IS THIS HOW I WILL BE TREATED? REDUCING UNCERTAINTY THROUGH RECRUITMENT INTERACTIONS

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While a great deal of research has investigated strategies for increasing job seekers’ initial attraction to organizations, far less is known about how job seekers respond to recruitment activities after application submission. We draw from signaling, uncertainty reduction, and uncertainty management theories to develop a conceptual model of the relationship between recruitment interactions (contact episodes) after application submission and organizational attraction. We test this model in three independent studies with data collected at multiple time periods. Study 1 employed a time-lagged research design with actual job seekers. Findings showed that justice perceptions associated with recruitment interactions influence attraction to an organization indirectly and directly via positive relational certainty (i.e., reduced uncertainty regarding how organizational relations might be upon entering the organization). Study 2 used a controlled experimental design to provide additional evidence of the relational certainty mechanism through which justice signals influence attraction. Finally, Study 3 incorporated a longitudinal (repeated-measures) design to examine reactions to recruitment interactions over ten weeks. Results indicated that the relationship between justice signals and organizational attraction via positive relational certainty is dynamic, suggesting that organizations should carefully manage their communications throughout the recruitment process.

Recruitment is an essential function for organizations, as “human capital” is a key component of an organization’s success and stock valuation (Huselid, Jackson, & Schuler, 1997). Despite the importance of human resource recruitment in acquiring and maintaining a key organizational re-

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source, this function poses ongoing challenges for organizations (Rynes & Cable, 2003). Of 628 staffing professionals surveyed in 2006, 73 percent reported increased recruiting competition hindered efforts to attract top talent in the marketplace (Howard, Erker, & Bruce, 2006). Such challenges remain even in times of relatively high unemployment (Ployhart, 2006), and organizations that fail to make recruitment a priority fare poorly in the “war for talent” (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). In contrast, firms that manage this
task effectively enable a potential competitive advantage because human capital influences organizational performance (Hitt, Bierman, Shimizu, & Kochhar, 2001; Ployhart, 2011).

Given the documented importance of recruitment to long-term organizational survival, it is not surprising that a growing body of research focuses on identifying strategies to improve recruitment success (see Breaugh [2008] and Ployhart [2006] for reviews). Specifically, this stream of research examines ways organizations can design activities to better identify and attract potential employees. For example, organizations can improve job seekers’ initial organizational perceptions by considering factors such as job advertisement content (Highhouse, Beadle, Gallo, & Miller, 1998; Walker, Feild, Giles, & Bernerth, 2008), advertised organizational diversity policies (Williams & Bauer, 1994), and recruitment website design (Allen, Mahto, & Otondo, 2007; Walker, Feild, Giles, Armenakis, & Bernerth, 2009).

While these advancements provide valuable insight regarding recruitment, several important theoretical and methodological gaps in the literature limit understanding of key phases and mechanisms during the recruitment process. For example, scholars have noted that recruitment research has had relatively weak theoretical grounding and that the theory most often used to explain recruitment phenomena—signaling theory (Spence, 1974)—is not currently well-defined or understood in the context of recruitment research (Breaugh & Starke, 2000; Ehrhart & Ziegert, 2005; Highhouse, Thornbury, & Little, 2007). Furthermore, the vast majority of studies have focused on job seekers’ reactions to recruitment activities before application submission (Dineen & Soltis, 2010). Focusing entirely on organizational efforts to improve job seekers’ initial perceptions is irrelevant if organizations are unable to maintain the positive attitudes that led job seekers to pursue employment with them in the first place (Stevens & Beach, 1996). For example, negative changes in organizational attractiveness during recruitment can result in the loss of qualified applicants who withdraw from the recruitment process before receiving an offer (Ryan, Sacco, McFarland, & Kriska, 2000; Schmit & Ryan, 1997).

Finally, recruitment research has primarily incorporated between-persons research designs (Breaugh & Starke, 2000). Doing so has prevented scholars from developing dynamic models of recruitment phenomena to explain why and how recruitment activities influence job seekers’ reactions over time (cf. Steel, 2002; Wanberg, Zhu, Kanfer, & Zhang, 2012).

We designed the current research to address these gaps. Specifically, we augmented recruitment’s existing theoretical underpinnings (i.e., signaling theory) by drawing upon theories of uncertainty reduction (Berger & Calabrese, 1975) and uncertainty management (Lind, 2001; Lind & van den Bos, 2002; van den Bos & Lind, 2002) to make predictions regarding job seekers’ reactions to contact episodes (e.g., e-mails and telephone calls) with recruiting organizations after application submission. We tested our hypotheses in three separate but complementary studies. Studies 1 and 2 employed time-lagged designs, while Study 3 tested a dynamic, longitudinal model of recruitment in which we studied preliminary recruitment interactions over ten weeks. To our knowledge, this is the first set of studies to (a) examine uncertainty reduction as a mediating mechanism in an explicit and isolated manner and (b) consider the dynamic nature of job seekers’ reactions to multiple written and verbal interactions with organizational representatives after employment application submission.

THEORIES OF UNCERTAINTY REDUCTION AND MANAGEMENT

Our conceptual approach builds on considerable research supporting the view that uncertainty is a motivational antecedent that drives behavior (Festinger, 1954; Fiske & Taylor, 1991; Hogg, 2007). Berger and Calabrese (1975) developed uncertainty reduction theory (URT) to explain the processes associated with strangers attempting to reduce uncertainty associated with meeting one another for the first time. According to this theoretical perspective, individuals reduce uncertainty regarding where they stand when they encounter a new relationship by progressing through three developmental phases: entry, personal, and exit. The entry phase is characterized by information seeking related to demographic characteristics such as age, race, gender, or economic status. As strangers progress to the personal phase, they seek out information that is not readily observable, such as a new person’s values, beliefs, and attitudes. Lastly, individuals negotiate plans for future interactions during the exit phase. If both strangers like one another, the relationship typically continues, whereas dislike from one party typically results in relationship termination (Berger & Calabrese, 1975).
The uncertainty reduction process described above is relevant to our research in as much as job seekers are attempting, in essence, to establish a new employment relationship. This view derives from the considerable overlap between the three stages of interpersonal relationship development and the three stages posited to comprise the recruitment process: generation, maintenance, and job choice (Barber, 1998; Breaugh & Starke, 2000). Figure 1 indicates the generation phase of recruitment (when applications are sought) is similar to the entry phase of interpersonal development because job seekers base their evaluations of recruiting organizations mainly on observable information the organizations present (i.e., online information, recruitment materials, etc.). The maintenance phase, which focuses on maintaining applicant interest, begins after application submission and corresponds to the personal phase of uncertainty reduction because job seekers have more interaction with an organization’s representatives. Therefore, they are able to assess the organization on characteristics beyond what they infer from recruitment materials. Lastly, the job choice phase occurs after a job offer and is similar to the exit phase of interpersonal development because applicants make decisions regarding the future of the relationship between themselves and the recruiting organizations.

One category of uncertainty that is likely to be particularly unsettling for job seekers and difficult to assess during recruitment is the type of organizational relations they might encounter after organizational entry. Specifically, job seekers want to ensure that employee relations are positive and result in fair procedures and outcomes (Lind, 2001; van den Bos, Lind, & Wilke, 2001). According to theories of uncertainty management, job seekers can reduce this uncertainty by using any justice-relevant information (i.e., treatment received) to assess the trustworthiness of recruiting organizations (Lind & van den Bos, 2002; van den Bos & Lind, 2002). These assessments lead to the formation of a fairness heuristic that guides subsequent attitudes and behaviors (van den Bos, Wilke, & Lind, 1998). We suspect that job seekers’ fairness heuristic is still malleable during the early stages of recruitment, so that individuals use it until a “phase-shifting event” causes them to revise their fairness perceptions. Stated another way, job seekers use evaluations of organizations’ justice to decide if they will have good relations as members of recruiting organizations and, by extension, fair treatment received during recruitment influences their certainty that relations will be positive in the future (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012).

FIGURE 1
Phases of Recruitment and Relationship Development

![Diagram of phases of recruitment and relationship development](image)
We draw from previous theoretical assertions regarding the role of justice during recruitment and selection (e.g., Gilliland, 1993) to argue that these justice evaluations are especially important during the maintenance phase of recruitment, because job seekers have the opportunity to reduce uncertainty in ways other than viewing information presented in formal recruitment materials. Specifically, justice evaluations of written and verbal interactions with recruiting organizations provide the means for doing so (Boswell, Roehling, LePine, & Moynihan, 2003). In our theoretical conceptualization, we view job seekers’ perceptions of justice associated with recruitment interactions as salient signals (cf. Colquitt & Rodell, 2011; Konovsky & Pugh, 1994; Rynes, 1991; Turban & Greening, 1997) and predict that these justice signals, measured in the form of levels of interpersonal and informational justice, will influence job seekers’ relational certainty. We define relational certainty as the degree to which job seekers believe they can predict the type of relationships they will have as employees after organizational entry. In turn, we theorize that job seeker relational certainty is a mediating mechanism through which justice signals relate to organizational attraction. To the degree that justice signals are seen as positive, organizational attraction will be higher (due to increased positive relational certainty), and to the degree that they are perceived as negative, organizational attraction will be lower (due to reduced positive relational certainty). As individuals progress through the stages of recruitment and relationship development, their uncertainty about recruiting organizations is affected, because they interpret and perceive signals as representative of unknown job and organizational characteristics (Connelly, Certo, Ireland, & Reutzel, 2011).

**CONCEPTUAL MODEL**

Figure 2 depicts our conceptual model of job seekers’ reactions to recruitment interactions. This model focuses on the maintenance phase of recruitment and the personal phase of relationship development, which occur after the submission of a job application. At this stage of recruitment, interactions with recruiting organizations are an important source of organizational information. Although job seekers may have interacted with organizational representatives during the generation phase (e.g., career fairs, company information sessions), the frequency and intensity of these interactions is likely to increase once job seekers have submitted a

![FIGURE 2](image-url)

**Maintenance Phase of Recruitment**

<table>
<thead>
<tr>
<th>Perceived Signal</th>
<th>Signaling Outcome</th>
<th>Uncertainty Reduction Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Justice</td>
<td>Positive Relational Certainty</td>
<td>Organizational Attraction</td>
</tr>
<tr>
<td>Informational Justice</td>
<td>Positive Relational Certainty</td>
<td>Organizational Attraction</td>
</tr>
</tbody>
</table>

Dynamic Model (Study 3 Tests Changes across Contact Episodes for Ten Weeks)

(Study 1 and Study 2)
job application. We argue that it is not only the information communicated during these interactions that reduces job seekers’ organizational uncertainty, but also the way organizational representatives treat job seekers. As depicted in our conceptual model, we expect the first interaction between job seekers and recruiting organizations to be unique and to influence relational certainty. That is, positively evaluated interactions will increase job seekers’ positive relational certainty, but negatively evaluated interactions will decrease their certainty. This view is consistent with prior research that has theorized justice can signal an individual’s value in societal groups (Tyler, 1989) and organizations (Colquitt & Rodell, 2011). Study 1 and Study 2 test these predictions.

Figure 2 also depicts the multiple recruitment interactions likely to occur during the maintenance phase, reflecting the dynamic aspects of our conceptual model. This dynamic model acknowledges that no interaction between job seekers and recruiting organizations occurs in isolation. Rather, an earlier interaction (e.g., contact episode 1) provides a reference point for evaluating treatment at a later time (e.g., contact episode 2) and so on. Thus, we do not expect job seekers to simply sum or average their reactions to treatment received from organizations. Instead, changes in the signals sent to job seekers through interactions with recruiting organizations should influence changes in the outcomes of these signaling and uncertainty reduction processes. Our reasoning suggests that the direction of justice change is important in understanding how and why positive relational certainty and organizational attraction may systematically vary in magnitude and direction over time. For example, an upward change in perceived justice would be associated with a more positive increase in positive relational certainty. In turn, an upward change in positive relational certainty would likely be associated with a corresponding upward change in organizational attraction. We make specific predictions regarding these dynamic relationships in Study 3.

STUDY 1: A MODEL OF UNCERTAINTY REDUCTION IN RECRUITING

During recruitment interactions with organizational representatives, job seekers are likely to evaluate interpersonal and informational justice (Ambrose & Schminke, 2003; Bies, 2005; Scott, Colquitt, & Zapata-Phelan, 2007) because they are searching for signals with which to assess the possibility of exploitation by potential employers (Lind, 2001). Such signaling cues are likely perceived as indicative of the type of relationships that exist in organizations. Therefore, justice assessments (whether positive or negative) inform job seekers as to whether or not they will have good relationships as organization members (cf. Bauer, Maertz, Dolen, & Campion, 1998; Boswell et al., 2003). Early contact episodes during the maintenance phase are likely to relate to the level of relational certainty job seekers feel. This view is consistent with justice researchers’ suggestions that employees use treatment from supervisors to gauge their standing in organizations (Lind, Greenberg, Scott, & Welchans, 2000; Tyler, 1989). As such, we expect this signaling process to influence job seekers’ certainty about the relationships they can expect to be involved in as organization members. Positive evaluations of treatment received from organizations (i.e., high interpersonal and informational justice) should positively relate to job seekers’ belief that they will have good organizational relationships (i.e., positive relational certainty).

Hypothesis 1. (a) Interpersonal justice and (b) informational justice positively relate to positive relational certainty.

As Aiman-Smith, Bauer, and Cable noted, “organizational attraction is an attitude or expressed general positive affect toward an organization, toward viewing the organization as a desirable entity with which to initiate some relationship” (2001: 221). In this vein, uncertainty reduction theory also makes important predictions regarding the relationship between uncertainty reduction and liking (i.e., organizational attraction). Specifically, liking is proposed to increase as uncertainty decreases because individuals are better able to predict others’ behavior (Berger & Calabrese, 1975). Empirical findings in the communications literature generally support these predictions (see Kellermann and Reynolds [1990] for a review). For example, Gudykunst (1985) argued that cultural uncertainty explains individuals’ tendency to be more attracted to their own rather than another culture. However, it is important to note conditions in which uncertainty reduction does not necessarily enhance liking. Sunnafrank (1990) argued that the relationship between uncertainty reduction and liking is dependent on the type of information obtained. That is, uncertainty reduction resulting from positive information will increase liking, but uncertainty reduction resulting from negative information will decrease attraction.
In a recruitment context, it seems reasonable to assume that when job seekers’ positive relational certainty increases, so will their attraction to recruiting organizations. This is because a reduction in a subjective experience of uncertainty tends to be associated with a decrease in anxiety and an increase in emotional involvement (Berger & Calabrese, 1975). Moreover, when job seekers’ anxiety about future treatment is low, URT holds that they will be certain of their abilities to predict potential employers’ behavior. Therefore, as positive relational certainty increases, organizational attraction should also increase.

**Hypothesis 2. Positive relational certainty positively relates to organizational attraction.**

Previous research has consistently found relationships between organizational justice perceptions and important outcomes (see Colquitt, Conlon, Wesson, Porter, and Ng [2001] for a meta-analytic review), including outcomes related to the recruitment process (e.g., applicant withdrawal, satisfaction with a selection process, organizational attraction [Hausknecht, Day, & Thomas, 2004]). In the context of recruitment interactions, we propose that reduction in uncertainty regarding job seekers’ assessment of expected relationships in organizations they interact with is a mechanism responsible for the relationship between interpersonal and informational justice and organizational attractiveness.

While the initial attractiveness perceptions that led job seekers to submit an application might be based on information gathered from recruitment materials, it is important to note that job seekers often question the authenticity of these organizationally controlled information sources (Highhouse, Hoffman, Greve, & Collins, 2002). Thus, they enter the maintenance phase of recruiting with uncertainty. The process of evaluating treatment received should reduce anxiety associated with uncertainty regarding expected relations (Lind & van den Bos, 2002; van den Bos & Lind, 2002) and signal whether or not these relationships will be positive or negative. Therefore, high levels of interpersonal and informational justice will positively relate to organizational attraction indirectly through its effect on positive relational certainty.

**Hypothesis 3. Positive relational certainty mediates the positive relationship between (a) interpersonal and (b) informational justice and organizational attraction.**

### STUDY 1 METHODS

#### Participants

We recruited Study 1 participants from upper-level undergraduate management courses at two universities in the southeastern United States. We identified participants actively searching for employment upon graduation who reported intentions to use online job applications. We included this requirement to control for any possible effects resulting from recruitment method. Course instructors offered extra course credit for participation, and we entered participating job seekers who completed all three portions of the study in a random drawing for restaurant gift certificates. Out of 233 students who reported that they were currently looking for work, 164 (70%) completed the time 1 survey. Of these, 95 percent (155) completed the time 2 survey, and 90 percent (147) provided complete data in all three data collection efforts of Study 1. We removed 19 participants from our analyses because they indicated that they had been rejected by the organization and were no longer in the maintenance phase of recruitment. The remaining sample used for analyses (n = 128) had 63 percent men and a mean age of 22.16 (s.d. = 3.49). In addition, 79 percent of sample members identified themselves as white, 13 percent, as African-American, 4 percent, as Latin-American, 3 percent, as Asian-American, and 1 percent, as “other.”

Response-nonresponse comparison revealed no differences in gender or race among those that completed all three data collection surveys and those that only completed the time 1 survey.

#### Design and Procedure

We gave job seekers agreeing to participate in Study 1 a packet containing several study-related materials (time 1). The first page contained an instruction sheet on which we asked participants to choose one organization they were considering for employment but had not applied to yet, and then apply to that organization following the company’s online application procedures. The second page was a short questionnaire used to collect several demographic items, and initial perceptions of organizational attraction (used as a control variable).

One week after time 1 data collection, course instructors provided participating job seekers with a second survey packet (time 2). In this packet, we asked job seekers to indicate if they had corresponded with the organizations that they applied to
during time 1 data collection. All reported that they had corresponded with their organizations via either phone call or e-mail since submitting application materials the week before. Next, job seekers answered a series of questions designed to measure perceptions of interpersonal justice and informational justice associated with this interaction.

One week after the time 2 data collection, participants received a final, time 3, survey packet. They provided responses to questions designed to measure their positive relational certainty, the outcomes of their initial applications, and their perceptions of organizational attractiveness.

Measures

Organizational attractiveness. We measured organizational attractiveness during times 1 (used as a control variable in our analyses) and 3 of Study 1 with Highhouse, Lievens, and Sinar’s (2003) five-item general attractiveness measure. A sample item from the scale is, “For me, this company would be a great place to work.” (1, “strongly disagree,” to 5, “strongly agree”; α = .86, time 1: .79, time 3).

Interpersonal justice perceptions. During time 2, we assessed interpersonal justice perceptions using four items adapted from Colquitt (2001). An example item from this measure (1, “strongly disagree,” to 5, “strongly agree”; α = .88) is, “The organization has treated you in a polite manner.”

Informational justice perceptions. We assessed informational justice perceptions at time 2 using five items adapted from Colquitt (2001). An example item from this measure (1, “strongly disagree,” to 5, “strongly agree”; α = .79) is, “The organization has been candid in their communications with you.”

Positive relational certainty. We measured job seekers’ positive relational certainty at time 3 with three items adapted from Truxillo and Bauer (1999). Participants indicated the degree to which they felt confident each statement applied to their expected relations as an employee (1, “not very confident,” to 5, “very confident”; α = .88). The items used for this measure were, “I will have good relations with management at this organization,” “In general, I will have few employee complaints at this organization,” and “In general, I will have few employee grievances at this organization.”

Application status. We asked job seekers to indicate (time 3 data collection) the status of their job applications. We coded responses as either 0, “still waiting to hear from the organization” (n = 97, 76%), or 1, “formally invited to continue in the recruitment process” (n = 31, 24%; phone interview invitations, face-to-face interview invitations, and company visit invitations are examples of responses coded 1). We used these responses in our data analyses to control for general positive or negative reactions toward particular organizations resulting from application status (cf. Ryan & Ployhart, 2000).

STUDY 1 RESULTS

Data Analyses

We tested Study 1 hypotheses by examining a mediation model in which the effects of interpersonal justice and informational justice on organizational attraction are transmitted through positive relational certainty. To avoid conceptual and mathematical limitations when testing for mediation, we employed statistical methods and SPSS syntax presented in Preacher and Hayes (2008). Confidence intervals for the population value of the unstandardized indirect effect (ab) were derived using bias-corrected and accelerated (BCa) bootstrapping methods. Through application of bootstrapped confidence intervals, it is possible to avoid power problems associated with nonnormal sampling distributions that arise when computing products of coefficient tests (e.g., Sobel’s mediation test) for intervening variable effects (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

Tests of Study 1 Hypotheses

A confirmatory factor analysis (CFA) revealed that our proposed four-factor model fit the data well (χ²[113] = 145.06, RMSEA = .05, SRMR = .07, NFI = .94, CFI = .99). Comparison of this model with alternative models did not reveal a better fit for our data. Table 1 reports descriptive statistics, coefficient alphas, and correlations among Study 1 variables. Summarizing Hypotheses 1–3, we expected that positive relational certainty would mediate the positive relationships between interpersonal justice and informational justice and organizational attraction. As shown in Table 2, both interpersonal justice (b = .46, p < .01) and informational justice (b = .44, p < .01) positively related to positive relational certainty—supporting both parts of Hypothesis 1 (a and b). In addition, in line with Hypothesis 2, we found a relationship between positive relational certainty and organizational attraction when controlling for interpersonal
and informational justice ($b = .21, p < .01$). Lastly, interpersonal justice had no effect on organizational attraction in analyses controlling for positive relational certainty ($b = .06$, n.s.), suggesting a pattern consistent with full mediation. Informational justice correlated with organizational attraction when we controlled for positive relational certainty ($b = .14, p < .05$), indicating a pattern consistent with partial mediation. As shown in Table 3, bootstrapped 95% confidence intervals (bias-corrected and accelerated) likewise demonstrated that both indirect effects ($ab = .10$ and $ab = .09$) were significant, in that the confidence intervals around the indirect effects did not contain zero. These results provided support for Hypothesis 3, part a, and mixed evidence for Hypothesis 3, part b.

### Study 1 Discussion

Results of Study 1 suggest that perceptions of interpersonal and informational justice associated with interactions between job seekers and recruiting organizations can influence job seekers’ organizational attraction. That is, after controlling for initial levels of organizational attractiveness and application status, interpersonal justice contributed to organizational attractiveness indirectly through its effects on positive relational certainty. Furthermore, informational justice signals contributed to perceptions of organizational attraction directly and indirectly through its effects on positive relational certainty. These results are consistent with our conceptual model suggesting that fairness

### Table 1

**Study 1: Means, Standard Deviations, Reliabilities, and Correlations among Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational attractiveness, time 1</td>
<td>3.82</td>
<td>0.75</td>
<td>(.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Application status</td>
<td>.24</td>
<td>0.43</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Positive relational certainty</td>
<td>2.38</td>
<td>1.07</td>
<td>.25**</td>
<td>.04</td>
<td>(.88)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Informational justice perceptions</td>
<td>3.15</td>
<td>0.64</td>
<td>.22*</td>
<td>.17</td>
<td>.45**</td>
<td>(.79)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interpersonal justice perceptions</td>
<td>3.27</td>
<td>0.98</td>
<td>.24**</td>
<td>.17</td>
<td>.55**</td>
<td>.42**</td>
<td>(.87)</td>
<td></td>
</tr>
<tr>
<td>6. Organizational attractiveness, time 3</td>
<td>3.26</td>
<td>0.61</td>
<td>.49**</td>
<td>.31**</td>
<td>.58**</td>
<td>.46**</td>
<td>(.79)</td>
<td></td>
</tr>
</tbody>
</table>

$a = 128$ (job seekers). Parentheses contain coefficient alphas for measures used in the study. All tests are two-tailed. Organizational attractiveness, time 3, was assessed approximately two weeks after organizational attractiveness, time 1.

$b = “still waiting to hear from the organization”; 1 = “formally invited to continue in the recruitment process.”

* $p < .05$

** $p < .01$

### Table 2

**Study 1: Summary of Regression Results**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Positive Relational Certainty</th>
<th>Organizational Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\Delta R^2$</td>
<td>$b$</td>
</tr>
<tr>
<td>1. Initial organizational attraction</td>
<td>.16</td>
<td>.11</td>
</tr>
<tr>
<td>2. Application status</td>
<td>-.23</td>
<td>.18</td>
</tr>
<tr>
<td>After step 1</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>3. Interpersonal justice</td>
<td>.46**</td>
<td>.09</td>
</tr>
<tr>
<td>4. Informational justice</td>
<td>.44**</td>
<td>.13</td>
</tr>
<tr>
<td>After step 2</td>
<td>.31**</td>
<td></td>
</tr>
<tr>
<td>5. Positive relational certainty</td>
<td>.16**</td>
<td></td>
</tr>
<tr>
<td>After step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall $F$</td>
<td>18.6**</td>
<td></td>
</tr>
<tr>
<td>Overall $R^2$</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.36</td>
<td></td>
</tr>
</tbody>
</table>

$a = 128$ (job seekers). Unstandardized regression coefficients ($b$'s) are shown. Final model results are reported.

* $p < .05$

** $p < .01$
in the treatment received after submitting an employment application is a signaling cue that reduces uncertainty regarding the type of organizational relations job seekers expect as employees. Specifically, positively evaluated contact episodes increased positive relational certainty, but negatively evaluated interactions decreased positive relational certainty. In turn, increased positive relational certainty correlated with organizational attraction.

Although Study 1 provides insights into the role of fairness signals during recruitment on job seekers’ organizational attitudes, we acknowledge several potential limitations. First, more tightly controlled research would help us isolate, more precisely, the nature of the uncertainty reduction mediating mechanism. Because we obtained our results from actual job seekers going through a recruitment process, extraneous variables or situational factors omitted from our conceptual model might have influenced our results. Second, in Study 1 we focused on the first contact between job seekers and recruiting organizations after job application submission. Because our research design did not account for the possibility that job seekers may have had more than one interaction with organizations, our findings may not generalize to the larger recruitment process as it unfolds over time.

To address these potential limitations and build upon Study 1 findings, we designed two additional studies. Study 2 experimentally examines the uncertainty reduction mediating mechanism proposed as responsible for the observed relationships (Spencer, Zanna, & Fong, 2005). In Study 3, we test a dynamic mediation model that considers job seekers’ reactions to their repeated interactions with recruiting organizations over a ten-week period. This latter investigation allowed us to embed job seekers’ reactions in a temporal context.

STUDY 2: ISOLATING AND TESTING THE UNCERTAINTY REDUCTION MECHANISM

While Study 1 results were generally consistent with our predictions, given the importance of our proposed mediating mechanism for the maintenance phase of recruitment, we sought to replicate our Study 1 findings experimentally to further assess the generalizability of our hypotheses. Scholars have argued that carefully designed experiments can provide compelling evidence of causal relationships and underlying psychological processes (e.g., Highhouse, 2009; Spencer et al., 2005). With this in mind, we employed a moderation-of-process design following Spencer et al. that involved creating an experimental condition in which the initial contact between job seekers and recruiting organization was not a signaling cue that reduced uncertainty about the type of relationships that exist in organizations. Specifically, we created an experimental condition in which randomly assigned participants were exposed to information about a hypothetical organization’s superior employee relations practices before they had any exchange (contact episode) with the organization, while others did not receive any information related to employee relations practices. We reasoned that individuals exposed to richer employer relations information would have greater positive relational certainty. Therefore, evidence for the uncertainty reduction mediating mechanism would exist if the relationship between fairness cues (i.e., interpersonal and informational justice signals) and participants’ reported organizational attraction was weaker under the condition in which preexisting information was provided. That is, justice signals associated with recruitment interactions would influence organizational attraction less because they did less to increase positive relational certainty.

<table>
<thead>
<tr>
<th>Model</th>
<th>Bootstrap Indirect Effect</th>
<th>Bootstrap s.e.</th>
<th>Lower Limit 95% CI</th>
<th>Upper Limit 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal justice perceptions (via positive relational certainty) on organizational attraction</td>
<td>.10</td>
<td>.03</td>
<td>.05</td>
<td>.17</td>
</tr>
<tr>
<td>Informational justice perceptions (via positive relational certainty) on organizational attraction</td>
<td>.09</td>
<td>.03</td>
<td>.04</td>
<td>.18</td>
</tr>
</tbody>
</table>

*a n = 128 (job seekers). Bootstrap sample size = 2,000. Bias-corrected and accelerated confidence intervals are reported. 
*b With initial organizational attraction and applicant status controlled for.
Thus, we tested the following hypothesis in Study 2:

**Hypothesis 4.** The relationship between (a) interpersonal and (b) informational justice and organizational attraction is weaker when participants have preexisting knowledge of superior organizational employee relations practices.

### STUDY 2 METHODS

#### Participants

We recruited Study 2 participants who were not involved in Study 1 from upper-level management courses at a large southwestern university. Participants received extra course credit for participation. Of those solicited \((n = 129)\), 94 (73%) provided complete data used for analyses. The final sample consisted of 52 percent men and had a mean age of 21.20 (s.d. = 2.27). Sixty-seven percent of sample members identified their ethnicity as white, 18 percent, as Latin-American, 11 percent, as African-American, and 4 percent, as Asian-American.

#### Design and Procedure

To facilitate our between-persons experimental design, we informed all participants that a Fortune 500 organization (named “HBA Corporation”) had requested assistance in evaluating their recruitment practices. We directed the participants to a website that provided specific instructions for participation. The instruction page informed participants that their task was to (a) take the role of an active job seeker, (b) evaluate HBA Corporation as if they were considering the company as a potential employer, (c) complete the online application process (i.e., provide basic information related to their education, prior work experience, special skills, e-mail contact, etc.), and (d) respond to a series of short surveys intended to assess their reactions to HBA’s recruitment practices. Participants were then randomly directed to one of two experimental website conditions designed specifically for Study 2 (website manipulations are discussed in the following section). After viewing one of the two websites and completing the online application process, participants responded to a time 1 survey incorporating demographic items and measures intended to assess perceptions of the organization and the recruitment website.

Approximately two days after submitting the time 1 survey, we randomly sent participants one of two correspondence e-mails from HBA Corporation (correspondence manipulations are discussed in more detail below). One week after we sent this e-mail, we gave participants a time 2 survey that included measures intended to assess their organizational attraction to HBA, interpersonal justice, and informational justice.

#### Recruitment Website Manipulations

We used two experimental recruitment websites, identical in design and the information presented on the following four links: “Career Development,” “Pay and Benefits,” “Company Information,” and “Our Plan for Growth.” The only difference in the websites was that one included a “pop-up” window on the homepage that participants had to close before viewing the remainder of the website. We intended the website pop-up to provide participants with information regarding superior employee relations practices; it included these statements:

- HBA has recently been recognized as one of the **Fortune 100 Best Companies to Work For 2010**. That makes three years in a row!!!!
- Among industry competitors, HBA had the smallest percentage of employees leaving voluntarily for the past five years. As noted by founder Jared York, “We strive to make our employees happy because they are our very best ambassadors.”
- HBA celebrates diversity and believes that attracting and hiring talented individuals of every possible perspective is critical to our success.

Participants could not view the website before closing the pop-up window, and the website would not load if the pop-up window was blocked by a web browser.

#### Organizational Correspondence Manipulations

We designed two different correspondence e-mails to represent either (a) high interpersonal and informational justice signals or (b) low interpersonal and informational justice signals. Previous research suggests that individuals respond more favorably when explanations are high in informational justice (i.e., include adequate information) and interpersonal justice (i.e., information is delivered in a sensitive manner [Greenberg, 1994; Ployhart, Ryan, & Bennett, 1999]). We followed Ployhart et al.’s (1999) approach to develop the following e-mail to
represent the high interpersonal and informational justice signal condition:

Dear __________,

Thanks for applying! We are excited that you have chosen to apply for the management trainee position at HBA. We have received all of your application materials and will be reviewing this information in the next seven business days. Should you have any questions regarding your application, please contact Susan Wilky at s.wilky@hba.com.

The low interpersonal and informational justice signal condition simply read, “A representative from HBA will contact you if you are selected for an interview.”

Measures

We assessed participants’ perceptions of organizational attractiveness, interpersonal justice, and informational justice with the same measures used in Study 1. Coefficient alphas for these measures in Study 2 were as follows: organizational attractiveness, .89; interpersonal justice, .86; and informational justice, .92.

STUDY 2 RESULTS

Manipulation Check

We conducted a manipulation check to ensure that participants presented with the pop-up window (in the experimental condition) knew more about HBA’s employee relations practices than participants in the control group. After viewing their assigned website, participants were asked to indicate how much they knew, from information gathered from the recruitment website, about organizational characteristics such as employee relations, community involvement, and corporate strategy (1 = “I know very little,” 4 = “I know a lot”). Our results ($F[1,93] = 40.69, p < .01, \eta^2 = .31, d = 1.33$) confirmed our intended manipulations, as participants in the pop-up window condition (mean = 3.24, s.d. = 0.53) indicated they had more knowledge of employee relations practices than individuals in the control condition (mean = 2.50, s.d. = 0.58).

Tests of Study 2 Hypotheses

A confirmatory factor analysis revealed that our proposed three-factor model fit the data well ($\chi^2[74] = 77.66, \text{RMSEA} = .02, \text{SRMR} = .07, \text{NFI} = .94, \text{CFI} = .99$). Comparison of this model with alternative models did not reveal a better fit for our data. Table 4 reports descriptive statistics, coefficient alphas, and correlations among Study 2 variables. We stated in Hypothesis 4 that the relationship between (part a) interpersonal justice and (part b) informational justice and organizational attractiveness is weaker when participants have preexisting knowledge of an organization’s employee relations practices (i.e., were in the pop-up window condition). To test our hypothesis, we used hierarchical moderated multiple regression. We entered the main effects for interpersonal justice, informational justice, and website condition (0 = “without employee relations information,” 1 = “with employee relations information”) in step 1. In step 2, we entered interpersonal justice by website condition and informational justice by website condition. As indicated in Table 5, both cross-product terms were significant (interpersonal justice x website condition, $b = -.39, p < .05$; informational justice x website condition, $b = -.32, p < .05$) and accounted for unique variance in organizational attraction ($\Delta R^2 = .11, p < .01$). As predicted, plots of these effects and simple slope tests revealed a

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpersonal justice perceptions</td>
<td>2.89</td>
<td>0.88</td>
<td>(.86)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Informational justice perceptions</td>
<td>2.70</td>
<td>1.06</td>
<td>.41**</td>
<td>(.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Website conditionb</td>
<td>0.45</td>
<td>0.50</td>
<td>-.01</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Organizational attractiveness</td>
<td>3.65</td>
<td>0.83</td>
<td>.40**</td>
<td>.26*</td>
<td>.27**</td>
<td>(.89)</td>
</tr>
</tbody>
</table>

* $n = 94$ (participants). Parentheses contain coefficient alphas for measures used in the study. All tests are two-tailed.

b 0 = “website without employee relations information,” 1 = “website with employee relations information.”

* $p < .05$

** $p < .01$
positive relationship between interpersonal justice ($t[93] = 3.94, p < .01$) and informational justice ($t[93] = 2.17, p < .05$) and organizational attractiveness for participants presented with the website that did not contain employee relations information but not for those presented with the website containing the pop-up window (interpersonal justice, $t[93] = 0.74, p = .46$; informational justice, $t[93] = -0.80, p = .43$). We have only included one plot, showing the effects for interpersonal justice on organizational attraction (see Figure 3), because the two plots are similar. These results supported Hypotheses 4a and 4b.

### STUDY 2 DISCUSSION

Study 2 complemented the results of Study 1 by explicitly investigating the uncertainty reduction mechanism responsible for the relationship between interpersonal and informational justice signals and job seekers’ organizational attraction perceptions. Moving from the field into the lab afforded us greater confidence in our proposed mediating mechanism. We incorporated a moderation-of-process design (Spencer et al., 2005) and found experimental evidence suggesting that when job seekers have preexisting knowledge about organizational employee relations practices, the justice signals associated with contact episodes do less to affect organizational attraction. However, in the absence of employee relations information, justice signals have a greater impact on job seekers’ organizational attraction. Results were consistent with Study 1 findings and provided further evidence

### TABLE 5

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\Delta R^2$</th>
<th>$b$</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpersonal justice</td>
<td>.49**</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>2. Informational justice</td>
<td>.24*</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>3. Website condition$^b$</td>
<td>.44**</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>After step 1</td>
<td>.24**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interpersonal justice $\times$ website conditions</td>
<td>$-$ .39*</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>5. Informational justice $\times$ website conditions</td>
<td>$-$ .32*</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>After step 2</td>
<td>.11**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall $F$</td>
<td>9.70**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall $R^2$</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^a$ $n = 94$ (participants). Unstandardized regression coefficients ($b$’s) are shown.

$^b$ 0 = “website without employee relations information,” 1 = “website with employee relations information.”

$^* p < .05$

$^{**} p < .01$
that justice evaluations associated with recruitment interactions following application submission are signaling cues that influence organizational attraction by increasing job seekers’ positive relational certainty.

**STUDY 3: DYNAMIC MODEL OF UNCERTAINTY REDUCTION**

The mediation model of job seekers’ reactions to a first recruitment interaction tested in Study 1 provides initial insight into the roles of justice signals and uncertainty reduction during recruitment. Although Study 1 results supported a pattern of mediation, we tested our hypothesized associations using a between-persons design incorporating static methods. However, the maintenance phase of recruitment is not static. Instead, it is more likely to unfold over time and to include multiple interactions between job seekers and organizational representatives. By employing a longitudinal (repeated-measures) design in Study 3, we sought to constructively extend Study 1 findings by testing dynamic mediated relationships over a longer span of time. We anticipated that doing so would improve our understanding of job seekers’ organizational attraction by more fully capturing the dynamic effects of justice signals and positive relational certainty.

Fairness heuristic theory (Lind, 2001) considers temporal issues in explaining how justice perceptions are formed. In particular, Lind observed that “the generation and use of fairness judgments will be episodic” (2001: 69). According to Marks, Mathieu, and Zaccaro (2001), for example, episodes are naturally segmented, with the conclusion of one marking the initiation of another. Because justice judgments exhibit an episodic patterning, Lind and his colleagues also posited that individuals “go into fairness-assessing mode whenever there are real or symbolic indications that the relationship is changing, and it is in that mode that fairness-relevant information will have the greatest impact on fairness judgments” (Lind, Kray, & Thompson, 2001: 191). In a recruitment context, it seems reasonable to presume job seekers’ repeated contacts with a potential employer are a conceivable indicator of a relationship change. Thus, we view recruitment interactions as a series of contact episodes that job seekers associate with specific authority figures and/or recruitment occurrences (cf. Beal, Weiss, Barros, & MacDermid, 2005: 1055). In this respect, Marks et al. contended, “each episode has a valence, or relative importance, attached to it that may heighten or weaken its salience” (2001: 359–360). Drawing on these theoretical perspectives, we posited that systematic intraindividual variation in job seekers’ current justice perceptions would capture meaningful deviations from justice perceptions formed because of a prior contact episode. That is, a contact episode from a prior time will act as a reference point when an individual is interpreting the valence of a subsequent episode during the maintenance phase of recruitment. This view is reinforced further by some emerging literature on justice as a dynamic construct (e.g., Hausknecht, Sturman, & Roberson, 2011) and in management research (Chen, Ployhart, Thomas, Anderson, & Bliese, 2011) more generally, according to which employees use past experiences as a reference point for evaluating and responding to current workplace experiences.

Thus, the direction of justice change plays an important role in understanding how and why its effects on job seekers’ positive relational certainty and organizational attraction might systematically vary in intensity over time. Whereas a relative improvement in fairness perceptions will signal a positive (i.e., gains) discrepancy, a relative decline intimates a negative (i.e., losses) discrepancy. For example, an upward trend or positive discrepancy may reanimate job seekers’ justice judgment process and allow relatively low justice perceptions to increase. For the same reason, however, job seekers with relatively high justice perceptions can experience a downward trend if the next few contact episodes suggest unfair treatment. Prior research has shown that justice perceptions can systematically vary (i.e., upward or downward) within individuals over time (Hausknecht et al., 2011; Loi, Yang, & Diefendorff, 2009). Therefore, previous research findings are consistent with our theoretical contention that justice signals are likely malleable during the maintenance phase as job seekers attempt to gather fairness information to aid in the formation of a fairness heuristic (Lind, 2001).

Our dynamic mediation model asserts that the indirect effect of justice perceptions change on organizational attraction change is transmitted through change in positive relational certainty. Because job seekers appraise each deviation in an upward justice trend as providing additional information about the trustworthiness of an organizational authority (Holtz & Harold, 2009; Lind, 2001), it follows that a positive trend will increase job seekers’ positive relational certainty, thereby fos-
tering increased levels of organizational attraction. In contrast, when job seekers experience a negative justice trend (i.e., downward change), they may view their future employment relationship with increasing uncertainty, thus increasing their attitude of indifference to an organization. Accordingly, we hypothesize:

**Hypothesis 5.** (a) Interpersonal justice change and (b) informational justice change positively relate to positive relational certainty change: Increase (decrease) in interpersonal justice and informational justice is associated with increase (decrease) in positive relational certainty.

**Hypothesis 6.** Positive relational certainty change positively relates to organizational attraction change: Increase (decrease) in positive relational certainty is associated with increase (decrease) in organizational attraction.

**Hypothesis 7.** Change in positive relational certainty mediates the positive relationship between organizational attraction change and (a) interpersonal justice change and (b) informational justice change.

### STUDY 3 METHODS

#### Participants

For Study 3, we solicited participants who did not overlap with participants in Studies 1 and 2 from students enrolled in upper-level undergraduate management courses at two southeastern universities. Course instructors offered extra course credit for participation, and we entered participants in a random drawing for restaurant gift certificates. Of the 228 students initially targeted, 119 (52%) indicated they were currently applying for employment online and completed the time 1 survey. We removed 47 (40%) of the 119 job seekers because of missing data. Of the 72 participants providing usable data, 53 percent were female, and mean age was 21.75 (s.d. = 1.63). Further, 88 percent of participants identified themselves as white, 8 percent, as African-American, and 4 percent, as Latin-American.

#### Design and Procedure

We provided each participant with a survey packet. The first page explained the nature of the study and provided instructions for completing the remainder of the packet. We asked job seekers to focus on one organization that they were planning to pursue employment with but had not yet applied to or interacted with. For ten consecutive weeks, we surveyed job seekers and asked them to describe each contact episode (e.g., date of each interaction, personal reflections about the interaction) with this organization immediately after it occurred. In addition, we asked them to complete items assessing interpersonal justice, informational justice, positive relational confidence, and organizational attraction after each contact episode. In total, 237 observations were available from the 72 job seeker participants. The average number of contact episodes per job seeker during the ten weeks was 3.43 (minimum = 3 and maximum = 5).

### Measures

We used the measures included in Study 1 in Study 3. Survey instructions, however, asked participants to respond with respect to the most recent contact episode with their potential employer. Specifically for Study 3, we also assessed a set of time-invariant measures that we used as controls in our hypothesis testing. These controls included participants’ a priori beliefs about how one should be treated by an employer—that is, the expectations a participant had about interpersonal (three items [Bell, Wiechmann, & Ryan, 2006]; \( \alpha = .89 \)) and informational (four items [Bell et al., 2006]; \( \alpha = .92 \)) justice before any interaction occurred with his/her organization. We likewise assessed participants’ (a) positive relational certainty before any interaction occurred (three items [Truxillo & Bauer, 1999]; \( \alpha = .76 \)) and (b) organizational attraction to the potential employer before any interaction had transpired (five items [Highhouse et al., 2003]; \( \alpha = .85 \)). We included these between-person controls because they were thought to capture job seekers’ general expectations of expected treatment during the recruitment process, and justice expectations have been shown to influence individuals’ reactions in the workplace (e.g., Bell et al., 2006; Rodell & Colquitt, 2009).

### Data Analyses

We used random coefficient modeling to develop and test a dynamic mediation model that predicts intraindividual change. This approach allows the analysis of variables at multiple levels using a series of regression equations (Bliese & Ployhart,
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Walker, Bauer, Cole, Bernerth, Feild, and Short

2002). In the present instance, the basic random coefficient model includes time, a dynamic predictor (e.g., time-varying justice perceptions), and a dynamic mediator (e.g., time-varying positive relational certainty) to explain intradimensional change in organizational attraction. Given our focus on within-person effects, we centered the time-varying predictors and mediator on each individual’s means (Enders & Tofghi, 2007) to remove any interindividual variance in the estimates of intradimensional effects. We conducted our analyses using the nonlinear and linear mixed effects (NLME) program for S-PLUS and R (Pinheiro & Bates, 2000).

In testing our hypothesized dynamic mediated relationships, we followed recommendations by Bliese and Ployhart (2002) as well as Pitaru and Ployhart (2010) to initially test whether there was change over time in each focal variable. Next, we applied a model-building approach (Bliese & Ployhart, 2002; Ployhart & Ward, 2011) that progressively estimates and evaluates more complex models. The purpose of these model-building steps was to determine the relationship between job seekers’ organizational attraction and time while also taking into account the possibility of autocorrelation and heteroskedasticity. We then tested the significance of the proposed dynamic mediated effect (ab) using bootstrapping methods (see Bauer, Preacher, & Gil, 2006). Mirroring Study 1, bootstrap sample size was 2,000.

STUDY 3 RESULTS

Preliminary Analyses

In a first step, we estimated a set of null models to determine whether our dynamic variables (interpersonal justice, informational justice, positive relational certainty, and organizational attraction) varied substantially within- and between-individuals. As shown in Table 6, the within-person variance components (\(\sigma^2\)) of the dynamic variables ranged from .03 to .31 (interpersonal justice, \(\sigma^2 = .09\), informational justice, \(\sigma^2 = .03\), positive relational certainty, \(\sigma^2 = .21\), organizational attraction, \(\sigma^2 = .31\)). The between-person variance components (\(\tau_{00}\)) for the dynamic variables were significant (\(p’s < .001\)), ranging from .57 to .85 (interpersonal justice, \(\tau_{00} = .73\), informational justice, \(\tau_{00} = .85\), positive relational certainty, \(\tau_{00} = .80\), organizational attraction, \(\tau_{00} = .57\)). The percentage of total within-individual variability ranged from 3.4 to 35.4% (interpersonal justice, 11.1%, informational justice, 3.4%, positive relational certainty, 20.8%, organizational attraction, 35.4%). With the possible exception of informational justice (3.4%), the amount of within-individual variability was not trivial. Thus, we deemed it appropriate to partition the variability in our dynamic variables into within- and between-person components.

We then identified the fixed function of time, determined the appropriate error structure, and examined the variability in growth parameters (Bliese & Ployhart, 2002). Analysis indicated that organizational attraction follows a linear growth trajectory. The within-individual errors were not correlated, suggesting autocorrelation did not unduly influence standard errors. We also found that organizational attraction variability increased over time. As one might expect, this result suggests that the spread of individual attraction scores increased with each additional contact episode. To account for heteroskedasticity, we included an additional

### Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpersonal justice expectation</td>
<td>3.68</td>
<td>0.93</td>
<td>(.89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Informational justice expectation</td>
<td>3.57</td>
<td>0.96</td>
<td>.51** (.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Initial positive relational certainty</td>
<td>3.32</td>
<td>0.58</td>
<td>.27* (.76)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Initial organizational attractiveness</td>
<td>3.94</td>
<td>0.61</td>
<td>.23* (.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interpersonal justice</td>
<td>3.27</td>
<td>0.58</td>
<td>.06* (.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Informational justice</td>
<td>3.25</td>
<td>0.57</td>
<td>.01  (.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Positive relational certainty</td>
<td>3.34</td>
<td>0.69</td>
<td>.14* (.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Organizational attractiveness</td>
<td>3.53</td>
<td>0.71</td>
<td>.09  (.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \(n = 72\) (job seekers). Expectation variables were measured at the person level. All other variables were aggregated to the person level. We computed descriptive statistics ignoring the multilevel structure of the data for simplicity. Readers should keep in mind that the aggregated values reported combined variance due to fluctuations over time and across job seekers.

* \(p < .05\)

* * \(p < .01\)*
restriction on the error variance-covariance matrix when computing the random coefficient models. As Bliese and Ployhart explained, this procedure is analogous to accounting for covariates in a model prior to interpreting effects of interest.

Tests of Study 3 Hypotheses

A confirmatory factor analysis revealed that our proposed four-factor model fit the data well (time 1, $\chi^2(113) = 219.08$, RMSEA = .09, SRMR = .08, NFI = .92, CFI = .96; time 2, $\chi^2(113) = 133.74$, RMSEA = .04, SRMR = .07, NFI = .94, CFI = .99; time 3, $\chi^2(113) = 140.22$, RMSEA = .06, SRMR = .09, NFI = .84, CFI = .96). Comparison of this model with alternative models did not reveal a better fit for our data. Additionally, the sample sizes associated with the repeated measures at time 4 and time 5 prevented CFAs (i.e., the number of parameters to be estimated exceeded the sample size). Table 6 presents descriptive statistics, coefficient alphas, and correlations among Study 3 variables. Summarizing Hypotheses 5–7, we predicted that the dynamic relationship between justice (interpersonal and informational) signals associated with recruitment interactions and organizational attraction is mediated by positive relational certainty. Table 7 (model 1) shows that interpersonal justice change was positively related ($b = .37$, $p < .01$) to positive relational certainty change, supporting Hypothesis 5, part a. As shown in Table 8 (model 1), and in keeping with Hypothesis 5, part b, informational justice change was also positively related ($b = .19$, $p < .05$) to positive relational certainty change. Results (see model 2 in Tables 7 and 8) likewise demonstrate a positive dynamic relationship between positive relational certainty change and organizational attraction ($b = .19$, $p < .01$). These results support Hypotheses 6–7 and are in line with our dynamic mediation hypotheses. Concerning interpersonal justice, bootstrapped confidence intervals of the indirect effect ($ab = .07$) did not include zero (lower 95% CI = .02; upper 95% CI = .13), providing further support for Hypothesis 7, part a. For informational justice, bootstrapped confidence intervals of the indirect effect ($ab = .04$) approached, but did not include, zero (lower 95% CI = .003; upper 95% CI = .08), thus supporting Hypothesis 7, part b.

STUDY 3 DISCUSSION

Although an assumption in the recruitment literature is that job seekers’ responses to recruitment activities remain stable over time, there have been calls (Truxillo, Steiner, & Gilliland, 2004) for longitudinal investigations—thereby implying this assumption does not necessarily hold. In response, our purpose in Study 3 was to advance and empirically test a “dynamic” version of the mediation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Positive Relational Certainty Change</th>
<th>Organizational Attraction Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.83 (.46)**</td>
<td>2.00 (.49)**</td>
</tr>
<tr>
<td>Time</td>
<td>−0.20 (.07)**</td>
<td>0.04 (.06)</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal justice expectation (time-invariant)</td>
<td>−0.22 (.08)**</td>
<td>−0.13 (.07)</td>
</tr>
<tr>
<td>Initial positive relational certainty (time-invariant)</td>
<td>0.47 (.13)**</td>
<td>−0.27 (.13)*</td>
</tr>
<tr>
<td>Initial organizational attraction (time-invariant)</td>
<td>—</td>
<td>0.73 (.13)**</td>
</tr>
<tr>
<td>Informational justice (time-varying)</td>
<td>0.18 (.08)*</td>
<td>0.10 (.07)</td>
</tr>
<tr>
<td>Intraintividual change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>0.37 (.08)**</td>
<td>0.07 (.07)</td>
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<tr>
<td>Positive relational certainty</td>
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<td></td>
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<tr>
<td>Model fit indexes</td>
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<tr>
<td>−2 log-likelihood</td>
<td>321.3</td>
<td>298.3</td>
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<tr>
<td>AIC</td>
<td>662.6</td>
<td>620.5</td>
</tr>
<tr>
<td>BIC</td>
<td>697.1</td>
<td>661.7</td>
</tr>
</tbody>
</table>

* $n = 72$ (job seekers); 237 (observations). Standard errors are reported in parentheses. Intraintividual change = level 1; interindividual change = level 2. AIC = Akaike information criterion; BIC = Bayesian information criterion.

* $p < .05$

** $p < .01$
model tested in Study 1. In doing so, Study 3 extended the previously reported two studies by examining job seekers’ reactions to recruitment interactions over time. Most organizations have multiple interactions with desired job seekers after application submission, and it is important to examine how, why, and when reactions to these interactions influence organizational attraction. Results were generally consistent with our predictions and suggested that job seekers use recruitment interactions as justice signals throughout the maintenance phase of recruitment. As we anticipated, these signals influence organizational attraction via positive relational certainty. Study 3 results also add to our understanding of fairness heuristic theory by indicating that the justice heuristic is being formed and job seekers’ organizational perceptions are still malleable.

Study 3 represents an important departure from the mainstream recruitment literature in that the predominant use of between-persons designs has prohibited a strong understanding of how temporal factors (cf. Maxwell & Cole, 2007) affect the experience of recruitment interactions and how fluctuations in justice signals may affect changes in job seekers’ attitudes toward recruiting organizations. Stated differently, by moving from a between-persons model of mediation (Study 1) to an analysis of longitudinal multivariate relationships that change and evolve over time (Study 3), our approach overcomes conceptual and methodological shortcomings associated with past recruitment research based solely on between-persons designs (Pitariu & Ployhart, 2010; Ployhart & Vandenberg, 2010). Because the maintenance phase of recruitment likely includes several contact episodes that unfold over time, we suggest that to be fully understood, job seekers’ reactions to justice signals should be examined in a longitudinal context.

### GENERAL DISCUSSION

Previous research has identified ways organizations can increase job seekers’ initial attraction to organizations (e.g., Highhouse et al., 1998; Walker et al., 2009), but far less is known about how organizations can maintain applicant interest. Such knowledge is valuable as many recruitment efforts are carried out as processes over time rather than through a single hiring event. In three studies, we examined job seekers’ reactions to treatment received during the maintenance phase of recruitment. Results showed that the treatment received serves as a signal about the types of relationships that exist in organizations and can influence job seekers’ organizational perceptions. We believe these findings have important implications for theory, recruitment research, and recruiting organizations.

### TABLE 8
**Study 3: The Dynamic Effects of Informational Justice and Positive Relational Certainty on Organizational Attraction**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1: Positive Relational Certainty Change</th>
<th>Model 2: Organizational Attraction Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.53 (.47)**</td>
<td>1.97 (.47)**</td>
</tr>
<tr>
<td>Time</td>
<td>−0.20 (.07)**</td>
<td>0.04 (.06)</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informational justice expectation (time-invariant)</td>
<td>−0.10 (.08)</td>
<td>−0.17 (.07)**</td>
</tr>
<tr>
<td>Initial positive relational certainty (time-invariant)</td>
<td>0.43 (.14)**</td>
<td>−0.24 (.13)</td>
</tr>
<tr>
<td>Initial organizational attraction (time-invariant)</td>
<td>—</td>
<td>0.74 (.12)**</td>
</tr>
<tr>
<td>Interpersonal justice (time-varying)</td>
<td>0.35 (.08)**</td>
<td>0.06 (.07)</td>
</tr>
<tr>
<td><strong>Intraindividual change</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informational justice</td>
<td>0.19 (.08)*</td>
<td>0.13 (.07)</td>
</tr>
<tr>
<td>Positive relational certainty</td>
<td></td>
<td>0.19 (.07)**</td>
</tr>
<tr>
<td><strong>Model fit indexes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>−2 log-likelihood</td>
<td>323.9</td>
<td>297.1</td>
</tr>
<tr>
<td>AIC</td>
<td>667.9</td>
<td>618.2</td>
</tr>
<tr>
<td>BIC</td>
<td>702.3</td>
<td>659.4</td>
</tr>
</tbody>
</table>

* n = 72 (job seekers); 237 (observations). Intraindividual change = level 1; interindividual change = level 2. Standard errors are reported in parentheses. AIC = Akaike information criterion; BIC = Bayesian information criterion.

* p < .05
** p < .01
Theoretical Implications

We integrated signaling, uncertainty reduction, and uncertainty management theories to develop a new conceptual model that explains how, why, and when contact episodes are likely to influence organizational attraction during the maintenance phase of recruitment. Regarding the **how** and **why** questions, we showed that uncertainty reduction is an intervening mechanism through which justice signals influence organizational attraction in the three studies presented. We are unaware of existing research that explicitly tests this mediation effect. Through our conceptual model testing, we simultaneously answered calls to use multiple theories when explaining justice phenomena (Colquitt et al., 2012) and provide a stronger theoretical grounding for **how** and **why** recruitment activities influence job seekers’ organizational perceptions (Breaugh & Starke, 2000; Ehrhart & Ziegert, 2005).

The dynamic mediation model tested in Study 3 also provides important theoretical insight regarding the recruitment relationships between job seekers and organizations as they evolve and change with the passage of time. While we relied on prominent theoretical frameworks from the organizational justice literature (Lind, 2001; Lind & van den Bos, 2002; van den Bos & Lind, 2002) to argue that job seekers use justice signals to assess expected organizational relations (Lind, 2001), our dynamic predictions deviate slightly from some of the core propositions associated with these theories. Specifically, fairness heuristic theory (Lind, 2001) would predict that job seekers’ fairness heuristic is formed rather quickly (e.g., on the basis of their initial interaction), so that the heuristic can be employed to inform future decisions. As a result, this notion suggests that job seekers are unlikely to respond differently to justice signals as they unfold over time. In contrast, we proposed and empirically demonstrated that justice perceptions fluctuated over time. It appears that when job seekers perceived discrepancies (i.e., positive or negative) between the levels of fairness experienced in the past versus the present, they amended their justice perceptions accordingly. In keeping with the idea that individuals’ justice perceptions are dynamic and likely to change over time (Hausknecht et al., 2011; Holtz & Harold, 2009), our results suggest that job seekers’ fairness heuristic was still malleable in the maintenance phase of recruitment.

On this basis, we reason that these recruitment interactions may serve as distinguishable events that can “push” job seekers toward deliberate judgments about their anticipated futures with recruiting firms. Perhaps in the context of recruitment, justice signals generate information that is interpreted and integrated into job seekers’ personal narratives of fit (Shipp & Jansen, 2011), defined as time-oriented chronicles, or stories, that connect the past and present with the future (see also Beach, 2010). According to Shipp and Jansen, for example, these crafted stories of fit over time may provide job seekers with answers to “why questions,” such as Why should I want to work here? and Would I fit in here? With regard to recruitment theory, our dynamic model results indicate that a focus on justice signals as a single event does not fully explain the phenomenological experience inherent in the maintenance phase of recruitment.

Managerial Implications

From a practical standpoint, our results support signaling theory and suggest that organizations provide signals through recruitment activities. It appears that the correspondence delivered to job seekers convey justice signals. Therefore, it is important for organizations to carefully consider the quality of interactions because they can influence organizational attitudes during the maintenance phase of recruitment. Our findings suggest that one way to accomplish this task and encourage the development of positive relationships early in the recruitment process is through the correspondence provided to job seekers immediately following application submission. Even initial correspondence sent to job seekers, which is often an automatic reply following application receipt, appears to influence job seekers’ reactions to hiring organizations. Organizations have control over recruitment procedures, and the characteristics of initial correspondence with job seekers likely affect organizational attitudes (Truxillo et al., 2004). Our findings are consistent with the selection decisions and explanations literature (see Shaw, Wild, and Colquitt [2003] and Truxillo, Bodner, Bertolino, Bauer, and Yonce [2009] for reviews) and suggest carefully planning correspondence with desired job seekers is a relatively low cost and potentially effective strategy that may allow organizations to positively influence job seekers’ attitudes. For example, Truxillo et al. confirmed the importance of carefully planning interactions with job seekers in a recent meta-analysis of the explanations received during the selection process and noted “employers
may be able to affect their attractiveness to job applicants by simply providing inexpensive explanations at opportune times” (2009: 356). Our findings indicate the same may be true regarding correspondence provided to job seekers following their employment application submission.

Potential Limitations and Future Research

We acknowledge several potential limitations of our research. First, our studies were limited to justice signals associated with recruitment contact episodes. It is important to acknowledge that other environmental cues encountered during recruitment may influence organizational attitudes, and more concrete organizational information may supplant justice signals over time (Connelly et al., 2011). Therefore, future researchers should examine the combined effects of perceived treatment early in the recruitment process and more objective job or organizational attributes on actual job choice decisions. It would be interesting to test the relative weights that job seekers give to recruitment fairness and other variables known to influence the recruitment process, such as recruiter/interviewer behaviors (Powell & Goulet, 1996; Stevens, 1997; Turban & Dougherty, 1992), job attitudes (Chapman et al., 2005), and organizational attitudes (Turban & Keon, 1993). We encourage future research to address these important questions.

Another possible limitation relates to the samples used in all three studies, as most participants were not currently employed. Therefore, we encourage future researchers to extend our findings beyond soon-to-be college graduates. Additionally, the job market conditions at the time of Study 1 and Study 3 data collections may have influenced our results, as we collected these data before the recent economic downturn. Thus, the relationships between justice signals and organizational attraction may not be as strong when job market conditions make it difficult to find employment. If true, the present findings should be viewed as conservative estimates, and we encourage future research that considers economic conditions on job seeker reactions.

Specifically, research that investigates the possibility that fair treatment influences job seekers’ organizational attitudes less when job prospects are rare is needed.

Finally, future research should attempt to “triangulate” our findings in both laboratory and field settings using behavioral measures. Research on applicant reactions has found mixed results in the lab versus field (Hausknecht et al., 2004) with field settings tending to show stronger results because participants are more personally involved (Truxillo et al., 2009). While we incorporated a series of studies that helped to triangulate this issue, it would be helpful for future research to create both a lab and field study using the same participants to further disentangle these effects.

In summary, we provide evidence of job seekers’ attempts to reduce uncertainty during organizational recruitment. For organizational scholars, our work suggests that one fruitful avenue of future inquiry involves building upon our efforts to incorporate additional theory surrounding the recruitment process over time. For scholars who test such theory, our work demonstrates the importance of testing hypotheses over multiple time periods to fully understand recruitment dynamics. For human resource practitioners, our work warns that organizations should not neglect the formal and informal cues projected to applicants throughout the recruitment process.

REFERENCES


Beach, L. R. 2010. The psychology of narrative thought:
How the stories we tell ourselves shape our lives. Bloomington, IN: Xlibris.


Highhouse, S., Hoffman, J. R., Greve, E. M., & Collins,


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