Effects of Customization on Application Decisions and Applicant Pool Characteristics in a Web-Based Recruitment Context

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The authors examined 2 forms of customization in a Web-based recruitment context. Hypotheses were tested in a controlled study in which participants viewed multiple Web-based job postings that each included information about multiple fit categories. Results indicated that customization of information regarding person-organization (PO), needs-supplies, and demands-abilities (DA) fit (fit information customization) and customization of the order in which these fit categories were presented (configural customization) had differential effects on outcomes. Specifically, (a) applicant pool PO and DA fit were greater when fit information customization was provided, (b) applicant pool fit in high-versus low-relevance fit categories was better differentiated when configural customization was provided, and (c) overall application rates were lower when either or both forms of customization were provided.

Keywords: person–environment fit, applicant pool fit, Web-based recruitment, customization

Despite the recognized growth in Web-based recruitment and the changes that are thought to accompany it (Ployhart, 2006), the Web has not yet reached its potential as an effective recruitment platform. For example, job postings found on job boards such as monster.com tend to solicit applications from increasing numbers of job seekers who do not exhibit sufficient levels of fit with associated jobs or organizations (e.g., Chapman & Webster, 2003; "Internet misuse may contribute to long joblessness," 2003; Lievens & Harris, 2003). Because companies are prone to inundation with unwieldy numbers of Web-based job applications (e.g., Maher, 2003), attracting applicant pools that are both smaller and of higher quality is important in a Web recruitment context to increase processing efficiency, minimize the number of applicants that must be rejected, and reduce the costs of identifying suitable job candidates (Cappelli, 2001). However, recruitment research has typically emphasized the maximization of job seeker attraction rather than the generation of smaller, higher quality applicant pools (Barber, 1998; Breauagh & Starke, 2000; Carlson, Connerley, & Mecham, 2002; Ployhart, 2006; Rynes & Cable, 2003).

We investigated how the potential for interactivity in a Web recruitment context might help organizations achieve these types of applicant pools. Our use of the term Web recruitment refers to the placement of job postings on either corporate Web sites or Web-based job boards such as monster.com. The study focused on the applicant generation stage of recruitment (Barber, 1998), wherein the Web is typically used as a primary interface platform allowing job seekers to attain job information prior to contact with organizational representatives. Job seekers then make screening decisions in terms of whether to apply to organizations for further consideration (Allen, Mahlo, & Otondo, 2007). Examining screening decisions is important because they determine the pool of potential employees from which an organization might select (Barber, 1998) and are thought to differ substantively from job choice decisions (Beach, 1990).

Dineen and colleagues (Dineen, Ash, & Noe, 2002; Dineen, Ling, Ash, & DelVecchio, 2007) have begun to investigate the interactive potential of the Web and how this potential might be leveraged to affect job seeker information processing and enhance recruitment outcomes. A key aspect of interactivity is that it allows for customization, or more careful targeting of recruitment information to individual job seekers. While recognizing that several customization options are possible, we focus on two forms of customization in the present study. First, fit information customization refers to the provision of information indicating objective fit (mathematical fit; Kristof-Brown, Zimmerman, & Johnson, 2005) between the job seeker and various aspects of the environment in response to job seeker input regarding preferences or abilities (Dineen et al., 2002; Dineen et al., 2007). Previously, Dineen et al. (2002) manipulated fit information customization such that feedback regarding likely fit was presented randomly to participants. Attraction varied according to the level of manipulated fit feedback. Dineen et al. (2007) used a holistic measure of participant objective fit and provided actual fit information customization to half their sample while also manipulating the aesthetic quality of the job posting (e.g., colors, fonts). When aesthetics were of higher

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quality, fit information customization increased job posting viewing times, which in turn increased information recall. This suggests that individuals might process customized information more deeply. Fit information customization also strengthened the relationship between objective fit and attraction among lower fitting job seekers.

A second form of customization on which we focus is configurational customization. This refers to the depiction of information categories within a job posting in the order of job seekers’ indicated preferences for viewing such categories. Typically, the fit literature has categorized fit along environmental-based dimensions (e.g., how fit with the organization or job relates to attraction; Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Kristof-Brown et al., 2005) or has combined environmental-based dimensions into a holistic fit measure (Dineen et al., 2007). Consistent with Cable and DeRue (2002), we examined environmental-focused fit categories, including person–organization fit (PO; congruence between individual and organizational values), demands–abilities fit (DA; congruence between abilities and the demands of the job), and needs–supplies fit (NS; congruence between needs and supplies in terms of benefits). However, job seekers likely have differential preferences for viewing information about these characteristics (values, required abilities, and needs). For example, research has found that individuals weigh organization- and job-related characteristics differently in relation to outcomes such as attraction and satisfaction (Allen et al., 2007; Kristof-Brown, Jansen, & Colbert, 2002). We considered how such preferences might be used to customize the configuration by which information is presented to job seekers (e.g., organizational values information might be presented prior to abilities information on the basis of job seeker preferences). Cable and Turban (2001) have noted the lack of research exploring the order of information presentation in a recruitment context.

The current study therefore builds on previous work by simultaneously incorporating multiple job postings and multiple fit categories to examine the effects of fit information customization and configurational customization on application rates and applicant pool fit. In developing our arguments, we synthesize several perspectives that are pertinent to issues of customization and application decision making, including the elaboration likelihood model (ELM; Petty & Cacioppo, 1986), person–environment (PE) fit (Kristof-Brown et al., 2005), and image and prospect theories (Beach, 1990; Kahneman & Tversky, 1979).

Theoretical Background and Hypotheses Development

Fit Information Customization and Environmental-Focused Applicant Pool Fit

PE fit research indicates that organizations often present information to job seekers that encourages favorable rather than accurate culture beliefs (Cable, Aiman-Smith, Mulvey, & Edwards, 2000). This suggests a disconnect between objective fit and the application decisions of job seekers (Kristof-Brown et al., 2005). A failure to provide adequate information also leads job seekers to make inferences about the missing information (e.g., Barber & Roehling, 1993; Rynes, Bretz, & Gerhart, 1991). Thus, relationships between fit in environmental categories (e.g., with the organization or a job) and application decisions may be weak, especially during earlier job search stages, when it is harder to obtain information on which to base application decisions (Cable & Turban, 2001).

Because of the need to better understand job seeker information processing (Breen & Starke, 2000) and because of the persuasive nature of many recruitment messages, theories such as the ELM have received increased attention in the recruitment literature (e.g., Cable & Turban, 2001; Dineen et al., 2007; Jones, Shultz, & Chapman, 2006; Lievens & Harris, 2003; Roberson, Collins, & Oreg, 2005). The ELM suggests that job seekers process recruitment message content either centrally by carefully considering the actual content or peripherally by relying on ancillary cues such as aesthetics or other heuristics. The ELM further posits that messages are more deeply and carefully processed when they are made personally relevant to the perceiver (Petty & Cacioppo, 1986). Thus, when information about potential fit with different environmental aspects is customized to individual job seekers, its personal relevance should increase processing depth (Dineen et al., 2007). Increased processing depth should facilitate job seeker receipt and utilization of messages and greater knowledge of the employer (Cable & Turban, 2001; see also Lievens & Harris, 2003). In turn, customized fit information should influence application decisions to a greater degree than does noncustomized information, creating a stronger link between objective fit across environmental-focused fit categories and application decisions. Thus,

Hypotheses 1A–1C: Fit for objective applicant pools (a) PO, (b) NS, and (c) DA should be greater when fit information customization is provided to job seekers.

Configural Customization and Relevance-Focused Applicant Pool Fit

Our focus on personal relevance, although germane to fit information customization, also pertains to the relevance of various fit categories to different job seekers. That is, individuals have been shown to exhibit preferences for certain types of fit (Kristof, 1996; Kristof-Brown & Jansen, 2007). Ignoring these preferences is limiting in both a research and a practical sense, given the need to study recruitment outcomes that pertain to both job seekers and organizations. Thus, we also examined relevance-focused fit as judged by individuals. Specifically, use of multiple fit categories allowed us to investigate whether differences in applicant pool fit based on fit category relevance occur when configural customization is provided.

Among job seekers viewing job postings, some may prefer to view PO fit information the most; others may prefer to view DA or NS fit information the most. These same job seekers also likely have least preferred types of fit. Based on these relative preferences, an index representing, for example, “applicant pool fit—most relevant categories” might comprise fit with abilities for the subset of applicants who find abilities information to be most relevant, fit with values for the subset that finds values to be most relevant, and fit with benefits supplied by the organization for the final subset, which finds this information most relevant. An index representing “applicant pool fit—least relevant categories” could be created in a similar manner. This would allow for a comparison of applicant pool fit in most and least relevant fit categories among those who actually apply for posted jobs. Consistent with calls to
examine how job seekers combine various fit indications (Kristof-Brown, 2007), a relevance-focused fit categorization might therefore supplement traditional environmental fit categorizations (e.g., DA or PO fit).

Kristof-Brown has suggested that the relative importance of characteristics on which fit is assessed might moderate the relationship between fit and outcome variables (Kristof-Brown & Jansen, 2007; see also Edwards, Cable, Williamson, Lambert, & Shipp, 2006, who mention fit dimension importance levels and resulting information processing depth). Because information processing depth is likely influenced by differences in personal relevance across different categories of information (Petty & Cacioppo, 1986), job seekers will likely more carefully scrutinize information related to their most relevant fit categories, therefore making application decisions that are more consistent with their level of fit in these categories. This suggests the following:

Hypothesis 2: Job seekers’ scrutiny of information related to their most relevant fit categories should yield greater applicant pool fit combined across applicants’ most relevant categories, compared with applicant pool fit combined across least relevant categories.

We further proposed that differences in applicant pool fit across most versus least relevant categories would be greater when configurational customization is provided. Complementing recent work that has considered Web site design characteristics in terms of attitude toward the Web site (e.g., Allen et al., 2007) or aesthetics (Dineen et al., 2007), configurational customization allows information most relevant to the job seeker (and thus likely processed more centrally) to appear first in all viewed job postings. Research on noncompensatory decision making (e.g., Rynes, Schwab, & Hemen, 1983) and consideration sets (Cable & Turban, 2001) suggests that job seekers may consider only information that is most relevant to them when making binary application decisions and use noncompensatory decision aids when making these types of decisions (Barber, 1998; Osborn, 1990). Such an approach is consistent with image theory (Beach, 1990), which proposes that decision makers engaged in a screening activity tend to start with a pool of options and screen out those options for which “violations,” or negative information about the option (such as information indicating a low level of fit), are discovered (e.g., Beach, 1993; Ordonez, Benson, & Beach, 1999). Specifically, decision makers engage in a compatibility test whereby they evaluate the fit between an option’s features and their personal standards. Image theory further proposes that (a) screeners weigh violations differently depending on the importance of the particular violation to the individual (Beach, 1990) and (b) these violations can thus be used to eliminate options in a noncompensatory fashion (Beach, 1993).

Configural customization, wherein higher relevance information appears first, might encourage both central and peripheral processing (Petty & Wegener, 1998) by consistently focusing a job seeker’s attention on whether such “violations” have occurred in regard to their most relevant type of fit, while causing them to peripherally process and thus reduce their focus on remaining information when information categories are structured to appear in the same order across job postings. Thus, Hypothesis 3: Objective fit information that is most relevant to the job seeker should be related more strongly, and fit information that is least relevant should be related less strongly, to application decisions, yielding even greater differences in applicant pool fit between most and least relevant fit categories when configural customization is provided.

Customization and Application Rates

When customization is provided, Hypotheses 1, 2, and 3 propose increases in applicant pool fit across environmental-focused fit categories as well as in most relevant fit categories due to enhanced personal relevance and thus clarity of information. However, it is uncertain whether increased applicant pool fit is more the result of higher fitting individuals screening themselves in (i.e., applying at greater rates) or lower fitting individuals screening themselves out (i.e., refraining from applying at greater rates). This distinction raises the question of whether overall application rates increase or decrease when varying forms of customization are provided.

Image theory (Beach, 1990), prospect theory (Kahneman & Tversky, 1979), and the ELM can be used to make predictions about the relationship between customization and application rates. On the basis of image theory, we expect that job seekers will screen out based on negative information to a greater extent than they screen in based on positive information. Specifically, once information about a job vacancy is made more personally relevant through customization, a job seeker will focus more on negative than on positive information in order to screen out options. Prospect theory, which suggests that negative information tends to receive more weight in decision making than do equivalent levels of positive information (Kahneman & Tversky, 1979), further complements the image theory perspective. Specifically, negative information tends to be more vivid and unexpected and thus personally relevant to individuals in general (Petty & Wegener, 1998), and even more so to job seekers who are searching for information with which to make screen-out (rather than screen-in) decisions, as image theory suggests they do. Dineen et al. (2007) found that, consistent with these perspectives, the objective fit-attraction relationship was strengthened when fit information customization was provided. They further discovered that lower fitting individuals in customization conditions indicated lower levels of attraction than did lower fitting individuals in noncustomization conditions, although this was not formally hypothesized. There was not as much difference in attraction levels across conditions among higher fitting individuals. These findings, which Dineen et al. (2007) discussed in terms of prospect theory, support Ryan, Horvath, and Kriska’s (2005) suggestion that job seekers from more informed sources may be better able to eliminate themselves from an application process if they perceive that they are poorly matched with the jobs or organizations under consideration.

A search cost perspective can also be used to predict differing application rates across customization conditions (Schwab, Rynes & Aldag, 1987; Stigler, 1962). Specifically, although the Web makes it easier for job seekers to apply for many jobs in a short time period (Sumser, 2004), job seekers will limit the number of jobs to which they apply and will strive to minimize the time devoted to job seeking while still trying to maximize their outcomes. Thus, job seekers will likely continue to apply for jobs until
they perceive diminishing marginal returns. For example, a job seeker looking for a human resources job on monster.com is not likely to apply for the more than 5,000 human resource jobs currently listed but will instead apply for a subset of those jobs until the marginal cost of an additional application appears to be higher than its expected utility. Job seekers should be more adept at perceiving diminishing marginal utility if they are engaged in more effortful processing (such as when they are provided with fit information customization), leading to more informed application decisions. Even in the absence of fit information customization, configurational customization offers another means of reducing job seeker search costs by making the most relevant information readily available as a decision heuristic. When both fit information customization and configurational customization are provided, job seekers likely experience the most certainty and clearest sense of diminishing marginal utility. Taken together, these perspectives and prior findings suggest the following:

Hypothesis 4: Application rates will be highest when no customization is provided, lower when fit information customization or configurational customization is provided, and lowest when both forms of customization are provided.

Method

Participants and Procedure

We recruited 348 upper-level undergraduate business students (51% male; 75.0% Caucasian, 4.6% African American, 2.6% Hispanic/Latino, 14.9% Asian, and 2.9% other) from a large midwestern university and collected data in two phases. Participants completed an online survey during Phase 1 (4 weeks prior to Phase 2) that assessed values preferences among the four values dimensions included in the study and self-reported ability levels and preferences among the needs dimensions included (i.e., fringe benefits). Participants were also asked to rank the three types of information (values, abilities, and needs) from most relevant to least relevant when assessing job opportunities. When these data were collected, participants were told that responses would be used to “build a personal profile for possible use in Phase 2.”

A Web-based job board was developed for Phase 2 to closely replicate the style of actual job boards such as monster.com. Participants were randomly assigned to one of four crossed conditions (fit information customization and configurational customization provided or not provided) and were told they would be making application decisions for jobs posted on a job board being developed by a startup job board company. After entering the study Web site, participants were provided with additional background information related to their condition. For example, in the baseline condition (neither type of customization), participants were simply told that they would be presented with various job opportunities for which they would have a chance to apply. Participants in the condition with both forms of customization were also told that, on the basis of their Phase 1 profile information, they would receive feedback about their potential fit with various aspects of the organizations and jobs listed and would see information presented in their preferred order. Those in other conditions were given appropriate subversions of this message. Participants were then linked to the job board home page, which provided hyperlinks listing the names of 20 fictitious companies offering jobs. Participants viewed one of two sets of 20 job postings created for the study.

The Appendix provides an example of one participant’s rank-ordered data, an example job posting viewed by this participant, and a more detailed description of the study conditions. Each posting was separated into three sections representing PO, NS, and DA fit categories. Some additional information normally included in job postings such as salary and required education level was held constant across all postings. Within each of the three sections representing the fit categories, four specific fit dimensions were described and varied in the degree to which they were present in or expected by a given company. For example, the “degree of organization” value was depicted in the Appendix example as “we feel that a degree of disorganization in the work environment leads to less rigidity and greater bottom line success” but in another posting as “our top value and driver of success is our degree of workplace organization.”

In the fit information customization conditions, likely fit for each of the three fit categories was indicated as shown in the Appendix. Fit scores ranged from 0% to 100% and represented linearly transformed rank order correlations between the individual profiles assessed during Phase 1 and the descriptions in each of the three sections of each job posting. For those in configurational customization conditions, the order in which the three categories of fit information were presented in each of the postings was customized based on fit category relevance data from the Phase 1 survey. Those in nonconfigural customization conditions viewed job postings in which the order of presentation of the three fit categories varied randomly within each posting. At the bottom of each posting, participants had the chance to apply for the job. An opportunity cost of applying was included by having participants complete a brief online application form.

Measures

Objective fit. This was assessed as a rank order correlation between individual and organizational fit dimension profiles as ranked by study participants (individual) and subject matter expert (SME) doctoral students (organizational) on commensurate dimensions (Kristof-Brown et al., 2005). Specifically, during Phase 1 we asked participants to rank the four abilities dimensions from 1 to 4 in the order in which they felt they could demonstrate the abilities.

1 These three categories were chosen on the basis of information found in actual job postings on seven leading job boards (Crispen & Mehler, 2002). Specific DA and PO fit dimensions can be found in Dineen et al.’s (2007) Appendix. NS fit dimensions were chosen on the basis of the procedure described therein and included specialized forms of insurance such as mental health insurance, paid professional memberships, holiday parties and other social events, and dependent care flexible spending account (Society for Human Resource Management, 2002).

2 To determine the number of job postings to present to participants, we examined postings on seven leading job boards (Crispen & Mehler, 2002). On average, 19.65 jobs were posted on these job boards in the region where data collection occurred. By creating two sets of 20 postings, we were able to generate 160 applicant pools (4 conditions × 40 postings). Similar types of companies appeared in each job posting set, and similar numbers of participants viewed each set.
We similarly had them rank-order their values and benefits preferences. Rankings were preferred to ratings because of decreased social desirability concerns (Judge & Cable, 1997) and greater consistency with research suggesting a hierarchical arrangement of values in values systems (Rokeach, 1973). Prior to the study, the three SMEs also ranked the abilities, values, and benefits dimensions from 1 to 4 as they appeared to be portrayed in each of the job postings (Kendall’s coefficient of concordance, W, averaged .99). Spearman rank order correlations were then computed for each participant for each fit category within the various job postings by using individual rank orders of personal characteristics and SME rank orders of job/organizational characteristics. These correlations were transformed to a 0–100 scale and presented as fit percentages to those provided with fit information customization (Dineen et al., 2002).

**Application decisions.** Applications were tallied when participants (a) clicked an icon labeled *Apply for this position* and (b) submitted the required electronic application form.

**Applicant pool fit (PO, NS, and DA categories).** Mean levels of objective PO, NS, and DA fit were calculated for each applicant pool within each study condition (Carlson et al., 2002). These figures resulted from participant applications to each organization within each condition. For example, of the 44 participants who viewed the second set of 20 job postings and were provided with neither fit information customization nor configural customization, 17 applied for one particular position. The average objective PO fit with that position was 45.88% across these 17 applicants.

**Applicant pool fit (relevance-focused categories).** Objective fit in the category ranked as most relevant by each participant on the Phase 1 survey was averaged across participants in a given condition who applied to a given organization. For example, among the 17 applicants for the particular company mentioned above, 7 had rated abilities as the most relevant type of information, whereas 6 and 4 had rated values and benefits information as most relevant, respectively. Thus, the index representing applicant pool fit for this company across most relevant categories comprised (a) average DA fit scores for the seven individuals indicating that abilities information was most relevant (*M* = 67.14%), (b) average PO fit scores for the six indicating that values information was most relevant (*M* = 43.33%), and (c) average NS fit scores for the final four indicating that benefits information was most relevant (*M* = 70.00%), for an overall fit index of [(67.14% × 7) + (43.33% × 6) + (70.00% × 4)]/17, or 59.41%. A similar procedure was used to generate fit indexes across least relevant categories within each company’s applicant pool.

**Results**

Table 1 presents the means, standard deviations, and correlations for the study variables.

Hypothesis 1 proposed greater applicant pool PO, NS, and DA fit when fit information customization was provided. The sample size for this analysis was the 160 applicant pools generated by participant application decisions (2 sets of 20 companies × 4 study conditions). Multivariate analysis of variance results showed an overall effect of fit information customization on the three types of applicant pool fit, Wilks’s lambda = .85, *F*(3, 156) = 9.11, *p* < .05. Fit information customization resulted in better fitting applicant pools in terms of PO fit, *F*(1, 158) = 8.93, *p* < .05, *d* = 0.47, and DA fit, *F*(1, 158) = 9.03, *p* < .05, *d* = 0.48, supporting Hypotheses 1A and 1C. According to Cohen (1988), these are medium effects. Conversely, differences across conditions were not significant for NS fit, *F*(1, 158) = 3.03, *ns*. Thus Hypothesis 1B was not supported.

Hypotheses 2 and 3 proposed that applicant pools would be better differentiated across fit categories deemed by individuals to be most and least relevant, with stronger effects expected when configurational customization was provided. A paired sample *t* test showed that applicant pool fit on most relevant categories was significantly greater than fit on least relevant categories across all applicant pools, supporting Hypothesis 2, *t*(159) = 2.33, *p* < .05, *d* = 0.26. To test Hypothesis 3, we created an index representing the distance between fit on the most relevant category and fit on the least relevant category for each applicant pool. Using analysis of variance, we found a significant configurational customization term, *F*(1, 158) = 4.21, *p* < .05, indicating differences in applicant pool fit between most and least relevant categories when configurational customization was provided (61.17% and 54.93% for most and least relevant categories, respectively). Cohen’s *d* was 0.32, indicating a small to medium effect. Because configurational customization was dichotomous, a nonsignificant intercept, *F*(1, 158) = 0.05, *ns*, also indicated the absence of any differences in applicant pool fit between most and least relevant categories when configurational customization was not provided (mean difference = 0.42%). Thus, Hypothesis 3 was supported.  

Hypothesis 4 proposed that application rates would be highest when no customization was provided, lower when either fit information customization or configurational customization was provided, and lowest when both forms of customization were provided. Because of the dichotomous nature of the application decision variable, we conducted a Pearson chi-square test, which showed significant omnibus differences in application rates across the four study conditions, *χ*²(3, *N* = 6,303) = 8.55, *p* < .05. A subsequent chi-square difference in proportions test comparing applications in the noncustomization condition with applications in the conditions where one form of customization was provided was significant, *χ*²(1, *N* = 4,765) = 7.43, *p* < .05, as was the difference in proportions between the noncustomization condition and the condition where both forms of customization were provided, *χ*²(1, *N* = 3,212) = 4.30, *p* < .05. The odds

3 Because of our desire for those in the noncustomized condition to remain unaware of the customization provided to those in other conditions, we included a manipulation check for noncustomized condition participants to ensure that they did not recall the reason for providing their Phase 1 profile information. Two participants were eliminated from analyses on the basis of this check. To enhance task relevance, we eliminated 29 participants who indicated no future job search plans. Finally, we eliminated one extreme outlier where a person applied for all 20 jobs.

4 To ensure that this finding was not simply attributable to order effects (means differ only because the information appears first and not because it is also more relevant), we undertook an examination of cases in the nonconfigural customization conditions whereby applicant pool fit in categories that happened to appear first and last were compared. There was no difference in applicant pool fit between information presented first and last in these conditions (mean difference in fit = 0.54%, *t* = 0.34, *ns*), discounting an order effects explanation.
The ratio for both of these tests was 0.84, indicating that individuals who were provided with either one form of customization or both forms were 0.84 as likely to apply as those provided with no customization. There was no significant difference in proportions of applications between the conditions where one form and the condition where both forms of customization were provided. Therefore, Hypothesis 4 was partially supported.

Although we found that applicant pool fit was greater in customization conditions, these results do not indicate whether this fit was a result of a tendency for individuals to screen in (apply based on negative fit information). Thus, to better understand our findings of enhanced applicant pool fit in customization conditions and decreased application rates when either or both forms of customization were provided, we conducted a supplementary analysis that specifically analyzed the role of customization (either or both forms) in facilitating screening in or screening out types of application decisions. Using the individual application decision data, we conducted a logistic regression to analyze and plot the Objective Fit × Customization interactions for two environmental-focused fit categories that were found to differ across customization conditions (DA and PO fit). Both interaction terms were significant (see Table 2 and Figure 1). As shown, customization was associated with relatively lower application probabilities among lower fitting individuals in both cases, whereas there was little difference across conditions in application probabilities among those with higher DA fit and virtually no difference across conditions among those with higher PO fit.

Discussion

This study builds on prior work examining interactivity in a Web recruitment context and makes several contributions. First, by simultaneously examining multiple job postings, multiple fit categories, and applicant pool characteristics, it provides a more complete understanding of the nature of job seeker information processing and applicant pool outcomes. The results show that customization has important implications not only for the application decisions of job seekers, but also for the quality of organizations’ applicant pools in terms of fit and the degree of fit that job seekers might achieve in the categories most relevant to them. Second, the study extends recruitment research that has begun to investigate customization (Dineen et al., 2002, 2007) by introducing configural customization. This complements other Web recruitment studies that have incorporated design considerations (Allen et al., 2007; Dineen et al., 2007). Furthermore, it considers fit both in traditional environmental categories (e.g., PO, DA) and by job seeker relevance rankings. Consistent with the tenets of the ELM (Petty & Cacioppo, 1986) and noncompensatory decision making (Osborn, 1990; Rynes et al., 1983), applicant pools were better differentiated in terms of fit on categories evaluated by job seekers to be most and least relevant when configural customization was provided. This complements other work suggesting that job seekers assign...
Table 2
Supplemental Analysis Results

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<th>Step $\chi^2$</th>
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<th>$B$</th>
<th>$SE$</th>
<th>Wald</th>
<th>Odds ratio $^a$</th>
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<td>0.10</td>
<td>20.77$^*$</td>
<td>1.57</td>
</tr>
<tr>
<td>Objective PO fit</td>
<td></td>
<td></td>
<td></td>
<td>0.35</td>
<td>0.10</td>
<td>11.96$^*$</td>
<td>1.42</td>
</tr>
<tr>
<td>Objective DA fit</td>
<td></td>
<td></td>
<td></td>
<td>0.81</td>
<td>0.06</td>
<td>216.97$^*$</td>
<td>2.25</td>
</tr>
<tr>
<td>Objective NS fit</td>
<td></td>
<td></td>
<td></td>
<td>0.81</td>
<td>0.06</td>
<td>216.97$^*$</td>
<td>2.25</td>
</tr>
<tr>
<td>Customization (either or both forms)</td>
<td></td>
<td></td>
<td></td>
<td>-0.30</td>
<td>0.07</td>
<td>18.91$^*$</td>
<td>0.74</td>
</tr>
<tr>
<td>Objective PO Fit $\times$ Customization</td>
<td></td>
<td></td>
<td></td>
<td>0.50</td>
<td>0.12</td>
<td>17.25$^*$</td>
<td>1.64</td>
</tr>
<tr>
<td>Objective DA Fit $\times$ Customization</td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.12</td>
<td>38.38$^*$</td>
<td>2.13</td>
</tr>
</tbody>
</table>

Note. $N = 6,320$. All results and significance levels were similar when we included a participant fixed effect term to account for the nonindependence of observations across the 20 postings viewed by each participant. The individual fixed effects are therefore excluded. PO = person–organization; DA = demands–abilities; NS = needs–supplies.

$^a$ Odds ratios are effect size indexes in logistic regression (e.g., Frone, 2000), with values of one indicating a null effect, values greater than one indicating a progressively more positive effect, and values less than one indicating a more negative effect. However, the odds ratios of interaction terms are more complex. For example, the 2.13 odds ratio associated with the objective DA Fit $\times$ Customization interaction term indicates that for participants in a customized condition, for every unit increase in objective DA fit, the odds of applying increase by an additional factor of 2.13, over and above the odds among those in noncustomized conditions. Thus, for those in customized conditions, a unit increase in objective DA fit implies a total increase of 3.02 in the odds of applying (Objective DA Fit main effect Odds Ratio from Block 3, or 2.13 $\times$ 1.42). When the DA fit–application decision relationship is analyzed among only those in customized conditions, the odds ratio is, accounting for rounding error, also 3.02 because customization is a dichotomy.

$p < .05.$

relative importance to various fit categories (Kristof-Brown et al., 2002), thus focusing more intently on relevant information rather than less relevant information. The finding is also particularly important given the tremendous growth in job boards that act as intermediaries between organizations and job seekers (Ployhart, 2006). Job boards must attract and retain not only organizations as customers (by generating high quality applicant pools) but also job seekers as customers (by linking them to opportunities with which they fit on categories they find most relevant). Use of configurational customization may help job boards meet both organizational and individual job seeker needs.

Third, the study examined overall applicant pool characteristics rather than just individual application decisions or attraction. When fit information customization was provided, application decisions were more consistent with objective fit on environment-focused categories (PO and DA fit), yielding greater applicant pool fit. This suggests that organizations may experience beneficial outcomes by providing more personally relevant information that may motivate job seekers to more carefully consider the content of job postings. Moreover, application rates were lower when one or both forms of customization were provided. This may appear counterintuitive but likely occurs because customized information allows job seekers to make more informed decisions about where to apply. Although the odds ratios associated with this pattern of findings were modest, even slight percentage decreases in applications are practically important, given that companies sometimes receive tens of thousands of applications, many of which are from applicants with lower levels of fit with the job or organization (Chapman & Webster, 2003). Tangible cost/benefit improvements for an organization—such as reductions in the number of false positive screening decisions, the number of rejected applicants, or time reviewing applications from job seekers who will likely either withdraw from the candidate pool later in the process because of a lack of fit or turn over soon after joining the organization (O’Reilly, Chatman, & Caldwell, 1991)—thus likely result.

Finally, a supplemental analysis found that the increased applicant pool fit in customized conditions resulted more from job seekers screening out options (i.e., refraining from applying based on lower fit indications) than from screening in options (applying based on higher fit). This is consistent with Dineen et al.’s (2007) finding involving the objective fit–attraction relationship in fit information customization conditions and is supported by image and prospect theories. Specifically, these theories both suggest that job seekers are more attentive to negative information, or “violations,” than they are to positive information. Thus, they tend to focus on eliminating jobs from consideration rather than including additional jobs in their pool of options. This is an important distinction, as the vividness of negative information appears to enhance its personal relevance in customized conditions, rendering it more predictive of differences in application probabilities across conditions. In fact, Beach (1993) has claimed that, unlike making a final job choice, screening is entirely dependent on violations, and non-violations play little if any role. This is consistent with the pattern shown in Figure 1. In a broader sense, this pattern also raises the question of whether degrees of “fit” are similar to
equivalent degrees of “misfit” among job seekers, and whether fit and misfit should even be considered to exist on the same continuum. Such issues are starting to receive research attention (e.g., Talbot & Billsberry, 2007).

Limitations

Several limitations deserve mention. First, an atomistic approach (Edwards et al., 2006), whereby rank order correlations represented objective fit, was used. Although research suggests that the hierarchical order of characteristics such as values matters more than absolute levels in determining reactions to the environment (e.g., Adkins, Russell, & Werbel, 1994; Rokeach, 1973; Verquer, Beehr, & Wagner, 2003), the use of profile similarity indexes has been criticized for attenuating results by constraining the amount of available information and preventing specific analyses of excesses and deficiencies of person or environment components (Edwards & Parry, 1993). However, these measures were used to provide holistic fit feedback information in customized conditions because holistic measures are thought to be more consistent with fit conceptualizations (e.g., Cable & Judge, 1996; Caldwell, Chatman, & O’Reilly, 2007).

The generalizability of the study results may be questioned for several reasons. First, we used a sample of undergraduate students. Although students typically have access to career placement services and other network-based sources for attaining job vacancy information, the 18–29 age group, which includes this study’s sample, represents the most likely group to use the Web for job searching (Pew Internet and American Life Project, 2002). Also, surveys indicate that more than 50% of the Fortune 500 companies tailor online recruitment efforts to college students (iLogos, 2003). Despite the proclivity for college students to use the Web for job searching, it could be that older, experienced job seekers more critically evaluate job postings and are thus less likely to apply for jobs. In our sample, however, age was not significantly related to application decisions, and work experience actually exhibited a small positive correlation (.05) with application decisions. Nonetheless, caution is warranted in generalizing the study results to more experienced and older job seekers.

Second, job postings presented only limited amounts and types of information. For example, we used only four dimensions to represent fit in each of the three categories, although fewer dimensions is more consistent with the amount of information appearing in typical job postings and our use of multiple fit categories across multiple job postings was more in keeping with actual job-seeking experiences. However, the organizations represented in the study presented similar types of information in similar categories, which is likely a simplification of reality, in which companies present varying information across jobs. Third, organizational reputation or brand image did not vary across organizations depicted in our study. Researchers have found the effects of recruitment information to be partly contingent on these types of characteristics (e.g., Collins & Stevens, 2002). Thus the results may not generalize as readily to well-known companies, although job postings from lesser known companies are prevalent on the Web and researchers recognize the importance of studying recruitment issues among less familiar companies (e.g., Ployhart, 2006). Fourth, participants were told they were viewing actual job postings, but application decisions were hypothetical. Thus, actual “costs” of job searching were diluted in this context, given that participants knew they would not actually have to follow up on their submitted applications. Because the study examined only hypothetical initial choices of where to apply, it is important to acknowledge that the degree to which central processing could potentially occur could have been restricted and may differ for actual job choices.

In general, although the level of experimental control may seem unrealistic compared with the type of environment in which Web...
recruitment actually occurs, we view it as an advantage in studying how information interactivity influences recruitment outcomes. The level of control also allowed us to provide preliminary evidence that fit information customization and configurational customization can make a difference in the application decisions of job seekers in a Web context. Future research should test whether the influences of customization found here are also found in naturally occurring Web recruitment contexts using local and regional job boards, recognizing that field-based effects may be attenuated in labor markets where job vacancies are scarcer.

Practical Implications and Conclusion

Research examining customization precedes practice, given that few companies have used customization in their Web recruitment efforts (Cable & Yu, 2007; Fraser-Blunt, 2004; for exceptions, see Deloitte’s and Texas Instruments’ Web site career sections, which match job seekers with jobs based on job seeker input). This study has several practical implications. For example, although the specific way in which customization is provided may differ by company, recruitment specialists might improve applicant pool fit while concurrently reducing the amount of application traffic. Providing better information to job seekers prior to requiring contact with company representatives gives poorly fitting job seekers the chance to screen themselves out of the applicant pool, saving job seekers and organizations time and effort. Customization might also enable job seekers to refrain from applying based on lower fit to a greater extent than they apply based on higher fit, which might further reduce the liability associated with rejecting larger numbers of applicants (Cappelli, 2001). If provided anonymously to job seekers via the Web, fit self-assessments should be more candid as socially desirable responses are decreased. Configural customization also might benefit job seekers by influencing them to base application decisions on their most relevant fit category. Finally, reducing applicant pool size early in the recruitment process might enable companies to better serve those who do apply, alleviating possible negative applicant reactions (Chapman & Webster, 2003) and fostering goodwill toward the company.

We recognize that other recruitment sources besides the Web may be customized (e.g., telephone, store-front kiosk), customization may occur via interpersonal contact (e.g., at a job fair), and the nature of job search decision making may vary at later stages of the process. Research should investigate how customization that occurs with other recruitment sources affects applicant pool characteristics at these different stages. This study has addressed the growing use of the Web as a recruitment platform at the earliest stages of the recruitment process and suggests a “win–win” for organizations (by achieving leaner applicant pools) and job seekers (by being able to focus on better long-run opportunities and apply to organizations with which they fit on valued dimensions). We encourage scholars to build upon these results and further examine how the interactivity of the Web might be leveraged for the benefit of both parties.

References


(Appendix follows)
Appendix

Participant A’s Rank-Ordered Abilities, Values, and Benefits Preferences and Sample Job Posting

<table>
<thead>
<tr>
<th>Abilities</th>
<th>Values</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time management</td>
<td>Performance expectations</td>
<td>Specialized insurance</td>
</tr>
<tr>
<td>2. Visualize problems</td>
<td>Organization</td>
<td>Holiday parties</td>
</tr>
<tr>
<td>3. Negotiation</td>
<td>People orientation</td>
<td>Flexible spending account</td>
</tr>
<tr>
<td>4. Customer service</td>
<td>Competitiveness</td>
<td>Club memberships</td>
</tr>
</tbody>
</table>

**Corporate Values:**

It appears that your fit with the values of this organization is: 50%

At Ultra, people are our number one priority, and you’ll know this from the first day on board. At the same time, our performance expectations are high, although we want you to feel comfortable getting used to our culture and make steady progress.

You'll find our environment to be friendly and relatively non-competitive, a plus in the eyes of most of our associates.

We also feel that a degree of disorganization in the work environment leads to less rigidity and greater bottom line success.

**Compensation and Benefits:**

It appears that your fit with the benefits offered of this organization is: 50%

Ultra offers salaries that are highly competitive with the industry. In addition, we offer a standard vacation and health care package and a specialized mix of benefits that will ensure that your needs inside and outside of work are met. Specifically, we offer the following benefits, broken down by percentages of the total:

- 50% - 80% - holiday spending account (time of pre-tax dollar to pay child/elder care costs)
- 50% - 70% - specialized insurance coverage (beyond) normal health plan including mental health coverage (50%)
- 50% - 60% - paid memberships to professional associations (25%)
- Holiday parties and other social events (10%)

**Skills and Abilities:**

It appears that your fit with the skills required by this job is: 50%

In terms of skills and abilities, we are looking for several important characteristics in our associates including a bachelor’s degree in a business or related field. While several characteristics are important, we highlight the following and give you an idea of the extent to which you might be asked to use each in your new job:

- First, you can expect to spend a good bit of time negotiating in various ways, and we highlight negotiating skills as particularly important for our managers.
- You will need to take a hard look at the degree to which our candidates can visualize problems themselves.
- We consider not only candidates, but also insiders to be customers, so customer and personal service is also looked for.
- Finally, time management is a plus, but not necessary since schedules are arranged in advance.

**Fit Information Customization**

Based on Participant A’s ranked data, Ultra Inc. would have appeared as shown above if A were in a fit information customization condition (e.g., the “50%” fit for values is based on a rank order correlation between A’s rankings from Phase 1 and subject matter expert ranks of the four values in the job posting). The four abilities, values, and benefits were randomly ordered in terms of importance when creating each of the companies for the study, with each company profile then remaining the same across all participants who viewed it. Thus, for those in fit information customization conditions, fit percentages varied according to the participants’ ranked profiles (from Phase 1). If a participant was not in a fit information customization condition, the only difference was the absence of the phrases starting with “It appears that your fit . . . ”

**Configural Customization**

If participants were provided with configural customization, their rank ordering of category preferences (abilities, values, benefits) from Phase 1 was used to order information in this manner across all 20 job postings viewed. For example, if Participant A was in a configural customization condition, values information was presented first, then benefits, then abilities across all postings (consistent with A’s category preferences). If A was not, the order in which the abilities, values, and benefits categories were presented varied across each of the 20 postings that A viewed.

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