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Changing an Unfavorable Employer Reputation: The Roles of Recruitment Message-Type and
Familiarity with Employer

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Abstract

An unfavorable employer reputation can impair an organization's ability to recruit job seekers. The present research employed a four-week longitudinal experimental design to investigate whether recruitment messages can positively change an existing unfavorable employer reputation. Two hundred and twenty-two (222) job seekers rated their perceptions of an organization before and after being randomly assigned to receive a series of high- or low-information recruitment messages. As expected, job seekers receiving high-information messages changed their perceptions more than job seekers who were exposed to low-information messages. In addition, job seekers' initial familiarity with the employer was negatively related to change in their perceptions of employer reputation. Finally, there was some evidence that job seekers' familiarity with the employer influenced the impact of different recruitment messages. Implications for research and practice are discussed.

Keywords: organizational attraction, recruitment, familiarity

Changing an Unfavorable Employer Reputation: The Roles of Recruitment Message-Type and Familiarity with Employer

The quality of an organization's workforce depends in part on the company's appeal to prospective job seekers. Specifically, the success of all recruitment, selection, and later human resources practices depends on first attracting qualified job seekers to apply to the organization (Boudreau & Rynes, 1985). One of the most important factors influencing a firm's ability to attract a large and high-quality applicant pool is the company's employer reputation—its reputation as a place to work (Rynes & Cable, 2003; Turban & Cable, 2003). Firms with unfavorable employer reputations receive substantially fewer and lower-quality job applications than firms with more favorable employer reputations (Collins & Han, 2004; Turban & Cable, 2003). For instance, Turban and Cable (2003) found that firms with less favorable employer reputations (i.e., one standard deviation below the mean) received 50% fewer, and lower-quality, job applications from undergraduate and graduate business students than firms with more positive employer reputations (i.e., one standard deviation above the mean). Because of the potential damaging effects of a negative employer reputation, we argue that understanding whether an organization can change a negative employer reputation is an important and practical problem facing many organizations.

There is a growing body of research that suggests that recruitment practices – specifically the messages embedded within different recruitment sources – can be an effective way to change job seekers' beliefs about an employer (Cable & Turban, 2001; Collins & Stevens, 2002; Lievens & Highhouse, 2003). Despite the detrimental consequences of a negative employer reputation, few empirical studies have directly tested if and how these negative employer perceptions are malleable. In one study, Van Hove and Lievens (2005) found that positive recruitment messages could change job seekers' perceptions of an unfamiliar organization when it immediately followed negative messages about the company. However, the generalizability of their findings

may be limited as their participants were evaluating a fictitious company about which they were likely to have weakly held beliefs that may be easy to change. Thus, we seek to contribute to the literature on recruitment and applicant attraction by examining the potential for recruitment messages to change job seekers' perceptions of a real organization. In addition, we look at the impact of two alternative recruitment message strategies that have been identified in the literature and hypothesize differences in the relative effectiveness of high versus low information recruitment messages.

We also look to contribute to the literature by examining a factor that may limit the extent to which reputation perceptions change over time. Specifically, scholars have postulated that high familiarity may reduce the effectiveness of reputation change efforts and therefore explain null or conflicting findings in the applicant attraction literature (e.g., Van Hove, *in press*; Williamson, King, Lepak, & Sarma, 2010). Further, examining this issue empirically is important because familiarity has been heavily studied as a predictor of employer reputation but generally treated as beneficial for recruiting job seekers (e.g., Collins, 2007); however, we are aware of no study that has directly tested the effects of familiarity on change in employer reputation. We contribute the literature by theoretically identifying and empirically testing how familiarity may impact the effectiveness of recruitment efforts.

Finally, the practical and theoretical importance of the issue of reputation change as well as threats to validity in cross sectional research (e.g., reverse-causality) warrant a careful investigation of these issues. Importantly, the impact of recruitment activities on job seekers may not be easily captured through studies with a cross-sectional design. For example, Collins (2007) noted that companies rarely rely on a single recruitment activity at a single point in time to impact job seeker's perceptions of the organization; therefore, we argue that it is more realistic

to look at the impact of repeated recruitment interventions over multiple periods of time. We look to enhance the validity and generalizability of our findings through a randomized, controlled and longitudinal experiment.

Conceptual Background and Hypotheses

Previous research in the applicant attraction literature has drawn on the marketing literature on consumer-based brand equity theory to argue that employer reputation is an important dimension of employer knowledge that may impact job seeker's application behaviors (Cable & Turban, 2001; Collins & Han, 2004). Organizational employer reputation refers to a job seeker's perception of how others view an organization as a potential employer (Cable & Turban, 2001). In contrast to general reputation—which is often associated with financial performance indicators (Fombrun & Shanley, 1990), employer reputation refers specifically to the company as a place to work and is more strongly related to job application decisions than is general reputation (Gatewood, Gowan, & Lautenschlager, 1991). There is growing evidence that employer reputation is significantly related to job seekers' application intentions and decisions (Cable & Turban, 2003; Collins & Han, 2004).

Employer reputation influences application and job offer decisions behaviors because these perceptions influence job seekers' beliefs about specific job and organizational characteristics that may be harder to observe, especially for job seekers early in the search process (Cable & Turban, 2003; Collins & Han, 2004). Additionally, employer reputation may have spillover effects on an individual's perceived social status. Specifically, job seekers may be more attracted to companies with positive employer reputations because being recruited or hired by an organization with a favorable employer reputation can lead to increased feelings of pride and self-esteem (Cable & Turban, 2003). Conversely, job seekers may feel a sense of

embarrassment or shame after pursuing an organization with an unfavorable employer reputation (Dutton, Dukerich, & Harquail, 1994).

Recruitment Messages and Changing Perceptions of Employer Reputation

Although researchers have found that employer reputation leads to important outcomes and have begun to uncover reasons why employer reputation is important, we could find limited empirical work directly addressing whether an existing *unfavorable* employer reputation is changeable. However, prior recruitment research suggests that recruitment activities may be an important tool for managing and shifting job seekers' perceptions of an organization as an employer (e.g., Gatewood et al., 1993). This may be especially true because job seekers' perceptions of organizations as potential employers are often based on assumptions (Barber & Roehling, 1993; Cable & Turban, 2003). Although they did not look directly at shifting negative reputation, several scholars have demonstrated a significant relationship between recruitment messages and perceptions of employer reputation (Collins, 2007; Van Hove & Lievens, 2005).

One means of influencing different dimensions of job seekers' employer knowledge – familiarity, employer reputation, and job information – is through a variety of recruitment activities, advertisements, endorsements, and sponsorship activities (Collins & Stevens, 2002). Drawing on the Elaboration Likelihood Model (ELM) from consumer-based brand equity literature (e.g., Petty & Cacioppo, 1986), Collins and colleagues (Collins, 2007; Collins & Han, 2004) argued that the relative effectiveness of different recruitment practices may depend on the level of information contained in the messages embedded in these activities and the amount of cognitive effort required on the part of the job seekers for the messages to be effective. Research using the ELM framework within the consumer marketing literature has found that some messages are designed to require little search and processing effort on the part of consumers and

influence consumers by exposing them to a product in an incidental manner, while other marketing messages are designed to require a greater degree of search and processing effort and influence consumers by exposing them to more detailed information or arguments about the attributes of a product (Petty & Cacioppo, 1986). Much like marketing activities and messages, recruitment activities and messages range from high to low in terms of information (Collins & Han, 2004).

High-information recruitment practices are designed to influence job seekers through detailed messages about the company and the job and this information can impact job seekers' perceptions of employer reputation (Collins & Han, 2004). By providing detailed, positive information about the company and specific aspects of the work environment (e.g., company culture, leaders, growth opportunities), high-information recruitment practices may provide job seekers with contradictory information that can help shift prior negative perceptions (Van Hoya & Lievens, 2005). Following the argument of the ELM, when job seekers process the positive, detailed recruitment messages they may develop more favorable beliefs about attributes of the organization as an employer, and also more favorable general impressions of the organization because the positive, detailed information signals the presence of a wider range of positive attributes (MacInnis & Jaworski, 1989; Petty & Cacioppo, 1986). These effects may be especially powerful in the early stages of recruitment because job seekers rarely have direct exposure to the organization and often base their beliefs on limited information and assumptions (Barber & Roehling, 1993).

Low-information marketing practices are often thought of as mere exposure in which companies look to influence consumers subconsciously by creating awareness through repeated exposure to the company's logo and/or positive images associated with the company's name

(Aaker, 1991; Petty & Cacioppo, 1986). The increased exposure to the brand and resulting higher level of awareness can create positive feelings toward the brand and also positively impact other perceptions because consumers unconsciously interpret awareness as a positive signal of other attributes to which they have not been exposed (Aaker, 1991; Fang, Singh, & Ahluwalia, 2007). In the context of recruitment, job seekers may develop more positive beliefs regarding an employer to the extent that low-information recruitment messages create greater awareness and job seekers use their heightened awareness as a signal of potentially positive attributes that are unobserved (Collins & Han, 2004). However, in terms changing existing reputational beliefs, low-information messages may have limited effects because they do not provide enough information to contradict existing beliefs and lead job seekers to reassess their perceptions (MacInnis & Jaworski, 1989; Petty & Cacioppo, 1986). Because high-information messages provide detailed, positive information about the company, we expect that high-information recruitment messages have greater potential to change unfavorable perceptions of employer reputation over time than low-information recruitment messages.

H 1: Job seekers exposed to high-information recruitment messages will exhibit more positive change in their perceptions of employer reputation than job seekers exposed to low-information recruitment messages.

Familiarity and Changing Perceptions of Employer Reputation

Whether job seekers revise their unfavorable perceptions of an employer over time may depend on not only their exposure to different types of recruitment messages but also their pre-existing beliefs about an organization. For example, some scholars have argued that once job seekers develop strong beliefs about an organization as an employer, they tend to search for additional evidence that confirms their beliefs (Stevens, 1997) or interpret any new information

in a manner that confirms prior beliefs even if that information is contradictory (Soelberg, 1967). Thus, there may be a number of factors that make an employer reputation more or less resistant to change. In this study, we specifically focus on the potential impact of familiarity, defined as the extent to which job seekers are aware of and the extent to which they can recall information about an organization (Cable & Turban, 2001). Evidence suggests that job seekers vary in their familiarity with potential employers (Gatewood et al., 1993). Importantly, prior research has typically viewed familiarity as desirable because there is some evidence that familiarity has positive effects on job seekers' behaviors and decision making (Cable & Turban, 2001; Collins, 2007; Gatewood et al., 1993). This view is based on the idea job seekers are more attracted to organizations that are familiar because familiarity serves as a simple affective heuristic (Gatewood et al., 1993).

However, research on consumer-based brand equity suggests that familiarity may have a dampening effect on efforts to change an employer reputation, which is undesirable for firms that are perceived unfavorably by job seekers. Job seekers who are familiar with an organization may have beliefs and attitudes about the company as a potential employer that are ingrained and difficult to change. Anderson's (1983) *associative network model* of memory conceptualizes job seekers' initial awareness of an organization as a "node" in memory (Cable & Turban, 2001). As an applicant learns more about an organization, new information in the form of memories and thoughts are stored as associations that are connected to the initial memory node. A greater number of associations attached to the memory node results in a more complex and resilient cognitive structure, making belief and attitude change more difficult (Alba & Hutchinson, 1987; Anderson, 1983). When a job seeker has a greater number of unfavorable thoughts and memories connected to the node representing a particular organization, changing the job seeker's overall

perceptions of the organization from unfavorable to favorable through the use of recruitment messages may be more difficult than if the job seeker had fewer unfavorable associations connected to the organization. In addition, memory nodes and their associations also become more ingrained when they are activated more frequently, suggesting that greater familiarity from increased exposure to the organization results in a more rigid belief structure (Anderson, 1983; Petty & Cacioppo, 1986). Because familiarity should result in more ingrained beliefs and attitudes that are more resistant to change, we predict a negative relationship between familiarity with an employer and change in perceptions of employer reputation.

H2: Job seekers' familiarity with employer will be negatively related to change in their perceptions of employer reputation.

While the above research and theory would suggest that familiarity should have a dampening effect on all recruitment efforts, research on the ELM would suggest that familiarity may have a particularly strong effect in the case of low-information recruitment messages. As noted above, low-information recruitment messages are likely to impact perceptions of employer reputation through a signaling effect. That is, repeated exposure to the company's name, logo, or positive images are expected to increase job seekers' awareness of the company and job seekers are likely to interpret this awareness as positive cues that lead them to believe that other more positive attributes exist for the firm (Collins, 2007). Although this positive signaling is likely to have a positive effect for job seekers with low levels of familiarity with the company, job seekers with existing high levels of familiarity, and thus more established beliefs, are unlikely to be affected (Collins & Han, 2004). In essence, the existing high familiarity overwhelms any potential effect of mere exposure as the individual will already have strong, existing reputational perceptions that are unlikely to be changed without exposure to more detailed, contradictory

information (Petty & Cacioppo, 1986). In contrast, those job seekers with low levels of familiarity are blank slates and mere exposure to the organization may create the initial image perceptions or change very loosely held perceptions (Collins, 2007, Petty & Cacioppo, 1986).

H3: Familiarity with employer moderates the impact of recruitment messages on change in perceptions of employer reputation such that low-information recruitment messages have a significantly greater effect on change in employer reputation under low versus high familiarity.

Methods

Sample, procedure, and design

Participants in the study were undergraduate students enrolled in an introductory human resources management course who were offered an additional percentage point toward their final course grade for completion of all four surveys. Two hundred and twenty-two (222) students began the study and 213 completed all four time periods, thus representing a 96% retention rate through the four weeks. All students (average age = 19.9 years, $SD = 2.74$) who began the study were included in the data analyses. The sample was 46% female and ethnically diverse, with 69% percent of respondents self-categorizing as White/Caucasian, 9% African American, 10% Hispanic/Latino, and 12% Asian/Pacific Islander. Seventy-four percent (74%) of students reported having actively searched for a job in the past six months.

A longitudinal experimental study conducted over a four-week period tested the hypotheses. The four-week time period has practical significance in the present context because a four-week gap also separates a career fair at the university and the time when companies can begin accepting applications for on-campus interviews. Thus, potential organizations recruiting on campus would have roughly four-weeks to make active efforts to change their employer

reputations, making the timeframe in our design highly relevant for studying employer reputation change processes. The entire experiment was conducted online and outside of the lab, allowing job seekers to take the survey at a time they found convenient and simulating natural exposure to company information. A pretest identified an organization that was perceived unfavorably by a similar sample of job seekers. Details of this analysis are available in Appendix A.

Job seekers were informed that the purpose of the study was to examine their opinions of an organization once each week for a four-week period. Each week job seekers received an email with a link to the survey and up to two reminder emails if they had not completed the survey within two days. In the first survey, job seekers reported basic demographic information, familiarity with the employer, and baseline perceptions of employer reputation. In weeks two, three, and four, job seekers were randomly assigned to either the low information (control) condition or one of two high-information (experimental) conditions. Table 1 describes the recruitment messages administered to job seekers in different experimental groups across the four time periods.

Low-information messages. Job seekers in the low-information condition were exposed only to the company name and logo during weeks two, three, and four prior to evaluating the organization. Nordhielm (2002) suggests that exposure to just the name and logo is a common type of low information message used by organizations. Individuals tend to pay minimal attention to such stimuli while using the Internet (e.g., banner ads), making such manipulations ideal for studying low-information messages (Fang et al., 2007).

High-information messages. Job seekers in the high-information messages condition were randomly assigned to receive one of two sets of detailed recruitment messages during weeks two, three, and four prior to evaluating the organization. Appendix B provides an example high-

information recruitment message. All high-information recruitment messages were in the form of an email sent directly to job seekers and contained between 16-25 lines of text. The content varied between each time period and directly addressed the three dimensions of job seekers' employer beliefs that have been shown to influence applicant behaviors—i.e., company information, people information, and job information (see Barber, 1998; Cable & Turban, 2001, for reviews). In particular, during the second week all job seekers receiving high-information messages received information about the company (e.g., corporate social responsibility information), during the third week they received information about the people who worked at the company (e.g., positive coworkers, company employed graduates of the same academic program), and during the fourth week they received information about specific job characteristics (e.g., pay).

Multiple high-information message sources provided variation in the experimental manipulations. Job seekers receiving high information messages were randomly assigned one of two sequences of message sources: 1) direct emails from corporate recruiters during weeks two, three, and four, or 2) a general company advertisement, an email from an university alumnus, and an email from a corporate recruiter during weeks two, three, and four respectively. The content and format of the high-information messages were identical across the sources except for a few words used to identify the message source. We conducted a multiple-groups latent growth curve analysis and did not find any differences between the high-information conditions regarding the structural path from familiarity to the linear growth factor ($\Delta\chi^2 = 0.43$, $\Delta df = 1$, *ns*) or between-group differences regarding the linear trend mean ($M = 0.16$, $EST/SE = 1.02$, *ns*). Therefore we collapsed the two high information message conditions, which allowed us to maximize statistical power, make the results more accessible by using a dummy-code variable

for recruitment message type, and minimize potential issues such as differences in source credibility.

Measures

Familiarity with employer. Three items used in previous research (Collins & Stevens, 2002) measured job seekers' initial familiarity with the employer. Job seekers self-reported their perceived level of familiarity with the organization in response to items such as "How much do you know about this company in general?" Responses were on a five-point Likert scale (*1* = Very little about this company, *5* = A lot about this company). Reliability for the scale was .81.

Employer reputation. We used five items from a validity study (Highhouse, Lievens, & Sinar, 2003) to assess job seekers' perceptions of the company's employer reputation each week. Example items are: "This is a reputable company to work for" and "Employees are probably proud to say they work at this company." Responses were on a five-point Likert scale (*1* = strongly disagree, *5* = strongly agree). Reliability for the scale at each of the four time periods ranged from .89 to .92.

Results

Preliminary analyses

Given the nature of the high- and low-information experimental manipulations, we examined the amount of time that job seekers spent on the recruitment messages each week as an indicator of cognitive effort (Payne, Bettman, & Johnson, 1993). We expected that job seekers in the high-information messages condition would spend more time reading the messages and responding to the surveys than job seekers in the low information messages condition. Analysis of time stamp data revealed that job seekers in the high-information condition spent more time in the manipulations than job seekers in the low-information condition during the weeks when they

received the manipulations (i.e., week two: $t = 3.12, p < 0.01$; week three: $t = 5.34, p < 0.001$; week four: $t = 2.36, p < 0.01$), but not during the week when no manipulation had been administered (i.e., week one, $t = 0.61, ns$).

Table 2 shows correlations and descriptive statistics for the study variables. It is important to note that employer reputation increased from Time 1 ($M = 2.38, SD = 0.84$) to Time 4 ($M = 3.03, SD = 0.84$), $t(209) = 11.03, p < .001$. This provides preliminary evidence that, on average, perceived employer reputation increased over the duration of the study. Because we aimed to study change in employer reputation, it was important that job seekers interpreted the employer reputation construct the same way over time. Therefore, we tested for measurement invariance over time and experimental groups as a precondition to modeling the growth trajectories (Table 3; Chan, 1998). A longitudinal measurement model was created with four reputation factors (i.e., one factor for each time period), each with five indicators (i.e., corresponding to the employer reputation scale items). The results of the invariance tests shown in Table 3 provide evidence that job seekers interpreted the employer reputation scales similarly over time and that constructs are comparable across the multiple assessment periods and experimental conditions.

Latent Growth Curves

We used the latent growth curve modeling (LGC) procedures outlined by Chan (1998) to analyze the repeated measures data. Conceptually, LGC is a process similar to confirmatory factor analysis that measures latent growth across variables measured longitudinally. Our LGC builds from the longitudinal measurement model described above that had four first-order reputation factors—one reputation factor corresponding to each of the four measurement occasions. To develop a LGC, we added one or more second-order latent *growth* factors to

capture the latent change across the four reputation factors over time. The factor loadings from the growth factor(s) to each of the reputation factors specify the shape of the reputation change trajectory. For example, a “no growth” model would include a growth factor with loadings to the four reputation factors set to “1.” Because the factor loadings are the same (i.e., 1) for the four time periods, perceptions of employer reputations at Times 2-4 are modeled to be similar to those at Time 1 (i.e., the intercept), hence specifying *no change* over time. In our study a “no growth” model would reveal that recruitment messages did not significantly change perceived employer reputation.

Including an additional growth factor with loadings to the four reputation factors set to 0, 1, 2, and 3 models a *linear* (i.e., constant change) growth trajectory. In a linear growth model, baseline employer reputation is captured by the intercept factor (described above) and the linear factor captures incremental linear change in perceived employer reputation across the four weeks. A positive linear growth factor would suggest that each additional recruitment message yielded similar additional positive change to job seekers’ perceptions of employer reputation. With four measurement occasions, researchers can also test for non-linear change by including a third *quadratic* growth factor with loadings set to 0, 1, 4, and 9 (i.e., linear factor loadings squared: $0, 1^2, 2^2, 3^2$). The quadratic factor adds information about the rate of change (i.e., acceleration or deceleration) over time. For example, a negative quadratic growth factor would suggest diminishing returns to each additional recruitment message for changing perceived employer reputation.

LGC models have two levels that are developed sequentially. The level-1 growth model examines the shape of intra-individual growth trajectories for all job seekers in the sample and provides information about the variability in these trajectories between job seekers. We used

nested models to compare the no-growth, linear, and quadratic trajectories described above using the $\Delta\chi^2$ statistic (Bentler & Bonett, 1980). Because LGC uses a structural equation modeling (SEM) approach, we used the same model fit indices to assess model fit: the chi-square goodness of fit test, the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), the standardized root mean square residual (SRMR; Bentler, 1995), and the root mean square error of approximation (RMSEA; Steiger, 1990). Analyses were conducted using MPLUS version 3.0. The MPLUS program produces an EST/SE statistic which is interpreted as a Z-statistic (Muthén & Muthén, 2004). Table 4 shows that the quadratic growth model produced the best fit to the reputation change trajectories.

The parameters from the best-fitting (i.e., quadratic) level-1 model provide information about the nature of reputation change trajectories across job seekers in the sample. Consistent with the results from the pilot study, the intercept factor mean ($\mu = 2.38$, $EST/SE = 40.70$, $p < .001$, measured on five-point Likert scales with lower scores indicating a more negative employer reputation) could be interpreted as showing that job seekers generally viewed the company unfavorably at the beginning of the study. A positive and significant linear growth factor mean ($\mu = 0.64$, $EST/SE = 10.06$, $p < .001$) suggests that the employer reputation became more positive by the end of the study. The unstandardized magnitude of the linear change suggests that, by the end of the study, job seekers on average had “neutral” (i.e., near “three” on the five-point Likert scales measuring employer reputation) perceptions of the firm. The negative quadratic factor mean ($\mu = -0.15$, $EST/SE = -8.74$, $p < .001$) suggests significant deceleration in the rate of change (e.g., a “learning curve” shape; see Figure 1) over time. To describe the size of the change in perceived employer reputation across the study in standardized terms, we calculated Cohen’s (1988) d statistic using the baseline (i.e., Time 1) sample standard deviation

and the level-1 latent growth curve model estimated means (Feingold, 2009). On average, job seekers' perceptions of employer reputation became more positive over the course of the study (Time 1 versus Time 4: $d = 0.67$). Using Cohen's (1988) guidelines for interpreting d , this suggests that the recruitment messages generally had a "medium" to "large" effect on change in reputation for job seekers in our sample. We next investigated whether reputation change trajectories differed across job seekers in our sample.

The variances of the growth factors in the level-1 model allow researchers to test for the presence of meaningful inter-individual differences in reputation change trajectories and baseline employer reputation. The intercept factor variance was significant ($\sigma^2 = 0.41$, $EST/SE = 3.49$, $p < .05$), suggesting job seekers varied in their baseline perceptions of employer reputation. Significant variation around the linear growth factor ($\sigma^2 = 0.41$, $EST/SE = 3.49$, $p < .05$) suggested the presence of meaningful individual differences in linear change over time. We did not find significant variation around the quadratic growth factor ($\sigma^2 = 0.01$, $EST/SE = 1.24$, ns). We also did not find a significant covariance between the intercept and linear ($\Psi_{IL} = -0.08$, $EST/SE = -0.71$, ns) or quadratic ($\Psi_{IQ} = 0.02$, $EST/SE = 0.67$, ns) growth factors, suggesting initial perceptions of employer reputation were not related to the magnitude or rate of change.

The level-2 growth model incorporated predictors to attempt to explain the variation in growth trajectories found in the level-1 model. The level-2 model added the predictors of recruitment message-type (dummy-coded: 0 = low information, 1 = high information), familiarity (as a latent factor) and an interaction term (familiarity X message-type) to attempt to explain the variation in job seekers' linear change in perceptions of reputation. Neither familiarity, ad type, nor the interaction term was significantly related to the intercept growth

factor (e.g., initial employer reputation). The level-2 model fit the data well $\chi^2(242, N = 222) = 439.48, p < .01$, CFI = 0.95, TLI = 0.94, SRMR = 0.10, RMSEA = 0.06.

Hypothesis 1 predicted that job seekers would experience greater positive change in their perceptions of employer reputation when exposed to high-information messages than low-information messages. The message-type dummy-variable significantly and positively predicted linear change in perceptions of employer reputation ($\beta = 0.70, EST/SE = 6.05, p < .001$), suggesting that job seekers in the high information condition exhibited greater linear change in their perceptions of employer reputation than job seekers in the low information condition. Hypothesis 1 was supported and is illustrated in Figure 1. Job seekers exposed to high-information messages exhibited greater overall change in their perceptions of employer reputation than job seekers who were exposed to low-information messages. We calculated the proportion of variance in linear growth explained (Raudenbush & Bryk, 2002) by the type of recruitment message and found that message-type explained 29% of the variation in linear change in employer reputation.

Hypothesis 2 predicted that familiarity would negatively predict change in employer reputation over time. As expected, familiarity significantly and negatively predicted linear change in employer reputation ($\beta = -0.22, EST/SE = -2.52, p < .05$). Supporting Hypothesis 2, job seekers who were more familiar with the organization exhibited less change in their perceptions of employer reputation across the four weeks. Figure 1 illustrates the negative effects of familiarity on change in employer reputation. We calculated the proportion of variance in linear reputation growth that was explained by familiarity with the employer (Raudenbush & Bryk, 2002) and found that familiarity explained 6% of the variation in linear change in employer reputation.

Hypothesis 3 predicted that the negative relationship between familiarity and change in employer reputation would be weaker for job seekers exposed to high information recruitment messages than for job seekers exposed to low information recruitment messages. The familiarity by message-type interaction did not significantly predict linear change in perceptions of employer reputation ($\beta = 0.10$, $EST/SE = 1.03$, ns). Contrary to Hypothesis 3, these results suggest that the effects of message-type and familiarity on change in job seekers' perceptions of employer reputation were additive rather than interactive.

Supplemental Analyses

We also conducted a set of supplementary analyses to examine whether there were mean differences in employer reputation across the different combinations of recruitment message-type and familiarity within each of the four time periods. We categorized job seekers as high or low on familiarity using a median-split technique and then created four conditions to represent the following combinations of message-type and familiarity: low information messages/low familiarity; low information messages/high familiarity; high information messages/low familiarity; and high information messages/high familiarity. The results of univariate analysis of variance (ANOVA) run within each time period revealed significant overall effects for the message-type/familiarity combinations on perceived employer reputation at time two ($F(3, 215) = 5.18$, $p < .01$), time three ($F(3, 213) = 13.17$, $p < .01$), and time four ($F(3, 206) = 8.39$, $p < .01$). As expected, there was no significant effect at the first time period ($F(3, 218) = 0.38$, ns), which occurred before job seekers were exposed to the recruitment messages. Follow-up comparisons showed that at the second, third, and fourth time periods, job seekers who had low familiarity and received high information messages exhibited significantly more positive perceptions of employer reputation than job seekers who had either low or high familiarity and

received low information messages. In addition, at these three time periods, job seekers who had high familiarity and received high information messages reported significantly more positive perceptions of employer reputation than those who had high familiarity and received low information recruitment messages.

To describe the size of these effects, we also compared the latent growth model-estimated means for employer reputation across four groups of job seekers corresponding to the four trajectories plotted in Figure 1. Following Feingold's (2007) recommendation, we calculated Cohen's (1988) d using the baseline (pre-intervention) SD. At the end of the four-week study (i.e., Time 4), we found the largest difference between less familiar (-1SD) job seekers receiving high-information recruitment messages and the more familiar (+1SD) job seekers receiving low information messages ($d = 1.90$). This "large" effect (Cohen, 1988) occurred partly because less familiar (-1SD) applicants who were exposed to high information recruitment messages improved their perceptions of employer reputation the most across the four weeks (Time 1 versus Time 4; $d = 1.41$). The large difference between the groups was also partly the result of the more familiar (+1SD) job seekers receiving low information messages decreasing their perceptions of employer reputation by the end of the four weeks (Time 1 versus Time 4: $d = -0.52$).

Overall, the supplementary analyses confirm that high information recruitment messages are more effective than low information messages for strengthening job seekers' perceptions of employer reputation. In addition, these results provide some evidence that familiarity influences the impact of recruitment messages. High information messages were particularly effective for strengthening perceptions of employer reputation when job seekers were relatively unfamiliar with the employer, and low information messages were particularly *ineffective* when job seekers were relatively familiar with the employer.

Discussion

Organizational recruitment is fundamentally about attracting qualified job seekers to apply to job openings, and a company's reputation as an employer is one of the most important factors influencing a job seeker's decision to apply (Cable & Turban, 2001). An important applied issue in the field of employee recruitment is whether a firm with an existing unfavorable employer reputation can improve job seekers' perceptions (Barber, 1998; Cable & Turban, 2001; Collins & Stevens, 2002; Ployhart, 2006). The present study provided an initial test of this question using a four-week longitudinal experimental design with college-level job seekers. We assessed job seekers' perceptions of employer reputation before and after exposure to a series of recruitment messages from an organization that was pre-tested to have an unfavorable employer reputation. We predicted that high-information messages would lead to greater change than low information messages, and that the magnitude of change would depend on job seekers' initial familiarity with the organization.

Our study produced several findings that are important to recruitment theory and practice. First, we found that the employer reputation, on average, became more positive over the course of the study. Because this study was a longitudinal randomized experimental study using a real organization, it provides evidence that reputation beliefs may be malleable through recruitment messages. Given that employer reputation has been linked to actual application decisions (e.g., Collins, 2007), the present findings are encouraging for organizations with unfavorable employer reputation and suggest that repeated recruitment messages may alter job seekers' unfavorable perceptions.

Second, we found that high-information recruitment messages were more effective for changing job seekers' unfavorable perceptions than were low-information messages (Figure 1),

confirming and strengthening the findings from prior recruitment studies (Williamson et al., 2010). High-information messages have greater potential to provide the type of information that can create favorable associations with the firm, whereas low-information messages do not have this ability. Further, the longitudinal and experimental method used in this study increases confidence in the causal link between recruitment practices and changes in job seekers' perceptions of potential employers.

Importantly, we found that familiarity with the employer was negatively related to reputation change across the four-week study. Regardless of the type of recruitment message they encountered (i.e., low information or high information), job seekers who were more familiar with the organization at the start of the study were less likely to change their perceptions of the organization than job seekers who knew less about the organization (see Figure 1). In addition, we found some evidence that familiarity influences the impact of different recruitment messages. Specifically, high information messages were particularly effective for building more positive reputation perceptions among job seekers who were less familiar with the employer. In addition, low information messages were especially ineffective when job seekers were more familiar with the employer. Establishing the negative effects of familiarity on employer reputation change is important because a few recent articles have speculated that the negative effects of familiarity on reputation change may underlie conflicting or null findings in the literature (Van Hove, in press; Williamson et al., 2010). Providing evidence that familiarity influences the magnitude of reputation change lends credence to those notions, and also may guide the design of future empirical studies using real organizations. Second, the applicant attraction literature has mostly focused on the beneficial effects of familiarity as a predictor of applicant attraction (Gatewood et al., 1993; Collins, 2007). By demonstrating that familiarity with an employer may dampen the

impact of recruitment activities, we show that the relationship between familiarity and applicant attraction is more complex (cf. Brooks et al., 2004). The impact of familiarity on applicant attraction has numerous beneficial and detrimental cognitive and motivational effects on applicant attraction (e.g., Brooks et al., 2004), and future research should investigate the interactions of these roles to better understand the dynamics underlying this key construct in the applicant attraction literature.

Future Research Directions

The present research addressed an important and understudied issue by looking at the malleability of an unfavorable employer reputation and individual difference factors that may buffer an organization's reputation change efforts. However, as with most research, our study has several limitations that can only be addressed by additional research. First, we used a sample of college job seekers to test our hypotheses which may limit the generalizability of our results to more experienced or employed job seekers. Yet, college job seekers are generally new labor-market entrants and as such represent an important part of the labor market. In addition, the controlled setting of a college environment was important for providing a rigorous test of our hypotheses. Given that our sample may have been less familiar with the organization than other populations such as experienced job seekers, studies using other populations may expect to find the negative effects of familiarity on reputation change more pronounced. However, future research is needed to replicate and extend our findings with other populations of job seekers.

Second, although the time frame (i.e., four weeks) had practical significance in the context of our student sample, future research might test different time intervals of practical or theoretical significance. Third, we assessed job seekers' opinions of an organization in a single industry and it is possible that other companies with unfavorable employer reputations in other

industries (e.g., tobacco) are more difficult to change. Job seekers rely on industry and other unique characteristics of organizations to screen-out undesirable employers, and therefore unique factors such as industry could also be viewed as providing a more rigorous test of the study hypotheses. We believe our study design provided a good test of the “can it happen?” question (Ilgen, 1984) for recruitment and employer reputation change, but we urge caution in interpreting the findings as suggesting that any organization with an unfavorable employer reputation can change job seekers’ perceptions. We expect that additional studies in this research stream to extend the present study with more refined questions about employer reputation change.

Fourth, we used only a small subset of all possible information sources, message arguments, and ordering for sources and messages in our study. We do not draw conclusions about the effects of any unique message or source in our study, but the results showed that these manipulations effectively changed job seekers’ perceptions of the organization over the four weeks. Future research could assess how different sources (e.g., university professors, face to face communications), different message arguments, and different source orderings could specifically influence job seekers’ perceptions of employer reputation.

Conclusion

One of the most important ways organizations can attract job seekers is through a favorable organizational employer reputation (Rynes & Cable, 2003). An unfavorable employer reputation can hurt an organization’s ability to attract talent, yet to our knowledge, the present study was the first study to directly attempt to change a company’s existing unfavorable employer reputation. We found evidence that job seekers’ employer reputation beliefs are changeable over time through recruitment efforts. Also, our results suggest that, compared to repeated low-information recruitment practices (e.g., exposure to a company’s logo), repeated

exposure to high-information practices (e.g., detailed messages from a corporate recruiter) were more effective for changing an unfavorable employer reputation over time. However, we also found some evidence that the effectiveness of both low and high-information practices for changing unfavorable perceptions depended on job seekers' initial familiarity with the company.

References

- Aaker, D.A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: The Free Press.
- Alba, J.W., & Hutchinson, W.J. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13, 411-454.
- Anderson, J.R. (1983). *The architecture of cognition*. Cambridge, MA: Harvard University Press.
- Barber, A. E. (1998). *Recruiting employees: Individual and organizational perspectives*. Thousand Oaks, CA: Sage.
- Barber A.E. & Roehling M.V. (1993). Job postings and the decision to interview: a verbal protocol analysis. *Journal of Applied Psychology*, 78, 845-856.
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246.
- Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software.
- Bentler, P.M. & Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Boudreau, J. W. & Rynes, S. L. (1985). Role of recruitment in staffing utility analysis. *Journal of Applied Psychology*, 70, 354-376.
- Brooks, M. E., Highhouse, S., Russell, S. S., & Mohr, D. C. (2003). Familiarity, ambivalence, and firm reputation: Is corporate fame a double-edged sword? *Journal of Applied Psychology*, 88 (5), 904-914.

- Cable, D. M., & Turban, D. B. (2001). Establishing the dimensions, sources and value of job seekers' employer knowledge during recruitment. *Research in Personnel and Human Resources Management*, 20, 115-163.
- Cable, D. M., & Turban, D. B. (2003). The value of organizational reputation in the recruitment context: A brand-equity perspective. *Journal of Applied Social Psychology*, 33, 2244-2266.
- Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures (LMACS) and multiple indicator latent growth modeling (MLGC). *Organizational Research Methods*, 1 (4): 421-483.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. 2nd ed., Lawrence Erlbaum Associates; Hillsdale, N.J.
- Collins, C.J. (2007). The interactive effects of recruitment practices and product awareness on job seekers' employer knowledge and application behaviors. *Journal of Applied Psychology*, 92 (1), 180-190.
- Collins, C.J. & Han, J. (2004) Exploring applicant pool quantity and quality: The effects of early recruitment practice strategies, corporate advertising, and firm reputation. *Personnel Psychology*, 57: 685–717.
- Collins, C. J., & Stevens, C. K. (2002). The relationship between early recruitment-related activities and the application decisions of new labor-market entrants: A brand equity approach to recruitment. *Journal of Applied Psychology*, 87: 1121-1133.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39, 239–263.

- Fang, X., Singh, S., & Ahluwalia, R., (2007). An examination of different mechanisms for the mere exposure effect. *Journal of Consumer Research*, 34, 97-113.
- Feingold, A. (2009). Effect sizes for growth-modeling analysis for controlled clinical trials in the same metric as for classical analysis. *Psychological Methods*, 14(1): 43-53.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 33, 233-258.
- Gatewood, R. D., Gowan, M. A., & Lautenschlager, G. J. (1993). Corporate image recruitment image and initial job choice decisions. *Academy of Management Journal*, 36: 414-427.
- Highhouse, S., Lievens F., & Sinar, E. F. (2003). Measuring attraction to organizations. *Educational and Psychological Measurement*, 63, 986-101.
- Ilgén, D.R. (1986). Laboratory research: A question of when, not if. In E.A. Locke (Ed.), *Generalizing from lab to field settings*. (pp 257-267). Lexington, MA: Heath.
- Lievens, F., & Highhouse, S. (2003). The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology*, 56, 75-102.
- Kanar, A. M., Collins, C. J., & Bell, B. S. (2010). A comparison of the effects of positive and negative information on job seekers' organizational attraction and attribute recall. *Human Performance*, 23 (3), 193-212.
- MacInnis, D.J. & Jaworski, B.J. (1989). Information processing from advertisements: Toward an interactive framework. *Journal of Marketing*, 53, 1-23.
- Muthén, L.K., & Muthén, B.O. (2004). *Mplus: The comprehensive modeling program for applied researchers. User's guide*, 3rd ed. Los Angeles: Muthén & Muthén.
- Nordheim, C.L. (2002). The influence of level of processing on advertising repetition effects. *Journal of Consumer Research*, 29, 271.

- Payne, J.W., Bettman J.R. & Johnson, E.J. (1993). *The adaptive decision maker*. Cambridge University Press, Cambridge.
- Petty R.E., Cacioppo J.T. (1986). The Elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*. 19, 123–205.
- Ployhart, R.E. (2006). Staffing in the 21st century: New challenges and strategic opportunities. *Journal of Management*, 32, 868-897.
- Raudenbush SW, Bryk AS. (2002). *Hierarchical linear models: Applications and data analysis methods*. 2nd ed. Sage; Thousand Oaks, CA.
- Rynes, S. L., & Cable, D. M. (2003). Recruitment research in the twentyfirst century. In W. Borman, D. Ilgen, & R. Klimoski (Eds.), *Handbook of psychology, volume 12: Industrial and organizational psychology*. New York: Wiley.
- Soelberg, P. O. (1967). Unprogrammed decision making. *Industrial Management Review*, 8, 19–29.
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173–180.
- Stevens, C. K. (1997). Effects of pre-interview beliefs on applicants' reactions to campus interviews. *Academy of Management Journal*, 40, 947–966.
- Tucker, L. R., & Lewis, C. A. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38, 1–10.
- Turban, D. B., & Cable, D. M. (2003). Firm reputation and applicant pool characteristics. *Journal of Organizational Behavior*, 24, 733-751.
- Van Hoyer, G. (In press). Word-of-mouth as a recruitment source: An integrative perspective. In K.Y.T. Yu, & D.M. Cable (Eds.), *Oxford Handbook of Recruitment* (pp. 251-268).

New York: Oxford University Press.

Van Hove, G., & Lievens, F. (2005). Recruitment-related information sources and organizational attractiveness: Can something be done about negative publicity? *International Journal of Selection and Assessment*, 13, 179-187.

Williamson, I.O., King, J.E., Lepak, D. & Sarma, A. (2010). Firm reputation, recruitment web-sites, and attracting applicants. *Human Resource Management*, 49, 669-687.

Appendix A.

Details of Pre-Test

Student job seekers ($n = 39$) in the same academic college as those in our focal study but enrolled in a different course rated their familiarity and employer reputation for 10 organizations that were counterbalanced for order effects. Employer reputation was measured with two-items ($\alpha = 0.87$). An example item is “This company has an excellent reputation as an employer” ($1 =$ strongly disagree, $5 =$ strongly agree). Familiarity with employer was measured with one-item “I am familiar with this firm” ($1 =$ strongly disagree, $5 =$ strongly agree).

Mean Familiarity and Reputation Perceptions for Pre-Test Organizations

Organization	<u>Familiarity with Employer</u>		<u>Employer Reputation</u>	
	M	SD	M	SD
MCI WorldCom	3.70	(0.95)	2.53	(1.01)
Martha Stewart Omnimedia	3.85	(0.96)	2.14	(0.79)
General Motors	4.33	(0.62)	3.74	(0.66)
Tyco International, Ltd.	3.30	(1.06)	2.94	(0.91)
KMart	4.15	(0.78)	2.44	(0.75)
Merck & Co.	3.23	(1.25)	3.39	(0.88)
Hewlet-Packard	4.15	(0.59)	4.00	(0.67)
Lucent Technologies	3.15	(1.20)	3.68	(0.64)
Global Crossings	1.82	(1.02)	2.88	(0.44)
Bridgestone Corporation	3.80	(0.73)	2.96	(0.76)

Using the results from the pre-test as a guide, we chose MCI WorldCom as the organization with a negative employer reputation for three reasons. First, MCI WorldCom had the second-worst (not significantly lower than K-Mart) reputation of the ten companies we

tested, and was perceived as having a significantly lower reputation than most of the other companies. Given that several of the companies were experiencing widespread negative press at the time, the results suggested that student job seekers perceived MCI WorldCom as having a relatively unfavorable reputation. Second, we found that the job seekers were generally familiar with MCI WorldCom, and more familiar than they were with several companies that were concurrently recruiting on campus. Third, MCI WorldCom was not actively recruiting on campus which reduced the likelihood that job seekers would encounter extra information about the company without intentional search. Although the results also suggested that K-Mart would may have been a suitable organization for the focal study, we noticed greater variation in job seekers' level of familiarity with MCI WorldCom and we felt that MCI WorldCom was a more likely place of employment for the student job seekers than Kmart.

MCI WorldCom was one of the largest telecommunication companies in the U.S. Prior to the beginning of the present study, the company had been involved in an accounting scandal and was experiencing widespread negative media publicity prior to the present study. An internal auditing department found \$3.8 billion in fraud, resulting in the largest case of accounting fraud in U.S. history at the time.

Appendix B

Example manipulation: High information recruitment message

Current Folder: **INBOX** [Sign Out](#)

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#)

[Message List](#) | [Delete](#) Previous | [Next](#) [Forward](#) | [Forward as Attachment](#) | [Reply](#) | [Reply All](#)

Subject: Job opportunities at MCI WorldCom
From: "Tommy Johnson" <tommyjohnson@mciworldcom.com>
Date: Mon, September 7, 2005 11:03 am
To: "Adam Michael Hume" <adam158@earthlink.net>
Priority: Normal
Options: [View Full Header](#) | [View Printable Version](#) | [View Message details](#)

Hello, as a recruiter at MCI WorldCom, I would like to tell you a little bit about what makes our company unique. Today, MCI WorldCom's focus is clear - to use our global network and expertise to deliver innovative products that provide simplicity and unsurpassed value to our customers. With millions of business and residential customers, MCI WorldCom is a leader in serving global businesses, government offices, and U.S. residential customers. MCI WorldCom delivers a comprehensive portfolio of local-to-global business data, Internet and voice services to a 'Who's Who' list of the Fortune 1000. MCI today owns and operates some of the world's most complex and sophisticated custom networks, delivering value for a wide variety of customers and more than 75 U.S. federal government agencies. We also are a premier provider of audio, video, and net conferencing services that enable customers to meet and collaborate remotely to effectively conduct business anywhere, anytime.

MCI WorldCom is the United States' second largest long distance company for residential customers. In April 2002, MCI launched The Neighborhood built by MCI WorldCom, the industry's first truly any-distance, all-inclusive offering combining local and nationwide long distance calling from home to consumers for one low monthly price. The Neighborhood continues MCI's pioneering tradition, which has been based on opening up monopoly markets and providing innovative services to consumers nationwide.

Additionally, our company is committed to being a good corporate citizen nationally, regionally and especially in the communities where we have offices. Our efforts have provided innumerable benefits including literacy education, scholarships, chemical dependency rehabilitation, healthcare, civil rights support, environmental conservation, housing, and support for public radio, television, libraries and museums. Our corporate philosophy is to build not just better products, but better communities. Further, at MCI WorldCom we believe commitment to environmental stewardship is great for business and the world around us. We're proud of our products and our accomplishments in seeking balance between production and preservation of our ecosystems. We're proud of our land conservation programs, and the recognition we've received from a broad range of respected organizations.

[Download this as a file](#)

Take Address

Delete & Prev | [Delete & Next](#)

Move to:

Table 1

Longitudinal study design

Study design	Time period (week)			
	1	2	3	4
Experimental condition				
Low information messages	No manipulation n = 73	Company logo only n = 73	Company logo only n = 71	Company logo only n = 71
High information messages: Version one	No manipulation n = 71	Organizational information: detailed recruitment advertisement n = 71	Information about people at the company: endorsement email from university alumnus n = 71	Information about the job: email from recruiter n = 67
High information messages: Version two	No manipulation n = 78	Organizational information: email from recruiter n = 75	Information about people at the company: email from recruiter n = 75	Information about the job: email from recruiter n = 72
Measures (all participants)	Employer reputation Familiarity Demographic variables	Employer reputation	Employer reputation	Employer reputation

Note. No differences were found between the two high-information conditions in the analyses and the two conditions were combined to maximize statistical power.

Table 2.

Descriptive Statistics and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. High information ^a	0.67	0.47	--					
2. Familiarity with employer	2.34	0.64	0.07	--				
3. Employer reputation week 1	2.39	0.85	- 0.03	0.00	--			
4. Employer reputation week 2	3.02	0.86	0.27 **	- 0.17 *	0.50 **	--		
5. Employer reputation week 3	3.08	0.87	0.36 **	- 0.14 *	0.43 **	0.76 **	--	
6. Employer reputation week 4	3.03	0.84	0.30 **	- 0.16 *	0.48 **	0.78 **	0.86 **	--

Note. ^a 1 = High information recruitment messages , 0 = Low information recruitment messages.

** p < 0.01 (2-tailed). *p < 0.05 (2-tailed).

Table 3.

Tests for measurement invariance across time and experimental conditions

Model	Constraints	χ^2	df	CFI	TLI	SRMR	RMSEA	$\Delta\chi^2$		Δdf
Model 1	Unconstrained full sample	177.05	134	0.988	0.983	0.030	0.038	--		--
Model 2	Constrained like items loadings: time	185.57	146	0.989	0.986	0.037	0.035	8.51	<i>ns</i>	12
Model 3	Unconstrained multiple groups	641.33	434	0.944	0.926	0.076	0.080	--		--
Model 4	Constrained like item loadings: groups	679.93	466	0.942	0.929	0.086	0.079	38.60	<i>ns</i>	32

Table 4.

Univariate Second-Order Factor Latent Growth Curves: Tests of Alternative Specifications

Model	Change-function	Residuals structure	χ^2	df	CFI	TLI	SRMR	RMSEA	$\Delta\chi^2$	Δdf
Model 5	No growth	Heteroscedastic	468.40	161	0.916	0.901	0.195	0.093		
Model 6	No growth	Homoscedastic	624.06	163	0.875	0.854	0.18	0.113		
Model 7	Linear	Heteroscedastic	393.70	158	0.936	0.923	0.124	0.082		
Model 8	Linear	Homoscedastic	439.35	160	0.924	0.910	0.138	0.089		
Model 9	Quadratic	Heteroscedastic	298.91	154	0.961	0.951	0.109	0.065		
Model 10	Quadratic	Homoscedastic	309.19	156	0.958	0.949	0.111	0.067		
Model 5 vs. Model 6									155.66 ***	2
Model 5 vs. Model 7									74.70 ***	3
Model 5 vs. Model 9									169.49 ***	7
Model 6 vs. Model 8									184.71 ***	3
Model 6 vs. Model 9									325.15 ***	9
Model 7 vs. Model 9									94.79 ***	4
Model 8 vs. Model 10									130.16 ***	4
Model 9 vs. Model 10									10.28 **	2

Note. *** $p < .001$, ** $p < .01$. All models specified an autoregressive and heterogeneous (freely estimated) error structure.

Figure 1. Influence of recruitment message type and familiarity on employer reputation change trajectories. Employer reputation measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), where higher scores indicate more favorable employer reputation.