We define *usability perceptions* as job seekers' perceptions that the Internet recruitment technology was useful for acquiring information to make an application decision, while expending minimal effort to acquire the information. We define *usability expectations* as the subjective beliefs that the recruitment technology will be useful and will require little effort to compile application decision information. The key distinction between usability expectations and perceptions is that the latter are formed after exposure to, and use of, the recruitment technology. Alternatively, expectations are formed upon learning that a specific recruitment technology will be used, but prior to actual use of that technology.

### 2.1. Influences on post-use technology perceptions

#### 2.1.1. Technology and post-use perceptions

Although usability is defined as a perception (Cober et al., 2004; Nielsen, 2000), research suggests that certain objective technological characteristics influence these perceptions. Past Internet recruitment research has found that easily navigable websites lead to positive usability perceptions (Braddy et al., 2008) and positive perceptions of the organization (Thompson et al., 2009). Other research has found that the type (Cober, Brown, Levy, Cober, & Keeping, 2003) and amount (Williamson, King, Lepak, & Sarma, 2010) of information presented (i.e., content) influences job seekers' organizational attractiveness perceptions. Similarly, Dineen et al. (2007) showed that customized website content can significantly influence job seekers' attraction to the organization.

Among the technological characteristics yet to be examined, however, is the implementation of usability metaphors in Internet
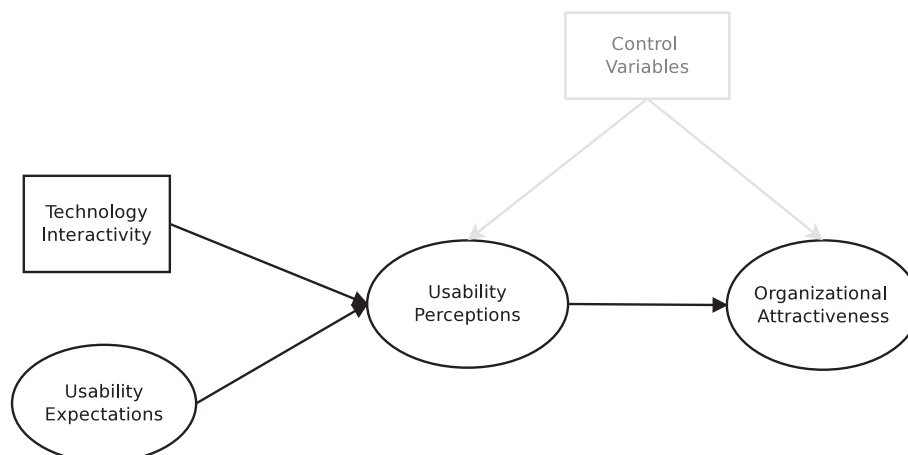
**Fig. 1.** Proposed theoretical model of technology usability expectations during Internet recruitment.