

A comparison of the effects of positive and negative information on job seekers' organizational attraction and attribute recall

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ABSTRACT

To date there have been no direct studies of how strong negative information from sources outside of organizations' direct control impacts job seekers' organizational attraction. This study compared models for positive and negative information against a neutral condition using a longitudinal experimental study with college-level job seekers (n = 175). Consistent with the accessibility-diagnostics perspective, the results indicated that negative information had a greater impact than positive information on job seekers' organizational attraction and recall, and this effect persisted one week after exposure. The results did not indicate that the influence of information sources and topics that fit together was lessened when the information was negative. The results suggest that job seekers interpret positive and negative information differently and that negative information, when present, has an important influence on job seekers' organizational attraction.

Job seekers' decisions to apply to organizations have a large impact on the quality and quantity of organizations' applicant pools (Collins & Han, 2004), ultimately influencing the utility of organizations' selection systems and the quality of their workforces (Boudreau & Rynes, 1985). Hence, researchers have recently taken steps to address some of the major determinants of job seekers' initial attraction to organizations, paying particular attention to information that organizations can directly control (e.g., Collins & Stevens, 2002). Although receiving substantially less research attention, sources of information that are outside of organizations' direct control such as media press or peer word-of-mouth can also impact job seekers' attitudes and beliefs (Collins & Stevens, 2002; Kilduff, 1990), and unlike company-provided information sources, non-company sources do not always act in organizations' best interests. Importantly, negative information from beyond organizations' direct control might have a devastating impact on their abilities to attract applicants, yet we currently have little understanding of how non-company information sources (Cable & Turban, 2001) or negative information exposures (Collins & Stevens, 2002) influence job seekers' organizational attraction. This omission is particularly alarming for organizations when we consider that job seekers' early beliefs and attitudes determine how they respond to organizations' recruitment activities (Soelberg, 1967; Stevens, 1997). In this paper we take an initial step toward addressing the question: how do job seekers interpret negative information about recruiting organizations from sources outside of the organizations' direct control?

Several factors might influence how job seekers interpret information from non-company sources before the beginning of active recruitment. Job seekers might interpret, encode, and weigh information about job and organizational attributes differently depending on whether the information is positive or negative. The category diagnosticity approach (Skowronski &

Carlston, 1987) explains that negative information is more diagnostic than positive information and generally is more useful for forming impressions; thus, job seekers are likely to weigh negative information more heavily than positive information. Further, according to the accessibility-diagnostics perspective (Feldman & Lynch, 1988; Lynch, Mamorstein, & Weigold, 1988), when such highly diagnostic information is present, it reduces the impact of information that is easily retrieved from memory—information that would otherwise have a strong impact on attitudes. This suggests that job seekers use different cognitive processes to weigh positive and negative information about recruiting organizations.

Although negative information has been examined in the context of realistic job previews (RJPs: e.g., Bretz & Judge, 1998), to our knowledge, this is the first study to directly examine how negative information influences job seekers while they are initially forming attitudes about a company as a potential future employer—before active company recruitment. As opposed to RJPs, negative information in the context of non-company sources has its primary implications for job seekers' initial interest in an organization as a place to work, more relevant to concepts such as employment brand equity (e.g., Collins & Stevens, 2002) and employer knowledge (Cable & Turban, 2001). Thus, the goal of the present study is to highlight key differences in how initial exposure to positive and negative information about an unfamiliar recruiting organization differentially influences job seekers' organizational attraction and memories. We focus on the greater diagnosticity of negative information (Skowronski & Carlston, 1989), and discuss how highly diagnostic information might impact how job seekers' interpret highly accessible information according the accessibility-diagnostics model (Feldman & Lynch, 1988; Lynch et al., 1988). This analysis suggests not only that negative information should have a much greater impact on job seekers' organizational attraction than positive, but 1) this effect

should persist over time and 2) negative information may lead job seekers to disregard specific attribute and source information they would otherwise attend to when the information is positive.

Negative Versus Positive Information

Historically, recruitment researchers have generally limited their examinations of early recruitment exposures to company-provided information sources in order to provide prescriptive advice to practitioners (Cable & Turban, 2001). Since organizations have clear incentives to convey a favorable impression in the minds of public audiences (Cable & Turban, 2001), researchers have mostly focused on positive information to date.

However, three studies have examined the effects of word-of-mouth (WOM) communication on applicant attraction and incorporated non-company negative information as part of the design (Van Hoyer & Lievens, 2005, 2007, 2009). In one experimental study, Van Hoyer and Lievens (2005) found that both positive word-of-mouth and recruitment advertisements can improve applicant attraction immediately after hearing negative information about a fictitious company. Because the design did not assess applicants' attraction prior to exposure to negative publicity, the study did not assess the impact of negative information on applicant attraction. In a second experiment, Van Hoyer and Lievens (2007) found that a recruitment advertisement/negative peer word-of-mouth combination had a greater negative effect on applicant attraction than a recruitment advertisement/positive peer word-of-mouth combination. This experiment confounded negative word-of-mouth with the recruitment advertisement, providing limited insight into the effects of non-company negative information on applicant attraction. In a recent field study, Van Hoyer and Lievens (2009) found that Belgian military recruits were more receptive to negative word-of-mouth about the Belgian Army when it was more credible or when a potential recruit was more conscientious. As the authors noted,

recruits' retrospective accounts of word-of-mouth exposure and the Belgian Army's strong and favorable organizational image substantially limited the study's insights regarding the effects of negative word-of-mouth on applicant attraction.

Researchers in cognitive and social psychology have provided evidence that negative information has a stronger impact than positive information on attitudes and behaviors across a vast array of settings (Baumeister, Bratslavsky, Fickenaue, & Vohs, 2001; Rozin & Royzman, 2001). For instance, in a selection context, Schmidt (1976) concluded that interviewers weigh negative information about applicants more heavily than positive, and Spingbett (1958) called the employment interview a "search for negative information" about job candidates. While this evidence suggests that negative information receives special consideration in interview settings, a review of this literature noted that we have little insight into the processes underlying interviewers' weighing of positive and negative information (Posthuma, Morgeson, & Campion, 2002).

The impression-formation literature, however, suggests that negative information is likely to have a stronger impact on impressions than positive information because negative information is more diagnostic, or useful, for discriminating between alternative judgments than positive information (Skowronski & Carlston, 1989). The category-diagnosticity approach suggests that people categorize others' traits on the basis of limited information cues, with some cues being more useful than others. For instance, in terms of morality traits, positive information cues are not useful for categorizing someone as good or bad since both good and bad people frequently engage in positive behaviors. However, to be perceived as good, one has to consistently engage in good behaviors, and only bad people occasionally engage in bad behaviors. Therefore, information about negative behaviors is more diagnostic than positive information for labeling a

person as good or bad, and negative information cues will have a greater weight in morality judgments than positive information cues (Skowronski & Carlston, 1987, 1989).

We expect that negative information will be a salient information cue to job seekers when they are forming attitudes toward organizations as potential employers (cf. Highhouse & Hoffman, 2001). For example, job seekers are flooded with positive information about organizations early in the recruitment process (Rynes & Boudreau, 1986; Gatewood et al., 1993), while negative information, even in sources such as media articles, may be rare (Fombrun & Shanley, 1990). Therefore, job seekers would expect to hear positive information about both undesirable and desirable potential employers, but might expect to only hear negative information about undesirable potential employers, making negative information highly diagnostic for categorizing a potential employer as “undesirable”. Recruitment research suggests that job seekers frame the early stage of job choice as a pre-screening process (Barber, Daly, Giannantonio, & Phillips, 1994; Beach, 1990) and that job seekers use early information exposures as signals of unknown firm attributes (Rynes, 1991; Turban & Greening, 1997). Because negative information is rare early in the recruitment process, job seekers will likely use any negative information as a simple unambiguous cue to screen an organization from future consideration. On the other hand, job seekers would expect to hear positive information about both desirable and undesirable potential employers, making positive information less diagnostic and having less of an impact on their organizational attraction than negative information. We expect that negative information about organizations will have a greater impact on job seekers’ organizational attraction than positive information. To assess effect sizes, we compared applicant attraction after exposure to positive or negative information against a “neutral” information condition (described in more details in the method section).

Hypothesis 1: Negative information from a peer or a media article will have a greater impact on job seekers' organizational attraction than positive information from the same source.

A particularly relevant issue to recruiting organizations is the duration of impact that positive and negative information have on job seekers' attraction and memories over time. According to Feldman and Lynch (1988), several factors determine the rate that attitudes or beliefs decay in peoples' minds, one of which is the extent that people process the information. Researchers have found inherent differences in the way that people process positive and negative information which could lead to differences in the way that positive and negative information impact job seekers' memories and organizational attraction over time. For instance, negative information inherently increases controlled information processing, thereby increasing the attentional resources devoted to thinking about negative information (Peeters & Csapinski, 1990; Robinson-Riegler & Winton, 1996; Taylor, 1991). This leads to a more elaborate memory trace in peoples' minds for the negative information than positive information (Peeters & Csapinski, 1990). While negative information should be more diagnostic and thus have a greater impact than positive information on job seekers' organizational attraction (Hypothesis 1), job seekers will also process the negative information more deeply, making the their unfavorable rating of the organization persist over time. Therefore, we expect that negative information will have a greater impact on job seekers' organizational attraction and will be freely recalled more than positive information one week after exposure.

Hypothesis 2a: Negative information from a peer or a media article will have a greater impact on job seekers' organizational attraction than positive information from the same source, one week after exposure.

Hypothesis 2b: Negative information from a peer or a media article will have a greater impact on job seekers' recall of the favorability of the information than positive information from the same source, one week after exposure.

Attribute Information and Information Sources

While we expect that positive and negative information will differ in their diagnosticity to job seekers, the impact of information on judgment is a function of both the diagnosticity of information and its accessibility in peoples' memories (Feldman & Lynch, 1988). According to the accessibility-diagnosticity perspective, the likelihood that any piece of information is used in judgment depends on 1) the accessibility of the information in memory, 2) the accessibility of alternative diagnostic information in memory, and 3) the diagnosticity or usefulness of the information (Feldman & Lynch, 1988; Lynch, et al., 1988). Holding all else constant, any factor that increases the accessibility of information should also increase the likelihood that the information will be used in judgment (Feldman & Lynch, 1988).

Multiple research streams in the marketing literature suggest that when information about a product is congruent, or "fits", with the source conveying the product information, the information will be highly accessible in consumers' memories and have an impact on their attitudes, behaviors, and recall of related information (Cornwell, Weeks, & Roy, 2005; Garretson & Burton, 2005).¹ For example, Till and Busler (2000) found that consumers perceived a greater congruence between an athlete endorsing an energy bar than an athlete endorsing a candy bar, and the former had a greater impact on consumers' brand attitudes, purchase intentions, and brand beliefs than the latter. The concept of congruence is important because it describes the way that attractive or expert sources—which are commonly thought to be excellent sources for

endorsing *any* product—will have little impact on consumers' attitudes and beliefs if they are not congruent with the product they are endorsing.

One key determinant of the accessibility of a set of memory nodes is amount of prior exposure (Higgins, 1996). Through repeated or frequent exposures to a source of information and a topic of information, a link between two memory nodes is established. After the link is established, activation of one node will spread and activate the linked node, making both nodes highly accessible together as a pair. Job seekers likely possess well-developed associations linking job and organizational attributes with frequently-used sources of organizational information. In the qualitative portion of the present study (described in more detail in the Method section), we found that job seekers commonly encounter firm performance attribute information from business press articles and work environment attribute information from their peers. Frequent exposures will create well-developed memory structures linking these source and attribute topic combinations together in the minds of job seekers, making them accessible in memory and making it easy for job seekers to store and encode new information related to these combinations.

Because the impact of information depends on both its accessibility as well as its diagnosticity (Feldman & Lynch, 1988), we would expect highly accessible information to impact job seekers differently depending on whether it is positive or negative. As discussed earlier, negative information from sources outside of a company's direct control is diagnostic as it sends job seekers a clear signal that the company is a poor place to work. Cognitive psychologists have called people "cognitive misers" that engage in the minimum amount of information processing needed to make a judgment (Petty & Cacioppo, 1986; Wyer & Srull, 1986). When a person is exposed to highly diagnostic information, he or she has sufficient

information for making a judgment about the organization and can end the search for additional information in memory (Feldman & Lynch, 1988; Herr, Kardes, & Kim, 1991). Thus, while highly accessible information in the form of congruent sources and topics should impact job seekers when the information is positive, the impact of this highly accessible information should be lessened in the presence of more diagnostic negative information (Feldman & Lynch, 1988; Herr et al., 1991).

Hypothesis 3a: Work environment information will have a greater impact on applicant attraction and attribute recall when it comes from a peer than when it comes from a media article, and this effect will be greater for positive information than for negative information.

Hypothesis 3b: Firm performance information will have a greater impact on applicant attraction and attribute recall when it comes from a media article than when it comes from a peer, and this effect will be greater for positive information than for negative information.

Method

Participants and design

Participants in this study were active job seekers consisting of a mix of professional and undergraduate-level business, engineering, and human resources management students (52% female, mean age = 22.5 years) from a large university in the Northeast. Two-hundred and two (202) job seekers completed the time one survey, and 175 of these participants also completed the time two survey given one week later (87% response rate). We found no significant differences between time two respondents and non-respondents in terms of previous work experience (part or full time), gender, ethnicity, or grade point average (GPA) (all p 's ns). The

results of the analysis for this sample are consistent with those for the full sample, and for clarity we present results for respondents who completed both the time one and time two surveys.

Job seekers were recruited to participate through courses for extra credit or through the university's career services office for \$10 compensation. Our sample was ethnically diverse with 61% of respondents self-categorizing as White/Caucasian, 23% as Asian/Pacific Islander, 10% as African American, 5% as Hispanic/Latino, and 1% as American Indian. Participants were randomly assigned to one of eight experimental conditions in a 2 (information favorability: positive vs. negative) x 2 (information source: peer word-of-mouth vs. business press article) x 2 (attribute topic: firm performance vs. work environment) fully-crossed between subjects design.

To choose appropriate source and topic combinations, we examined the frequency of different information topics as they appeared in two non-company information sources used by job seekers. Specifically, we conducted a qualitative examination of 1) a university database of over 4,000 students' comments regarding their summer internship experiences and 2) Fortune and BusinessWeek's online web-sites. We found that many of the students' recommendations to their peers were based on the work environments at their previous employers (18% of all recommendations), while no students based their recommendations on their previous employers' financial performance. Additionally, we found that the on-line business press articles often focused on a firm's financial performance (21% of articles) but rarely focused on organizations' work environments (2%). Details of this analysis can be obtained from the first author upon request.

Procedure

To ensure realism and involvement in our study, we informed participants that we were interested in their perceptions of an organization that was potentially coming onto campus to

recruit students at the university during the next academic semester. We first presented all participants with a one-page description of the hypothetical organization that was adapted from a company profile on www.yahoo.finance.com, with the name of the organization altered slightly (see Appendix A). We used a hypothetical company that was “neutral” with respect to potentially confounding organizational characteristics such as industry (i.e., conglomerate), size (i.e., mid-sized), and location (i.e., locations throughout the U.S.). A pilot study (described in more detail below) confirmed that this company was perceived as “neutral” by a sample of job seekers that was similar to those in the focal study.

Next, we randomly assigned participants to one of the eight experimental conditions. We told participants in the peer word-of-mouth condition that we had received an email from one of their peers who had previously worked at the organization and who wished to remain anonymous for purposes of the research. In the business press article condition we told participants that we had recently found an article about the organization on Fortune Magazine’s web-site. The email and media article manipulations were exact replicas of the University’s email and Fortune’s web-site formats respectively, with potential confounds carefully removed (e.g., the student peer’s name was blacked-out, advertisements removed from media article). Appendix B and C provide example manipulations.

The content of each manipulation included ten lines of text reflecting both the information frame (i.e., positive or negative) and the information topic (i.e., work environment information or firm performance information). The content across the sources (i.e., business press article or peer word-of-mouth) was identical except for qualifiers to make the information more realistic from each source. Information favorability was manipulated using polar opposite adjectives to represent positive information (e.g., fantastic, incredible, great, ahead of the times, has its

priorities straight) and negative information (e.g., troubled, not ideal, poor, behind the times, has its priorities mixed-up). In Appendix B and C we provide example manipulations with the words used in the negative information condition in parentheses. Further, we manipulated polar opposite adjectives to describe either the organization's work environment (e.g., work atmosphere, office environment, work environment, place to work) or financial performance (e.g., stock performance, financial performance, competitor in the market, profit potential). We established the relative levels of extremity of the positive and negative information manipulations with a small pilot study ($n = 22$) using a convenience sample (50% female, average age = 27; Pratto & John, 1990). We exposed participants to either the two (i.e., work environment and firm performance information) positive or two negative manipulations and asked them to rate the information on two 11-point scales assessing whether the information was very positive and extremely positive (e.g., -5 = extremely negative, + 5 = extremely positive), cronbach's alpha = .90. Participants rated the positive information ($M = 4.5$, $SD =$) as favorable and the negative information ($M = -4.5$, $SD =$) as unfavorable. Using absolute values of the ratings to assess extremity (Pratto & John, 1990), we found no differences in the extremity of the information $t =$, ns. The credibility of the information was assessed in the main study.

After we exposed participants to the company descriptions and the manipulations we asked them to complete a 29-item survey. We also sent participants a survey via electronic mail one week later that included five-items to measure their attribute recall and organizational attraction. Students who had not responded to the follow-up survey within 24 hours were sent two reminder emails.

Pilot Study

We conducted a pilot study to examine whether job seekers perceived the short description of the hypothetical organization as "neutral". Participants ($n = 22$) were not different

than those in our focal study with respect to age, $t(193) = -0.45, ns$, gender, $\chi^2(1, 194) = 0.48, ns$, degree status, $\chi^2(1, 194) = 0.60, ns$, ethnicity, $\chi^2(4, 195) = 1.34, ns$, GPA, $t(193) = -0.39, ns$, part-time work experience, $t(193) = -0.89, ns$, full-time work experience $t(193) = -0.44, ns$, number of job offers, $t(193) = -0.74, ns$, and academic major $\chi^2(5, 189) = 0.69, ns$. Using the same procedures and measures as the focal study, we asked participants to rate their organizational attraction after exposure to only the neutral company description. We found that participants reported approximately neutral organizational attraction ($M = 3.09, SD = 0.52$). This confirmed our expectation that this description was neutral. Because all participants in the focal study were first exposed to this brief company description, this would serve as a neutral baseline group to test our hypotheses about the effect size of positive and negative information (e.g., Kuvaas & Selart, 2004). Thus, our inclusion of the matched neutral condition represents a quasi-experimental design (Cook & Campbell, 1979).²

Measures: Time one

Control variables. We included measures for several variables that have been suggested by prior recruitment research as control variables. These included age, gender, ethnicity, grade point average (GPA), part and full time work experience, number of job offers, and academic major.

Source credibility. It was particularly important that we ruled out source credibility as an alternative explanation for our hypotheses. Specifically, we wanted to ensure that relative impact of positive and negative information (Hypotheses 1 and 2), and the effects of a source and topic combinations, on job seekers' organizational attraction (Hypotheses 3) was not a result of differences in perceived source credibility. We adapted two five-item semantic-differential scales from Ohanian (1990) to measure participants' perceptions of the information sources' expertise

and trustworthiness. Participants were asked, “As a source of information, I would describe the email from my peer (the article in the business magazine) as,” followed by bipolar adjectives for trustworthiness (i.e., sincere, honest, dependable, trustworthy, and reliable) and expertise (i.e., expert, knowledgeable, qualified, experienced, and skilled) (e.g., 1 = *trustworthy*, 5 = *not trustworthy*). The scale was then reverse coded. Internal consistency reliabilities of the two scales using cronbach’s alpha were .87 for trustworthiness and .88 for expertise.

Organizational attractiveness. We measured participants’ perceptions of the organization’s attractiveness as an employer with a four-item scale adapted from Taylor and Bergmann (1987). Participants were asked to indicate their agreement with items on a 5-point scale (1 = *strongly agree*, 5 = *strongly disagree*). An example item is: “Overall, a job opportunity at this company is very attractive to me”. Internal consistency of the scale using Cronbach’s alpha was .87.

Measures: Time two

Organizational attractiveness at time two. We used the same four items used at time one to assess participants’ perceptions of the attractiveness of the organization as an employer one week after they were exposed to the information about the company. Internal consistency of the scale at time two was .86.

Unaided recall of the attribute topic. We assessed participants’ unaided recall of the attribute topic (i.e., work environment information or firm performance information) with a single open-ended question asking them to “indicate in a few words the topic that was discussed in the information they received about the organization” (e.g., Lynch et al., 1988). Two graduate students coded “1” if the topic was correctly identified and “0” if it was incorrect, missing, or too vague to discern. For example if a participant in the work environment condition responded

“work atmosphere”, this would be coded as “1”; if the same participant responded “company’s reputation” this would be coded as “0”. Inter-rater agreement was .99. Disagreement on one item was resolved through discussion.

Unaided recall of the information favorability. We assessed participants’ recall of information favorability (i.e., positive or negative) by examining whether they freely mentioned the favorability of the information in the item above. Two graduate students coded “1” if participants correctly indicated the favorability and “0” if they did not. For example if a participant in the negative condition responded that the information topic was “poor financial performance”, this would be coded as “1”; if the same participant responded simply “financial performance” this would be coded as “0”. Inter-rater agreement was .99. Disagreement on one item was resolved through discussion.

Results

Manipulation checks

We first examined the manipulation checks in order to rule out source credibility as an alternative explanation for our findings. We found that job seekers did not perceive differences between the trustworthiness of the positive information ($M = 3.43, SD = 0.77$) and the negative information manipulations ($M = 3.40, SD = 0.74$), $F(1, 172) = 0.45, ns$. Job seekers also did not perceive differences between the expertise of the positive information ($M = 3.18, SD = 0.75$) or the negative information manipulations ($M = 3.34, SD = 0.75$), $F(1, 172) = 2.09, ns$. Further, we did not find differences in job seekers’ perceived expertise or trustworthiness of the information sources across all eight experimental conditions (all p 's > .20).

Analyses

Means, standard deviations, and correlations for the study variables are shown in Table 1. We first performed a repeated measures analysis of variance (RM-ANOVA) to establish the omnibus effects of the independent variables and time on organizational attraction. We then tested each hypothesis with ANOVAs (for the continuous attraction variables) or logistic regression (for the dichotomous recall variables).

Our first set of analyses examined the omnibus effects of the independent variables and time on organizational attraction using a RM-ANOVA. The between-subjects effects showed that information favorability (i.e., positive or negative) had the expected significant and substantial overall effect $F(1, 167) = 139.46, p < .001, \eta^2 = .46$. The information topic $F(1, 167) = 4.05, p < .05, \eta^2 = .02$, but not the information source $F(1, 167) = 3.52, ns, \eta^2 = .02$ also had a small but significant overall effect on the outcomes. The expected three-way interaction between information favorability, information source, and information topic was not significant $F(1, 167) = 1.82, ns, \eta^2 = .01$.

Within-subjects effects revealed that time $F(1, 167) = 10.31, p < .001, \eta^2 = .06$, and the interaction between time and information favorability $F(1, 167) = 15.29, p < .001, \eta^2 = .08$ influenced organizational attraction. Inspection of means showed the effect of negative information on applicant attraction lessened over time more than the effect of positive information. We return to this finding in the discussion section. Next, we conducted a series of ANOVAs to test our hypotheses.

Hypothesis 1 predicted that negative information would have a greater impact than positive information on job seekers' attraction at time one. We calculated the differences between the mean organizational attraction of job seekers in the neutral condition and those in the positive and negative information conditions (e.g., Kuvaas & Selart, 2004). As expected, job

seekers' mean organizational attraction in the negative information condition deviated more from the mean of the neutral condition than did the attraction for the job seekers exposed to positive information, $F(1, 172) = 143.46, p < .001, \eta^2 = .46$; $M_{\text{positive}} = .09, SD = .65, M_{\text{negative}} = 1.06, SD = .63$; see Table 2 for means).

A limitation to calculating mean differences is that it does not allow us to include the standard deviations of the neutral condition in our analysis. Therefore, we also computed the standardized differences (i.e., Cohen's d ; Cohen, 1988) between the neutral condition and each experimental condition using pooled standard deviations (Kuvaas & Selart, 2004; Rosnow & Rosenthal, 1996). In terms of job seekers' organizational attraction, the standardized differences between the neutral baseline condition and the positive condition ($d^{\text{p-nb}} = .23$, with 60% overlap in confidence intervals) and the neutral baseline and the negative conditions ($d^{\text{n-nb}} = -1.83$, with 0% overlap in confidence intervals) were consistent with the results we found in the ANOVAs. We found support for Hypothesis 1. It appears that negative information had a significantly stronger impact on job seekers' organizational attraction than positive information immediately after exposure.

Hypothesis 2 predicted that negative information would have a greater influence than positive information on job seekers' organizational attraction (Hypothesis 2a) and recall of information favorability (Hypothesis 2b) one week after exposure to the information. The omnibus RM-ANOVA was significant so we inspected the ANOVA for job seekers' organizational attraction at time two. We found that job seekers' mean organizational attraction in the negative information condition deviated much more from the mean of the neutral condition than those in the positive condition, $F(1, 172) = 63.97, p < .001, \eta^2 = .27$; $M_{\text{positive}} = .06, SD = .58, M_{\text{negative}} = .70, SD = .67$). We also found that the standardized differences between the

neutral baseline condition and the positive condition ($d^{p-nb} = .16$, with 71% overlap in confidence intervals) and the neutral baseline and the negative conditions ($d^{n-nb} = -1.79$, with 0% overlap in confidence intervals) provided further support for the results we found in the ANOVA. Thus, Hypothesis 2a was supported. Because recall of the favorability was a dichotomous variable, we used logistic regression to test Hypothesis 2b. We found that participants were more likely to recall the information favorability ($B = -0.57$, $SE = 0.17$, $Wald = 11.07$, $p < .01$) when they were exposed to negative information than positive information $\chi^2(1, N = 175) = 11.57$, $p < .01$. We found support for Hypothesis 2b.

Hypothesis 3 predicted that the information source would moderate the influence of the attribute topic on job seekers' organizational attraction and attribute recall, and this effect would be lessened for negative information. Table 3 shows the means for organizational attraction for each experimental condition. As noted above, the three-way interaction in the RM-ANOVA was not significant, suggesting a greater risk of Type I error when examining the planned contrasts. Using a conservative p – value, we examined a planned contrast where we compared work environment information that came from a peer to the same information from a Fortune article, across the positive and negative conditions. The greater impact of work environment information on organizational attraction at time one $t(166) = -1.84$, $p = .07$, and at time two $t(166) = -0.59$, ns , was not significantly lessened when the information was negative rather than positive. Next, we examined a planned contrast where we compared firm performance information from a peer or a Fortune article across the positive and negative conditions. Contrary to expectations, we did not find that the effects of firm performance information on organizational attraction at time one $t(166) = 0.57$, ns , or attraction at time two $t(166) = 0.47$, ns , were lessened when the information was negative. Finally, because recall of the attribute topic was a dichotomous variable, we used

logistic regression. We entered predictors in steps; we entered the favorability, source, and topic variables in the first step $\chi^2(3, N = 175) = 0.44$; we entered the two-way interactions in the second step: χ^2 for step (3, $N = 175$) = 6.99, $p = .07$. Finally, testing Hypothesis 3b, we entered the three-way interaction ($B = -0.42$, $SE = .31$, $Wald = 1.79$, ns) in the third step: χ^2 for step (1, $N = 175$) = 1.80, ns . We did not find support Hypothesis 3b.

Discussion

In this study, we sought to examine the influence of non-company sources of job and organizational attribute information on job seekers' organizational attraction and attribute recall before the beginning of the active recruitment process. Importantly, we contribute to the literature by including the first direct examination of the effects of negative information during this early stage of recruitment and job search. We first compared separate models for positive and negative information, hypothesizing that negative information would have a greater impact on job seekers' organizational attraction than positive information. In addition, we hypothesized that the information source would moderate the impact of the attribute topic on job seekers' attraction, but this impact would be lessened when more diagnostic, negative information was present.

As hypothesized, we found that negative information had a much larger impact than did positive information on job seekers' organizational attraction immediately after exposure to the information. Consistent with our theory, job seekers who were exposed to negative information were much less attracted to the organization compared to participants who were only exposed to neutral information, suggesting it was particularly salient to job seekers. In contrast, positive information had relatively little impact on job seekers' attraction immediately after exposure, suggesting it was less relevant to them at this stage of the recruitment and job search process.

Rynes (1991) suggested that, given the small amount of information job seekers have early in the job choice process, initial application decisions are based largely on general impressions of organizational attractiveness. Our study provides an important contribution to the recruitment literature by showing that when present, negative information from non-company sources can be a substantial determinant of job seekers' initial attraction to an organization as an employer.

More importantly for companies and practitioners, we found that the differences in the effects of negative versus positive information persisted one week later. One week after the initial exposure, we found that participants freely recalled negative information more than positive information, and, as with immediate impressions, the effect size of negative information was much larger than positive information. On the other hand, positive information had little impact on job seekers' organizational attraction one week later. Thus, it appears that job seekers may more deeply process negative information than positive information and that exposure to negative information may have long-lasting effects on job seekers' attraction, potentially affecting their subsequent interest in applying to the organization. To determine how far reaching the impact of negative information may be on job seekers, future research should explore the effects of negative information over a lengthier timeframe using a longitudinal design.

The RM-ANOVA revealed that the effects of negative information on organizational attraction lessened over time to a greater extent than the effects of positive information. Although this seems to contradict our conclusions, a closer inspection of the results reveals that positive information had a non-significant effect on applicant attraction relative to the neutral condition, both initially $t(106) = 0.96$, *ns*, and one week after exposure $t(106) = 0.63$, *ns*. This highlights that the effects of positive information could not be lessened over time.

Overall, based on our findings for Hypotheses 1 and 2, it appears that negative information early in the recruitment and job search process has a powerful impact on job seekers' impressions and has the potential to have a detrimental impact on a company's ability to attract applicants. Therefore, it is critical that future research explore how companies can mitigate these effects, particularly since they may not be able to prevent job seekers from being exposed to negative information. Future research along these lines might also consider whether job seekers' familiarity with a particular organization plays an important role in determining which strategies that the organization can use to mitigate these negative effects (see Ahluwalia, Burnkrant, & Unnava, 2000).

Our study fits into a broader literature that has examined negative information in the context of organizational recruitment effects on applicant attraction. In contrast to realistic job preview (RJP) studies, our study is most relevant to when applicants are initially forming impressions about potential future employers and deciding whether to apply to an organization. This pre-recruitment stage is particularly important because recruitment research consistently finds that applicants' pre-recruitment impressions of organizations influences the applicants' interpretation of recruitment activities (Soelberg, 1967; Stevens, 1997). For example, Stevens (1997) found that applicants with more negative pre-interview impressions of organizations tend to ask more negative questions during job interviews than applicants with more positive pre-interview impressions. Our study complements the RJP literature by addressing ways applicants form their pre-recruitment beliefs that may determine how applicants interpret an organization's recruitment practices.

Although we found that negative information was more influential than positive information, a study by Highhouse, Stanton, and Reeve (2004) found some evidence of a

positivity bias during exposure to information during RJPs. Specifically, the authors found that job seekers' moment-to-moment affective reactions were more strongly influenced by exposure to positive information than negative information during a simulated online job fair. The authors suggested that job seekers may have discounted the value of negative information because people generally have optimistic expectations of future circumstances. Our results do not negate their results because the context of our study was before formal company recruitment—the stage where applicants are initially evaluating the viability of a company as a potential employer. During this early stage, job seekers are likely to use non-compensatory decision-making styles (Stevens & Beach, 1996), making negative information particularly salient. On the other hand, Reeve, Highhouse, and Brooks (2006) found that the moment-to-moment affective reactions of college job seekers evaluating a company during a career fair were compensatory. Future research could examine job seekers' moment-to-moment affective reactions to online information search during the early stages of applicant attraction. Such research must allow job seekers to voluntarily end the search for information about a particular organization to capture the non-compensatory nature of initial applicant attraction.

We did not find support for our hypothesis that the impact of attribute topic and source congruency on attraction and recall is lessened for negative information. One reason we did not find the expected three-way interaction might be because we found only weak support for the source and topic interaction in the positive condition (see Table 3). In another study, Highhouse, Hoffman, Greve, and Elder (2002) provided some evidence that the impact of information type on applicant attraction depends on the information source. Specifically, they found that statistical information had a greater impact on organizational attractiveness when it came from a recruitment brochure, and anecdotal information had a greater impact on applicant attraction

when it came from a newspaper article. Rather than the information accessibility perspective that we outlined in the present research, the authors proposed that these effects resulted from differences in source credibility. However, the authors did not find the expected pattern of results for source credibility. Future research is needed to clarify the findings in this area.

As with any research, we acknowledge that our study has several limitations. First, we used only one company and two pieces of information about the company. In the context of universities, student job seekers are often exposed to information about the same company from multiple sources, and information on multiple companies within a short period of time. The accessibility-diagnostics model suggests that since negative information is highly diagnostic, a single piece of negative information would be used in judgment even in the presence of many other sources of positive information. However, future research should explore whether our findings extend to situations where there is greater information availability.

Second, we constrained our analysis to the context of an organization that was unfamiliar to the job seekers in our sample. We believe that our choice of using a company that was unfamiliar to job seekers does not limit the applicability of our results. Unfamiliar organizations are especially salient in the context of early labor-market entrants such as college-level job seekers. For instance, college-level job seekers are often unfamiliar with many Fortune 500 organizations that are recruiting on their university's campus (Gatewood, Gowan, & Lautenschlager, 1993). However, future research may want to examine whether familiarity influences the nature of the relationships examined in this study, such as that between information favorability and job seekers' attitudes and intentions.

Third, we used an experimental study with college-level job seekers. However, the laboratory is an ideal setting for a preliminary examination of this type because of the ability to

control for extraneous variables and to effectively test the “can it happen” question (Ilgen, 1986). Further, given the realism involved in our study and the diversity of our sample, we would expect that our findings would generalize to college students at other universities forming beliefs about unfamiliar organizations. However, further research using other samples is needed in order to examine the extent to which our findings generalize to experienced workers who are searching for a job or the elusive set of good performers who may not be actively looking for a job.

In summary, our findings provide evidence that job seekers are likely to see negative information as more diagnostic than positive information in the early stages of recruitment and job search. Specifically, our results suggest that, compared to positive information, negative information has a larger impact on job seekers immediately after exposure and the effects of negative information are more likely to persist over time. Further, it appears that negative information from any source may be seen as salient to job seekers and result in negative attitudes and lower interest in the company as an employer.

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Footnotes

¹ Researchers have also found that information that is highly incongruent is attention-grabbing (e.g., Lee & Mason, 1999; Kulik & Ambrose, 1993). In our study we investigate a situation where we expect that job seekers' attention is engaged. Incongruent information may, however, be a fruitful avenue of research in recruitment, specifically in the area of job advertisements (see Breugh & Starke, 2000).

² The ratio of participants in the neutral condition to the positive and negative conditions is 1:4. When cell sizes differ to this extent it is important to test the assumption of homogeneity of error variances to avoid increased Type I error rate (Tabachnick & Fidell, 2006). We failed to reject the hypothesis of homogeneity of error variances in our analysis which included the neutral condition (i.e., Hypotheses 1 and 2; Box's multivariate test = 5.61, $F = .92$, *ns*; Levene's test for equality of error variances for Attraction: $F(2, 193) = 1.62$, *ns*; Attraction time two: $F(2, 193) = 1.99$, *ns*).

Table 1
Descriptive Statistics and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1 Favorability ^a	0.46	0.50						
2 Source ^b	0.51	0.50	0.03					
3 Attribute topic ^c	0.51	0.50	0.04	0.03				
4 Organizational Attraction	2.60	0.86	0.67 **	0.00	0.11			
5 Organizational attraction Time Two	2.76	0.73	0.52 **	- 0.14	0.13	0.60 **		
6 Recall of information favorability	0.41	0.49	- 0.26 **	0.19 *	- 0.06	- 0.21 **	0.22 **	
7 Recall of information topic	0.46	0.50	- 0.02	0.04	- 0.02	- 0.07	- 0.07	0.10

Note. *n* = 175. ^aNegative = 0, positive = 1. ^bPeer email = 0, business press article = 1. ^cFirm performance = 0, work environment = 1.

* *p* < .05, ** *p* < .01.

Table 2. Cell means for positive, negative, and neutral conditions

Variable	Positive		Negative		Neutral		D(Positive - Neutral) ^a		D(Negative - Neutral) ^b	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	Cohen's <i>d</i>	<i>M</i>	Cohen's <i>d</i>
Organizational attraction time one	3.18	0.65	2.03	0.63	3.09	0.53	0.09	0.14	-1.06***	0.99
Organizational attraction time two	3.14	0.58	2.39	0.67	3.09	0.53	0.05	0.08	-0.70***	0.66

Note. ^aMean differences and standardized mean differences in organizational attraction between participants in the positive information condition and participants in the neutral condition. ^bMean differences and standardized mean differences in organizational attraction between participants in the negative information condition and participants in the neutral condition.

*** $p < .001$

Table 3. Organizational attraction as a function of information source and topic across the positive and negative information conditions.

Positive information		
Independent variables	Attraction Time one	Attraction Time two
Group	<i>M</i>	<i>M</i>
Firm performance		
Email from peer	2.95 _a	3.14 _{ab}
Fortune Article	3.28 _{ab}	2.95 _{a†}
Work environment		
Email from peer	3.40 _b	3.39 _{b†}
Fortune Article	3.34 _b	3.11 _{a†}
Negative information		
Firm performance		
Email from peer	2.20 _c	2.49 _c
Fortune Article	1.88 _c	2.17 _c
Work environment		
Email from peer	2.01 _c	2.51 _c
Fortune Article	2.08 _c	2.38 _c

Note. Within column means that do not share the same subscripts differ at $p < .05$.

† means differ at $p < .10$.

Appendix A. Brief description of recruiting organization shown to all participants.

Reucadia National Corporation

DETAILS:

Index Membership:	<u>S&P 400 MidCap</u>
Employees (last reported count):	<u>5,269</u>

REUTERS ABRIDGED BUSINESS SUMMARY:

- Diversified company with subsidiaries is engaged in telecommunications, healthcare services, banking and lending, manufacturing, real estate activities, winery operations and property and casualty reinsurance
- Principally operates in markets in the United States
- Assets principally consist of the stock of its direct subsidiaries, cash and cash equivalents and other non-controlling investments in debt and equity securities.
- Multiple locations throughout the United States

Appendix B. Peer email manipulation for work environment information. Negative information words in parentheses.

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

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

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

Subject: Re: Perceptions of Reucadia National Corporation
From: "[Redacted]" <[Redacted]>
Date: Sun, November 7, 2004 11:03 am
To: "[Redacted]" >
Priority: Normal
Options: [View Full Header](#) | [View Printable Version](#) | [View Message details](#)

H [Redacted]

Thanks for asking about my perception of Reucadia. Sure, I'd be glad to help. First of all, to be honest, Reucadia has an incredible (awful) work atmosphere. When I got there I immediately loved the (was thrown into an unpleasant) work environment. Employer – employee relations were impressive (not ideal). I'd say the company has its priorities straight (mixed-up) when it comes to the office environment. The company is very ahead of (behind) the times in terms of creating an employee-friendly atmosphere and they have been very aggressive (passive) when it comes to making Reucadia a better place to work. The office environment is fantastic (terrible). It seems upper management really understands (doesn't understand) how to make the employees happy. This is a very promising (troubled) company with a great work atmosphere.

I hope this helps.

[Redacted]

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Take Address

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

Move to: ▼

Appendix C. Media article manipulation for firm performance information. Negative information words in parentheses.

The header features the 'FORTUNE' logo in large white letters on a dark blue background. To the right of the logo are links: 'Try 3 Issues Free', 'Magazine Customer Service', and 'Subscribe to FORTUNE'. Further right is a search box with a 'GO' button and links for 'Archive' and 'Current Issue'. Below the logo area is a horizontal navigation bar with links for 'RANKINGS', 'Companies', 'CEOs', 'Investing', 'Careers', 'Technology', 'Small Business', and 'Downloads'.

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GOOD (BAD) NEWS FOR REUCADIA

Employees and investors are increasingly focused on the company's incredible (awful) record of financial performance

Employees at the Reucadia National Corporation often report that upon hire they are impressed (shocked) with the (troubled) business processes. According to one industry analyst, "Sales are up (down) and they are gaining a (losing their) strong customer base. The company has its priorities straight (mixed up) when it comes to competing in the market." The company is very ahead of (behind) the times in terms of developing an innovative product line and they have been very aggressive (passive) when it comes to making Reucadia a stronger competitor in the market. Analysts report that over the last two years, the stock performance has been fantastic (terrible). It seems upper management really understands (doesn't understand) how to make the investors happy. This is a very promising (troubled) company with a great (poor) profit potential.

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