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# JOB APPLICANTS' TESTING AND ORGANIZATIONAL PERCEPTIONS: THE EFFECTS OF TEST INFORMATION AND ATTITUDE STRENGTH

by

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### A DISSERTATION

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# JOB APPLICANTS' TESTING AND ORGANIZATIONAL PERCEPTIONS: THE EFFECTS OF TEST INFORMATION AND ATTITUDE STRENGTH

# Andrew L. Noon, Ph.D. University of Nebraska, 2006

Advisor: Wayne Harrison

This quasi-experimental study examined job applicants' organizational perceptions prior to and immediately after completing pre-employment assessments, and after the hiring decision was announced. Participants were actual applicants (N = 262) for non-exempt level data processing positions at a medium-size Midwestern insurance company. As part of the selection process, applicants completed both a cognitive ability test and a personality inventory. Information about the tests was used as a manipulation. Approximately half of the participants received information prior to completing the assessments that explained the tests' content, job relatedness, and validity, and a description of the testing process, while the other half were not provided with this information. Applicant perceptions were measured prior to testing, immediately after testing, and after hearing about the hiring decision (approximately 30 days after testing). Applicants' general test fairness perceptions, attitude strength antecedents, information condition, hiring decision, as well as a number of control variables, were used as predictors of applicants' organizational attraction and word-of-mouth behavior. Testing information was significantly related to organizational attraction at each measurement phase and to recommendation behaviors after the hiring decision was announced. Additionally, information provision influenced applicants' posttest organizational attraction through its impact on applicants' interactional justice perceptions. Applicants' organizational knowledge and job importance, two attitude strength antecedents, were positively related to applicants' pretesting organizational attraction. The attitude strength antecedents and test information interacted to influence applicants' post-hiring decision organizational attraction and word-of-mouth behavior, such that applicants receiving

information whose attitude strength was high were more strongly attracted to the organization and engaged in more word-of-mouth behavior. This research indicates that providing job applicants with pretesting information increases their attraction to the organization and their pro-organizational behaviors. Both practical and theoretical implications of the findings are discussed.

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### Chapter I

#### Introduction

Historically, the preemployment testing literature has focused on the psychometric characteristics of assessment instruments, such as validity, test bias, and utility. Much of the research has embraced the "prediction paradigm" and has focused on ways to develop assessments that maximize predictive ability (de Wolff, 1993). Organizations now have access to assessments that enable them more accurately to identify quality applicants, thus leading to greater selection utility. As a result, organizations attempting to make successful hiring decisions will continue to use the most valid selection tools, which often include tests (Cascio, 1991). A recent survey by the American Management Association (2004) indicates the popularity of corporate preemployment testing. In the survey, 63% of American companies indicated they have incorporated formal preemployment tests, such as cognitive ability tests and personality inventories, into their applicant screening process.

Despite the long history and increased usage of preemployment assessments, researchers only recently have begun examining how applicants actually react to completing them. Generally, reactions have not been positive. Schmit and Ryan (1997) indicated that one out of every three Americans have unfavorable attitudes towards employment testing. Similarly, Rosse, Ringer, and Miller (1996) found in a simulated applicant situation that individuals preferred a hiring process that excluded testing. In addition, hiring processes containing interviews are viewed less favorably when combined with a personality test (Harland, Rauzi & Biosiotto, 1995; Rosse, Miller & Stecher, 1994). These negative test perceptions have significant implications for the organization if they alter applicants' opinions of the organization.

For example, research findings indicate that the testing process impacts several organizational outcome variables, including organizational attraction (Macan, Avedon, Paese, & Smith, 1994), job acceptance intentions (Ployhart & Ryan, 1998), recommendation intentions (Gilliland, Groth, Baker, Dew, Polly, & Langdon, 2001; Ployhart & Ryan, 1998; Smither, Reilly, Millsap, Pearlman, & Stoffey, 1993), and

purchasing intentions (Macan et al., 1994). Preemployment tests provide organizations with a serious dilemma: how can organizations administer assessments in order to take advantage of their predictive capabilities without offending the applicants they are trying to attract? With the increasing war for top quality talent, organizations must develop recruiting and selection processes that attract rather than drive away highly qualified individuals.

Recently, researchers have stressed the importance of viewing selection as a social process, in which the organization's relationship with the applicant is a paramount concern (Derous & De Witte, 2001; Herriot, 1989, 2002; Schuler, 1993). These researchers suggest the importance of treating applicants with fairness, dignity and respect during the recruiting and selection process. To further this effort, Gilliland (1993, 1995) proposed a model of test taker reactions suggesting that fair selection practices and selection outcomes impact both applicants' perceptions of the testing process and their view of the organization. Although there exists support for some aspects of Gilliland's model, researchers have suggested few practical ways to administer a preemployment test that leaves an applicant feeling the process was fair and appropriate.

In the organizational justice literature, information provided through explanations and justifications has been one way to improve fairness perceptions in spite of negative outcomes (Bies, 1987, Bies & Shapiro, 1988; Shaw, Wild, & Colquitt, 2003).

Information about the testing process is something that matters a great deal to job applicants (Kluger & Rothstein, 1993; Ployhart & Hayes, 2002). In fact, applicants expect to receive information about many aspects of the testing process: what a test measures, why it is necessary, who sees the results, and how it will be used (Ployhart & Hayes, 2002). Receiving informative pretesting information should lead to applicants viewing their treatment and the organization's attractiveness more favorably (Gilliland, 1993). Pretesting information is a quick, cost-effective, and thus a practical step that every organization can take to help improve perceptions of testing; unfortunately, it is also often neglected (Lounsbury, Bobrow, & Jensen; 1989).

Even when potentially fair selection practices are administered, there is evidence suggesting that selection processes may not affect applicants' view of the organization in

every situation. In fact, other variables, such as an applicant's initial job and organizational attraction, show a stronger relationship with posthiring decision organizational attraction than do test fairness variables (Macan et al., 1994; Ployhart & Ryan, 1998). To date, no research has explicitly examined how the strength of applicants' initial attitudes may bias applicants' evaluation of the selection process. This is surprising considering the wealth of research in the attitude strength literature that suggests that strong attitudes are resistant to incongruent information and bias information processing of subsequent information. The assumption is that when an individual has a strong attitude towards the organization prior to testing, the applicant may be relatively unaffected by their treatment during the testing process. On the other hand, if the applicant does not have a strong view of the organization, the applicant's treatment during the testing process may have a stronger influence on his/her attraction to the organization. This interaction of the applicant's initial attitude strength and test fairness has not been examined to date in the test taker reaction literature. I will examine how three attitude strength variables, job and organizational knowledge, job importance, and attitude certainty, interact with test fairness to affect posttest and postdecision organizational perceptions.

My goal is to add to the test-taker reaction research literature in three main ways:

- (a) examining how thorough pretesting information affects applicants' perceptions of the testing process and the testing organization;
- (b) examining how applicants' attitude strength affects applicants' perceptions of the organization;
- (c) examining how applicants' attitude strength interacts with assessment information to affect their attitudes towards the organization.

In the chapters that follow, I will review: (a) the organizational impact of applicant test perceptions; (b) the fairness variables that affect test taker reactions; (c) the impact of test information on test taker reactions; and (d) the relationship between pretesting attitude strength and test perceptions.

### **Chapter II**

### **Testing and Organizational Perceptions**

Preemployment testing is becoming a common selection technique organizations use to evaluate applicants' knowledge, skills, and abilities. As stated previously, applicants have generally disliked being tested as part of a selection process (Schmit & Ryan, 1997). To the extent that these negative testing perceptions are generalized to the organization, preemployment assessments can have a significant negative effect for the organization. In this chapter, I will specifically review prior research examining the relationship between applicants' test reactions and their subsequent perceptions of the organization. The chapter will begin with a short review of relevant recruitment research. Specifically, it will examine how recruiter behaviors affect applicants' view of the organization. Next, I will review how test reactions affect three types of organizational perceptions: (a) organizational attraction and corporate image; (b) pre-hire intentions and behaviors; and (c) post-hire attitudes, intentions and behaviors. The chapter will conclude with a brief summary and conclusion.

#### Recruitment Research

The recruiting and selection process is a two-way interaction between the applicant and organization; both parties gather information about the other in order to determine the adequacy of fit (Bertz & Judge, 1994). Organizations use the recruiting process as an opportunity to gather information about the applicant's knowledge, skills, and abilities to determine job fit, while the applicant uses the recruiting phase to gather information about the organization's characteristics in order to evaluate the congruence between the organization's advantages and the individual's needs. Unfortunately, organizational information that applicants need to truly evaluate the merits of an organization and a job opportunity is often lacking, thus leaving the applicant with little or no knowledge about the organization (Lind, 2001).

In the absence of direct information about the organization, applicants will use early experiences with the organization as a signal for unobservable characteristics (Rynes & Miller, 1983). For example, treatment during recruiting and selection provides a basis on which the applicant can build an opinion about what the broader organization is like,

without gathering credible information about the company's policies or culture (Rynes, 1993, Rynes & Barber, 1990; Rynes, Bertz, & Gerhart, 1991; Schwab, Rynes, & Aldag, 1987). Rynes and Barber (1990), in a proposed model of organizational attraction strategies, suggest that reactions to recruitment can have a positive impact on various preand post-hire outcomes, such as general organizational image, employee retention, and future patronage. Additionally, others have suggested that selection processes impact additional intentions and behaviors, such as job acceptance, recommendations, job performance, and job satisfaction (Gilliland, 1993).

The recruiting research has found that recruiter behavior does in fact have a substantial impact on how applicants view the organization. Recruiters, through their interactions with job applicants, influence not only applicants' attraction to the organization but also their intentions and behaviors toward the organization. Rynes and Miller (1983) were some of the first researchers to examine how people evaluate recruiter behavior and the impact it has on reactions to the organization. During their first experiment, 133 undergraduate students were instructed to view four videotapes of an interview between a recruiter and a job applicant. The researchers manipulated the recruiter affect (e.g., eye contact, smiles) and job information (high and low specificity). Individuals then rated a series of organizational relevant variables (e.g., acceptance of second interview and organizational attraction). Recruiters who presented greater positive affect were perceived by applicants to be better representatives of the organization and were more likely to influence applicants to endorse a second interview, to endorse a job offer, to accept a second interview, and to believe that the organization treats its employees well.

Rynes et al. (1991) continued in a similar vein of research by conducting a qualitative analysis study that examined applicants' reactions to job interviews. In their study, 41 undergraduate students who were currently participating in job interviews were asked to describe their experiences and reactions to the organization's interviewing process. Participants identified three variables – job characteristics, interactions with formal organizational representatives, and contacts with other people already part of the organization – as the variables responsible for determining early fit with the organization.

Job applicants were more likely to form negative impressions about the organization based on the recruiter or recruitment process than they were to form positive impressions. Additionally, based on these impressions of the organization, applicants were inclined to form negative attributions about the organization (e.g., disorganized organization) based on their recruitment experience.

In a more recent study, Turban, Forret, and Hendrickson (1998) developed a model of applicants' attraction to organizations. Specifically, their model examined how organization reputation, job and organizational attributes, and recruiter behaviors influence organizational attraction. Three hundred sixty-one job applicants completed surveys before and after an on-campus interview. Recruiter behavior was predicted to have both a direct effect and an indirect effect on organizational attraction through job and organizational attributes. The evaluation of the model indicated that the recruiter behavior did not have a direct effect on organizational attraction. Instead, recruiters actually improved applicants' organizational attraction by improving their perceptions of the attributes of both the job and the organization. These results are in direct support of the proposed signaling effect of the recruiting process.

### Preemployment Testing Literature

As can be seen through the recruitment literature, applicants' perceived treatment by the recruiter influences their organizational impressions. Preemployment testing is another opportunity for organizations to interact with applicants, and thus is another chance for the organization to influence applicants' perceptions of the organization. Recent literature suggests that the preemployment testing process, namely assessment fairness, can influence applicants' perceptions of the organization. In the next section, I will examine how testing has been shown to affect three categories of applicant reactions:

(a) organizational attraction and corporate image, (b) pre-hire intentions and behaviors, and (c) post-hire attitudes and behaviors.

Organizational attraction. Applicant attraction is extremely important for organizations. First, enhancing applicant attraction will improve the utility of the organization's selection process. Greater attraction leads to applicants' willingness to remain in the selection process, and if it helps keep top candidates from self-selecting out

of the selection process, it will have positive economic ramifications (Cascio, 1991; Murphy, 1986). Second, applicant attraction may reduce recruiting costs through increased applicant recommendations and reapplications, thus increasing applicant pools (Rynes & Barber, 1990). This may help lower recruiting costs. Third, applicant attraction may impact post-selection behaviors such as future organization patronage (Macan et al., 1994). Continued and new patronage is extremely important to consumer-based companies. It would be extremely detrimental to an organization to have job applicants refuse to purchase a company's products because of their treatment during the selection process.

Organizational attraction is a complex phenomenon with many antecedents and tends to be strongest when there is a close "fit" between the organization's characteristics and the applicant's needs (Bertz & Judge, 1994). Research indicates that a wide variety of organizational and job characteristics such as location, organizational reputation, and job duties influences applicants' attraction to the organization (Turban & Keon, 1993). In addition, organizations' human resource practices such as compensation, career potential, and treatment during both recruiting and selection also contribute to an applicant's overall attraction (Rynes & Barber, 1990; Turban & Keon, 1993).

Therefore, it is not surprising to find that applicants' treatment during the assessment process influences their impressions of the organization. Applicants tend to take into consideration the fairness of the testing process when evaluating an organization. Rynes and Connerley (1993) found that applicants who perceived a test to be fair were more likely to endorse the attractiveness of the organization. Testing information, a variable directly related to fairness perceptions, has also shown a strong relationship with organizational attraction. Mayer and Ployhart (2003) found that explanations for unfavorable hiring decisions help mitigate negative organizational perceptions for those rejected. Additionally, Truxillo and Bauer (1999) indicate that fair selection procedures impact current employees' perceptions of the organization when applying for promotions. In their study, police personnel participating in a competitive selection situation had more positive impressions of the organization when provided with a rationale for how the assessments were used in the promotion process. Additionally, two seminal studies in the test taker reaction literature further support a test fairness-applicant attraction relationship.

Macan et al. (1994) were some of the first researchers to examine the effects of applicant reactions on organizational variables. They used a field study to examine manufacturing applicants' perceptions of two commonly used assessments, a cognitive ability test and an assessment center. In addition to the cognitive ability test, applicants participating in Study 1 completed a questionnaire examining their perceived self-performance as well as their evaluation of the test's face validity, fairness and controllability. Applicants who rated the tests' face validity and fairness along with their own self-performance higher were more satisfied with the selection process, the job and the organization compared to those individuals rating these variables low. Test controllability had no significant influence on applicant's views of any of the three variables.

In their second study, Macan et al. compared applicant's reactions to the cognitive ability test to their reactions to an assessment center administered as the next step of the selection process. Complete data for both assessments was available for 149 job applicants. The assessment center was perceived to have greater face validity than the cognitive ability test. Face validity was able to predict satisfaction with the selection process, job liking and organizational attraction above and beyond the applicants' perceptions of these variables after completing the cognitive ability test. The test fairness predicted satisfaction with selection only, while applicant control and perceptions of performance had no influence on applicants' evaluation of the selection process, the job or the organization. The strengths of this study, specifically the large applicant sample, provide strong support for the importance of test perceptions when applicants evaluate organizations.

Despite the importance of these results, the study does contain two significant limitations. First, applicants' pretest perceptions of the job and organization were not gathered. Therefore, the posttest organizational perceptions may be inflated due to a failure to control for pretest reactions (Macan et al., 1994). Second, applicant reactions were not evaluated postdecision. It would be beneficial to understand how posttest evaluations of the organization are changed after receiving a positive or negative selection decision. To further help in the understanding of applicant evaluation of testing, Bauer,

Maetz, Dolen, and Campion (1998) have conducted an empirical study that eliminated the methodological limitations of Macan et al. (1994).

Bauer et al. (1998) examined how characteristics of testing fairness impacted individuals' perceptions of the organization. Applicants applying for an office position in a large organization's accounting department completed both a cognitive ability and a job knowledge test as part of the selection process. The study specifically examined the effects of five procedural fairness variables on applicants' perceptions of the organization: (a) information provided about the selection process; (b) whether an applicant felt he/she had a chance to perform; (c) treatment at the test site; (d) consistency of test administration; and (e) job-relatedness of the test. These fairness perceptions were gathered during three phases of the study: prior to, immediately after, and three weeks after testing (test results accompanied the questionnaire). The results indicate that the five fairness variables predict applicants' posttest organizational attraction even after controlling for pretesting organizational attraction, but as the authors point out, the  $R^2$ change was relatively small ( $\Delta R^2 = .07$ ) but not trivial. Interestingly, information provided about the test and treatment at the testing site were the only significant contributors to this prediction. The authors also examined how both the assessment fairness and the outcome favorability feedback affected organizational attraction. Not unexpectedly, outcome favorablility predicted applicant organizational attraction over and above pretesting organizational attraction perceptions. Specifically, applicants who passed the assessment held a more favorable view of the organization. Unlike posttest results, the five fairness variables did not predict organizational attraction over and above pretesting organizational attraction and outcome favorability. The results of this study indicate that perceptions of the testing process have some impact on the applicant's organizational attraction especially prior to the communication of the decision, but other variables such as the selection outcome and pretesting attraction may be more important to applicant's overall evaluation of the organization.

In addition to Bauer et al., other studies have found that testing reactions may have a limited effect on organizational attraction. Ryan and Sackett (1987) found no evidence that integrity tests, one of the least face valid assessments (Kravitz, Stinson, & Chavez,

1996), produced negative impressions of the organization. Additionally, Kluger and Rothstein (1993) found that four assessments (biographical data, cognitive ability, interviews and trainability tests), despite the differences in their perceived fairness, did not differ in their impact on applicant perceptions of the organization's image.

Pre-hire intentions and behaviors. Much research has shown the potential economic ramifications of preemployment tests for organizations (Cascio, 1991). A positive benefit of testing includes its ability to identify the top applicants, who when hired increase work productivity. Unfortunately, assessment utility cannot and will not be realized if the top applicants self-select out of the hiring process (Boudreau & Rynes, 1985). Therefore, testing processes that discourage top candidates from remaining in the selection process and accepting job offers must be avoided; such actions would have a significant negative impact on the organization.

The relationship between applicants' reactions to testing and their job acceptance intentions and behaviors has shown mixed results. Recent research with student samples suggests that procedural injustice experienced during testing reduces the likelihood that applicants will accept job offers. For example, Ployhart and Ryan (1998) found that test administration consistency influenced student reactions to a simulated selection situation. During the selection process, applicants received the exact amount of time allotted (consistent condition), more time than allotted (positive inconsistent), or less time than allotted (negative inconsistent) to complete the assessment. The applicants who received less than the allotted time felt that the testing process was unfair and indicated that they would be less likely to participate in future experiments conducted by the same researchers. The results of this study indicate that inconsistent testing processes not favoring the applicant will adversely affect reactions to testing. In a study by Smither, Millsap, Stoffey, Reilly, and Pearlman (1996), students reviewed recruiting materials from a hypothetical organization. The study manipulated both the compensation (average or high) and the selection method (job simulation, biodata inventory, or cognitive ability test). Using a path analysis, the authors found that the test's job-relatedness had an indirect effect on applicants' job pursuit intentions through the variables of fair selection, fair HR procedures, and organizational attraction. These two laboratory studies indicate that test

fairness can affect applicants' willingness to pursue relationships with the testing organization. Nevertheless, these findings may have limited generalizability to real world selection situations, considering the fact applicants were not part of a competitive selection process or a real testing situation.

Limited evidence for the relationship between test reactions and job acceptance intentions has been found in actual selection situations. Ployhart and Ryan (1997) examined psychology graduate school applicants' intentions to accept the school's admissions offer if extended. Individuals applying for graduate school were asked to evaluate both the process fairness and the outcome fairness of the application process. They found that individuals who perceived the selection process to be unfair lowered their intentions to accept the graduate school offer.

Despite the somewhat supportive findings, in real-word selection contexts the impact of preemployment testing has shown minimal effect on actual job acceptance behaviors. A series of studies by Ryan and her colleagues has examined the impact of assessments on applicants' withdrawal from the selection process. Schmit and Ryan (1997) found that fewer than 12% of the 618 interviewed police officer candidates withdrew prior to selection because of injustice felt about the selection process and only .6% specifically mentioned testing as a reason for withdrawal. Likewise, Ryan, Ployhart, Greguras and Schmit (1997) observed that justice-related issues during hiring displayed only modest associations to application withdrawal and even these were in the direction opposite to what was predicted. Additionally, other studies of civil service jobs have found little relationship between felt injustice with the selection process and applicant withdrawal (Ryan et al., 1997; Ryan & McFarland, 1997; Ryan, Sacco, McFarland & Kriska, 2000). Surprisingly, there is little evidence that testing impacts withdrawal behavior of individuals applying for civil servant positions. Withdrawal tends to result from specific individual issues (i.e., conflict with current work, transportation problems, job fit).

*Post-hire attitudes, intentions, and behaviors.* Ultimately, reactions to assessments are significant to the extent that they influence applicants' attitudes and behaviors towards the organization after the selection decision. Applicants' reactions are proposed to affect

such important post-hire attitudes and behaviors as organization recommendations, reapplication, future patronage, job performance, and on-the-job attitudes, including satisfaction and commitment (Gilliland, 1993; Rynes & Barber, 1990). Despite the supposed connection between applicants' treatment during the assessment process and subsequent interactions with the organization, the research again produces mixed results.

One effective and inexpensive way for organizations to expand their business is through customer word of mouth. Similarly, corporate image is enhanced when applicants recommend the organization as a quality organization. Smither et al. (1993) found that test characteristics, such as a test's perceived predictive validity and the potential for test score improvement, positively influenced applicants' willingness to recommend the organization. Additionally, applicants who receive consistent treatment during testing (Ployhart & Ryan, 1998), selection information about the hiring decision (Gilliland, 2001), and overall fair procedures (Ployhart & Ryan, 1997), are more willing to recommend the organization to others. Unfortunately, all of these studies examine applicants' recommendation intentions, and the test-taker reaction literature would clearly benefit from research examining how test fairness actually impacts recommendation behaviors.

Two additional organizational-relationship intentions are sometimes studied in the literature: reapplication intentions and purchasing intentions. Ployhart and Ryan (1998) found that applicants who were rejected for graduate school were more likely to re-apply if they felt the university used a fair process. Additionally, these same researchers found that undergraduate students intended to re-apply for a similar experiment if during the simulated selection process they were treated consistently (Ployhart & Ryan, 1997).

It has been proposed that applicants' reactions to the selection process may also spill over into their potential purchasing intentions (Rynes & Barber, 1990). To date, only one study has examined the relationship between test perceptions and future patronage intentions. Macan et al. (1994) found that a test's face validity and test fairness significantly predicted future purchasing intentions. Interestingly, the authors also found that job and organizational attraction were better predictors of purchasing intentions, predicting above and beyond test fairness variables. These results indicate that test

characteristics may be one of many variables impacting post-assessment intentions and behaviors (Greenberg, 2001; Macan et al., 1994).

The potential exists that treatment during selection may spill over into job performance and job attitudes. Despite this potential impact, research examining the link between assessment reactions and organizational-relationship variables for those hired has been sparse. Konovsky and Cropanzano (1991), in one of the few studies examining this issue, found that applicants who perceived an organization's drug testing as unfair were more likely to report lower satisfaction and less commitment to the organization. In another study, Singer (1992) surveyed a cross sampling of 233 individuals about the fairness of the selection practices they have experienced and then rated their later organizational commitment, job satisfaction, and perception of organizational effectiveness. Applicants who perceived the selection process as fair were significantly more committed, more satisfied, and more positive about company effectiveness.

Despite their apparent positive impact on job attitudes, test perceptions may not impact job *performance*. Gilliland (1994) examined how two justice variables, the test's job relatedness and selection information, would impact numerous organizational-relationship variables, including job performance. Gilliland found no relationship between test job relatedness and job performance. In contrast, there was a significant relationship between selection information and job performance, although the relationship was in the direction opposite to that hypothesized.

### Summary

The research reviewed indicates that applicants' test reactions affect their organizational-relationship attitudes and intentions in some situations. Specifically, applicants who perceive the testing process as fair are more likely to be attracted to the organization, to recommend the organization, to re-apply if rejected, and to possess positive attitudes once on the job. On the other hand, applicants' test reactions have shown little relationship with actual applicant and incumbent behavior. Specifically, test perceptions have little impact on both actual applicant withdrawal from the selection process or on-the-job performance. The literature also suggests that other variables such as initial perceptions of the job and organization and outcome favorability may have a

stronger effect on organizational perceptions than test fairness does. Organizations attempting to attract the most qualified applicants, to maintain a positive corporate image and to encourage applicants' future patronage should be cognizant of how the testing process influences these variables. With this in mind, the next section will review how applicants form reactions to tests based on organizational justice theory and how fairness perceptions impact applicants' preference for specific assessments.

### **Chapter III**

### **Organizational Justice and Test Perceptions**

Research discussed in the previous chapter indicates that selection processes frequently impact applicants' impressions of the organization. Research on applicants' perceptions of testing has been sparse until recently (Arvey & Sackett, 1993; Gilliland, 1993; 1995; Iles & Robertson, 1989; Schuler, 1993). Much of the test-taker research has concentrated on establishing the link between testing characteristics and applicants' reactions to them. This has resulted in numerous models and studies exploring how applicants react to testing, and this chapter will summarize much of this research. Issues of fairness of selection procedures, although not always explicitly mentioned, have been part of almost all test-taker reaction models. Therefore, I will begin this chapter by reviewing organizational justice theory. Next, I will review the early models of test taker reactions and Gilliland's (1993) widely accepted model of applicant test reactions based on organizational justice theory. I will end by examining applicants' reactions to specific types of assessments.

Review of Organizational Justice Research

Organizational justice theory examines individuals' reactions to reward allocation situations. Most of the early research on justice emphasized individuals' reactions to outcome decisions, referred to as distributive justice (Folger & Cropanzano, 1998).

Individuals use three norms to establish the fairness of an outcome: equity, equality, and need (Adams, 1965; Deutsch, 1975). More recently, researchers have begun examining the fairness of decision-making processes, referred to as procedural justice. Greenberg (1990b) proposed that procedural justice was composed of three factors: (a) formal procedural characteristics; (b) explanations of the decisions and procedures; and (c) the interpersonal treatment of the individual. Bies and Moag (1986) attempted to expand the two-factor model of justice by proposing a separate factor called interactional justice. Interactional justice is defined as the interpersonal treatment an individual receives during a decision process and comprises the informational and interpersonal components of procedural justice (Bies & Moag, 1986). The three-factor model of justice has not come without controversy. Some researchers have embraced the new conceptualization

(Skarlicki & Folger, 1997) while others continue to view interactional justice as a component of procedural justice (Tyler & Bies, 1990). Then, to cloud understanding of organizational justice's make-up further, Greenberg (1993) proposed the existence of a four-factor structure of organizational justice. He suggested that the components of interactional justice (information and interpersonal treatment) were actually separate factors.

A recent meta-analysis by Colquitt, Conlon, Wesson, Porter, and Ng (2001) was conducted to try to clear up the matter, evaluating the unique effects of the different forms of justice. The meta-analysis reviewed 183 studies published between 1975 and 1999. The results support Greenberg's (1993) proposed four-factor model. Thus, the empirical evaluation supports the distinctiveness of distributive, procedural, informational, and interpersonal justice. In the sections that follow, I will provide a brief overview of the research literature supporting the four justice factors.

Distributive justice. One of the most well-established theories of distributive justice has been Adams' (1965) equity theory. Equity theory states that individuals judge the fairness of the outcomes they receive by comparing their input/outcome ratio to the input/outcome ratio of a referent other. Individuals will perceive their outcomes as fair to the extent that the ratios of the individual and referent other are in balance. Inequality between the two proportions results in feeling of either anger (when the individual receives the lower proportion) or guilt (when the individual receives the larger proportion). Individuals are motivated to balance the equity equation by actually or cognitively altering the referent other's or their own inputs or outcomes (Adams, 1963).

People evaluate the fairness of outcomes through other norms besides equity. Deutsch (1975) proposed that people might use the distributive rules of equality or need to evaluate distributive justice. People applying the equality norm believe that people should receive the same outcomes regardless of their individual inputs. The need norm is achieved when people are rewarded based on need and not on quantity of input. Extensive research examining equity has provided research supporting each of these three distributive rules (Cohen, 1987).

Procedural justice. Unfortunately, organizations possess limited resources (i.e., promotions, pay, and job opportunities) resulting in people receiving negative, and therefore potentially unfair, outcomes. When presented with an unfair outcome, people tend to scrutinize the decision processes to determine fairness (Cropanzano & Wright, 2003). In the context of the four-factor model of justice, procedural justice comprises only the formal characteristics of procedures (Colquitt et al., 2001). Two research veins have been critical in defining procedural justice.

Thibaut and Walker (1975), through a series of studies on dispute-resolution procedures, were instrumental in defining some of the first components of fair procedures. The authors used a legal perspective to examine process fairness. Individuals were given two types of dispute-resolution procedures that differed in the type of control they had over the proceedings: a) process control – the level of control disputants were offered over the procedures used to settle the grievance, and b) decision control – the level of control the individual had over the outcome decision. Disputants perceived the legal decision to be fairer to the extent they were given either process control or decision control.

In spite of the importance of process control, other structural variables also affect the fairness of procedures. Leventhal (1980) proposed six procedural rules that people use to evaluate the perceptions of outcome allocation procedures. The six rules are: (a) consistency – allocating procedures should be consistent across people and time; (b) bias suppression – personal self-interest and blind allegiance to narrow preconceptions should be prevented; (c) accuracy – decisions should be made on as much information as possible; (d) correctability – opportunities must exist to modify and reverse decisions; (e) representativeness – the allocation process must represent the concerns of all important subgroups and individuals; and (f) ethicality – the allocation process must be compatible with prevailing moral and ethical standards. People expect decision makers to use fair and appropriate procedures. When presented with a negative outcome, people will evaluate a procedure's formal characteristics to determine its fairness.

Fair procedures tend to carry greater weight when an individual receives a negative outcome. This results in a distributive justice x procedural justice interaction called the fair-process effect (Lind & Tyler, 1988). In the presence of a positive outcome, people are

not motivated to examine the fairness of the procedures because of the attainment of the outcome. On the other hand, the individual who receives a negative outcome is motivated to make sense of the situation by evaluating the fairness of the procedures. When the procedures are perceived to be fair, the individual will evaluate a negative outcome more favorably than will an individual receiving unfair procedures and negative outcomes. The fair-process effect illustrates that "outcomes and procedures work together to form a sense of injustice. A full understanding of fairness cannot be achieved by examining the two constructs separately. Rather, one needs to consider the interaction between outcomes and procedures" (Cropanzano & Folger, 1991, p. 79). The fair-process effect is observed frequently in organizational justice research across many different organizational settings (Brockner & Wiesenfeld, 1996).

Informational justice. Until recently, the primary thrust of organizational justice research was confined to research examining distributive justice and procedural justice. Bies and Moag's (1986) advancement of interactional justice lent focus to the importance of the interpersonal treatment received during resource allocation situations. One of the two components of interactional justice focuses on the information given to educate people about the procedures used and the outcomes received in reward allocation situations. Significant research supports the proposal that explanations can improve peoples' perceptions of a negative outcome, especially if the explanation is seen as adequate (Bies, 1987; Bies & Shapiro, 1998; Bobocel & Farrel, 1996; Sitkin & Bies, 1993). A more thorough examination of the importance of procedure and outcome information is provided in the next chapter in conjunction with the research on selection information.

Interpersonal justice. Not only do people expect fair outcomes and procedures that are communicated adequately, but they also expect to be treated with dignity and respect. Interpersonal justice suggests that people's fairness perceptions are impacted by the interpersonal manner in which procedures and information are presented (Colquitt, 2001; Greenberg, 1993). The assumption is that procedures can be fair in terms of adherence to the procedural rules and adequacy of explanations, but if they are not presented in a sensitive manner, injustice will be felt. A study by Mikula, Petri, and Tanzer (1990) examined what types of events in everyday life provoked feelings of injustice. Participants

were asked in an open-ended format to describe a recent unjust event. Many of the reported injustices were related to interpersonally unfair treatment. The categories of behaviors that individuals found interpersonally unfair were (a) inconsiderate, impolite or aggressive behavior; (b) treatment that violates personal dignity; and (c) acts that indicate lack of loyalty from another person. The implication of this study is that people in their daily lives are aware of their interpersonal treatment and perceive poor interpersonal treatment as unfair.

In summary, people evaluate the fairness of resource allocation situations. They employ fairness rules based on the outcome, the procedure, the information, and the interpersonal treatment. Because hiring is a decision in resource allocation, it is possible that people react to selection situations based on justice perceptions. Although not specifically framed in organizational justice theory, the early models of test taker reactions do incorporate organizational justice concepts proposed to improve peoples' reactions to testing.

Early Research on Test Taker Reactions

Despite being one of the most overlooked research areas of preemployment testing (Schmitt & Gilliland, 1992), recent research on test taker reactions indicates a renewed interest in this area. Early models of test taker reactions proposed numerous testing characteristics that researchers suggested would influence applicants' reactions to the selection process and perceptions of the hiring organization. Unfortunately, none of these models was grounded in a comprehensive theory and thus provoked no wide research base. Regardless, these models provide the foundation for the most widely accepted model of test taker reactions, that proposed by Gilliland (1993).

The early models of applicant reactions stress the importance of four factors: (a) test characteristics, (b) information provisions, (c) applicant treatment, and (d) situational variables. Robertson and colleagues proposed one of the earliest conceptualizations of applicant reactions. In their model, its proposed that selection methods can have a strong psychological impact on individuals, and that the chosen method will impact test taker reactions (Robertson & Smith, 1989). This in turn will ultimately affect numerous applicant perceptions and behaviors, such as work performance, organizational

commitment, turnover, and psychological well-being. Iles and Robertson (1989) hypothesized that reactions to the selection method are most impacted by the following characteristics: (a) test job-relatedness, (b) type and degree of feedback give to candidates, (c) sympathetic treatment provided during process, and (d) invasiveness of questions.

An additional model developed by Schuler (1993) supports and expands the model developed by Iles and Robertson. Schuler (1993) proposed a model of "Social Validity" that outlines four selection characteristics that impact individuals' experience and reactions to the process. In the model, Social Validity is achieved to the extent that (a) information about the job and organization is available (Information); (b) applicants have the opportunity to perform without coercion (Participation); (c) the selection process is transparent (Transparency); and (d) feedback regarding performance is made available (Feedback).

Arvey and Sackett (1993) developed a more integrated model of applicant reactions that incorporated additional applicant considerations. In their model, they propose that applicant fairness results from the selection system content (e.g., job-relatedness; thoroughness of knowledge, skills, and abilities coverage), an understanding of selection system development, the administration of the selection process, and the organizational context (e.g., selection ratio).

Though not specifically proposed as a model, additional early studies do provide some insights into applicant's psychological reactions to selection methods. Kluger and Rothstein (1993) found that individuals react differently to assessments based on a host of test characteristics (e.g., difficulty, test performance improvability, and fakeability). Interestingly, these are variables that have never been integrated into any applicant reaction model. Additionally, Bies and Moag (1986) discovered that interpersonal interactions affect applicants' reactions to selection processes. In an open-ended format, participants were instructed to describe both fair and unfair recruiting experiences. Results indicate that applicants expected to be treated with respect and to be given quality communication. Specifically, the study found four fairness criteria: (a) Truthfulness – receiving open and honest communication; (b) Respect – avoiding rudeness during recruitment; (c) Propriety of Questions – asking no questions that are inappropriate; and (d) Justification – providing

adequate explanations for the hiring decision. Although not specifically examining the testing process, this study does provide insights into the importance of communication and treatment during the selection processes.

Although these early models and research studies contribute significantly to understanding applicants' perceptions of selection methods, they contributed little to the understanding of the psychological processes underlying applicant perceptions (Gilliland, 1993). This limitation, combined with a lack of theoretical support imposed serious limitations on these models. Gilliland (1993) attempted to develop an applicant reaction model that would remove the limitations of prior models. Gilliland (1993, 1995) integrated many of the variables proposed by these early models into a model based on organizational justice theory.

Organizational Justice and Test Perceptions

Gilliland's (1993) model of test perceptions proposes a framework for applicants' psychological reactions to testing based on organizational justice theory. This model has provided the most coherent theoretical framework, and thus has become the most common conceptualization of test-taker perceptions. The model proposes that applicant reaction to testing and perception of the organization is based on the fairness of the selection process and the selection outcome. The sections that follow will provide a review of the major components of Gilliland's (1993) model along with empirical support for his propositions.

In his model, Gilliland proposes that three distributive justice rules and 10 procedural justice rules impact how applicants react to testing processes and ultimately evaluations of the organization. Research examining the major components of Gilliland's (1993) model is presented below.

Distributive justice. Selection decisions are expected to be very important for most individuals and, based on the outcome, can have a psychological impact on the candidate. Gilliland (1993) proposed that applicants evaluate the fairness of the hiring decision based on three distributive justice rules: equality, equity, and needs. To date, there has been no specific research in which investigators have examined the normative evaluation applicants make to evaluate the fairness of selection outcomes. Instead, much

of the research has used general measures of distributive justice (e.g., "I feel the hiring decision was fair.").

Similar to results found frequently in the organizational justice literature, applicants who receive a negative outcome are more likely to view the outcome as unfair. Specifically, rejected applicants perceive the outcome fairness to be significantly less than applicants who are selected (Gilliland, 1994; Ployhart & Ryan, 1998). Unfortunately, organizations have limited positions available, which results in many applicants being rejected by the organization. In order to try to maintain a positive corporate image for all of the rejected applicants, organizations must find other ways to enhance nonhires' perceptions. As described in the organizational justice literature, one possible way to impact test and organizational perceptions is with fair selection procedures.

Procedural justice. Selection decisions, just like other resource allocation decisions, are very important to people. As a result, applicants are very cognizant of the fairness of the selection procedures used in making the hiring decision. The 10 procedural justice rules highlighted in Gilliland's (1993) model can be divided into three categories: formal test characteristics, interpersonal treatment, and selection information. In the sections that follow, I will elaborate on each of the 10 individual procedural justice rules.

Formal test characteristics. One of the most-often examined procedural rules studied in the test taker reaction literature is the *job-relatedness of tests*. A test is perceived to be job related to the extent that it measures the content of the job (content validity) or appears to be predictive of future job performance (criterion-related validity) (Gilliland, 1993). Job-relatedness is similar to Schuler's (1993) concept of transparency in that it should be easy for an applicant to understand how a job-related test aligns with the job. Research on the impact of test job-relatedness indicates that it is one of the most important variables affecting fairness perceptions. In an evaluation of individuals' reactions to 13 selection tools, Rynes and Connerley (1993) instructed students to evaluate the content validity of the assessments along with their reactions. The results indicate that applicants have more positive evaluations (faith in employer's ability to interpret the test, belief that employer needs information, and belief about self-performance) of assessments

that they perceive to be more content valid. Additionally, assessment centers (Dodd, 1977) and work samples (Schmidt, Greenthal, Hunter, Berner, & Seaton, 1977), both highly jobrelated, are viewed very positively by job applicants. Additional empirical studies have shown a strong link between applicants' perceptions of test-job relatedness and their perceived fairness of the test (Chan, Schmitt, Jennings, Clause, & Debridge, 1998; Gilliland, 1994; Ployhart & Ryan, 1998; Smither et al., 1993).

The second formal test characteristic is *chance to perform*. Applicants want assessment techniques that will allow them the opportunity to display their true abilities and possess less favorable views of selection procedures that limit their ability to perform. For example, applicants tend to have a more positive view of unstructured interviews than structured ones (Bazerman, Schroth, Shah, Diekmann, & Tenbrunsel, 1994; Latham & Finnigan, 1993). These results may be due to applicants' perceptions that unstructured interviews allow applicants the ability to provide more information about their strengths, thus giving the perception that applicants have a greater opportunity to perform (Cropanzano & Wright, 2003).

The third formal test characteristic is *reconsideration opportunity*. It is proposed that applicants want organizations to have procedures in place to correct mistakes if and when they occur. This is similar to Leventhal's (1980) procedural rule of correctability. Cropanzano and Konovsky (1995) found that individuals held a more favorable view of a drug-testing program when a formal grievance process was available. The sparse research on the importance of reconsideration opportunities indicates that applicants and incumbents may have different opinions on the matter. For example, Gilliland (1995) found that, compared to the other procedural variables, reconsideration opportunities were of little importance to applicants. On the other hand, McEnrue (1989) found that incumbents applying for a promotional position felt reconsideration was very important.

The final formal test characteristic proposed by Gilliland (1993) is *consistency of administration*. Applicants expect to receive the same procedures and treatment as every other applicant. In a survey research study, Singer (1990) attempted to identify how applicants determined the fairness of selection practices. Two samples of individuals from New Zealand were asked to write one characteristic that makes a selection process fair.

Across both samples, consistency of process was identified as a key determinant of fairness. In an evaluation of the importance of consistency during testing, Ployhart and Ryan (1998) examined the effects of positive inconsistency, negative inconsistency and consistent procedures. The results indicate that applicants viewed consistent procedures (receiving designated time to complete assessment) as fairer than negative inconsistent procedures (receiving less time than designated). Interestingly, positively inconsistent procedures (receiving more time than designated) did not significantly differ from the consistent condition.

Interpersonal treatment. The first interpersonal treatment variable is the interpersonal effectiveness of the administrator. In general, the organizational justice literature indicates that people want to be treated with dignity and respect (Bies & Moag, 1986), and this is no different in selection settings. Steiner and Gilliland (1996) found that both French and Americans prefer friendly treatment during the assessment process.

The majority of the work on interpersonal treatment has come from the recruiting literature. Applicants expect an organization's recruiters to treat them with respect (Bies & Moag, 1986). Additionally, applicants have a more favorable view of an organization if the interviewer is warm and thoughtful (Liden & Parsons, 1986).

The second interpersonal treatment variable is *propriety of questions*. Applicants have limits to the amount of and type of personal information that should be gathered about them during the selection process. Job applicants usually view highly invasive selection procedures such as graphology, polygraph tests, and personality inventories less favorably (Kravitz et al., 1996).

The third interpersonal treatment variable is *two-way communication*. Applicants expect that they will be given an opportunity to present their skills and abilities to the organization. Additionally, they expect the organization to divulge information about the selection process, the organization, and the job. For example, the presentation of a realistic job preview has been shown to have a positive impact on applicants' views of the organization (Wanous, 1980). Singer (1990) found that two-way communication is one of the most important variables applicants use to evaluate selection fairness. Yet, almost no

empirical research has examined how communication during the testing process impacts applicant reactions.

Explanations. Oneway people judge the fairness of their treatment is by evaluating the honesty and the thoroughness of information they receive during the explanation of negative outcomes. The selection process provides multiple opportunities for organizations to communicate with applicants. Pretesting communication helps applicants understand the selection method and process. Additionally, information is needed postdecision to help applicants understand the hiring decision. Three procedural rules fall into the explanation category.

The first explanation procedural rule is *feedback*. Feedback is made up of two aspects: (a) information about the selection outcome and (b) specific information about the individual's assessment performance. Applicants probably expect feedback because they perceive that it will help identify areas of improvement which, if corrected, will enhance their future selection opportunities. In order for this information to be helpful, it must be detailed (Schmitt & Coyle, 1976). Additionally, applicants have a less favorable view of organizations that don't keep them informed of their employment status and provide feedback on the hiring decision (Arvey, Gordon, Massengill, & Mussio, 1975; Rynes et al., 1991). Applicants receiving a thorough explanation for the hiring decision perceive greater fairness than those who do not (Bies & Shapiro, 1988; Bobocel & Farrel, 1996; Gilliland et al., 2001; Ployhart, Ryan, & Bennett, 1999).

Selection information is the second explanation procedural rule. Assessments present some dilemmas for organizations. They are often not well accepted by applicants (Schmitt & Ryan, 1997). This may be partly due to applicant's lack of understanding of what the test measures, how it is used, and how it will be scored (Ployhart & Hayes, 2002). It is proposed that applicant understanding of assessments can produce positive reactions (Schuler, 1993; Thornton, 1993). Research indicates that selection information presented before the testing process will impact fairness perceptions. In an evaluation of drug-testing procedures, Cropanzano and Konovsky (1995) found that rejected individuals felt the procedure was fairer to the extent they received advanced notice about the testing. Additionally, selection information that both explains the testing process and provides

some understanding of the test's job relatedness produces greater perceptions of procedural justice (Truxillo, Bauer, Campion, & Paronto, 2002).

The third procedural rule of the explanation category is *honesty*. Honest communication is a key determinant in applicant's perception of selection fairness (Singer, 1990). Bies and Moag (1986) found that the most-often identified (34% of participants) reason for felt injustice during the recruitment process was lack of truthfulness, which was defined as lack of open and honest communication. To date no research has examined how honesty impacts fairness perceptions in an actual testing situation.

Interaction of distributive justice and procedural justice. The importance of procedural justice is magnified greatly by the fact that most applicants applying for an open position are rejected. Gilliland (1993) proposes that distributive justice and procedural justice perceptions interact to affect applicant's reactions. Specifically, for rejected applicants, perceived fair procedures are hypothesized to improve applicant reactions more than unfair procedures, and for selected applicants the fairness of the procedures will not affect organizational perceptions.

This is the same pattern as the fair process effect (Lind & Tyler, 1990) found frequently in the organizational justice literature (Brockner & Weisenfeld, 1996).

The studies examining the distributive fairness x procedural fairness interaction produced mixed results. In support of the proposed interaction, Gilliland (1994) found that rejected applicants were more likely to recommend the experimenter's project when given an explanation for the selection process, while the explanation did not change selected applicants' evaluations. Ployhart and Ryan (1998) examined how administration consistency and hiring decision interacted to predict several organizational relationship variables (e.g., recommendation intentions and reapplication intentions). Contrary to predictions, no significant interactions were found for any of the predicted variables. Additionally, Ployhart and Ryan (1997) actually found a Process Fairness x Outcome Fairness interaction in the opposite direction to that hypothesized. Individuals applying for graduate school completed a questionnaire about the process and outcome fairness of the selection process. This study found that applicants held greater recommendation intentions and reapplication intentions when both the procedures and the outcome were perceived to

be fair. Specifically, process fairness had a more pronounced effect on recommendation and reapplication intentions when the outcome was perceived as fairer. The inconsistency of these results suggests that additional research is needed to better understand the process fairness x outcome fairness interaction in selection situations.

Fairness of Specific Assessment Tools

As described in the review above, the 10 procedural rules proposed by Gilliland (1993) have significant implications for applicants' fairness perceptions. The model makes no reference to the specific assessments that will be perceived most favorably except to say that the extent to which the procedural rules are present, the perceived fairness should improve. Since the development of the model, many studies have examined individuals' reactions to numerous selection devices. I will elaborate on the results of these studies.

Based on Gilliland's (1993) model, one of the key determinants of an assessment's fairness is its job-relatedness. Job-related assessments should provide applicants some understanding of the required job skills and insights into their ability to perform them (Cropanzano & Wright, 2003). Assessments such as assessment centers, work samples, and job simulations have all been identified as highly job-related. Research indicates applicants view both assessment centers and work samples favorably (Dodd, 1977; Schmidt et al., 1977). Additionally, Kravitz et al. (1996), based on survey research, found that applicants perceived work samples to be very fair methods of evaluation. Similarly, Rynes and Connerley (1993) used undergraduate students (*N*=390) to determine the favorability of 13 different selection instruments. The results indicated that 3 of the 4 highest-rated tools (simulation-based interviews, written simulations, and business-related tests) are all consistent with high job-relatedness. Additionally, handwriting analysis, a nonjob-related assessment, was viewed least favorably in Rynes and Connerley's study. Similar results have been found for individuals outside the United States (Steiner & Gilliland. 1996).

This research indicates that whenever possible, organizations should use job-related assessments. However, there are many other assessments available, such as cognitive ability and personality tests, with impressive validity (Schmidt & Hunter, 1998; Hunter &

Hunter, 1984), which if used will have important economic utility (Cascio, 1991). Unfortunately, reactions to these assessments have not been as favorable as more jobrelated varieties due to their perceived low face validity.

In general, applicants view personality inventories least favorably of these other methods. There are potential issues of job-relatedness and propriety of questions that contribute to this evaluation. In a study that examined applicants' evaluation of 16 selection techniques, Kravitz et al. (1996) found that individuals only rated personality inventories more favorably than five other selection tools (11<sup>th</sup> out of 16). Smither (1993, Study 1) found that personality inventories had among the lowest perceived face validity and predictive validity ratings of a group of different assessments (numerous cognitive ability tests, assessment center exercises, interviews, and biodata). Rosse et al. (1994) examined actual applicants' evaluations of a personality inventory, a cognitive ability test, and an interview. The authors found that applicants do not view personality tests very positively. Specifically, applicants would rather complete all three assessments combined over completing the personality test alone, and those who only completed the interview viewed the selection process most favorably. In total, the research indicates that organizations that incorporate personality tests into their selection process may be viewed more negatively than those who do not.

Another type of preemployment assessment often administered is cognitive ability tests. This is mostly due to the fact that cognitive ability tests are the single best predictor of overall job performance (Hunter & Hunter, 1984). Unfortunately, this positive predictive capability has not always translated into a positive evaluation by applicants. Of the 16 types of assessments evaluated by Kravitz et al. (1996), cognitive ability tests were rated seventh. Rynes and Connerley (1993) found that of the 13 assessments evaluated by students, cognitive ability tests were rated ninth.

There is some indication that the modest evaluation of cognitive ability tests may be due to a perceived lack of job-relatedness. In particular, Smither et al. (1993) studied how newly hired managers and corporate recruiters rated the perceived face validity and predictive validity of a number of cognitive ability tests (e.g., logical reasoning, vocabulary in context), a number of highly job-related assessment center exercises (e.g.,

leaderless group discussion and in-basket), a personality inventory, and biodata inventory. The cognitive tests were rated much higher on both face validity and predictive validity than either a personality test or a biodata inventory but lower than the assessment center exercises. These results appear to be counter to those produced by Kluger and Rothstein (1993). In the authors' first study, students were randomly assigned to complete one of four computerized assessment instruments (biodata inventory, cognitive ability test, interview, or trainability test). The biodata instrument was actually viewed most positively of any of the assessments, including cognitive ability. This result was further supported in their second study, when two biodata inventories were viewed more positively than two cognitive ability tests (Rynes & Connerley, 1993).

Generally, applicants do not have a positive reaction to cognitive ability tests and personality inventories. This appears to be partially the result of the assessments' perceived lack of job-relatedness. Because both of these assessment types are often used by organizations in the selection process, research is needed to explore practical ways to improve applicants' reactions.

## **Chapter IV**

# **Impact of Information During the Selection Process**

Based on the research reviewed in the prior two chapters, it is clear that the fairness of selection processes is critically important to both organizations and to applicants. Organizations must find practical ways to implement selection processes in order to avoid causing applicant discontent. Despite the recent research examining applicants' reactions to selection procedures, researchers have provided few practical suggestions for actually improving applicants' reactions to testing. Only recently have Cropanzano and Wright (2003) proposed four methods that organizations can use to improve applicants' reactions. This chapter will discuss the four methods outlined by Cropanzano and Wright with special emphasis placed on how information provisions can improve applicant test reactions.

First, Cropanzano and Wright (2003) proposed that organizations could substitute poorly viewed assessments with more positively viewed assessments. Test perceptions are more favorable to the extent applicants perceive the test to be job-related (Kravitz et al., 1996; Rynes & Connerley, 1993; Smither et al., 1993; Steiner & Gilliland, 1996). Therefore, Cropanzano and Wright suggest replacing less job-related assessments with highly job-related assessments.

Second, organizations should modify assessments low in face validity (e.g., cognitive ability tests, integrity inventories, personality inventories) to appear more face-valid. One way to do this is to write test items with a business frame of reference. Rynes and Connerley (1993) found that a cognitive ability test composed of items written with a business focus was viewed much more favorably than a general cognitive ability test. Additionally, instead of modifying test content, in some situations the test's format can be changed to improve applicants' reactions. For example, Chan and Schmitt (1997) administered the same situational judgment test (SJT) to a group of students (*N*=244) via either a video-based method or a paper-and-pencil method. Individuals who received the video-based SJT felt the assessment was more face valid than those receiving the pencil-and-paper SJT.

Cropanzano and Wright's (2003) third suggestion is to combine assessments low in face validity with face valid assessments as part of the same test battery. It follows that as long as a highly face-valid assessment is part of the test battery, organizations could use assessments with high predictive validity that are low in face validity without lowering applicant reactions. However, there is, as yet, limited research evidence for this suggestion. In a study by Rosse et al. (1994), applicants' reactions to a cognitive ability test, an interview, and a personality inventory were examined. Applicants who received all three assessments held almost the same positive perceptions of the tests as individuals receiving an interview only (means of 4.3 and 4.2, respectively, on a 5-point scale) while those completing the personality test only held significantly less favorable perceptions (M=3.5). These results indicate that combining two nonjob-related assessments (cognitive ability and personality) with a job-related assessment (interview) did not lessen the favorability of applicants' reactions to the selection process.

Although all three of the discussed methods are appropriate suggestions with some empirical support, each lacks practical utility for organizations. First, substituting face valid assessments for nonface-valid assessments is appropriate only to the extent that a highly face valid assessment can measure the important job competency. For example, work samples – a transparent assessment – may not be an acceptable alternative measure for personality characteristics. Second, highly job-related assessments such as assessment centers and work samples are often both more costly and more time-consuming to develop (especially compared to off-the-shelf assessments) as well as frequently less valid than other assessments, thus making some highly job-related assessments less appealing to organizations (Hunter & Hunter, 1984). Third, modifying an assessment risks changing its psychometric properties; this could result in a less valid assessment (Nunnally & Bernstein, 1999). Fourth, each of these suggestions places an economic burden on the organization to identify and validate a new assessment, which can be significant if the organization is already using a valid but nonface-valid assessment.

Cropanzano and Wright's (2003) final suggestion to improve applicants' reactions to tests is to supply applicants with sufficient information about the hiring process and hiring outcome. Applicants expect to receive open and honest communication from hiring

organizations (Gilliland, 1993; Schuler, 1993; Thornton, 1993). In fact, applicants who experience adequate explanations for the selection process view the hiring organization more favorably (Gilliland, 1994). Unlike the other three methods, explanations are practical and cost-effective. Therefore, every organization can integrate an information provision into their selection process with little or no economic burden. The practical merits of providing information make it a viable alternative to the other three proposed methods.

In the next sections, I will provide a more in-depth examination and evaluation of explanations in selection contexts. Germane to this review is the impact explanations have on persons' fairness perceptions. Therefore, before examining the impact of explanations in the selection literature, I will provide a short discussion of the organizational justice literature linking explanation and fairness.

# Organizational Justice and Explanations

People have been characterized as "intuitive jurists" because of their proclivity to examine critically personally relevant negative events (Bies, 1987). Thus, in the presence of a negative outcome, individuals seek and evaluate information in order to understand their treatment. Much of the recent research has examined how explanations (also called "social accounts") improve peoples' reactions to negative outcomes. A social account can be defined as a verbal strategy employed by a decision-maker to minimize the severity of the decision or to convince the individual that the wrongful act was not truly what the decision-maker was "really like" as a person (Bies, 1987). The four types of social accounts decision-makers can provide are: (a) causal, (b) ideological, (c) referential, and (d) penitential.

Most of the research on explanations has incorporated Bies's conceptualization of these different types of social accounts. A causal account is an explanation that attempts to reduce the perceived responsibility of the decision-maker for the injustice. It is often referred to as an excuse. An ideological account attempts to legitimize an action by appealing to higher order concerns. Also referred to as a justification, an ideological account acknowledges the decision-maker's responsibility for the decision by explaining that the decision was the "right thing to do." Referential accounts influence perceptions of

injustice by comparing employees' treatments or outcomes to the treatment, or outcomes that others have received; in essence, by explaining that things could be worse. A penitential account, commonly referred to as an apology, is an expression of remorse by the harm-doer for the negative outcome.

Generally, research indicates that managers would be well served to include a thorough explanation to help employees understand negative outcomes. For example, in the absence of an adequate explanation, negative outcomes have been shown to reduce fairness perceptions (Bies & Shapiro, 1987) and task performance (Konovsky & Cropanzano, 1991), while increasing theft (Greenberg, 1990a) and turnover intentions (Ball, Trevino, & Sims, 1993). Although providing an explanation tends to help mitigate peoples' reactions to unfair events, clearly all explanations are not equally effective. Variables such as explanation adequacy (Bies, 1989; Bies & Shapiro, 1987; Bies & Sitkin, 1992; Sitkin & Bies, 1993), explanation type (Bobocel & Farrel, 1996) outcome favorability (Colquitt & Chertkoff, 1996), and organizational context all play a role in the effectiveness of explanations. Shaw, Wild, and Colquitt's (2003) recent meta-analysis lends further support to the importance of these variables.

Through a meta-analytic study, Shaw et al. (2003) examined the effects of explanation provision and explanation adequacy on five variables: (a) procedural fairness, (b) distributive fairness, (c) cooperation responses (e.g., extra-role behaviors), (d) retaliation responses (e.g., theft), and (e) withdrawal responses (e.g., turnover intentions). In addition, they proposed that these effects would be moderated by type of explanation (e.g., excuse or justification), outcome favorability (high or low), and context. The authors separated fairness situations into three context categories. First, instrumental contexts are indicative of economic consequence, such as hiring, firing and compensation situations. Second, the relational context includes situations that suggest the individual's status in the group, such as discipline, job change and layoff situations. Finally, the moral virtue context contains more morally charged situations, such as drug testing, criticism, deception and sexual harassment.

The results of the meta-analysis support most of the authors' hypotheses. First, both explanation provision and explanation adequacy predicted all five outcome variables.

Thus, explanations – especially those that are clear, detailed and appropriate – are critical to improving peoples' fairness reactions and behaviors after a negative outcome. In fact, providing a vague explanation was found to be more detrimental to individuals' reactions than providing no explanation at all (Shaw et al., 2003). Second, the manner in which explanations are framed also matters. Specifically, explanations that express a lack of alternative (i.e., excuse) were more beneficial than a justification. Third, explanations were comparatively more effective if combined with a negative outcome than they were if combined with a positive outcome. It appears, then, that people receiving unfavorable outcomes expect to receive and do actually use explanations to evaluate the fairness of the outcome. Fourth, explanations were critical in all three contexts, thus supporting the authors' notion that explanations are not only helpful in economic situations, but also in situations related to group membership and morally charged events. In summary, failure to provide adequate explanations for negative outcomes can have serious economic consequences for the organization. Additionally, explanations were shown to be effective in all types of organizational situations.

Effects of Explanations in the Selection Literature

Providing applicants information should be advantageous for organizations during hiring situations. First, organizations have a limited number of job openings, which can result in a large number of rejected applicants. Explanations provide an inexpensive way for organizations to manage rejected applicants' organizational impressions. As discussed earlier, keeping applicants' organizational perceptions favorable can improve the likelihood that they will accept job offers, will participate in future patronage, will recommend the organizations to other applicants, and in general will have a more favorable disposition about the organization.

Second, applicants are often blind to the fairness and appropriateness of the selection process (e.g., consistency, bias suppression, and reconsideration opportunity), thus making it difficult for applicants to evaluate the fairness of the process. Organizations can alleviate this problem by providing applicants with specific selection process information, which will help make it more transparent to applicants, and ultimately increase applicants' belief that the selection process is fair.

Third, unlike many other resource allocation situations, the selection process provides multiple opportunities to interact with the applicant. By disseminating information during the selection process, the organization can educate the applicant about the selection process and organization, thus helping the organization build relationships with its applicants.

In the next section, I will review how information presented during the selection process affects applicants' satisfaction with both the process and the organization. This review will be broken into two stages. The review will begin by discussing the advantages and limitations of postdecision feedback. This will be followed by a review of the literature on pretesting information. I will end by discussing the limitations of the studies examining pretesting information and suggestions for improvements.

Postdecision information. Postdecision explanations provide individuals with information about why he/she was or was not selected, or why another individual was selected. Gilliland (1993) proposed that providing a justification for a selection decision would improve applicants' fairness perceptions and organizational attraction. It is anticipated that because applicants expect to receive a thorough and accurate justification for hiring decisions (Bies & Moag, 1986), applicants receiving the justification will view the selection process and the organization more favorably (Gilliland, 1993, 1995).

Communicating the reasons for a selection decision has been shown to affect fairness perceptions. For example, Bies and Shapiro (1988) examined how receiving a justification for a negative hiring decision affected individuals' perceptions of procedural justice. In the scenario-based job interview, the job candidate was given either voice or no voice opportunity and a rejection letter that contained either a justification or no justification for the decision. Students receiving the scenario with the justification rated the procedural justice of the interview higher. Cropanzano and Konovsky (1995) found similar results in a drug-testing context. Specifically, rejected individuals felt that drug testing was fairer when receiving a justification for the outcome as compared to those given no justification.

Unlike the studies just mentioned, Bobocel and Farrell (1996) proposed that explanation type might impact fairness perceptions during selection situations. In an

Affirmative Action decision, Bobocel and Farrell (1996) examined the effect of two types of accounts (ideological and causal accounts) on white males' perceptions of interactional fairness. In the ideological account, the hiring manager took responsibility for the outcome and framed the outcome around diversity needs. Conversely, the causal account attempted to exonerate the decision-maker by shifting the responsibility to his/her superior. Comparatively, white males who were denied a promotion expressed less interactional fairness when given a causal account than when given an ideological account. This result further supports the importance of providing explanations to rejected applicants, but also stresses the importance of an explanation's type and content.

Despite the fact that postdecision explanations improve applicants' fairness perceptions, organizations also expect explanations to attenuate any negative impressions of the organization caused by the unfavorable hiring decision. In their first study, Ployhart et al. (1999) examined how explanations affected not only fairness perceptions but also general organizational perceptions. A student sample (N=156) was instructed to examine a series of rejection explanations that differed in terms of type of information (justification, procedural, personal, or control), level of sensitivity (sensitive or control), and selection decision (hired or rejected). The authors predicted that these variables would affect procedural fairness, self-perceptions, and organizational perceptions. Except for a few instances, all of the information and sensitivity conditions produced significantly higher procedural fairness, self-perceptions and organizational perceptions than the control conditions. Although the student sample limits its generalizability to applied settings, this is the first study evidencing explanations' ability to improve persons' views of hiring organizations, in spite of the negative outcome.

In another study, Gilliland et al. (2001) examined how three different explanations affected applicants' fairness perceptions, recommendation intentions and reapplication intentions. The three explanations were developed in accordance with the three counterfactuals described in Folger and Cropanzano's (1998) Fairness Theory. Fairness Theory proposes that negative outcomes prompt individuals to develop counterfactual reasons in order to make sense of the outcome (Folger & Cropanzano, 1998; 2001). People develop three types of counterfactuals: would, should, and could. Would

counterfactuals propose alternative outcomes that would have been more favorable for the individual. A would reducing explanation suggests why the outcome was justified. With an unfavorable would counterfactual, people rely on could and should counterfactuals to further evaluate fairness. Could counterfactuals determine if the outcome was under the direct control of the decision-maker. A could reducing explanation suggests the lack of other options. Finally, should counterfactuals address the moral standards of the decision. The should reducing explanation provides a justification for the appropriateness of the process.

Through a series of three empirical studies (two scenario-based studies and one field study) examined by Gilliland et al. (2001), three rejection letters, each containing an explanation based on one or more of the three counterfactuals, were compared. The results indicate that the would reducing and could reducing explanations improved individuals' fairness perceptions, recommendation intentions and reapplication intentions.

Additionally, the three explanations form an interesting three-way interaction. The pattern of this interaction suggests that fairness perceptions and recommendation intentions are increased to a greater extent when at least two counterfactual reducing explanations are used compared to when either one or no explanations are provided. Finally, the should reducing explanation was not effective unless coupled with an additional explanation. These results indicate that explanations help individuals make sense of the hiring decision process by reducing counterfactual thoughts, thus leading to more favorable fairness perceptions and to more pro-organizational behaviors (e.g., recommendation intentions and reapplication intentions).

In summary, this research highlights the importance of postdecision explanations in managing applicants' reactions to being rejected. Explanations were shown to enhance rejected applicants' perceptions of both fairness perceptions and impressions of the organization. Despite the abundance of research supporting the need for detailed explanations, most organizations are unwilling to abandon the standard rejection letter that provides vague and uninformative details about the hiring process. Unfortunately, the time required to write letters with detailed explanations combined with perceived legal implications hinder the implementation of explanations that best meet applicants'

expectations. This is not surprising considering organizations as a whole as well as individual managers often distance themselves from negative events (Folger & Skarliki, 2001). Fortunately for organizations, explanations can be presented at other stages of the selection process that will allow the organization to manage applicants' impressions proactively. In particular, organizations can provide information before the administration of the assessments as a way to help applicants understand the process. These pretesting explanations should be useful, especially in the absence of informative postdecision information. Below is a research review of the effects of pretesting information.

Pretesting information. Pretesting explanations are communications that provide applicants with information that helps them better understand what to expect in the testing process. In a recent survey examining peoples' expectations regarding the testing process, Ployhart and Hayes (2002) found that applicants want to receive information about the testing process. In particular, they found that the majority of applicants want to be told what the test measures (76%), why it is necessary (74%), how it will be used by the organization (72%), and who will see the results (68%). These are all issues that can and should be addressed before assessment administration. In another survey study, Lounsbury et al. (1989) found that individuals who received information on how the test was related to the job expressed more favorable attitudes about the organization. In support of Lounsbury et al.'s results in an empirical study, Rynes and Connerley (1993) found that individuals unfamiliar with an assessment's validity evidence were less likely to view the assessment as fair.

In general, then, it appears that applicants are not always well informed about assessments, but want to be. As "intuitive jurists," applicants expect organizations to provide information about the characteristics of the organization's assessments and selection processes. Doing so should help improve applicant's impressions of both the assessment and the organization (Bauer et al., 1998; Gilliland, 1993).

Supplying pretesting information has numerous advantages. First, providing information about the testing process allows the organization proactively to manage applicants' perceptions of the testing process by educating them on the need for and steps of the testing process. This has been the most researched aspect of the pretesting

explanation literature (Truxillo et al., 2002). Second, educating applicants about the testing process prior to testing may help the applicant feel more comfortable about completing the organization's tests, which may reduce the applicant's test-taking anxiety (Arvey, Strickland, Drauden, & Martin, 1990). Third, applicants may view organizations that provide detailed information about the testing process as open and honest. Research suggests a link between an organization's level of communication and its perceived trustworthiness (Bies & Moag, 1986).

The research on pretesting explanations has concentrated almost exclusively on ways to educate applicants about the appropriateness of tests. Much of this research has examined how information about a test's job-relatedness and predictive validity affects applicants' fairness and organization perceptions. Based on prior applicant reaction research, this seems to be an effective tactic, considering that perceptions of an assessment's face validity and predictive validity enhances perceptions of fairness (Smither et al., 1993); additionally, people may not be familiar with the validity evidence (Rynes & Connerley, 1993). However, much of this research has not produced impressive results.

Gilliland (1994) was one the first researchers to examine the effects of pretesting information on fairness perceptions. In his study, students completed one of three assessments (cognitive ability, work sample, or overt integrity) as part of a simulated hiring situation. Before completing one of the three assessments, each individual received a written explanation describing how the assessment was a useful tool for hiring people for the current job (coding journal articles). For example, individuals completing the integrity test were told that the integrity test was appropriate because there was a need for confidentiality in handling rejected applicants' manuscripts (Gilliland, 1994). After the assessment, student applicants were randomly assigned to either rejected or selected conditions. The authors proposed an interaction between the explanation and the selection outcome, such that those rejected would find the process fairer and would recommend the experiment more when an explanation was provided. Gilliland did not find this interaction for distributive fairness or procedural fairness perceptions, but an interaction was found for recommendation intentions, although the effect size was relatively small (p<.10).

Specifically, explanations improved rejected applicants' willingness to recommend the experiment, but they had no effect on selected applicants.

Hovarth, Ryan, and Stierwalt (2000) examined how pretesting explanation content impacted persons' fairness perceptions. Using Bies's (1986) social account conceptualization, the authors developed three explanations that differed in content. The causal account explained that a cognitive ability test was used because the organization had made many bad hires recently, and that the assessment would help reduce the number of poor performers. The ideological account stated that the assessment developed did not discriminate and will help identify the best performers. Finally, the referential account informed the individual that it could be worse, and that other organizations were using much more rigorous assessments.

In the experiment, a student sample (N=186) attended two experimental sessions. Participants began the first session by reading one of the three explanations. Then, a commonly-used cognitive ability test was administered as part of a simulated hiring situation. Session one ended with the completion of the dependent variable measures (perceptions of face validity, predictive validity, and process fairness). In the second session, participants were randomly assigned to either the rejected or the hired conditions and were provided with a written explanation for the decision. After receiving the hiring decision and explanation, participants completed a questionnaire using the same dependent variables with the addition of an outcome fairness measure.

The results of this study support the importance of pretesting explanations. Fairness perceptions post–test and post–decision were positively affected by receiving a causal account. Interestingly, individuals receiving an ideological account had the lowest face validity perceptions. Additionally, after the hiring decision, causal accounts produced higher predictive validity perceptions regardless of the applicants' level of self-efficacy. These results indicate that the explanation that provided individuals information about the accuracy of the assessment was viewed more favorably than was the explanation appealing to diversity needs. Gilliland (1994) and Horvath et al. (2001) each found that information about preemployment tests can improve both fairness and organizational perceptions. These authors stress the importance of validating these results with applicant samples.

Truxillo et al. (2002) provided a useful extension to previous research by examining the effects of pretesting information with an actual applicant sample. In their study, police officer candidates (*N*=204) watched a five-minute video containing information about two structural aspects of the assessment process, assessment jobrelatedness and feedback timeliness, before completing a video-taped situational test. The study examined how the recipient of the information evaluated both process fairness – jobrelatedness, feedback timeliness, and fairness of the test – as well as perceptions of the organization – organizational attractiveness, job pursuit intentions, and recommendation intentions. These dependent variables were measured at three different times: pretesting, posttesting/pre-decision, and postdecision. Responses from applicants who received pretesting information were compared to applicant responses from a control group. The control group was a group of applicants who participated in police officer application process in the prior year that had not received pretesting information.

Testing information was found to predict perceptions of job-relatedness, feedback timeliness, and overall test fairness above and beyond gender, process fairness (pretesting), and outcome. Unfortunately, these positive fairness perceptions did not translate into positive organizational perceptions. Information did not predict applicants' posttest or post-decision organizational attraction, job pursuit intentions, or recommendation intentions over and above gender, prior attitudes, and outcome favorability.

One reason for the lack of significant results for the organizational relationship variables is the exceptionally positive pretesting perceptions of the organization. Before testing, applicants rated organizational attraction (M=4.20), job pursuit intentions (M=4.70) and recommendation intentions (M=4.07) (each on a 5-point scale) very positively, thus resulting in a potential ceiling effect. This extremely positive view is not unexpected, considering the civil service context. People are often aware of the positive aspects of police officer jobs before entering the selection process (excellent benefits, job prestige, compensation, and the like) (Truxillo et al., 2002). Despite the lack of support for the enhancement of organizational perceptions, this study adds to the research supporting the importance of pretesting information in real-world selection situations. Individuals

receiving information felt the selection process was fairer than applicants who were supplied with no additional information.

Not all studies have produced favorable results such as those discussed previously. Harland et al. (1995) examined persons' reactions to a number of different pretesting explanations. In a field study, employees (*N*=138) from a printing firm were randomly selected to complete either an interview only or an interview plus two personality inventories. Individuals completing the personality inventories were also provided with one of five written explanations describing why the personality inventories were used. The explanations provided information about either the test validity, benefits for the applicant, sensitivity to individual's feelings, correctability, or organizational benefits. None of the explanation conditions produced fairness perceptions more favorable than the no explanation condition, and all the explanation plus personality inventory conditions were viewed less favorably than the interview only condition. In terms of the explanations' respectfulness, only the sensitivity explanation was rated significantly higher than the no explanation condition. Overall, this study found that none of the short pretesting explanations were able to improve the typically negative perceptions of personality inventories.

In another study, Lievens, DeCorte, and Brysse (2003) examined how job-relatedness and predictive validity information impacted persons' perceptions of eight different types of tests. Individuals read short descriptions of eight commonly used selection processes along with information describing their validity evidence. Next, the individual rated each instrument on procedural justice, scientific value, and reasonableness for identifying quality candidates. The authors found that the pretesting information condition had no impact on individuals' ratings of the three dependent variable measures. In a similar simulated hiring situation, Mayer and Ployhart (2003) found that a pre-hire explanation that provided hypothetical job applicants with information about a cognitive ability test's predictive validity did not affect individuals' perceptions of process fairness, organizational perceptions, or self-perceptions.

Several limitations in the pretesting information literature may account for the mixed results. First, most of the studies use student samples or individuals who are not

part of a competitive selection process (see Truxillo et al., 2002, as the sole exception). Actual applicants experiencing the explanation and selection processes may experience the process differently than do individuals in a simulated situation. It is unclear how prior results generalize to real selection situations outside of the civil service arena. Therefore, additional research with real-world job applicants is needed.

The second limitation of prior research is the limited focus of pretesting information. Ployhart and Hayes's (2002) survey found that applicants expect to receive information about many aspects of the selection process, not simply its job-relevance. Despite this fact, the research has almost exclusively examined how educating applicants about test job-relatedness and validity evidence impact their reactions. These short narrowly-focused explanations may not meet applicants' communication expectations. More holistic explanations that provide specific information related to other aspects of the test and testing process, such as what applicants should expect, what the test measures, why it is useful, how the scores are used, how the applicant can prepare, and so on, may be more powerful.

A third limitation is a lack of understanding about how applicants evaluate the pretesting explanations. Unlike most of the explanation research, including that of postdecision explanations, none of the research cited above specifically examined the pretesting explanation adequacy. Adequate explanations are much more effective at improving perceptions of fairness (Bobocel & Farrel, 1996; Shapiro, Buttner, & Barry, 1994; Shaw et al., 2003). Therefore, it is possible that the mixed empirical results for pretesting explanations may be the result of applicants not feeling the information was clear, detailed, and thorough. This may have some merit considering that almost all the studies developed written explanations that were short (often less than 3 sentences) and narrowly focused. This may well not be enough information to help applicants understand both the test and selection process. In order for pretesting explanations to improve applicants' impressions of the test and organization, adequate explanations must be supplied.

#### Chapter V

## **Implications of Pretesting Attitude Strength on Applicant Test Perceptions**

Personnel selection is not performed in a vacuum. Applicants often enter into the recruiting and selection process with varying impressions of the organization they are applying. These initial perceptions may bias how an applicant evaluates subsequent information obtained about the organization. It is known from the attitude strength literature that strong attitudes are more stable, resistant to change and linked to behavior (Krosnick & Petty, 1995). Therefore, applicants whose initial attitudes are relatively strong and positive should be more resistant to negative experiences resulting from the recruiting and selection process, while weak positive attitudes may be more susceptible to change. Currently, almost no research has examined the relationship between applicants' initial positive attitude strength and their subsequent evaluation of the preemployment testing process.

Hence, I will focus in this chapter on the recruitment literature in order to discuss how applicants' initial attitude strength may account for some of the inconsistent findings in the test-taker reaction literature. Next, I will discuss dimensions of attitude strength relevant to recruiting and selection. Finally, I will examine the impact of three attitude strength dimensions relevant to applicant attitudes.

### Attitude Strength Research

Previous research cited in Chapter 2 highlights the importance of testing fairness on applicants' perceptions of the organization. However, despite the consistency of these results, instances occurred in which testing perceptions were unrelated to organizational outcome variables. Many of these studies were set in situations in which applicant attitudes about the job and organization should have been strong. For example, a number of studies with nonsignificant results were performed with civil servant applicants. Although not empirically examined, there is good reason to think that applicants of these positions should have had strongly positive initial attitudes about the organization. First, due to the nature of the job, applicants surely have evaluated the benefits and analyzed the potential risks of the job, thus ensuring confidence in their attitudes. Second, information concerning the intrinsic and extrinsic benefits of the job are readily available, thus ensuring

that attitudes are established based on accurate knowledge. Third, due to the attractiveness of civil service jobs, job attainment should be important to applicants, thus ensuring that the attitudes are personally relevant.

In a series of studies by Ryan and colleagues (Ryan et al., 1997; Ryan et al., 2000), the authors found civil servant applicants rarely withdrew from a selection process because of testing issues, but instead withdrew for personal reasons (e.g., took another job or had a conflict with the test time). Additionally, Truxillo et al. (2002) found that pretesting information did not predict civil servant applicants' job acceptance or recommendation intentions over and above pretesting levels. Therefore, in situations in which initial attitudes should be strongly positive, the testing process was found to have little impact on attitudes and behaviors towards the organization.

The relationship between the selection process and applicant attitudes, intentions, and behaviors towards the organization are more complex than simply issues of test fairness (Macan et al., 1994). The question really revolves around when the recruiting and selection process will have the greatest effect. If preemployment testing does not impact posttesting or postdecision organizational attitudes in all situations, then in which situations will it?

Extrapolating from other research domains, it appears that testing processes may be most influential when the applicant has positive but relatively weak initial attitudes. For example, when an applicant's organizational attraction is strong, the attitudes will be more resistant to persuasion, thus less likely to change; but if the attraction is weak, the attitude will be much easier to change (Petty & Krosnick, 1995). A considerable amount of research in social psychology has grappled with the issues of attitudes and attitude strength.

Attitude strength definition. Krosnick and Petty (1995), in their widely accepted definition of attitude strength, described attitude strength as the extent to which an attitude is durable and impactful. Durability is further broken into two components: persistence and resistance. Persistency refers to the attitude's ability to remain unchanged over an extended period of time, while resistance refers to the attitude's ability to remain unchanged in the face of incongruent information (Krosnick & Petty, 1995). Similarly,

attitudes that are impactful comprise two components: bias processing and attitude-behavior linkage. First, attitudes affect information processing. Strong attitudes bias information processing towards the attitude domain. Additionally, attitudes are impactful to the extent that they guide behavior. Research suggests that strong attitudes have a direct link to actual behaviors (Krosnick & Abelson, 1992; Krosnick & Petty, 1995). In summary, strong attitudes have been defined as those that lead to selective cognitive processing, are resistant to change, persist over time, and are predictive of behavior. Much research in the social psychology and in the consumer behavior domains have examined the antecedents leading to attitude strength.

Aspects of attitude strength. Researchers agree that attitude strength is a multidimensional construct with potentially many antecedents. Strong attitudes are developed in a number of ways, and they include the importance of the attitude object, the certainty or confidence with which the attitude is held, the amount of knowledge regarding the attitude object, links between the attitude or attitude object and one's self-concept or values, attitudinal accessibility, attitudinal extremity, and consistency between the attitude and beliefs about the attitude object (see Petty & Krosnick, 1995, for a thorough discussion of each dimension). Each of these attitude strength antecedents has been shown to affect at least one aspect of attitude strength and in particular, resistance (Pomerantz, Chaiken, & Tordesillas, 1995).

For example, Spira (2002) used a consumer behavior situation to evaluate how antecedents of attitude strength affected resistance to persuasive product messages. In the study, participants were exposed to persuasive information about a generic shampoo brand approximately 2-3 weeks after the initial measurement of product attitudes. Supporting the proposition that attitude strength enhances attitude resistance, the authors found an interaction between persuasion congruence, defined as the similarity between initial attitudes and subsequent persuasion messages, and attitude strength dimensions (i.e., knowledge, intensity, importance, or centrality). Specifically, heightened levels of a dimension resulted in less shift away from the initial attitude when presented incongruent information and larger shifts when presented congruent information. These results indicate

that attitude strength dimensions foster resistance to counter-attitudinal influences (Spira, 2002).

The goal of the present study is not to re-examine the attitude strength literature or even to contribute to this literature domain. Instead, the goal is to examine how a number of strength dimensions affect applicants' organizational perceptions prior to and subsequent to the recruiting and selection process. Three attitude strength dimensions are most relevant to the recruiting and selection process: knowledge, importance, and certainty. Job and organizational knowledge and importance are two dimensions that should be relevant to all applicants and should vary from applicant to applicant. Applicants' confidence in their initial attitudes about the organization also should impact the strength of these attitudes. In the sections that follow, I examine each dimension in turn.

*Knowledge*. One of the most often researched dimensions of attitude strength is attitude knowledge. The amount of knowledge an individual has about an issue is a form of strength, and the possession of ample knowledge is associated with greater resistance to social influence attempts (Wood, 1982; Wood & Kallgren, 1988; Wood, Kallgren & Preisler, 1985) and more predictive of behavior (Wood, Rhodes, & Biek, 1995). The more knowledge someone has about the attitude object, the less likely attitudes will be changed (Krosnick & Petty, 1995).

Individuals with greater knowledge about an attitude object are more able to resist persuasion attempts. In a process outlined by Wood et al. (1995), increased attitude knowledge should result in biased processing of subsequent information. The biased processing then will result in greater processing of information that is congruent with the individual's initial attitude, in greater critical evaluation of incongruent information, and in less reliance on heuristics (Wood et al., 1995). Thus, minimal attitude change will occur only if extensive knowledge is provided, while minimal information will result in weak attitudes, enabling substantial change in attitudes.

Additionally, knowledge may enhance resistance to persuasion because of its ability to focus attention to argument information. For example, people with strong feelings about an issue but less actual knowledge about it may be less proficient at

selectively reviewing new information; their lack of knowledge leaves them without guidelines for evaluating various sorts of attacking and supporting information. In support of this view, Bieks, Wood, and Chaiken (1995) examined the effect of attitude affect and attitude knowledge on applicants' evaluation of new attitude information. In the study, college students' working knowledge of and affective intensity toward personal AIDS risk were assessed. Subjects read a series of findings from AIDS research studies, some of which suggested that the AIDS risk of various sexual behaviors of college students is very low, indicating little need for prevention.

As expected, only subjects with strong attitudes, as indicted by intense affect, used their knowledge in detailed, biased processing of the research evidence. That is, to the extent high affect/high knowledge subjects were favorable towards AIDS risk prevention, they agreed more with the studies indicating high risk for AIDS than those indicating low risk. Further, this processing bias was manifested in subjects' evaluation of various experimental findings. Subjects with attitudes derived from intense affect and considerable knowledge generated greater numbers of favorable thoughts and fewer unfavorable thoughts to studies congruent with their initial attitudes towards AIDS risk than studies opposing their attitudes.

Knowledge, therefore, is a key indicator of strength, which may impact applicants' attitudes toward an organization or a job. Existing knowledge provides a standard from which to detect the strengths and weaknesses of incoming information. People with minimal knowledge do not possess the information necessary to distinguish strong, valid information from that which is weaker and less valid (Bieks et al. 1995). Unfortunately, applicants, especially those for entry-level positions, may not have considerable knowledge about the job or the organization (Herriot & Rothwell, 1981; Liden & Parson, 1986; Taylor & Sniezek, 1984). When scant details are provided to applicants, applicants are forced to rely on heuristics and peripheral processing to form impressions and make decisions about job choices (Larsen & Phillips, 2002).

Job applicants prefer organizations that possess organization and job attributes that align with their preferences and values (Cable & Judge, 1996). Therefore, in order for applicants to make accurate job choice decisions, they may need to rely on any information

available to help them understand the organization. As stated previously, under conditions of incomplete information about the organization, applicants will use early experiences with the organization as signals for unobservable characteristics (Rynes, 1991; Rynes et al., 1993). Therefore, applicants with less knowledge about a job or organization should be more likely than those with more knowledge to use recruiter behavior and potentially the preemployment testing process as signals for organizational characteristics. Lind (2001) and Greenberg (2001) also suggest that when provided little other information about the organization, the applicant will evaluate the organization based on the fairness of his/her treatment during the recruiting and selection process. The logic of these suggestions indicates that the ability of the recruiting and selection process to impact an applicant's impressions, intentions, and behaviors is restricted to instances in which the applicant has minimal knowledge of the organization and job.

The effects of applicant knowledge of the organization and job have been frequently studied in the recruitment literature. Some research indicates that recruiter behavior will not predict applicant attraction over and above job and organizational attribute knowledge. For example, Rynes and Miller (1983) found that providing more information, especially attractive information, was more important to predicting variables most closely related to job choice (i.e., organizational attraction, willingness to attend a second interview and intentions to accept the job) than was recruiter behavior. Similarly, Powell (1984) used structural equation modeling techniques to test a model in which job and organizational attributes and recruiter behavior had direct effects on applicant attraction. The author found that a model was supported showing a direct link between job attributes and attraction but not a direct recruiter behavior-attraction link.

In contrast to the research cited, there are other studies supporting the ability of recruiter behavior to influence applicant attraction beyond job and organization attributes. For example, Rynes et al. (1991), using applicant interviews, found recruiters have a direct effect on applicants' attraction to an organization. Additionally, Harris and Fink (1987) found that recruiter behaviors explained unique variance in applicant attraction to an organization after job attribute knowledge were entered into the regression equation, suggesting a direct influence of recruiter behavior on attraction.

As suggested by Rynes (1991), job and organizational attributes are important indicators of applicant attraction. Therefore, knowledge plays an important part in developing strong organizational attitudes. However, yet untested is the relationship between job and organizational knowledge and an applicant's evaluation of preemployment testing.

Attitude Importance. Certainly, not all attitudes hold the same importance. Attitudes with strong psychological significance for the individual are said to be important (Boninger, Krosnick, Berent, & Fabrigar, 1995). Similar to attitude knowledge, heightened attitude importance is associated with both greater resistance to social influence (Borgida & Howard-Pitney, 1983) as well as attitudes that are more predictive of behavior (Jaccard & Becker, 1985).

Attitude importance seems to bolster attitude strength through its effect on information processing. Generally, research shows that people are miserly in their information processing unless they are motivated to engage in elaborate processing (Petty & Cacioppo, 1986). One instance in which motivation is high and elaborative processing should occur is when attitudes are important. Numerous studies have examined this issue of attitude importance and how it motivates people to examine selectively information relevant to the attitude. In a study by Berent and Krosnick (1993), subjects were asked to evaluate political candidates based on statements made on six policy issues. Subjects were told that they could only read statements on three issues, which they wanted to hear. As expected, subjects selected information relevant to important attitudes at the expense of information relevant to unimportant attitudes.

Studies in the social psychology literature indicate that people attempt to gather more information and to elaborate to a greater extent on very important attitudes. These important attitudes lead to more stable and resistant attitudes that are more predictive of behaviors. In a selection situation, the importance applicants place on their attitudes toward the organization and job often hinges on multiple individual factors. For instance, importance may be affected by the applicant's current financial need (Larsen & Phillips, 2002), his/her available job alternatives (Taylor & Bergmann, 1987), or the status of the

job and/or organizational characteristics. Thus, there are many reasons why applicants place importance on a job opportunity.

Financial need has indeed been found to impact the importance of job and organization attitudes. Sheppard and Belitsky (1966) found female job seekers, as secondary breadwinners, were less motivated to evaluate an organization's characteristics. Despite the datedness and potential gender bias of the article, the results are relevant for the current selection process. Individuals who have less financial need, for whatever reason, may be less motivated cognitively to evaluate new information presented about the organization or job.

A second operational definition of importance in the recruitment literature has been the number of job opportunities available to the individual. The assumption is that the more job opportunities an applicant has, the less important any one organization is; therefore, information acquired through the recruiting and selection process may help set the organization apart from the others. Unfortunately, much of the research examining job alternatives has found little, if any, relationship between this variable and applicants' views of the organization. For instance, Taylor and Bergmann (1987) examined the moderating effect of labor market opportunities on the relationship between a company's recruitment activities and applicants' reactions. They proposed that the relationship between recruitment activities and applicant reactions would be stronger for those with greater labor market opportunities. The authors found that the number of alternative job opportunities did not moderate the relationship. Similarly, Harris and Fink (1987) found that recruiter characteristics have a significant relationship with applicants' evaluations of the job; again, however, there was no moderating effect of job alternatives.

In contrast to these prior two studies, Liden and Parson (1986) found that job opportunities did have a moderating effect. In an interview setting, the relationship between applicants' affect towards the job and job acceptance intentions were moderated by the number of alternative job possibilities such that job affect was more highly related to job acceptance intentions with applicants who had relatively more alternative job opportunities. These results support the contention that when importance is relatively low, recruiting information can have a positive impact on applicants' attitudes.

*Certainty*. Another attitude strength variable is attitude certainty. Certainty involves the feelings of accuracy and correctness of one's attitudes. Research suggests that people who are certain about their attitudes tend to be more resistant to persuasion attempts and to behave more consistently with their attitudes (Gross, Holtz, & Miller, 1995).

One of the symptoms of uncertainty is the lack of knowledge and information about the attitude object. Thus, one cure for uncertainty is increased knowledge of or experience with the attitude object. For example, Estes and Hosseini (1988) found that investors with little investing experience had less confidence in their investing ability. Additionally, greater experience (Gross, Rocissano, & Roncoli, 1989) and greater elaborative thought (Abelson, 1988) lead to greater confidence. Thus, allowing individuals to gain knowledge or experience with an attitude object should enhance an individual's attitude certainty.

Certain attitudes have important consequences. First, people who are confident in their attitudes are more likely to resist the social influence of others (Swann & Ely, 1984). Second, certainty guides information seeking. For example, people with certain attitudes tend to process information that conforms to their attitude, thus perpetuating the certainty of the attitude (Gross et al., 1995). When uncertainty is present, people are more susceptible to social influence. Third, attitudes with greater certainty have a stronger link to behavior. For example, Davidson, Yantis, Norwood, and Montano (1985) found a strong effect of attitude certainty on actual voting behaviors. Specifically, they found consistency between voting intentions and voting behavior only when certainty about voting intentions was high.

In employee selection situations, applicants' confidence in their beliefs about the organization or job they are applying for may have an important effect on how the recruiting and selection process is evaluated. Because attitude certainty tends to bias information processing in the direction of the initial attitude, incongruent information about the organization may not be processed, thus maintaining the current attitude strength. Therefore, attitude certainty should have important consequences for organizations. Applicants who are more certain about their attraction to the organization or job may be more resilient in regard to unfavorable hiring decisions or more willing to show proorganizational behaviors (e.g., recommendations or patronage). To date, little research has

examined how level of certainty affects applicants' attitudes throughout the recruiting and selection process and how certainty affects the attitude-behavior relationship.

One of the few studies to examine applicants' attitude certainty was conducted by McCulloch and Turban (1997). In their study, they examined how applicants' concerns about a life insurance sales job impacted their perceptions of an integrity test completed as part of the selection process. As discussed previously, integrity tests are perceived to possess little face validity and thus not viewed very favorably by job applicants. The authors found that people who were uncertain about the desirability of the job were more likely to view the integrity test less favorably than individuals who were sure about the job. This study suggests that the certainty of individuals' initial attitudes can affect applicants' processing of subsequent information.

Conclusion. Much research has examined ways to improve applicants' perceptions of recruiting and selection processes and subsequently their perceptions of the organization. Unfortunately, much of this research has neglected examining how applicants' initial attitudes towards the organization affect applicants' reactions to the recruiting and selection processes and later organizational attitudes. The research reviewed in this chapter suggests that the strength of applicants' initial attitudes could significantly affect how applicants process and evaluate subsequent information. Specifically, people with strong attitudes will be more resistant to incongruent information, while individuals with weak attitudes will be more likely to change attitudes, which suggests that preemployment testing should have a greater effect on applicants' perceptions when applicants' initial attitudes are weak. This study will examine the effects of three attitude strength dimensions that appear to have the greatest relevance to selection situations: (a) knowledge, (b) importance, and (c) certainty.

### **Chapter VI**

## **Statement of Problem and Hypotheses**

As discussed earlier, much research has emerged in the last decade studying the role of applicants' reactions to preemployment testing on areas ranging from assessment performance to the formation of company perceptions. Despite the influx of research, however, there are still many gaps. One gap involves the lack of practical recommendations of ways for organizations to improve perceptions of preemployment assessments, which are not face valid. In the current study, I examine how a pretesting explanation provision impacts applicants' reactions to testing and to the organization. A pretesting explanation is a cost-effective, proactive technique organizations can use to manage applicants' later impressions of both testing and the organization. Thus, this study will include a thorough, detailed explanation that will inform applicants about the many facets of the testing process (e.g., test content, test purpose, predictive validity, benefits to organization and applicant, etc.). In addition, this detailed information will be provided to the applicants in advance of the testing session, which will provide applicants time to understand the process.

Another gap in the research involves the test process itself: it has been shown to influence applicants' attitudes, intentions, and behaviors in some situations but not others. A significant contribution to this research domain would be to determine exactly when and under what circumstances the testing process will impact applicants' perceptions of the organization. Applicants enter into the testing process with differing levels of knowledge about and attitudes toward the hiring organization. The strength of pretesting knowledge of and attitudes towards the hiring organization may impact whether testing will be important. The attitude strength literature suggests that strong attitudes are resistant to change and are linked to behaviors (Pomerantz et al., 1995). Therefore, if an applicant's initial organizational attitudes are strong, the testing process may not impact applicants' reactions; whereas weak attitudes may be more susceptible to change as a result of the testing process. In this study, I examine three attitude strength dimensions relevant to the selection process: job and organizational knowledge, job importance, and attitude confidence.

I also attempt to add to a very short list of studies that have examined actual applicant reactions as part of a competitive selection process. Much of the test taker reaction literature has examined student reactions to different assessments in simulated hiring situations. The motivations involved in selection situations suggest that real applicants may react differently to an actual testing situation than do students in a simulation (Truxillo et al., 2002). Additionally, much of the research with actual applicants has been limited to civil service jobs. I will examine test reactions of applicants applying for an entry-level position at a medium-sized insurance company.

Finally, most of the test taker reaction studies have used limiting experimental designs. In a review of the applicant reaction literature, Ryan and Ployhart (2000) found that only about 10% of studies include pretest measures. Based on their review, the authors concluded, "without assessing attitudinal measures (e.g., organizational attractiveness) and intentions prior to participating in the selection process, one is hard pressed to be able to definitively attribute a causal order. That is, applicant perceptions of the selection procedure may cause intentions and attitudes, or these intentions and attitudes may lead one to hold certain perceptions of the procedure" (p.593). In order to truly understand how preemployment testing affects applicants' perceptions of the organization, measurement of applicants' reactions to the organization must occur at three different times: prior to testing, immediately after testing and after the hiring decision is made. This longitudinal design allows the researcher to determine if the testing characteristics predict applicants' perceptions of the organization above and beyond both pretesting attitudes and the effects of the hiring decision. The present study will add to the short list of studies using a longitudinal design.

# Hypotheses

I propose six hypotheses in this study. The sections that follow will provide a short rationale for and statement of each hypothesis. To help the reader follow the predicted relationships among the study's variables, a model is shown in Figure 1. The model suggests a direct relationship between the dependent variables across time. It should be noted that in all analyses the dependent variables immediately prior in time to the

**Time 1: Pretesting Time 2: Posttesting Time 3: Postdecision Tests** Hiring Completed Outcome **Procedural** H1 **Justice** Info x Outcome Test Interaction Information H2 Н6 Н3 DVs\* DVs\* (Time 3) DVs\* (Time 2) (Time 1) H5 H4 **Attitude** Strength **AS** x Information Interaction \* Dependent Variables (DVs) Organizational attractiveness Recommendation intentions Job acceptance intentions Reapplication intentions Customer patronage intentions Word-of-mouth behaviors (T3 only)

dependent variables being evaluated will be used as controls. For example, organizational attraction measured at Time 1 will be used as a control variable for all analyses that include organizational attraction at Time 2.

Increasingly, applicants expect organizations to share information about preemployment assessments they are asked to complete (Loundsbury et al. 1987; Ployhart & Hayes, 2002). Gilliland (1993) proposed that pretesting information about the assessment process would have a positive impact on applicants' perceptions of procedural justice. Organizations can help applicants understand the testing process by providing information prior to its administration. Providing pretesting information gives organizations an opportunity to manage the often-negative impressions of testing by educating applicants about the tests with which they may be unfamiliar. For example, by sharing information about the test's development and job relatedness, applicants may have a more positive view of the test's integrity. Additionally, providing information on how to prepare for the test may help applicants feel like they had a better chance to perform. Finally, providing applicants with pretesting information may enhance applicants' perceptions of the organization; that is, since the organization was willing to communicate openly about the process, applicants may believe they are being treated fairly. Thus, a test explanation provision should have a positive effect on a number of procedural justice variables and overall procedural justice.

Hypothesis 1: Provision of information about the selection process will be positively related to perceptions of procedural justice: (a) job relatedness; (b) chance to perform; (c) selection information; (d) openness; (e) two-way communication; and (f) overall procedural justice measured immediately after testing.

If as proposed in Hypothesis 1, information does positively affect applicants' perceptions of procedural justice, then it is critically important to determine if their procedural justice reactions then impact their posttesting organization perceptions. In replication of prior research findings (see Chapter II for full review), procedural justice is proposed to impact posttest organizational perceptions.

*Hypothesis 2:* Procedural justice will be positively related to organizational perceptions (organizational attraction, recommendation intentions, job acceptance

intentions, reapplication intentions, customer patronage intentions) and will mediate the influence of test information on organizational perceptions *measured immediately after testing*.

Gilliland (1993) also suggests that fair selection procedures enhance applicants' perceptions of the organization. To date, much of the research on pretesting information has not shown a clear and consistent relationship between provisions of various sorts of pretesting information and applicants' perceptions of the organization. This is not unexpected, considering the short, non-descriptive and often-technical explanations used in the research. I will attempt to increase the power of the pretesting explanation by administering a more thorough, specific explanation that will better enhance applicants' understanding of the testing process. I believe that a more powerful explanation will have a positive effect on applicants' perceptions of the selection process and the organization.

*Hypothesis 3:* Information will be positively related to organizational perceptions (organizational attraction, recommendation intentions, job acceptance intentions, reapplication intentions, customer patronage intentions) *measured prior to testing*.

People enter the testing process with vastly different attitudes towards the testing organization. The strength of these initial attitudes may be affected by a number of variables: (a) amount of knowledge of the job and organization; (b) importance of the job; and (c) certainty of job attitudes. To the extent that applicants have greater job knowledge, place greater importance on the job, and express greater certainty in their job attitudes, their initial attitudes towards the organization will be stronger. The attitude strength research suggests that stronger attitudes are more stable over time (Krosnick & Petty, 1995). Thus, these attitude strength variables as measured prior to testing should have a significant effect on applicants' perceptions of the organization throughout the selection process. It is known that applicants' initial organizational perceptions tend to be strong predictors of postdecision organizational perceptions (Chan et al., 1998; Ployhart & Ryan, 1998), but to date, it is unclear how factors which influence the strength of these attitudes affect applicants' reactions.

*Hypothesis 4:* Attitude strength (knowledge, importance and certainty) will be positively related to organizational perceptions (organizational attraction, recommendation

intentions, job acceptance intentions, reapplication intentions, customer patronage intentions) *measured prior to testing*.

Signal Theory suggests that in the absence of direct information about the organization, applicants will use their treatment during the recruiting and selection process as a signal for unobservable characteristics (Rynes & Miller, 1983). Thus, the fairness of the preemployment testing process should have the greatest impact on applicants' perceptions of the organization when their knowledge of the job and organization is minimal. On the other hand, when information about the job and organization is abundant, the applicant will not need to rely on other information to learn about the organization; thus test fairness will have a minimal impact on applicants' organizational perceptions. In a similar vein, when applicants are certain about their job attitudes and place great importance on a job, their initial attitudes towards the organization should be unaffected by test fairness. Conversely, in situations of low certainty and importance, the testing process may influence the applicant's attitudes.

Hypothesis 5: Attitude strength (knowledge, importance, and certainty) will interact with information condition to affect postdecision organizational perceptions (organizational attraction, recommendation intentions, job acceptance intentions, reapplication intentions, customer patronage intentions), such that when attitude strength is low, information condition will have a greater impact compared to when attitude strength is high.

Additionally, an interaction between hiring outcome and information condition is proposed. As stated in the research review, an interaction between hiring outcome and procedural justice has been inconsistently obtained in the applicant reaction literature. As expressed in the fair process effect, procedural justice is proposed to have a greater impact on rejected applicants' organizational perceptions. Because test information is predicted to impact procedural justice, the same relationship should result for the hiring outcome x information condition interaction.

Hypothesis 6: Hiring outcome will interact with information condition to affect posttest organizational perceptions, such that for rejected applicants, receiving information will have a greater impact than for accepted applicants.

*Exploratory hypothesis*. Finally, I propose using structural equation modeling to establish the fit between the proposed model and the actual data obtained from job applicants. The first step in this process will involve establishing the latent structure of the dependent variables. This step is crucial to establishing the validity of the model. Clearly, the challenge in evaluating the model is its complexity. This model includes two interactions, which will make the structural model more difficult to analyze. However, the full-model analysis could potentially provide a more complete understanding of how testing impacts applicants' perceptions of organizations by examining all of the variable relationships together and not in isolation, as is done with regression analysis.

# **Chapter VII**

#### Method

# **Participants**

Participants were 262 applicants for nonexempt level data processing positions at a medium-size Midwestern insurance company. The study sample consisted of 65% female and 35% male applicants. The majority of applicants' age fell in the range of 21 to 30 (58%), while 22% fell between 31 and 40, 11% between 41 and 50, 6% above 51, and 3% below 21. Applicants predominantly classified themselves as Caucasian (66%) (African American, 15%, Hispanic, 4%, Native American, 1%, other, 14%). Finally, 76% of participants had not applied for a similar job with the company in the past, and 70% had no family or friend currently working for the organization. *Design* 

Because this study used actual job applicants as participants, it was critical that all applicants in the same recruiting class be treated consistently. Therefore, random assignment of applicants to experimental conditions would have presented both legal and ethical challenges for the study. Instead of random assignment, data was gathered from participants in two cohorts. The study began by collecting data from participants receiving no formal information about the assessment process (control cohort). This phase continued for approximately six months and a total of 130 participants completed surveys. After gathering data from applicants receiving no information, the information cohort began receiving formal information about the assessments as part of the recruiting process. Again, data was gathered for approximately six months and resulted in 132 participants.

It is acknowledged that this design presents some potential limitations. Specifically, threats to the internal validity (e.g., selection, history, and mortality) may make the interpretation of results difficult. Unfortunately, due to legal and ethical considerations, this is the most appropriate design for examining a manipulated variable in an actual applicant selection situation. Truxillo et al. (2002) provides a precedent for using this research design in applicant reaction research. To help reduce the potential impact of confounds, equivalence of cohorts was statistically examined and condition differences were statistically controlled in subsequent analyses.

#### Procedure

Data was gathered at three separate times. Applicants meeting the organization's minimum qualifications for the position were required to complete a battery of preemployment tests as the next step of the selection process. Time 1 data was collected at the testing facility prior to completing the test battery consisting of a cognitive ability test (Wonderlic Personnel Test) and personality inventory (Hogan Personality Inventory). Time 2 data was collected immediately following the completion of the tests at the testing facility. Finally, Time 3 data was collected after the applicant learned his or her hiring outcome. Due to the organization's policy, applicants did not receive a copy of their actual assessment scores at anytime throughout the process. Thus, the only additional information applicants received prior to Time 3 survey was the hiring outcome. The Time 3 survey was sent to applicants approximately 30 days after the applicant had completed both the assessments and the first two surveys. Time 1, 2, and 3 survey data were submitted to the principal investigator using an electronic survey. To help increase response rate, participants also received the Time 3 survey via standard U.S. mail. The dual surveying methodology resulted in 56% response rate for Survey 3. Figure 2 shows the study's data collection sequence, along with the measures used at each stage.

*Pretesting information*. Participants in the control condition received limited information about the tests they would complete. Specifically, company's recruiters provided only general information about the assessments' content and the time needed to complete them. Applicants received this information over the phone approximately 2-3 days prior to the testing session.

Following the guidance of Ployhart and Hayes (2003), the information cohort received detailed information prior to testing that explained the tests' content, job relatedness, and validity, as well as the testing process. The information was sent to applicants in a written format via email (preferred if available) or U.S. mail 2-3 days prior to testing. Appendix A contains the information provision provided to applicants.

Figure 2 Study Design and Data Collection Sequence

Time 1	<b>←</b>	Time 2	4	<b></b>	Time 3
Pretesting	1 hour	Posttesting	1-2 weeks	1-2 weeks	Postdecision
Organization	Cognitive	Organization			Organization
Attraction	ability test	Attraction	Interview	Job offer	Attraction
• Recommendation	Personality	Recommendation			Recommendation
Intentions	inventory	Intentions			Intentions
Acceptance Intentions		Acceptance			Customer Patronage
• Reapplication		Intentions			Intentions
Intentions		Reapplication			• Word-of-mouth
Customer Patronage		Intentions			Behaviors
Intentions		Customer Patronage			
Belief in Tests		Intentions			
Organizational		Outcome			
Knowledge		Favorability			
Job Importance		Procedural Justice			
Attitude Certainty		Measures			

### Measures

Time 1 (pretesting). The organizational attractiveness measure ( $\alpha = .75$ ) examined applicants' attraction to both the company and the job and was assessed by three items adapted from Macan et al. (1994) (e.g., "This company is exactly what I am looking for in an employer."). Recommendation intentions ( $\alpha = .91$ ) assessed applicants' willingness to advocate for the company based on their selection experiences and was assessed with two items adapted from Smither et al. (1993) (e.g., "Based on my experiences so far, I would encourage others to apply for employment with this company."). Reapplication intentions ( $\alpha = .87$ ) used two items and measured applicants' potential willingness to reapply to the company in the future, if they were not offered the position (e.g., "I intend to apply for another job at this company if I am not offered this job."). The job acceptance intentions measure ( $\alpha = .72$ ) assessed the applicants' willingness to accept the job offer if it were extended and was measured by two items adapted from Macan et al. (1994) (e.g., "I will definitely accept a job here if it is offered."). Additionally, two items (adapted from Macan et al., 1994) measured customer patronage intentions ( $\alpha = .70$ ), and assessed the applicants' propensity to purchase the company's products and/or services (e.g., "I am more likely to purchase this company's products/services now than I was in the past."). The response format for the measures of organizational attractiveness, job acceptance intentions, recommendation intentions, reapplication intentions, and customer patronage intentions was a 5-point Likert scale with 1 representing "strongly disagree" and 5 representing "strongly agree."

In addition to the dependent variables, a number of other variables were measured at Time 1. Job/organizational knowledge ( $\alpha$  = .87) was measured with six items evaluating applicants' understanding of important features of the job and organization, such as reputation, pay, employee treatment, benefits, and job tasks (e.g., "How much knowledge do you have of the company's reputation?"). The response format used a 5-point Likert scale with 1 representing "no knowledge" and 5 representing "extensive knowledge." Attitude certainty ( $\alpha$  = .75) assessed applicants' confidence in their attitudes about the company and was measured with two items (e.g., "I am unlikely to

change my opinions about this organization."). Four items were designed to measure participants' perceptions of job importance. Unfortunately, the job importance scale did not possess adequate reliability ( $\alpha$  = .45) and no two items produced an alpha above .70. Therefore, I used the most transparent item that would get to the essence of the scale I was trying to measure (e.g., "Due to my current situation, I really need this job."). Belief in tests ( $\alpha$  = .85) was measured with three items adapted from Arvey et al. (1990) (e.g., "Tests are a good way of selecting people into jobs."). The response format for job importance, attitude certainty, and belief in tests measures was a 5-point Likert scale with 1 representing "strongly disagree" and 5 representing "strongly agree."

Time 2 (posttesting). In addition to organizational attractiveness ( $\alpha = .81$ ), recommendation intentions ( $\alpha = .91$ ), job acceptance intentions ( $\alpha = .80$ ), reapplication intentions ( $\alpha = .93$ ), and customer patronage ( $\alpha = .79$ ), five measures from Bauer, Truxillo, Sanchez, Craig, Ferrara, and Campion's (2001) Selection Procedural Justice Scales (SPJS) were used to measure characteristics of test fairness. Test job-relatedness (cognitive test, ( $\alpha = .87$ ; personality inventory, ( $\alpha = .91$ ) was measured with two items (e.g., "A person who scored well on this test means a person can do the job well."). Information known ( $\alpha = .79$ ) examined applicants' understanding of the tests and testing process prior to completing the assessments and was measured with four items (e.g., "I understood in advance what the testing processes would be like."). Chance to perform (cognitive test, ( $\alpha = .90$ ; personality inventory,  $\alpha = .94$ ) assessed applicants' perception that the tests would enable them the opportunity to show their skills and abilities, and was measured with three items (e.g., "I could really show my skills and abilities through this test."). Three items examined applicants' perceptions that the organization was open and honest during the testing process ( $\alpha = .75$ ) (e.g., "I was treated honestly and openly during the testing process."). Two-way communication ( $\alpha = .80$ ) examined applicants' satisfaction with the communication during the testing process and was measured with three items (e.g., "There was enough communication during the testing process."). Overall Procedural Justice ( $\alpha = .82$ ) was measured with three items adapted from Smither et al. (1993) (e.g., "Whether or not I get the job, I feel the selection process was fair.").

Additionally, outcome favorability ( $\alpha$  = .83) assessed applicants' perceptions of success on the assessments and was measured with two items (e.g., "I believe I did well on the tests I took today."). The response format for all test fairness measures and the outcome favorability measure was a 5-point Likert scale with 1 representing "strongly disagree" and 5 representing "strongly agree". Finally, a number of demographic and control variables were measured at Time 2 including, age, gender, race, employment status, similar position previously applied for, and experience completing employment tests.

Time 3 (postdecision). In addition to organizational attractiveness ( $\alpha$  = .86), recommendation intentions ( $\alpha$  = .92), and customer patronage ( $\alpha$  = .85), participants also completed two word-of-mouth measures. Specifically, applicants estimated the number of people they told about their recruiting experience and the number of people they recommended to apply for a position at the organization. A full list of measures is shown in Appendix B.

## **Chapter VIII**

### **Results**

In this study I examined how assessment information, attitude strength antecedents, and hiring outcome affected applicants' attitudes and behaviors during an actual selection process. Applicants' organizational perceptions were examined at three points during the selection process: prior to completing assessments (Time 1, T1), immediately after completing assessments (Time 2, T2), and after hearing about the hiring decision (Time 3, T3). At Time 3, two behavioral dependent measures (number of people talked to about the recruiting experience and number of people encouraged to apply) were measured in lieu of the attitudinal measures of Job Acceptance Intentions and Reapplication Intentions.

The study results are discussed below. I begin the results section by reviewing multiple principal components analyses used to consolidate the number of measures in the study. Next, I examine the results of some preliminary analyses. This discussion includes a review of the experimental condition equivalence, the manipulation impact, and the differential responding to Survey 3. I then discuss the testing of each hypothesis, beginning with the impact of the information condition on the procedural justice variables (Hypothesis 1). The results of the remaining hypotheses testing are reviewed in time order according to when the dependent variable was measured (T1 – Hypotheses 3 and 4, T2 – Hypothesis 2, T3 – Hypothesis 5 and 6). The results section concludes with a number of exploratory analyses.

#### Scale Reduction

Due to the large number of dependent variables measured in this study, a principal components analysis (PCA) was used to explore how the observed variables could be consolidated into common components, which would lead to greater parsimony when examining the hypotheses. PCA accomplishes variable consolidation by extracting maximum variance from the measured variables and distributes it to a fewer number of independent components. When theory is not guiding the anticipated factor structure of observed variables, as in this study, researchers propose using PCA instead of factor analysis (Tabachnick & Fidell, 2001). PCA with varimax rotation was used to extract

new components from the scales originally measured. For each analysis, I examined eigenvalues and % of variance contributed by a component to determine the final structure. The sections below provide the PCA results.

Procedural justice variables. Two components were extracted from the seven procedural justice scales (Information Known, Openness, Two-way Communication, Jobrelatedness (cognitive and personality tests), and Chance to Perform (cognitive and personality tests)). The first component (PC1) possessed an eigenvalue of 3.17 and accounted for 45% of the variance. This component was comprised of the four procedural justice variables – Job-relatedness (cognitive and personality tests) and Chance to Perform (cognitive and personality tests) – that measured applicants' perceptions of the tests' format and its relationship to the job. Loadings of these four variables on PC1 ranged from .78 to .82; loadings of the other three variables on PC1 were lower, .44 to .48. Therefore, PC1 was labeled Test Structure Fairness. The second component (PC2) had an eigenvalue of 1.68 and accounted for an additional 24% of the variance. This component was composed of the remaining three procedural justice variables with loadings of .50 to .75. Cross-loadings of the other four variables ranged from -.20 to -.39. PC2 measured applicants' perceptions of their interpersonal treatment during the assessment process and was labeled Interactional Justice. No other components had an eigenvalue greater than one.

Theoretically, it was important to examine the relationship of applicants' overall procedural justice perceptions to other variables in the study. Because it was anticipated that overall procedural justice would correlate with any component extracted through the PCA, Overall Procedural Justice was not included in the previously conducted PCA. In support of this, it was found that Overall Procedural Justice possessed a moderate correlation with both of the new principal components, Interactional Justice (r = .43) and Test Structure Fairness (r = .47). Therefore, three scales, Interactional Justice, Test Structure Fairness and Overall Procedural Justice, were retained and examined in the results section.

Organizational perception dependent variables at T1, T2, T3. For the five dependent variables measured at T1 and T2 (Organizational Attraction, Recommendation

Intentions, Reapplication Intentions, Job Acceptance Intentions, and Customer Patronage Intentions), only one component was extracted. At T1, the component possessed an eigenvalue of 2.64, accounted for 53% of the variance, and the loadings ranged from .46 to .82. At T2, the component had an eigenvalue of 3.00, accounting for 60% of the variance, and its loadings ranged from .52 to .88. Interestingly, the Customer Patronage Intentions variable showed the weakest factor loadings for both T1 and T2. At both times, the next lowest component loading was around .70. For both analyses, no other component reached an eigenvalue greater than 1. Because these two components contained content measuring applicants' overall organizational attraction, they were referred to as T1 and T2 Organizational Attraction in the results section. Additionally, a PCA was performed on the three organizational perception dependent variables measured at T3 (Organizational Attraction, Recommendation Intentions, and Customer Patronage Intentions). The three variables were found to load on one component. The one component possessed an eigenvalue of 2.17, accounting for 72% of the variance, and the loadings ranged from .60 to .88. This factor was called T3 Organizational Attraction.

Attitude strength antecedents. The three attitude strength antecedents were found to load on two components. The first component (PC1) had an eigenvalue of 1.41, accounting for 47% of the variance. This component was comprised of the two variables Organizational Knowledge and Attitude Certainty. Loadings for these two variables were .77 and .86, respectively; the loading for Job Importance was lower, .30. PC1 was labeled Organizational Knowledge. The second component (PC2) was composed of the remaining attitude strength variable and had an eigenvalue of 1.04, accounting for 35% of the variance. PC2 had a loading of .92 on Job Importance and loadings of -.43 and .07 for Organizational Knowledge and Attitude Certainty, respectively. The high loadings and lower cross-loadings suggest that PC2 is measuring a different component from Organizational Knowledge. PC2 was labeled Job Importance. It should be noted that all other components used in this study were composed of psychometrically acceptable scales and not individual items as in the case of Job Importance.

In summary, a large number of variables were measured in this study and by using principal components analysis with varimax rotation, It was found that many of

those variables loaded on common factors. Specifically, seven procedural justice variables were reduced to two, Interactional Justice and Test Structure Fairness; the five organizational perception dependent variables at T1 and T2 were reduced to one factor called Organizational Attraction; the three organizational perception variables measured at T3 were reduced to one factor, T3 Organizational Attraction; and finally the three attitude strength antecedents were reduced to two factors, Organizational Knowledge and Job Importance. By reducing the number of variables through the PCA, I have increased the parsimony of the study without losing the important theoretical concepts that needed to be examined.

# Preliminary Analyses

Means, standard deviations, reliabilities, and intercorrelations for the final study variables are presented in Table 1. Means and standard deviations by information condition for the procedural justice, attitude strength, control, and dependent variables are presented in Table 2.

Condition equivalence. Because of the study's quasi-experimental design and the nonrandom placement of applicants into conditions, it was necessary to understand whether or not a variable other than the one manipulated could be partly or even wholly responsible for observed differences (Pedhazur, 1997). To establish condition equivalence and ensure significant results were not due to an unanticipated variable, I compared the participants in the experimental (information) condition with those in the control condition in terms of demographics, attitude strength variables, and other control variables. No significant differences were found between the information condition and the control condition for age,  $\chi^2$  (4, N=254) = 3.13, ns; gender,  $\chi^2$  (1, N=256)= .39, ns; ethnicity,  $\chi^2$  (3, N=255) = 4.80, ns; work status,  $\chi^2$  (4, N=256) = 1.17, ns; applied for similar job,  $\chi^2$  (1, N=256) = 4.20, ns; friends or family employed  $\chi^2$  (1, N=238) = .00, ns; job importance, t(256) = 1.73, ns; organizational knowledge, t(256) = 1.25, ns; belief in tests, t(256) = 1.07, ns; outcome favorability, t(261) = .63, ns; and number of assessments completed, t(254) = .27, ns. Additionally, I examined potential differences in hiring outcome by condition, but no differences emerged between the experimental

Table 1 Means, Standard Deviations, Reliabilities, and Intercorrelations for the Study Variables

Study Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Belief in Tests	3.61	.74	(.85)												
2. Outcome Favorability	3.95	.78	.29**	(.83)											
3. Interactional Justice	3.72	.74	.22**	.28**	(.84)										
4. Test Structure Fairness	2.94	.73	.47**	.38**	.26**	(.94)									
<ul><li>5. Overall Procedural Justice</li><li>6. Organizational Knowledge</li></ul>	3.80 3.45	.67 .63	.50** .25**	.47** .21**	.43** .31**	.47** .25**	(.82) .21**	(.86)							
7. Job Importance	3.65	1.03	.09	.01	.03	.15*	.08	.09	-						
<ul><li>8. T1 Organizational Attraction</li><li>9. T2 Organizational</li></ul>	4.08	.47	.31**	.22**	.29**	.29**	.28**	.57**	.20**	(.84)					
Attraction	4.02	.49	.32**	.27**	.34**	.40**	.36**	.50**	.17**	.84**	(.89)				
10. T3 Organizational Attraction 11. Number Discussed	3.62	.74	.10	.16*	.12	.20*	.12	.18*	02	.24**	.20*	(.89)			
Recruiting	5.17	5.17	10	27**	21*	22*	22*	.04	12	.00	.00	.03			
<ol><li>Number Encouraged Apply</li></ol>	1.17	2.51	.06	.06	.13	.02	.07	.26**	.13	.28**	.24**	.29**	.37**		
13. Hiring Decision	-	-	20*	.05	.02	13	.02	.05	.06	04	06	.32**	.21*	.06	
14. Information		-	.07	.04	.20**	.12*	.03	.08	.11	.15*	.13*	.16*	.01	.15	.09

Note. Ns for T1 and T2 range from 242 to 262. N for T3 is 118. Information is coded 0 = no information condition, 1 = information condition. Outcome favorability is applicants' perceptions of how they performed on the assessments. Hiring Decision = the actual hiring decision, whether or not the individual was offered the job, 0 = not offered job and 1 = offered job. Alpha reliabilities are in parentheses along the diagonal. T = time.

\*p < .05. \*\*p < .01.

Table 2

Means and Standard Deviations for Dependent Variables by Information Condition

	Control		Infor	mation
	condition		conc	lition
Study Variables	M	SD	M	SD
Dependent Variables				
T1 Organizational Attraction	4.00	.43	4.15	.50
T2 Organizational Attraction	3.96	.43	4.08	.54
T3 Organizational Attraction	3.50	.78	3.74	.70
Number Encouraged Apply	.80	1.83	1.53	3.00
Number Told About Recruiting	5.11	5.18	5.23	5.20
Experience				
Attitude Strength Variables				
Organizational Knowledge	3.40	.62	3.50	.64
Job Importance	3.76	.95	3.54	1.10
Procedural Justice Variables				
Interactional Justice	3.62	.54	3.82	.48
Test Structure Fairness	2.85	.71	3.02	.74
Overall Procedural Justice	3.78	.66	3.82	.69
Control Variables				
Belief in Tests	3.56	.76	3.65	.72
Outcome Favorability	3.92	.76	3.98	.80

*Note*. For T1, N = 256, and ns = 125 and 131 for the control group and information condition, respectively. For T2, N = 262, and ns = 130 and 132 for the control group and information condition, respectively. For T3, N = 140, and ns = 71 and 69 for the control group and information condition, respectively. T = time.

(17/63, 27%) and the control (21/60, 35%) conditions,  $\chi^2$  (1, N=123) = .93, ns. In summary, the analysis of the demographic, attitude strength and control variables, by information and control conditions show no significant differences and suggest that the two conditions are equivalent. Therefore, any significant differences between the two conditions should be the result of the information manipulation used in the study and not the result of condition differences influenced by one or more study variables. Although steps were taken to ensure equivalence of experimental conditions, the study's quasi-experimental design still leaves it susceptible to condition differences resulting from currently unknown variables not specifically examined in the study. Analyses will continue with the assumption that the conditions are equivalent but with the understanding that any significant results need to be interpreted with caution.

Final survey response. As part of the study, applicants were asked to complete surveys at three different times. The length of time between when an applicant completed Survey 2 and received Survey 3 was approximately 30 days. Due to the significant duration between Survey 2 and Survey 3, not all participants chose to complete Survey 3. To ensure that applicants' likelihood of responding to the third survey was not affected by other study variables, I compared those who completed all three study surveys (n = 140) to those who only completed the first two (n = 122) on demographic variables, Time 1 and Time 2 Organizational Attraction, procedural justice variables, attitude strength variables, and control variables. There were no significant differences in the control variables age,  $\chi^2$  (4, N=254) = 4.51, ns; gender,  $\chi^2$  (1, N=256) = .32, ns; ethnicity,  $\chi^2$  (4, N=256) = 3.63, ns; work status,  $\chi^2$  (3, N=256) = 3.80, ns; applied for similar job,  $\chi^2$  (1, N=256) = 1.47, ns; or friends or family employed  $\chi^2$  (1, N=238) = 3.31, ns. Additionally, completion of Survey 3 was not impacted by being in either the experimental (71/131, 54%) or the control condition (70/132, 53%),  $\chi^2$  (1, N=263) = .04, ns. Additionally, no significant differences in responses were found for T1 or T2 Organizational Attraction, procedural justice variables, attitude strength antecedents or control variables. Means and standard deviations by response category are presented in Table 3. The lack of significant findings for the dependent variables (both T1 and T2) was surprising considering a similar study (Truxillo et al., 2002) found that applicants' survey return rate was related to their earlier attraction to the organization; specifically, individuals with more positive organizational perceptions were more likely to return the final survey. Interestingly, in this study, participants' likelihood of responding to all three surveys appears not to be biased by how they felt about the organization or the assessment process.

Manipulation check. Applicants participating in the information condition received a two-page document explaining the assessment process and outlining ways to prepare for optimum performance. The participants in the control condition received no additional information regarding the assessments other than a quick overview by the company's recruiters and assessment administrators. If the manipulation were to be effective, it was anticipated that applicants receiving information would perceive that they had a better understanding of the assessments and assessment process than those who received no information. To examine the effectiveness of the manipulation, differences in information and control conditions were compared on the four items making up the Information Known procedural justice variable.

The results show that the information and control conditions were significantly different for all four questions. First, applicants in the information condition (M = 3.67, SD = .83) felt they had a better understanding of the assessments ("I knew what to expect on the tests") than applicants in the control condition (M = 2.83, SD = 1.04), t(253) = 7.13, p<.01, Cohen's d=.89. Second, applicants in the information condition (M = 3.76, SD = .83) believed they received more information about the assessment format ("I had ample information about what the format of the tests would be") than applicants in the control condition (M = 3.05, SD = 1.09), t(253) = 5.87, p<.01, d=.73. Third, applicants in the information condition (M = 4.09, SD = .59) felt that the testing process explanation was more adequate ("The organization provided an adequate explanation of the testing process") than applicants in the control condition (M = 3.67, SD = .95), t(253) = 4.22, p<.01, d=.53. Fourth, applicants in the information condition (M = 3.91, SD = .74)

Table 3

Means and Standard Deviations for Study Variables by Response Condition

	Compl	eted two	Completed all three		
	sur	veys	surv	veys	
Study Variables	M	SD	M	SD	
Dependent Variables					
1	4.08	.46	4.08	.48	
T1 Organizational Attraction					
T2 Organizational Attraction	4.03	.46	4.02	.52	
Attitude Strength Variables					
Organizational Knowledge	3.42	.63	3.48	.63	
Job Importance	3.63	1.03	3.67	1.04	
Procedural Justice Variables					
Interactional Justice	3.70	.48	3.73	.56	
Test Structure Fairness	2.93	.72	2.95	.74	
Overall Procedural Justice	3.85	.61	3.83	.65	
Control Variables					
Belief in Tests	3.63	.76	3.58	.72	
Outcome Favorability	3.85	.81	4.03	.75	

*Note.* For T1, N = 256, and ns = 136 and 120 for the two survey respondents and third survey respondents, respectively. For T2, N = 262, and ns = 140 and 122 for the two survey respondents and third survey respondents, respectively. T = time. No significant differences were found between the two conditions for any of the listed variables.

felt they had a better understanding of what would happen during the assessment process ("I understood in advance what the testing process would be like") than applicants in the control condition (M = 3.36, SD = .97), t(253) = 5.18, p<.01, d = .64. The significant results and substantial effect sizes suggest that the information provided in the experimental condition did result in applicants' improved understanding of the assessments and assessment process. Thus, the information produced its intended effect on participants' assessment understanding.

Control variables. The primary goal of this study was to determine if the attitude strength antecedents and information condition accounted for unique variance in the applicants' procedural justice and organizational perceptions above and beyond the variance accounted for by variables already known to impact these perceptions. Analysis of each hypothesis began with an examination of the direct relationship between the independent and dependent variables predicted. If the direct relationship was significant, a more rigorous analysis of the hypothesis was performed by controlling for variables known to impact the dependent variables. Two variables, belief in tests and outcome favorability (actual hiring outcome was used at T3), were used as control variables in the analyses.

Additionally, prior research has shown that applicants' earlier organizational perceptions have a strong relationship with their later perceptions (Bauer et al., 1998). Therefore, in order to examine the unique effect of the independent variables, applicants' perceptions were measured immediately prior to the time being evaluated, and these perceptions were used as control variables. For example, organizational attraction measured at T1 was used as a control for analyses involving T2 organizational attraction.

Finally, because the covariates were not measured prior to administering the information manipulation there was some concern that the information condition might interact with the covariates, thus violating the homogeneity of regression assumption. Therefore, homogeneity of regression was assessed prior to testing each hypothesis that included covariates and the information condition. Because multiple covariates were used in most analyses, a technique outlined by Tabachnick and Fidell (2001) was used to examine the overall homogeneity of regression across all covariates in a single analysis.

Specifically, the statistical technique pools the interaction effects between the information condition and each covariate for the specific dependent variable, which allows for an overall examination of homogeneity of regression.

## *Test of Hypotheses*

Impact of information condition on procedural justice (Hypothesis 1). Hypothesis 1 predicted that providing assessment information would be positively related to procedural justice perceptions. To test the direct effect of information condition on applicants' procedural justice perceptions, a multivariate analysis of variance (MANOVA) was performed using the three procedural justice variables (Interactional Justice, Test Structure Fairness, and Overall Procedural Justice) as the dependent variables and information condition as the independent variable. Based on the Wilk's Lambda criterion, the combined procedural justice variables were significantly affected by the information condition, F(3, 249) = 4.44, p < .01. The results reflect a modest association between the information condition and the combined procedural justice variables,  $\eta^2 = .05$ . Variable means are shown in Table 2.

With the direct relationship between the procedural justice variables and information condition confirmed, a more rigorous evaluation of Hypothesis 1 was performed. Based on previous research, it was hypothesized that applicants' initial belief in tests and their test performance perceptions would be significantly related to their procedural justice perceptions. An additional multivariate analysis of covariance (MANCOVA) was conducted using the three procedural justice measures as the dependent variables, the information condition as the independent variable, and Belief in Tests and Outcome Favorability as covariates. A test of the homogeneity of regression between the two covariates and the information condition for the three procedural justice variables was not significant, F(2, 242) = 1.70, ns. These results support the homogeneity of regression assumption and the analysis continued as outlined. After adjusting for applicants' belief in tests and outcome favorability perceptions, the combined procedural justice dependent variables were significantly affected by the information condition, F(3, 241) = 3.54, p<.05. The strength of the association

between the adjusted procedural justice perceptions and the information condition was weak,  $\eta^2 = .04$  (see Table 4).

With the overall effect found, three multiple regression analyses were performed with each of the procedural justice variables to determine the impact of the information condition on each variable separately. Belief in Tests and Outcome Favorability were entered in Step 1 as controls, and the information condition was entered into Step 2 (see Table 5). The addition of the information condition resulted in a statistically significant increase in  $R^2$  for Interactional Justice ( $\Delta R^2 = .03$ ), F(1, 251) = 8.63, p<.01. Analysis of the betas confirmed that applicants who received assessment information believed they were treated interpersonally fairer than those in the control condition. In contrast, the information condition provided no significant effect for Test Structure Fairness, ( $\Delta R^2 = .01$ ), F(1, 245) = 2.12, ns or Overall Procedural Justice, ( $\Delta R^2 = .00$ ), F(1, 253) = .00, ns beyond the effect produced by the covariates.

Time 1 analyses (Hypotheses 3 and 4). Hypothesis 3 predicted that assessment information would be positively related to organizational perceptions measured prior to testing. As predicted, applicants in the information condition (M = 4.15, SD = .43) were more attracted to the organization than individuals in the control condition (M = 4.01, SD = .50), t(151) = 2.42, p < .05, d = .30.

With the direct relationship between T1 Organizational Attraction and information condition confirmed, a more rigorous evaluation of Hypothesis 3 was performed. One hierarchical regression analysis was performed examining the effect of the information condition after controlling for applicants' initial belief in tests (Outcome Favorability was not included as a control because at Time 1 applicants had not yet completed the assessments). Belief in Tests was thought to be a strong covariate because of the significant correlation with T1 Organizational Attraction (r = .31, p < .001). With the nonsignificant interaction between information condition and Belief in Tests for T1 Organizational Attraction, F(1, 246) = 3.40, ns, the homogeneity of regression was confirmed, and the analysis continued as planned. Belief in Tests was used as a control and was entered into Step 1 of the model, and the information condition was entered into

Table 4

MANCOVA Between Procedural Justice Variables and Information Condition

Controlling for Belief in Tests and Outcome Favorability.

	df	F	p	$\eta^2$
Belief in Tests	3	28.78	.001	.26
Outcome Favorability	3	20.37	.001	.20
Information Condition	3	3.54	.01	.04
Error	241			

Table 5
Hierarchical Regressions with Controls and Information Condition Predicting Procedural Justice Variables

	I	nteraction	ıal	Test St	ructure	Fairness	Over	all Proc	edural
		Justice						Justice	
Variable	$R^2$	$\Delta R^2$	β	$R^2$	$\Delta R^2$	β	$R^2$	$\Delta R^2$	β
Step 1	.10**			.28**			.37**		
Belief in Tests			.13*			.39**			.36**
Outcome Favorability			.25**			.26**			.39**
Step 2	.13**	.03**		.29**	.01		.37**	.00	
Information Condition			.17**			.08			01

*Note.* Ns range from 245 to 253. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding. Information condition is coded 0 = no information and 1 = information.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Step 2. The addition of the information condition resulted in a statistically significant  $\Delta R^2$  for T1 Organizational Attraction ( $\Delta R^2 = .02$ ), F(1, 247) = 4.80, p<.05 (see Table 6). Analysis of the betas confirms that applicants in the information condition held more positive perceptions of the organization even after controlling for their belief in tests. Thus, Hypothesis 3 was supported.

Hypothesis 4 predicted that attitude strength variables would be positively related to organizational perceptions measured prior to testing. Hypothesis 4 was tested using one hierarchical regression with the T1 Organizational Attraction as the dependent variable. The two attitude strength variables accounted for statistically significant variance in T1 Organizational Attraction,  $(R^2 = .35)$ , F(2, 246) = 64.87, p < .001. With the direct relationship between the attitude strength antecedents and T1 Organizational Attraction established, a more rigorous analysis was performed using the same regression model outlined above, except Belief in Tests was entered into the model as a control variable. For the model, belief in tests was used as a control and entered in Step 1, and the two attitude strength variables (Organizational Knowledge and Job Importance) were entered in Step 2. The addition of the attitude strength variables resulted in a statistically significant  $\Delta R^2$  for the T1 Organizational Attraction ( $\Delta R^2 = .28$ ) F(2, 245) = 53.67, p < .001 (see Table 7). The betas showed that Organizational Knowledge and Job Importance had a positive relationship with T1 Organizational Attraction. Thus, applicants who possessed greater knowledge of the organization and who needed the job were more attracted to the organization. In total, these findings provided further research support for knowledge and importance as antecedents of attitude strength. Therefore, Hypothesis 4 was supported.

Because both the information condition and the attitude strength variables showed a significant relationship with T1 Organizational Attraction, an exploratory analysis was performed to determine whether the information condition accounted for significant variance in T1 Organizational Attraction over and above Belief in Tests and the attitude strength antecedents. A hierarchical regression analysis was performed with Belief in

Table 6

Hierarchical Regressions with Controls and Information Condition Predicting T1

Organizational Attraction

	T1 Organizational Attraction					
Variable	$R^2$	$\Delta R^2$	β			
Step 1	.10**					
Belief in Tests			.30**			
Step 2	.12**	.02*				
Information Condition			.13*			

*Note.* N = 248. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding. Information condition is coded 0 = no information and 1 = information.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Table 7

Hierarchical Regressions with Controls and Attitude Strength Predicting T1

Organizational Attraction

		T1 Organizat Attraction	
Variable	$R^2$	$\Delta R^2$	β
Step 1	.10**		
Belief in Tests			.17**
Step 2	.37**	.28**	
Organizational Knowledge			.51**
Job Importance			.14**

*Note.* N = 247. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Tests, Organizational Knowledge and Job Importance entered in Step 1 and the information condition entered in Step 2. The addition of the information condition resulted in a statistically significant  $\Delta R^2$  for the T1 Organizational Attraction ( $\Delta R^2 = .02$ ) F(1, 244) = 5.36, p<.05 (see Table 8). An examination of the betas shows that applicants who received the testing information held more positive perceptions of the organization even after accounting for applicants' belief in tests, their organizational knowledge and their job importance beliefs.

Time 2 analyses (Hypothesis 2). Hypothesis 2 predicted that procedural justice variables would be positively related to T2 Organizational Attraction and would mediate the relationship between the information condition and T2 organizational attraction. To test the first part of this hypothesis, T2 Organizational Attraction was regressed on the three procedural justice variables. The procedural justice variables accounted for significant variance in T2 Organizational Attraction, ( $R^2 = .23$ ), F(3, 247) = 24.58, p < .001. Thus, the direct relationship between procedural justice perceptions and posttest organizational attraction was confirmed.

A more rigorous evaluation of Hypothesis 2 was performed to determine if the relationship between procedural justice and T2 Organization Attraction would remain after controlling for applicants' T1 organizational attraction, their belief in tests, and their outcome favorability perceptions. A multiple regression analysis was performed with T1 Organizational Attraction, Belief in Tests, and Outcome Favorability entered into Step 1 of the model, and the three procedural justice variables entered in Step 2. The results show that the procedural justice variables accounted for significant variance beyond that accounted for by the three control variables ( $\Delta R^2 = .02$ ), F(3, 236) = 6.82, p<.001 (see Table 9). The betas indicate that Test Structure Fairness was the only variable able to impact significantly applicants' T2 organizational attraction after adjusting for the three control variables.

Next, I examined the potential for the relationship between information condition and T2 Organizational Attraction to be mediated by procedural justice. The four steps outlined by Baron and Kenny (1986) were used to test the potential mediation effect of

Table 8

Hierarchical Regressions with Belief in Test and Attitude Strength as Controls and Information Condition Predicting T1 Organizational Attraction

		T1 Organization Attraction	nal
Variable	$R^2$	$\Delta R^2$	β
Step 1	.10**		
Belief in Tests			.16**
Step 2	.37**	.28**	
Organizational Knowledge			.51**
Job Importance			.15**
Step 3	.39**	.02*	
Information Condition			.12*

*Note.* N = 245. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Table 9

Hierarchical Regressions with Controls and Procedural Justice Predicting T2

Organizational Attraction

		T2 Organizati	
		Attraction	l
Variable	$R^2$	$\Delta R^2$	β
Step 1	.71**		
Belief in Tests			.03
Outcome Favorability			.02
T1 Organizational Attraction			.77**
Step 2	.73**	.02**	
Interactional Justice			.05
Test Structure Fairness			.14**
Overall Procedural Justice			.06

*Note.* N = 247. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

procedural justice. First, information condition was found to have a direct effect on T2 Organizational Attraction ( $\beta = .13$ ), F(1, 260) = 3.12, p < .05. The second step was to determine the direct relationship between the information condition and the predicted mediating variable. While analyzing Hypothesis 1, it was discovered that information condition was significantly related to only one of the procedural justice variables, Interactional Justice ( $\beta = .20$ ), F(1, 259) = 10.60, p < .001. Therefore, the mediation analysis continued with Interactional Justice as the mediator but no further examination of mediation was performed with the other two procedural justice variables. Third, Interactional Justice possessed a significant relationship with T2 Organizational Attraction ( $\beta = .25$ ), F(1, 259) = 30.00, p < .001. The fourth step involved examining the direct effect of information condition on T2 Organizational Attraction after controlling for Interactional Justice. A fully mediated relationship is present if after controlling for Interactional Justice, the previously significant relationship between information condition and T2 Organizational Attraction is no longer significant (Baron & Kenny, 1986). The relationship between information condition and T2 Organizational Attraction was found to be nonsignificant after controlling for interactional justice ( $\beta = .05$ ), t(258)= .85, ns. Additionally, a follow-up Sobel test was conducted to determine the strength of the mediation. The Sobel test was found to be significant (z = 2.4, p < .05), and this result shows that significant full mediation has occurred. In plain terms, the inclusion of Interactional Justice as a mediator significantly reduced the association between Test Information and T2 Organizational Attraction. Overall, this mediation analysis indicates that applicants who receive the information provision perceive their interpersonal treatment as fairer, which leads to more positive perceptions of the organization. Thus, both parts of Hypothesis 2 were supported.

Time 3 analyses (Hypotheses 5 and 6). Hypothesis 5 predicted that attitude strength antecedents would interact with information condition, such that when the attitude strength variable was low, information would have a greater impact on T3 Organizational Attraction and the two word-of-mouth variables compared to when attitude strength was high. To test Hypothesis 5, three hierarchical regressions were performed with T3 Organizational Attraction and the two word-of-mouth dependent

variables (number of people told about recruiting experience and number of people encouraged to apply). Information condition and each of the two attitude strength variables (separately entered for each analysis) were entered in Step 1 and the interaction term (e.g., Information Condition X Organizational Knowledge) was entered in Step 2. To reduce the potential for multicollinearity, the attitude strength variables were centered around their mean (Organizational Knowledge, M = 3.45; Job Importance, M = 3.65). The Information Condition X Organizational Knowledge interaction produced a significant  $\Delta R^2 = .06$  for T3 Organizational Attraction, F(1, 129) = 8.58, p < .01, and for number of people told about recruiting experience,  $\Delta R^2 = .02$ , F(1, 124) = 2.70, p < .05, but not for number of people encouraged to apply,  $\Delta R^2 = .00$ , F(1, 130) = .42, ns. Additionally, the Information Condition X Job Importance interaction produced a significant  $\Delta R^2 = .02$  for number of people encouraged to apply, F(1, 131) = 3.43, P < .05, but not for either number of people told about recruiting experience,  $\Delta R^2 = .00$ , F(1, 125) = .89, ns, or T3 Organizational Attraction,  $\Delta R^2 = .00$ , F(1, 130) = .39, ns. The form of these interactions will be discussed below.

A more rigorous evaluation of Hypothesis 5 was performed to determine if the significant interactions would remain after controlling for applicants' T2 organizational attraction and the actual hiring decision (hired/not hired). Hiring Outcome (hired/not hired) and T2 Organizational Attraction measures were used as control variables and were entered into Step 1 of the model. Information condition and each attitude strength variable were entered in Step 2 and the interaction term was entered in Step 3 (see Table 10). The Information Condition X Organizational Knowledge interaction produced a significant  $\Delta R^2 = .06$  for T3 Organizational Attraction, F(1, 109) = 8.26, p < .01. As Figure 3 shows, exposure to assessment information led to increased organizational attraction when applicants possessed significant organizational knowledge but had no positive effect when the applicants' knowledge was low.

Following the same hierarchical regression process outlined above, the Information Condition X Job Importance interaction produced a significant  $\Delta R^2 = .03$  for

Table 10

Hierarchical Regressions with Controls, Knowledge, and Information Condition

Predicting T3 Dependent Variables

	Т3	Organization	nal
		Attraction	
Variable	$R^2$	$\Delta R^2$	β
Step 1	.14**		
Hiring Outcome			.32**
T2 Organizational Attraction			.13
Step 2	.17**	.04	
Organizational Knowledge			17
Information Condition			.15
Step 3	.23**	.06**	
Knowledge x Information			.38**

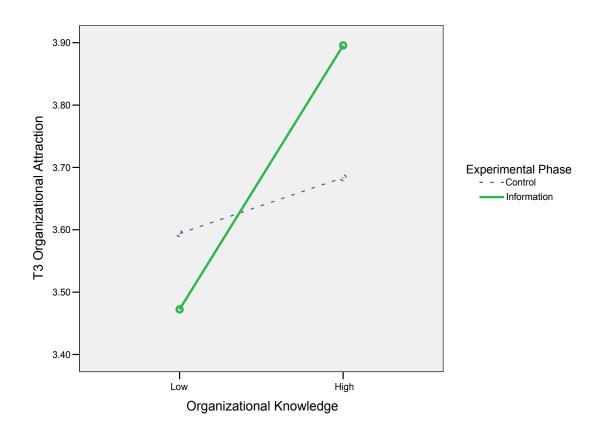
*Note.* N = 110. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding. Information condition is coded 0 = no information and 1 = information. T = time.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Figure 3

Interaction of Organizational Knowledge and Information Condition with T3

Organizational Attraction



number of people encouraged to apply, F(1, 110) = 3.34, p<.05 (see Table 11). As shown in Figure 4, applicants receiving assessment information were more likely to encourage others to apply when job importance was high but were less likely when job importance was low even after adjusting for applicants' T2 organizational attraction and their hiring outcome.

Although interesting and deserving of further review in the discussion section, these interaction results did not show assessment information as having the greater impact on the T3 dependent variables when the attitude strength variables were low. In fact, the interactions showed the exact opposite. Assessment information led to the increase in pro-organizational attitudes and behaviors when the attitude strength variables were high whereas information provided little or no effect when the attitude strength variables were low. Therefore, Hypothesis 5 was not supported.

Hypothesis 6 predicted that applicants' hiring outcome would interact with information condition to affect T3 dependent variables, such that for rejected applicants, the information would have a greater impact than for accepted applicants. To test the Information Condition x Hiring Outcome interaction, a MANOVA was performed using the three T3 dependent variables (T3 Organizational Attraction, number encouraged to apply, and number told about recruiting experience) as the dependent variables, and information condition and Hiring Outcome as the independent variables. Results of the analysis are shown in Table 12. Based on the Wilk's Lambda criterion, the Information Condition x Hiring Outcome interaction showed no significant relationship to the combined T3 dependent variables, F(3, 105) = .33, ns. Therefore, Hypothesis 6 was not supported.

Although not specifically hypothesized due to the anticipated higher-order interaction with hiring decision, it was predicted that assessment information would have a direct relationship with the T3 dependent variables. I began by examining the direct relationship between information condition and T3 dependent variables. Applicants in the information condition (M = 3.74, SD = .77) were significantly more attracted to the organization than applicants in the control condition (M = 3.50, SD = .70), t(136) = 1.93,

Table 11

Hierarchical Regressions with Controls, Job Importance, and Information Condition

Predicting Number Encouraged to Apply

	Nu	ımber Encour	aged		
	to Apply				
Variable	$R^2$	$\Delta R^2$	β		
Step 1	.06*				
Hiring Outcome			.07		
T2 Organizational Attraction			.25**		
Step 2	.10**	.03			
Job Importance			08		
Information Condition			.13		
Step 3	.13**	.03*			
Importance x Information			.26*		

*Note.* N = 115. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding. Information condition is coded 0 = no information and 1 = information. T = time.

<sup>\*</sup> *p*<.05, \*\**p*<.01.

Figure 4

Interaction of Job Importance and Information Condition with T3 Number of People
Encouraged to Apply

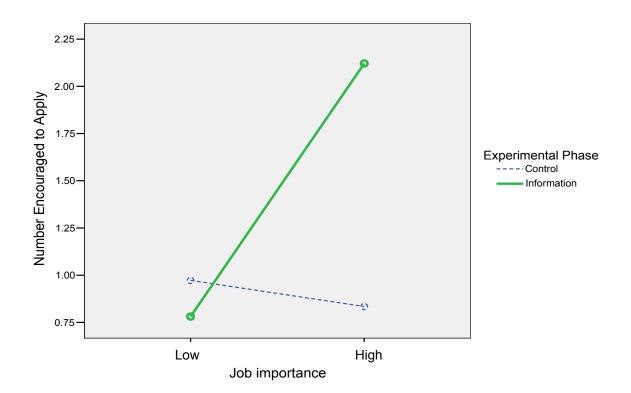


Table 12

MANOVA Between T3 Dependent Variables, Information Condition and Hiring Outcome

	df	F	p	$\eta^2$
Information Condition	1	1.94	ns	.05
Hiring Outcome	1	6.68	.001	.16
Hiring Outcome X Information Condition	1	.33	ns	.01
Error	105			

p<.05, d = .32. Additionally, applicants were marginally more likely to encourage others to apply to the organization when in the information condition (M = 1.53, SD = 3.00) compared to the control condition (M = .80, SD = 1.82), t(137) = 1.73, p = .08, d = .29. No significant differences were found between the information and control conditions for number told about recruiting experiences, t(131) = .14, ns. Variable means for these analyses can be found in Table 2.

As a follow-up to the previous significant analyses, a more rigorous analysis of the relationship between the information condition and T3 Organizational Attraction and number recommended was performed by controlling for applicants' T2 organizational attraction and hiring outcome. Prior to performing the analysis, a test of the homogeneity of regression between the information condition and the covariates, T2 Organizational Attraction and Hiring Outcome, for each of the dependent variables was performed. Homogeneity of regression was confirmed for T3 organizational attraction, F(2, 117) = 2.05, ns, number told about recruiting experience, F(2, 118) = .79, ns, and number encouraged to apply, F(2, 112) = 1.42, ns.

With the homogeneity of regression assumption confirmed, hierarchical regression was used to examine the relationship between information condition and T3 Organizational Attraction and number encouraged to apply. Hiring Outcome and T2 Organizational Attraction were used as controls and were entered into Step 1 of the model, and information condition was entered in Step 2 (see Table 13). The addition of the information condition resulted in a statistically significant  $\Delta R^2 = .03$  for T3 Organizational Attraction, F(1, 114) = 4.62, p<.05, and marginally statistically significant  $\Delta R^2 = .02$  for Number Encouraged Apply, F(1, 117) = 2.62, p = .09. Further analysis of the betas showed that receiving detailed information during the assessment process had a positive impact on applicants' perceptions of the organization as well as their word-of-mouth behaviors at the end of the selection process, even after controlling for

Table 13

Hierarchical Regressions with Controls, Hiring Outcome, and Information Condition

Predicting T3 Dependent Variables

Variable	T3 Organization Attraction			Number Encouraged Apply		
	Step 1	.16**			.06*	
Hiring Outcome (offered/not offered)			.23**			.07
T2 Organizational Attraction			.35**			.25**
Step 2	.19**	.03*		.08*	.02†	
Information Condition			.18*			.14†

Note. N = 118. Betas are for the final regression model.  $R^2$  and  $\Delta R^2$  may appear inconsistent due to rounding. Information condition is coded 0 = no information and 1 = information.

<sup>\*</sup> *p*<.05, \*\* *p*<.01, †*p*<.10.

applicants' earlier organizational attraction and their hiring outcome. These results suggest that information, when given during the assessment phase of a selection process, produces a positive enduring effect on applicants' organizational attitudes and behaviors. *Supplemental Analyses* 

Differences in accepting a job offer. A number of applicants who received a job offer decided to decline the offer and pursue other opportunities. I examined whether or not applicants were more likely to accept a job offer if they were part of the information condition. Interestingly, the results indicated that, for applicants receiving a job offer, no significant differences existed between the information condition (17/24 or 71%) and the control condition (21/32 or 66%),  $\chi^2$  (1, N=56) = .17, ns. Therefore, receiving assessment information during the selection process had no significant relationship with an applicant's willingness to accept a job offer.

Evaluation of the model's fit with Structural Equation Modeling (SEM). Using AMOS 6.0 (Arbuckle, 2003), the relationships were examined between Attitude Strength, a latent variable with two indicators (Attitude Certainty and Organizational Knowledge; Job Importance was not included because it contained only one item); Procedural Justice. a latent variable with two indicators (the 23 items from the eight procedural justice variables were randomly assigned to two variables); T2 Organizational Perceptions, a latent variable with two indicators (the 11 items from the five T2 dependent variables were randomly assigned to two variables); and T3 Organizational Perceptions, a latent variable with three indicators (Organizational Attraction, Recommendation Intentions, and Customer Patronage Intentions). Also included in the model were two measured indicators, Information Condition and Hiring Outcome. Due to model complexity and sample size constraints, the interaction between information condition and attitude strength, which was part of the study hypotheses and analyzed in the results section was not included in the SEM analysis. Additionally, a T1 Organizational Perceptions latent variable was not included in the model because previous analyses show that T1 dependent variables show considerable redundant variance with the T2 dependent variables (e.g., relationship between T1 Organizational Attraction and T2 Organizational

Attraction, r = .84). Table 14 shows the correlation matrix for the latent variable indicators.

The first step of the SEM analysis was to examine the measurement model. The measurement model examines the relations between the indicators and the underlying latent constructs. In the measurement model no causal relationships are proposed, thus the four latent variables and two measured indicators (Information Condition and Hiring Outcome) were allowed to freely intercorrelate. Figure 5 shows the measurement model with the indicators and their loadings. As the figure shows, each indicator loads strongly onto its latent variable.

A number of fit statistics were used to evaluate how closely the sample data fit the proposed model. A good fitting model should have a nonsignificant  $\chi^2$ , which indicates that the sample data does not significantly differ from the estimated model. Additionally, the normed fit index (NFI) and comparative fit index (CFI) were used to examine the degree of fit. Values greater than .90 indicate a strong fitting model. Finally, the root mean square error of approximation (RMSEA) was included to estimate the lack of fit in the model compared to the perfect (saturated) model. Values lower than .10 indicate a good fitting model. Analysis of the measurement model indicated that the data fit the model well,  $\chi^2$  (31, N=262) = 36.45, ns, and the fit statistics confirmed the strong fit, RMSEA = .03, NFI = .97, CFI = .99.

After the measurement model confirmed a strong relationship between the measured indicators and the latent factors, the structural model was then examined. The structural model evaluates the hypothesized relationships among the constructs in the model. The proposed direct and indirect relationships between constructs are shown in Figure 6. The hypothesized structural model was found to fit the data reasonably well. Although the  $\chi^2$  was significant,  $\chi^2$  (40, N=262) = 72.40, p<.001, significant results such as these are not uncommon when large sample sizes are used. One good rule of thumb is that a good fitting model may be indicated when the  $\chi^2$  is less than twice the degrees of freedom of the model, which in this case it is (Tabachnick & Fidell, 2001). The fit statistics indicate that the hypothesized model was a strong fit with the observed data, RMSEA = .06, NFI = .95, CFI = .98, but the structural model did not fit the data

Table 14

Correlation Matrix Containing Measured Indicators in Structural Equation Model

Study Variables	1	2	3	4	5	6	7	8	9	10
1. Procedural Justice 1										
2. Procedural Justice 2	.90**									
3. T2 Org Attraction 1	.46**	.48**								
4. T2 Org Attraction 2	.42**	.44**	.92**							
5. Attitude Certainty	.32**	.34**	.46**	.43**						
6. Org Knowledge	.22**	.21**	.39**	.35**	.39**					
7. T3 Org Attraction	.22**	.20**	.31**	.21*	.23**	.16*				
8. T3 Recommendation Intention	.07	.08	.18**	.09	.08	.08	.79**			
9. T3 Customer Patronage Intention	.19**	.21**	.17**	.10	.11	.12*	.48**	.46**		
10. Information Condition	.18**	.18**	.12*	.12*	.08	.05	.17**	.13*	.12*	
11. Hiring Outcome	07	04	05	07	14*	.05	.30**	.28**	.28**	09

Note. N = 262. Information Condition is coded 0 = no information condition, 1 = information condition. Hiring Decision = the actual hiring decision, whether or not the individual was offered the job, 0 = not offered job and 1 = offered job. Org = Organization, T = time. The items from the eight procedural justice variables were randomly assigned to one of two new variables and the same process was used for the five T2 dependent variables. \*p < .05. \*\*p < .01.

Figure 5

Measurement Model for Applicant Perceptions During Preemployment Testing

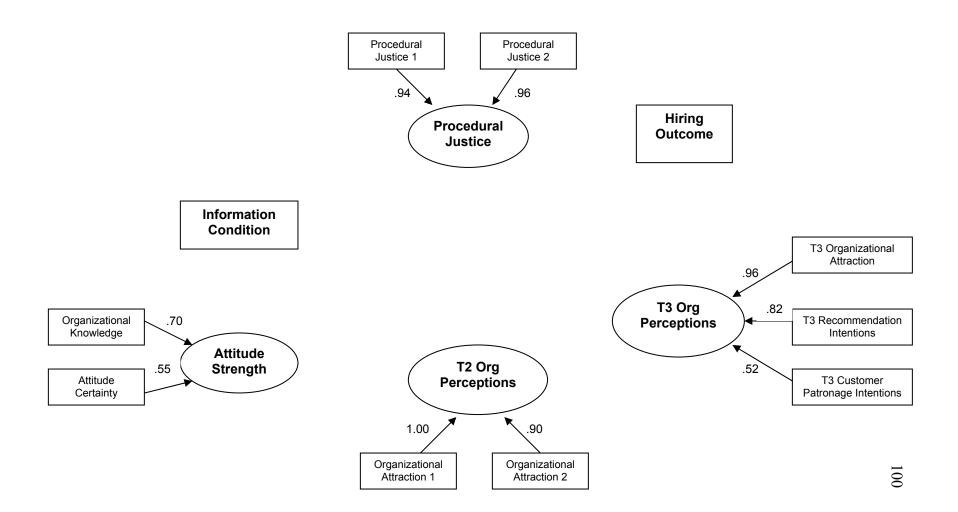
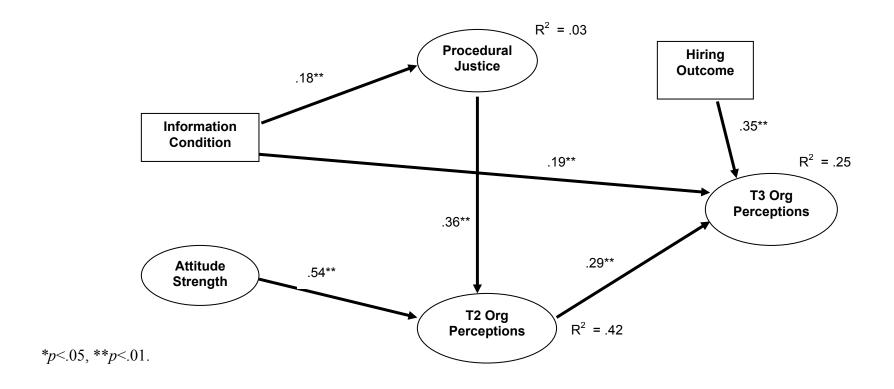


Figure 6
Standardized Path Loadings for Model of Applicant Perceptions During Preemployment Testing



as well as the measurement model,  $\Delta \chi^2$  (9, N=262) = 35.95, p<.001. Figure 6 presents standardized path coefficients and R<sup>2</sup>s for the hypothesized model. Overall, it was found that the hypothesized model was a good fit with the data gathered from actual job applicants, and these results provide further support for the hypothesis testing results described previously in the results section.

# **Chapter IX**

### **Discussion**

In this study I examined how assessment information, attitude strength antecedents, and hiring outcome affected applicants' attitudes and behaviors during an actual selection process. This study yielded two important contributions to the test-taker reaction research. First, this is the first study to integrate attitude strength variables into the study of applicants' test fairness perceptions. Second, this is the only study in which the relationship between testing information and actual applicant word-of-mouth behaviors is examined. In addition to these contributions, two results were found that are unique in the literature concerning research on test-taker fairness. First, the results supported the importance of test information on applicants' organizational perceptions throughout the entire selection process. Second, I found that the information explaining the testing process interacts with the attitude strength antecedents to affect applicants' posthiring decision organizational perceptions. The power of each of these results, as well as all the study findings, is further enhanced by the fact that the research was conducted with real job applicants in an actual selection situation. A review and analysis of the study findings are provided below.

Summary and Analysis of the Research Findings

Two of the central findings of this study involved pretesting information. Specifically, it was found that providing applicants with testing information positively influenced their perceptions towards not only the fairness of the selection process, but also the hiring organization itself. Previous research has shown that individuals who receive detailed explanations generally believe they are treated more interpersonally fairly compared to individuals receiving less adequate explanations (Shaw et al., 2002). To this end, the two-page information provision used in this study was intentionally written to be very detailed in order to address many concerns applicants have regarding the testing process (Ployhart & Hayes, 2002). It was not a surprise, then, that the results of this study confirm the role explanations play in influencing applicants' perceptions of interpersonal treatment. Applicants who received testing information did view the testing process as fairer than applicants who received no testing information, after controlling for

applicants' belief in tests and belief in their test performance. Despite the fact that the information provision showed a relatively weak ( $\eta^2 = .04$ ) overall effect on the three procedural justice variables (Interactional Justice, Test Structure Fairness, and Overall Procedural Justice), this does not lessen the importance of this result. This result suggests that a relatively weak manipulation such as a two-page written document explaining the testing process can positively influence applicants' process fairness perceptions even after accounting for their general test beliefs and their test performance perceptions.

Despite the value of the previous finding, it is still important to examine reasons for the weak relationship and identify potential ways to further enhance the relationship between testing information and procedural justice. One possible reason for this weak overall relationship was that the information provision produced a significant relationship with Interactional Justice alone, but not with either of the other two procedural justice variables. This discrepancy is interesting, especially since the provision included information regarding both the assessments' relationship to the job and their predictive validity. By providing information about the tests' characteristics, it was anticipated that applicants would form more positive perceptions of the test structure fairness. Unfortunately, this relationship did not materialize. One possible reason for this outcome could be that the actual act of completing the assessments was a more powerful influence on applicants' perceptions than simply reading about the structural characteristics of the assessments. Research has shown that both cognitive ability tests and personality inventories are viewed by applicants as not job related (Kravitz, et al., Rynes & Connerley, 1993). Thus, applicants could have had a difficult time seeing the direct connection between the general test items and the specific functions of the job, even if they read information about them. The information provision may show greater influence on applicants' test structure fairness when the assessment possesses greater transparency (e.g., assessment center or work sample), thus allowing the information to reinforce the applicants' experience.

In addition to the relationship to selection fairness, testing information in this study also influenced applicants' pretesting organizational perceptions. When applicants received detailed information about the testing process, they viewed the organization with

greater attraction compared to applicants who received no information, after controlling for their initial belief in tests. This result shows that testing information has a direct impact on applicants' organizational perceptions prior to the testing event. Surprisingly, this outcome remained significant even after controlling for the effects of the two attitude strength antecedents, organizational knowledge and job importance. Thus, the information provision provides a small but nontrivial influence on applicants' pretest organizational attraction.

There are a number of potential explanations for these results. First, Signal Theory suggests that under conditions of incomplete information about the organization, applicants use early experiences with the organization as signals for unobservable characteristics (Rynes, 1991; Rynes et al., 1993). Rynes and her colleagues provided no direct evidence supporting the reason why this signaling effect tends to occur. One possibility Rynes and colleagues gives is that applicants use their experiences during the selection process as a proxy for how the organization treats its employees. If this explanation was correct, then one would expect that applicants who received the information provision would believe they possess greater knowledge of the organization than those in the control condition. In this study, a question in the Knowledge scale asked applicants to rate their knowledge of employees' treatment by the organization. No significant differences between the information condition (M = 3.25, SD = 1.08) and the control condition (M = 3.07, SD = 1.12) were found for this item, t(157) = 1.28, ns. The results show that applicants who received testing information did not report greater knowledge of the organization's treatment of employees. Thus, in this study, testing information did not influence T1 organizational attraction by increasing applicants' knowledge of how the organization treats it employees, as has been asserted by Signal Theory.

A second and more plausible explanation for these results could be that the detailed explanation increased applicants' perceptions that they were being treated fairly, which led to more positive perceptions of the organization. This mediated relationship was confirmed by the results of this study. Completing assessments as part of a testing process can be stressful and anxiety-provoking (Arvey et al., 1990). The proactively

administered information provision provided applicants with information on how to prepare for the assessments and how the assessments would be used, which may have both diminished the ambiguity of the testing process and helped applicants to prepare to the best of their ability.

In addition to the general relationship between testing information and applicants' pretesting organizational perceptions, I also examined how these organizational perceptions changed – or didn't change – over the course of the entire selection process. Studying the time factor yielded interesting results. It was proposed that the relationship between testing information and pro-organizational perceptions would endure throughout the entire selection process. Results show that this did happen, but not in the way originally anticipated.

Initially, it was suggested that the information condition would interact with the applicants' hiring outcome, such that for those rejected, the assessment information would be more impactful on postdecision organizational perceptions than it would be for accepted applicants. Contrary to results found in a simulated selection situation (Gilliland, 1994), this study yielded no interaction. Instead, applicants who received testing information felt more positive about the organization and showed more proorganizational behaviors regardless of the result of their hiring outcome even after controlling for both their hiring decision and posttesting organizational attraction.

This is an important research finding for a number of reasons. First, only one study (Ployhart et al., 1999) has discovered a significant positive influence of testing information on postdecision organizational affiliation variables and none on actual behaviors (e.g., encouraging applicants to apply). As a practical consideration, applicants who received the testing information (M = 1.53, SD = 3.00) on average recommend the organization about twice as many people as applicants receiving no information (M = .80, SD = 1.83). This is important when considering the cost of applicant sourcing and the importance of employment branding. Second, no significant results have been found in any studies that utilize actual applicants in a selection situation (Truxillo et al. 2002). Third, in this study, the information provisions had a powerful and enduring impact on applicants' organizational perceptions. Making this result even more impressive was the

fact that the information provision accounted for significant variance in the postdecision dependent variables even after controlling for testing information's impact on early organizational perceptions. Additionally, the information provision was effective even after a 30-day lapse from the time of its administration until the gathering of applicants' postdecision organizational perceptions survey. In fact, the relationship between testing information and organizational attraction remained steady throughout the selection process (pretesting, d = .30; posttesting, d = .25; posthiring decision, d = .32). Overall, the information provision was shown to be a practical and effective tool that organizations can use to enhance applicants' organizational perceptions throughout the selection process, regardless of the hiring decision.

In addition to the hypothesized relationships between information provision and the procedural justice and organization perception attitudes and behaviors, the relationship between testing information and applicants' withdrawal behaviors were explored. This study found that the information provision had a null effect on applicants' withdrawal from the selection process, which directly supports previous research (Ryan et al., 1997; Ryan & McFarland, 1997; Ryan et al., 2000). One reason for the limited effect of the information provision on actual withdrawal behaviors may be that applicants are only motivated to take action (either positively or negatively) when their fairness perceptions are at the extremes. In a recent theoretical work by Truxillo, Steiner, and Gilliland (2004), it was suggested that there may be a threshold for fairness, and only when that threshold is reached will applicants take action. In most testing situations, including this one, applicants' procedural and outcome fairness perceptions rarely dipped below the center point on a five-point scale, thus indicating that the selection process is neither viewed extremely positively nor extremely negatively, and as a result, fairness perceptions played little or no role in applicants' decisions to withdraw from the company's selection process.

In summary, applicants who received testing information viewed both the testing process and the organization more positively. Although information was found to have a significant overall effect on the three procedural justice variables, the biggest influence was on applicants' interactional justice perceptions. Additionally, applicants who

received the information provision held more positive views of the organization prior to completing the assessment. Although no interaction between testing information and the hiring decision was found for applicants' posthiring decision organizational perceptions and behaviors, a direct relationship for testing information was found, which indicates that the effect of testing information is not limited by the hiring decision. In contrast, testing information did not significantly impact applicants' likelihood of either talking to others about the recruiting process or remaining in the selection process.

In addition to exploring how testing information impacted applicants' perceptions throughout the entire selection process, this study also examined how the attitude strength variables, organizational knowledge and job importance, influenced applicants' organizational perceptions. It was discovered that applicants who have greater knowledge of the organization and who place greater importance on being hired view the organization as more attractive. These results further validate previous research, which shows the important role these attitude strength antecedents play in the creation of individuals' initial attitudes. Additionally, it also supports the premise that people enter into a recruiting process with an organization with very different perceptions (e.g., organizational knowledge) and personal circumstances (e.g., job importance), which ultimately impact how they view the organization.

One of the most interesting findings of this study was the interaction between the attitude strength antecedents and information condition for applicants' posthiring decision organizational attraction and the word-of-mouth behaviors. Lind (2001) and Greenberg (2001) proposed that when provided with little other information about the organization, the applicant will evaluate the organization based on the fairness of his/her treatment during the recruiting and selection process. Therefore, it was anticipated that when the attitude strength antecedents were low, information provision would have greater impact because applicants would use the test information to better understand the organization.

In contrast to the theoretical relationship, this study showed that the information condition had greater impact when the attitude strength antecedents were rated high. The interaction between organizational knowledge and information condition was significant

for both posthiring decision organizational attraction and number of people who were told about the recruiting experience. However, the significant relationship with number of people who were told about recruiting experience did not remain significant after controlling for applicants' posttesting organizational attraction and hiring decision. A similar interaction between job importance and information condition was found for number encouraged to apply.

Taken together, these results suggest that the information condition had an additive effect for applicants when they either knew a great deal about the organization or they really needed the job. One explanation could be that by receiving the testing information, applicants viewed the application process as a positive experience, one that served to validate their knowledge and positive impressions about the organization. Interestingly, these results further refute the Signal Theory notion that the selection process, in this case testing information, acts as a signal to applicants.

Similar to other test-taker reaction studies, this study also found a significant relationship between test structure fairness perceptions and applicants' organizational perceptions. Specifically, applicants who felt the assessments were more job-related and enabled them to show their skills held more positive views of the organization. This result was an even more impressive finding, considering that the control variables (applicants' belief in tests, outcome favorability perceptions) and pretesting organizational perceptions accounted for 71% of the variance in posttesting organizational attraction. Thus, assessment content and format are salient to applicants, and transparency is an important determinant of applicants' organizational perceptions immediately after completing the assessments.

These results provide further support for the claim that applicants' perceive a selection process as more fair and hold more positive perceptions of an organization when the applicant perceives the assessments as more job-related. This supports previous research (Bauer et al., 1998; Macan et al., 1994; Meckley, LaHuis, Ferguson, 2006). Organizations can apply this information by taking steps whenever possible to influence applicants' perceptions of a test's job-relatedness, either by wording questions in a

business context or using tools known to have high transparency (Cropanzono & Wright, 2003).

With all of the significant findings found in this study, it is important to remember that a greater proportion of variance in the dependent variables was accounted for by the control variables: belief in tests, outcome favorability, hiring decision and organizational attraction measured prior to testing. Both researchers and practitioners must begin to acknowledge that other variables besides test fairness are critical to applicants' judgments about an organization, and thus deserve to be taken into consideration during the design of fair selection and testing processes. For example, if researchers are going to advance the understanding of test-taker reactions, they must continue to examine how selection tools and processes impact fairness and organizational perceptions over and above previous perceptions, motivations and beliefs. Only by parsing out the unique impact of different selection and testing characteristics will researchers be able to determine practical and effective ways for practitioners to mitigate any potential negative effects involved with preemployment testing.

Similarly, practitioners must be aware of these variables' effect. It may be possible to have a greater effect on applicants' test fairness and organizational perceptions by influencing these control variables instead of spending time and resources trying to impact test characteristics, which thus far have met with limited success.

One unexpected result involving a control variable emerged between hiring outcome and the word-of-mouth behaviors measured posthiring decision. Unlike the significant relationship between hiring decision and organizational attraction posthiring decision, however, no significant relationship was found for the word-of-mouth behaviors. In other words, applicants' willingness to recommend the organization or to talk about the recruiting experience was not influenced by their hiring status. In retrospect, however, this result should not have been unexpected. Applicants would most likely have already engaged in word-of-mouth activities during the approximate 30-day period that elapsed from the day they completed the assessments to the day they received communication about the hiring decision. Therefore, most word-of-mouth behaviors would probably have occurred prior to knowing the employment outcome, and a

relationship between hiring outcome and posthiring decision word-of-mouth behaviors would be quite surprising.

Finally, the exploratory structural equation model was performed to examine the fit between the proposed relationship between the study variables and the actual data. Unfortunately, it was not possible to analyze the full model proposed in Figure 1 due to sample size constraints. The sample size was not adequate to handle the number of parameters that needed to be estimated. Using a conservative sample of five participants per parameter, it would have been necessary to have 375 participants to adequately analyze this 75-parameter model (Tabachnick & Fidell, 2001). Instead of foregoing the SEM analysis, a simplified model was created that incorporated most of the study's hypotheses shown in Figure 1. The results show that the data fits this simplified model reasonably well. The model supports the study's hypothesis that testing information, attitude strength antecedents, procedural justice, hiring decision, and posttesting organizational attraction impact applicants' postdecision organizational attraction. *Limitations and Future Research* 

In this section, I will discuss the limitations associated with this study and review some potential future research opportunities. The most unique aspect of this study was the use of a quasi-experimental design; however, this aspect turned out also to be its major limitation. This study's quasi-experimental design provides challenges to the interpretation and generalization of the study's results because it is susceptible to some threats to internal validity (Cook & Campbell, 1979), specifically due to potential selection problems that may have resulted from the nonrandom assignment of applicants to condition. While selection seemed not to be an issue, because the cohorts did not statistically differ on any of the demographic or control variables, it is possible that the cohorts may have differed on variables not measured in this study. For example, a study by Van Vianen, Taris, Scholten, and Schinkel (2004) found that applicants' Openness to Experience – a variable not measured here – had a positive effect on their test beliefs prior to completing the assessments. Future research should examine a more exhaustive list of variables, such as individual differences, test taking motivation, and self-efficacy, to rule out these variables as alternative explanations for why the information condition

positively affected test fairness and organizational perceptions. Although these variables were not examined in this study, there is no reason to believe that the cohorts in this study would have been impacted by any of the unmeasured variables.

Another limitation of this study was the timing of the control variable measurement. Control variables were not measured prior to the administration of the information condition. Unfortunately, because this was a real selection situation and survey response rate was critical, it was decided not to add another touch point with the applicants prior to the testing experience. It is possible that the information provision could have confounded the covariate variables. It is impossible to know for sure if the test provision influenced the covariates, but a number of results suggest that it had little or no effect. First, no significant differences for belief in tests or outcome favorability were found between the information or no information conditions. Additionally, the information condition showed no heterogeneity of regression with any of the control variables.

An additional methodological limitation of this study was the short duration between the collection of applicants' Time 1 and Time 2 organizational perceptions. This study found that applicants' Time 1 and Time 2 measures were very highly correlated and therefore provided little opportunity for the information condition or the procedural justice variables to predict posttesting organizational attraction. It is possible that the very short lag time between the measurements allowed applicants to remember how they responded to the prior organizational perception measures, which resulted in relatively consistent responding.

An alternative explanation may be that, compared to their initial perceptions of the organization, applicant test perceptions may have very little impact on their broader level view of the organization. As a result, the assessment process may need to be viewed either extremely negatively or extremely positively in order to significantly influence applicants' post-assessment organizational perceptions. In retrospect, it would have been easier to parse out this distinction if pretesting survey was provided one or two days prior to completing the assessments. Researchers should take these timing issues into consideration when designing future studies.

Although I found that the attitude strength antecedents had a significant positive relationship with applicants' pretesting and postdecision organizational perceptions, none of these variables were actually manipulated in the study. On the one hand, it is unlikely that researchers will be able to manipulate attitudes towards job importance, but on the other hand, it should be relatively easy to manipulate applicants' organizational knowledge. I confirmed that organizational knowledge is critical to applicants' positive organizational perceptions. Unfortunately, however, it is unclear exactly what type of information and what presentation style will be most beneficial to enhancing applicants' perceived organizational knowledge. Therefore, future researchers may want to manipulate both test information and job and organizational knowledge in the same study using a similar quasi-experimental design with actual applicants.

An additional limitation of this study was that the full selection process was not taken into consideration when examining applicants' postdecision organizational perceptions. Obviously, applicants form their perceptions by examining all of the activities and interactions they experience with the hiring organization during the selection process, not just those examined by this study. One experience that was not studied here, and that should have had a powerful influence on fairness perceptions, was the interview. Research findings from the 1980s and 1990s show a strong relationship between applicants' interview experience and their organizational perceptions. In this study, a large amount of variance in postdecision organizational perceptions still needs to be accounted for, even after controlling for posttest organizational perceptions, the hiring outcome, and testing information. Thus, including measures of applicants' perceptions of the interactions with the recruiter, fairness of interview, and duration of the entire selection process may enhance researchers' understanding of how applicants form postdecision attitudes about companies. I am aware of no study examining the impact of test fairness, interview fairness, and overall recruiting fairness in the same study.

The generalizability of postdecision results is another limitation of this study. Forty-four percent of participants voluntarily decided not to complete the postdecision survey. Every attempt was made to minimize participant attraction by sending participants multiple surveys by both paper and electronic means. Despite the large

attrition, a 56% response rate did provide an adequate sample size to examine applicants' postdecision organizational perceptions and behaviors but does limit the generalizability of the research findings.

The final limitation of this study was the poor psychometric characteristics of the job importance scale. Prior research had used one-item scales to measure the importance people place on gaining employment at an organization. This study attempted to create a four-item scale measuring a number of factors presumed to affect job importance (e.g., number of other opportunities, life circumstances, etc.). Unfortunately, the items did not intercorrelate, and only one item was used to measure job importance. Future research should examine how applicants determine job importance, and should then create a psychometrically stable scale that can be used to measure effectively job importance. *Implications* 

This study has several practical and research implications. Obtaining actual applicant samples is often difficult, but it is only through the utilization of these samples that significant advancement in test-taker reaction research will be achieved. As this study shows, applicants enter selection situations with varying levels of perceptions regarding the organization and preemployment assessments. These individual differences must be taken into consideration because they impact applicants' motivations and influence how they evaluate both the selection process and the organization. The goal of test-taker reaction researchers must be to parse out the unique impact of the tests and fairness initiatives, so that practitioners can take actions that will truly improve applicants' perceptions. Because early perceptions tend to have a positive correlation with measures of selection fairness, research that does not control for these early perceptions could result in inflated relationships between test fairness and organizational perceptions. For example, the information condition possessed a direct relationship with applicants' posttesting organizational attraction, but once pretesting organizational attraction, belief in tests, and outcome favorability were controlled, the relationship was no longer significant. Future researchers are also encouraged to use real applicants and control for their initial perceptions, despite the challenges inherent in such populations,

since doing so can further reduce the occurrence of inflated results or incorrect relationships.

This study's results also provide some practical implications for how organizations can influence applicants' test fairness and organizational perceptions. By taking a proactive approach, organizations can positively influence applicants' test and organizational perceptions. The results of this study suggest that applicants have a more positive view of both testing and the organization when they receive testing information. As other research has shown, not all information provisions have a positive effect on fairness reactions. In fact, the recipient of the explanation must view it as adequate (Bobocel & Farrell, 1996; Shaw et al., 2002). The present study is the only one in which the effect of providing testing information is investigated to have examined applicants' perception of the test information's adequacy. Applicants did find the detailed explanation significantly more adequate than receiving no information. It appears that not just any testing information will impact applicant perceptions, and organizations must be diligent in constructing thorough and detailed information provisions that address many more potential questions than the often-technical issues of validity and jobrelatedness (Ployhart & Hayes, 2002). Providing information about the tests is an inexpensive method every organization can use to improve applicants pro-organizational perceptions.

Additionally, organizations can positively influence applicants' perceptions of the organization by increasing their knowledge of the organization. Organizations should become more proactive in providing information to potential applicants about the organizations' employment advantages. One way organizations have attempted to educate potential applicants about their organization is through employment branding initiatives. These initiatives involve providing applicants with information, either in brochures or on the organization's website, that provides applicants with more information about the characteristics of the organization. Examples of information provided include testimonials from current employees, diversity initiatives, day in the life reviews, and the benefits of working at the company. Providing this information is relatively inexpensive but can be important to applicants' formation of positive

impressions about the company. These impressions can be enduring even if the individual is not hired, especially if the impressions are validated throughout the selection process. In the future, it would be valuable to know which sorts of information are most influential in enhancing applicants' organizational knowledge.

#### Conclusion

Many organizations have decided to use nonface-valid measures, such as general cognitive ability measures and/or personality inventories, to screen potential job candidates, due to these methods' low cost and their ability to predict job performance. Unfortunately, applicants often perceive these same instruments negatively. The present results suggest that when applicants receive testing information prior to the testing event, they view both test fairness and the organization more positively. Additionally, because applicants' organizational knowledge and personal circumstance (e.g., job importance) impact how they evaluate an organizations' attractiveness, they variables must be considered by researchers and influenced by practitioners. Overall, providing testing information is a practical step that every organization can take, and all organizations should be able to improve applicants' perceptions of their organization even if they use nonface-valid assessments.

# Chapter X

### References

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## Appendix A

# **Applicant Assessment Preparation Guide**

Our assessments will provide you an opportunity to present information about yourself, your interests and your abilities. You will complete one or more online assessments that will require a total of one hour to complete.

We recognize that some applicants may experience stress or anxiety as a result of having to complete preemployment assessments. Our goal is to provide you with the information to help you do your best. Therefore, we have established this guide to help answer your questions about the assessments and the overall process. Before taking the assessments, there are several things you can do to prepare yourself, including:

- Setting aside a time to complete the assessments when you will have few if any distractions.
- Choosing a location that is pleasant and comfortable.
- Completing assessments on a day when you are well-rested and at a time when you have the greatest level of concentration.
- Reviewing the assessment descriptions and sample questions in this document to
  increase your understanding of what the assessments measure and what you will be
  asked to do. If you have any questions, contact the Mutual of Omaha representative
  identified in the original email.

### Why do I need to complete the assessments?

Over the years, we have learned that many positive outcomes occur when there is a good fit between an employee's characteristics and the characteristics of the job. When there is a good fit, employees tend to enjoy their work more, to be more successful on the job, to experience less stress, and to feel better about themselves. When there is a good fit, we also tend to see high levels of employee performance and customer satisfaction, and lower levels of absenteeism and turnover. This helps the organization maintain high levels of overall effectiveness and long-term competitiveness. The assessments you will complete help us achieve a good fit between our potential employees and the jobs by identifying the people who are best suited for the organization and for each particular position. Finally, Mutual of Omaha is committed to providing an equal employment

opportunity and these assessments have been statistically validated and standardized to help us make sure we evaluate candidates in a fair, consistent, and efficient manner.

#### How will the tests be used?

The assessments you complete are just one part of the employment selection process. Although these assessments are important and should be taken seriously, they will never be used as the sole basis for making a hiring decision. The results of your assessments will be used along with your prior work experience and, potentially, the results of an interview to determine if the job characteristics are a good match with your strengths. A Human Resources representative, who has been specially trained on interpreting applicant assessment scores, will review your results with the hiring manager.

# **Assessment Descriptions**

The position you applied for requires the completion of a number of assessments. Each of these assessments is standardized to ensure that everyone who wants to be considered for this position receives a fair and objective opportunity to demonstrate his/her strengths. The sections below provide a general description of the assessments along with suggestions to help you perform your best.

### Q Factor 6

The Q Factor 6 is a general abilities test that will assess your numerical ability and language skills – two characteristics that are needed to succeed in most jobs at Mutual of Omaha. The assessment is composed of 25 questions and will have a six-minute time limit. Your score will be based on the number of questions answered correctly.

- 1. Paper clips sell for 23 cents per box. What will 4 boxes cost? The correct response is 92 cents
- 2. REAP is the opposite of:
  - 1. obtain, 2. cheer, 3. continue, 4. exist, 5. sow The correct response is **5. sow**

# **Strategies**

- The test is timed, so it is important to be aware of that during the test
- Don't spend too much time on any one question. If you get stuck on one
  question, move on to the next. If you are not sure of the answer, eliminate those
  answers that are clearly wrong to narrow your choices and perhaps illuminate the
  correct answer.

### Personality Inventory

The inventory is designed to evaluate your interests and individual characteristics - some of which have been linked to employee job fit. The inventory is composed of 203 True/False items. For each item, you will respond to the item in a way that best represent you. There is no time limit, but most people are able to complete the inventory in approximately 30 minutes. Some example items include:

I am a relaxed easygoing person. T/F
I am rarely irritated by faults of others. T/F

### **Strategies**

- Do not over analyze the items, it is best to answer the questions based on first reactions
- Be honest and forthright when responding

# Appendix B

## **Study Measures**

### Dependent Variables

# Organizational Attractiveness (T1, T2, T3)<sup>1</sup>

- This organization has a positive reputation in the community.
- This company is exactly what I am looking for in an employer.
- Overall, this company is one of the best companies to work for.

# **Recommendation Intentions (T1, T2, T3)**

- Based on my experiences so far, I would encourage others to apply for employment with this company.
- I would **not** recommend this company to my friends or relatives. (**R**)<sup>2</sup>

## **Job Acceptance Intentions (T1, T2)**

- I will definitely accept a job here if it is offered.
- This company would be my first choice as an employer.

# **Reapplication Intentions (T1, T2)**

- I intend to apply for another job at this company if I am not offered this job.
- I will continue to try to gain employment with this company even if I am not hired this time.

# **Customer Patronage Intentions (T1, T2, T3)**

- Based on my experiences with this company, I am unlikely to purchase its products/services. (R)
- I am more likely to purchase this company's products/services now than I was in the past.

# **Recommendation Behaviors (T3)**

- How many people did you talk to about your recruiting experience?
- How many people did you encourage to apply for a position at the company?

<sup>&</sup>lt;sup>1</sup>T1 = Time 1; T2 = Time 2; T3 = Time 3

 $<sup>^{2}</sup>$  (**R**) = Reverse scored

### Attitude Strength Variables

### Job and Organizational Knowledge (T1)

- How much knowledge do you have of the company's reputation?
- How much knowledge do you have of this position's pay?
- How much knowledge do you have of the company's benefits?
- How much knowledge do you have regarding the position's job tasks?
- Overall, how much knowledge do you have of this company?

### **Job Importance (T1)**

• Due to my current situation, I really need this job.

### **Attitude Certainty (T1)**

- I am sure that my opinions about this organization are correct.
- I am unlikely to change my opinions about this company.

### Control Variables

### **Belief in Tests (T1)**

- Tests are a good way of selecting people for jobs.
- The tests I am going to take should be eliminated from selection processes. (R)
- I do not believe tests are valid. (R)

## **Outcome Favorability (T2)**

- I believe I did well on the tests I took today.
- I believe the assessments will show that I am qualified for this job.

# **Demographic Data (T2)**

- Age
- Gender
- Race
- Employment status
- Applied for a similar job at Company previously
- Experience completing employment tests for previous jobs

#### Test Fairness Variables

### Test Job-Relatedness (T2 – for both assessments)

- Doing well on the test means a person can do the job well.
- A person who scores well on the test will be good at the job.

### Chance to Perform (T2 – for both assessments)

- I could really show my skills and abilities through this test.
- I was able to show what I could do on this test.
- This test allowed me to show what my skills are.

### **Information Known (T2)**

- I knew what to expect on the tests.
- I had ample information about what the format of the tests would be.
- The organization provided an adequate explanation of the testing process.
- I understood in advance what the testing process would be like.

## Openness (T2)

- I was treated honestly and openly during the testing process.
- The company was candid when answering questions during the tests.
- The company did not try to hide anything from me during the testing process.

### **Two-Way Communication (T2)**

- There was enough communication during the testing process.
- I am satisfied with the communication that occurred during the testing process.
- I would have felt comfortable asking questions about the tests if I had any.

### **Overall Procedural Fairness (T2, T3)**

- Whether or not I get the job, I feel the selection process has been fair.
- I think that this testing process is a fair way to select people for this position.
- I think the tests themselves were fair.