Improving Applicant Reactions by Altering Test Administration

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Research on applicant reactions to selection procedures has traditionally focused on a limited set of test characteristics, predominantly test content and job relatedness. Using an organizational justice framework, this study takes a different approach and examines six characteristics of the way tests are administered and their role on such salient outcomes as company attractiveness and intentions to remain in the selection process. Two hundred eight actual job applicants vying for the same jobs in nine different locations across the United States provided their reactions before the test and immediately after. Results show that six rules (participation, consistency of administration, uncertainty reduction, interpersonal treatment, transparency, and quality of two-way communication) are related to overall perceptions of fairness, and that these perceptions are related to applicant intentions to recommend the company to others and to accept a job offer.

Early research on employee selection focused on either how well tests predicted future performance or how much utility they added (Gilliland, 1993; Herriot, 1989; Hunter & Hunter, 1984; Schmitt 1989) rather than on applicants' attitudes and reactions (Avery & Sackett 1993; Iles & Robertson 1989; Lounsbury, Bobrow, & Braden 1989). However, the importance of applicant reactions is easy to understand once one considers the importance of attracting top talent in competitive labor markets, the need to reduce litigation from rejected applicants (or applicants who are hired), and a general desire to treat applicants ethically and fairly (Smither et al., 1993; Thiboudeaux & Kudisch, 2003).

Driven by these needs, many researchers have studied selection's impact on applicants. Although some of this research has contributed to our knowledge of applicant reactions, many researchers examined only one test characteristic or differentiated between tests at only a superficial content level such as "Test A vs.Test B" (e.g., Carless, 2003; Hamill & Bartle, 1998, Kravitz, Stinson, & Chavez, 1996). Finding that applicants favor simulations over interviews is interesting and important but does not help explain the underlying reasons *why*. Understanding why a test is described as unfair or disliked is essential because it reveals valuable information about how these perceptions can be improved. Indeed, without this crucial knowledge, it may be assumed that little can be done to make the test seem fairer.

One approach that might lead to greater understanding is to focus on aspects of the testing *administration* as well as the test *content*. Though characteristics of the test itself (e.g., job-relatedness) have been shown to affect applicant reactions (Gilliland, 1993, 1995; Macan et al., 1994), little attention has been given to the procedural characteristics of selection situations (c.f., Chan and Schmitt, 2004).

Such a focus represents a great opportunity for scholarly and applied contributions as these administrative elements may be more malleable than test content. Also, differences in administration procedures across test types may explain variance in fairness perceptions beyond test content. Pragmatically, changing the administration could make testing more acceptable to applicants regardless of test type. However, there is little direction in the literature with regard to which changes in test administration might provide the most benefit. Therefore, an important question remains unanswered and serves as the focus of this research: Which characteristics of the selection test administration most affect perceptions of overall fairness?

Organizational Justice

Some direction for answering this question may be found in the field of organizational justice. Gilliland (1993, 1994, 1995) and others (e.g., Baur et al., 1998; Greenburg, 1993; Truxillo et al., 2004) have suggested organizational justice as a guiding framework for studying applicant reactions. Procedural justice rules include the formal characteristics of the test and process (job relatedness, opportunity to perform, reconsideration opportunity, consistency), explanation of the process (feedback, justification, honesty), and interpersonal treatment (likeability of the administrator, two-way communication, propriety of questions). The distributive justice rules consist of equity, equality, and need-based distribution of outcomes. The procedural justice and distributive justice rules lead to perceived fairness of the overall process. These perceptions, in turn, drive three sets of outcomes: Reactions during hiring (e.g., acceptance, test motivation, and litigation), reactions after hiring (e.g., performance, organizational citizenship, and job satisfaction), and self-perceptions (e.g., self-esteem, self-efficacy, and future job search intentions).

Contributions of the Present Research

Borrowing from the organizational justice literature and current theory on applicant reactions, the present study delineates six rules about test administration that are hypothesized to directly affect fairness perceptions and company attractiveness. Such information is useful, as these characteristics have been linked to such important outcomes as job acceptance (Macan, et al., 1994; Smither et al., 1993), willingness to recommend the company to other job-seekers (Gilliland, 1994), and willingness to stay in a protracted selection process (Taylor and Bergman, 1987).

Although the primary focus of this research is on test administration, one aspect of test content, job relatedness, will also be examined. Job relatedness is an important construct in the history of applicant reactions research and is needed to

establish the relative effects and relationships between administration characteristics and job relatedness (Gilliland, 1995; Macan et al., 1994; Schmitt & Gilliland, 1992; Smither et al., 1993; Smither et al., 1996).

Test Administration Procedural Rules

Borrowing from Gilliland's (1993) model, we focus on six procedural rules that are hypothesized to be related to the fair administration of selection tests. Procedural justice is concerned with the fairness of processes by which information is gathered and how it is used when a decision is made, rather than the distribution of outcomes.

Rule 1: Participation. Participation (a.k.a., control, voice, and opportunity to perform) is the degree to which applicants can take part in an evaluation, exerting control over the situation and their own behavior. Latham and Finnegan (1993) found that less-structured interviews were evaluated more favorably than highly-structured interviews, possibly because applicants could participate more and influence the situation more. Also, in comparing reactions to biographical inventories and cognitive ability tests, Kluger and Rothstein (1993) found a relationship between reactions and the degree to which participants felt they could control their performance. Finally, Singer (1992) found that applicants held more favorable perceptions of the selection process when the employer actively sought the applicant's input on his/her qualifications. Therefore, we hypothesize that perceptions of participation will be positively related to overall selection process fairness perceptions.

Rule 2: Consistency of Administration. This rule is defined as the degree to which the same administration procedures are used for everyone. This factor is often linked to fairness in the performance evaluation literature (e.g., Greenberg, 1986). Murphy et al. (1986) found that testing all applicants (or employees) for drugs was preferable to random testing. We expect that perceptions of administration consistency will be positively related to overall selection process fairness perceptions.

Rule 3: Uncertainty Reduction. This concept deals with the amount of information about the selection situation a candidate is given prior to testing (Arvey & Sacket, 1993; Gilliland, 1993; Truxillo et al., 2002). Such information could include the types of tests used, how long they will take, or with whom the candidate will be meeting. Arvey and Sackett (1993) argued that reducing uncertainty would make applicants more likely to attribute poor performance to themselves rather than the situation and not knowing what to expect. Schmitt and Chan (1998) made similar suggestions. We expect that the amount of uncertainty reduction about a selection situation will be positively related to overall selection process fairness perceptions.

Rule 4: Interpersonal Treatment. The way in which a test administrator treats an applicant can also vastly affect the applicant's opinion of the organization (Bies & Moag, 1986; Gilliland, 1993; Iles & Robertson, 1989; Rynes, 1993). Rynes (1993)

describes several anecdotal situations where unpleasant recruiters caused job seekers to self-select out of the selection process. Also, research by Bies and Moag (1986) and Iles and Robertson (1989) found that respect and sympathy from test administrators were related to applicants' evaluation of the company. Therefore, we hypothesize that the greater the quality of interpersonal treatment the more fair participants will perceive the overall selection process.

Rule 5: Quality of Two-way communication. Applicants often want to gather quality information about the company and the job. The relationship between quality of two-way communication and fairness is well established in the performance evaluation literature (e.g., Greenberg, 1986) and by some research in the applicant reactions literature (e.g., Bauer et al., 2004). Such opportunities are vital for evaluating job offer attractiveness. We expect that the quality of the two-way communication will be positively related to overall selection process fairness.

Rule 6: Transparency. As defined by Schuler (1993), this concept deals with the degree to which an applicant understands what to do in order to test well. Although transparency has not been widely tested in the applicant reactions literature, some indirect support for its importance is available. Smither et al. (1993) speculate (but do not directly test) that the favorable reactions to simulations are due to their readily apparent criteria. Therefore, we expect that the more transparent the selection situation, the more positive participants' reactions will be to the selection process.

Perceived Job Relatedness

Most research in the applicant reaction literature examines perceived job relatedness in some form. Perceived job relatedness refers to perceptions about how related the content of a test is to what the person will be required to do on the job. This perception of job relatedness represents a procedural justice rule, but one that is linked to test content. Consistent with past findings, we also expect that the higher a test's perceived job relatedness, the better applicants react to it and the more fair they see the selection procedure (Gilliland, 1993, 1995; Macan et al., 1994; Schmitt and Gilliland, 1992; Smither et al., 1993; Smither et al., 1996; Steiner and Gilliland, 1996).

Outcomes

Borrowing from Gilliland's (1993) model, we expect that overall selection process fairness will be positively related to applicants' attitudes toward the company. In addition, there are at least five important outcomes that are likely to be related to the perceived fairness of the test administration: Decisions to stay in the selection process, job offer acceptance, willingness to recommend the company to others seeking jobs, willingness to apply for another job with the company, and willingness to use the companies products (Aamodt & Peggans, 1988; Gilliland et al., 2001; Macan, et. al., 1993; Smither et. al., 1993; Taylor & Bergman, 1987; Waung & Brice, 2003). We expect to find a positive relationship between attitudes

toward the company and (1) intentions to remain in a multistage selection process, (2) job acceptance intentions, and (3) willingness to recommend the company to others.

Method

Participants

Participants were 208 applicants for blue-collar jobs at a large beverage manufacturing organization. In all, nine different breweries participated in the research. The majority of participants were men (74%). Of the 208 participants, 64% were Caucasian, 16% were African American/Black, and the remaining were Hispanic/Latino, Native American Indian, Asian, or another race. Thirty-five percent had a college degree and 38% were between the ages of 36 and 45.

Study Design

This field study used surveys at two points in time—before employment testing and after. Data on applicants' attitudes toward the employer were gathered at these two times to gauge changes in these attitudes. The HR Director at each brewery received a description of the research, a cover letter, a set of commonly asked questions, and copies of the two questionnaires.

This organization's breweries use a multiple-step selection process for all jobs. Reactions to six of these steps (personality test, cognitive ability test, structured interview, work samples, and assessment center) were measured in this study. As a means to keep the participants' involvement manageable, each of the breweries was randomly assigned one test for which applicant reactions would be studied—applicants from a given brewery were surveyed only if they were taking that test.

Procedure

Before applicants were tested, the test administrator briefly described the research and gave each applicant a formal letter from the researchers written on university letterhead. The letter explained, and the administrator reinforced orally, that the surveys were solely for research purposes and would not affect any hiring decisions. Those who volunteered to participate completed Questionnaire 1 (three items) before being tested to obtain baseline attitudes toward the company as an employer. A second, 39-item questionnaire was given to applicants immediately after completing their location's assigned test. Using two to three items per variable, Questionnaire 2 asked about perceptions of the six procedural justice rules, the test's job relatedness, attitudes toward the company, and outcomes (willingness to stay in the selection process, job acceptance intentions, and willingness to recommend the company to others). See Appendix A for a list of items. Participants returned the surveys to the researchers via pre-addressed envelopes.

Questionnaire Scale Scores. Ratings on each of the six procedural justice scales were averaged separately to create six scale scores. Scale scores for overall fairness perceptions of the process and attitudes toward the company as an employer were calculated in the same manner. Cronbach's alpha was calculated to obtain internal consistency reliability for each of the scales. These coefficients are shown in Table 1 along with other descriptive statistics.

Manipulation Check. The second questionnaire contained an item to ensure participants understood only to consider the test they had just taken while responding to the surveys. Specifically, participants responded "yes" or "no" to the following item: "When I answered all the above questions, I considered only the ____ (test name filled-in), and not any of the other "tests" I've gone through for this job.

Results

Descriptive statistics on the scale scores are shown in Table 1. Given that most of the scales were two or three items, the alpha coefficients are respectable.

Procedural Justice Rules and Overall Selection Process Fairness Perceptions

Simple correlations between scores on each procedural justice rule and the overall fairness perceptions are shown in Table 2. As hypothesized, all of the correlations were statistically significant.

To explore these findings further and evaluate the weight of each of the variables simultaneously in predicting overall selection fairness, an additional analysis was conducted, regressing the six procedural justice rules as a set on perceptions of overall selection fairness. As shown in the Step 1 section of Table 3, the standardized beta coefficients for Participation, Consistency, Transparency, and Quality of Two-Way Communication were statistically significant, whereas the coefficients for Uncertainty Reduction and Interpersonal Treatment were not.

Table 1
Descriptive statistics

Scale	α	N	Mean	SD
Attitude toward company as an employer (Time 1)	.92	203	6.02	1.39
Participation	.85	203	4.69	1.41
Consistency of administration	.83	205	6.22	0.87
Uncertainty reduction	.83	201	3.93	1.58
Interpersonal treatment	.95	202	6.50	0.71
Transparency	.81	205	5.42	1.14
Quality of two-way communication	.81	200	5.44	1.12
Job relatedness	.76	205	5.09	1.25
Attitude toward company as an employer (Time 2)	.77	204	6.23	0.92
Overall fairness	.58	204	5.84	0.99

Table 2
Intercorrelations among procedural justice scales and overall fairness

Scale	1.	2.	3.	4.	5.	6.	7.	8.
1. Participation	(.85)	.25	.19*	.29*	.34*	.44*	.61*	.45*
2. Consistency		(.83)	.14	.57*	.07	.14	.14*	.29*
3. Uncertainty Reduction			(.83)	.21*	.17*	.19*	.25*	.16*
4. Interpersonal Treatment				(.95)	.13	.27*	.20*	.36*
5. Transparency					(.81)	.51*	.52*	.40*
6. Quality of two-way Communica	tion					(.81)	.58*	.48*
7. Job Relatedness							(.76)	.55*
8. Overall Fairness								(.58)

^{*}Correlation is significant at the .05 level (2-tailed)

Table 3
Stepwise multiple regression analysis for variable predicting overall fairness perceptions

Step/Variable	β		
Step 1		$R^2 = .40$	
Participation	.20*		
Consistency	.18*		
Uncertainty reduction	.00		
Interpersonal treatment	.10		
Quality of two-way communication	.26*		
Transparency	.18*		
Step 2		$\Delta R^2 = .05*$	
Participation	.07		
Consistency	.18*		
Uncertainty reduction	03		
Interpersonal treatment	.11		
Quality of two-way communication	.17*		
Transparency	.11		
Job relatedness	.32*		

In a second step, job relatedness was entered into the multiple regression analysis. As shown in Step 2 of Table 3, adding Job Relatedness to the linear combination reduced the significance of the other factors, so that in addition to Job Relatedness, only Consistency of Administration and Quality of Two Way Communication remained significant. The standardized beta coefficient (.32) for Job Relatedness was higher than the other coefficients, and its inclusion in the model yielded a significant increment of .05 in variance accounted for, F = 2.20, p < .05. In addition, Job Relatedness had a significant bivariate correlation with Overall Fairness (r = .55), supporting our expectations.

Table 4
Correlation Matrix

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
(.85)	.25*	.19*	.29*	.34*	.44*	.61*	.27*	.37*	.23*	.19*	.25*	.45*	.05	02	.09	.28*
	(.83)	.14	.57*	.07	.14	.14*	.34*	.24*	.19*	.14	.22*	.29*	.05	12	.05	.34*
		(.83)	.21*	.17*	.19*	.25*	.12	.17*	.14	.07	.12	.16*	.00	06	.10	.15
			(.95)	.13	.27*	.20*	.46*	.37*	.26*	.33*	.35*	.36*	.01	15	.04	.46*
				(.81)	.51*	.52*	.21*	.45*	.24*	.22*	.23*	.40*	.09	05	.11	.25*
nication					(.81)	.58*	.30*	.48*	.31*	.34*	.32*	.48*	07	12	.13	.34*
						(.76)	.31*	.51*	.21*	.26*	.26*	.55*	.04	.03	.16*	.35*
								.56*	.43*	.45*	.50*	.38*	10	16	.00	.93*
									.47*	.58*	.39*	.54*	01	09	.34*	.63*
										.61*	.71*	.26*	04	01	.30*	.52*
											.56	.34*	01	12	.27*	.51*
on												.26*	.00	03	.18	.50
													.02	05	.21*	.43*
														.27*	12	12
															09	19
															(.92)	.36*
																(.77)
	nication	(.85) 25* (.83)	(.85) .25* .19* (.83) .14 (.83)	(.85) .25* .19* .29* (.83) .14 .57* (.83) .21* (.95)	(.85) .25* .19* .29* .34* (.83) .14 .57* .07 (.83) .21* .17* (.95) .13 (.81)	(.85) .25* .19* .29* .34* .44* (.83) .14 .57* .07 .14 (.83) .21* .17* .19* (.95) .13 .27* (.81) .51* nication (.81)	(.85) .25* .19* .29* .34* .44* .61* (.83) .14 .57* .07 .14 .14* (.83) .21* .17* .19* .25* (.95) .13 .27* .20* (.81) .51* .52* nication (.81) .58*	(.85) .25* .19* .29* .34* .44* .61* .27* (.83) .14 .57* .07 .14 .14* .34* (.83) .21* .17* .19* .25* .12 (.95) .13 .27* .20* .46* (.81) .51* .52* .21* nication (.81) .58* .30* (.76) .31*	(.85) .25* .19* .29* .34* .44* .61* .27* .37* (.83) .14 .57* .07 .14 .14* .34* .24* (.83) .21* .17* .19* .25* .12 .17* (.95) .13 .27* .20* .46* .37* (.81) .51* .52* .21* .45* nication (.81) .58* .30* .48* (.76) .31* .51*56*	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* (.83) .14 .57* .07 .14 .14* .34* .24* .19* (.83) .21* .17* .19* .25* .12 .17* .14 (.95) .13 .27* .20* .46* .37* .26* (.81) .51* .52* .21* .45* .24* nication (.81) .58* .30* .48* .31* (.76) .31* .51* .21*56* .43*47*	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* (.83) .14 .57* .07 .14 .14* .34* .24* .19* .14 (.83) .21* .17* .19* .25* .12 .17* .14 .07 (.95) .13 .27* .20* .46* .37* .26* .33* (.81) .51* .52* .21* .45* .24* .22* nication (.81) .58* .30* .48* .31* .34* (.76) .31* .51* .21* .26* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .47* .58* .48* .45* .47* .58* .48* .45* .47* .58* .48* .48* .48* .48* .48* .48* .48* .4	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* .25* .19* .25* .19* .14* .22* .17* .14* .14* .34* .24* .19* .14* .22* .17* .14* .07 .12 .17* .14* .07 .12 .17* .14* .07* .12* .10* .14* .22* .25* .12* .17* .14* .07* .12* .14* .14* .34* .24* .22* .23* .15* .21* .26* .23* .21* .21* .26* .22* .23* .13* .34* .32* .28* .21* .21* .26* .26* .26* .26* .26* .26* .26* .26	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* .25* .45* (.83) .14 .57* .07 .14 .14* .34* .24* .19* .14 .22* .29* (.83) .21* .17* .19* .25* .12 .17* .14 .07 .12 .16* (.95) .13 .27* .20* .46* .37* .26* .33* .35* .36* (.81) .51* .52* .21* .45* .24* .22* .23* .40* nication (.81) .58* .30* .48* .31* .34* .32* .48* (.76) .31* .51* .21* .26* .26* .55* .38* .30* .47* .58* .39* .54* .38* .30* .47* .58* .39* .54* .30* .30* .30* .30* .30* .30* .30* .30	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* .25* .45* .05 (.83) .14 .57* .07 .14 .14* .34* .24* .19* .14 .22* .29* .05 (.83) .21* .17* .19* .25* .12 .17* .14 .07 .12 .16* .00 (.95) .13 .27* .20* .46* .37* .26* .33* .35* .36* .01 (.81) .51* .52* .21* .45* .24* .22* .23* .40* .09 (.81) .58* .30* .48* .31* .34* .32* .48* .07 (.76) .31* .51* .51* .21* .26* .26* .55* .0456* .43* .45* .50* .38* .1047* .58* .39* .54* .0161* .71* .26* .0056* .0056* .0002	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* .25* .45* .05	(.85) .25* .19* .29* .34* .44* .61* .27* .37* .23* .19* .25* .45* .0502 .09 (.83) .14 .57* .07 .14 .14* .34* .24* .19* .14 .22* .29* .0512 .05 (.83) .21* .17* .19* .25* .12 .17* .14 .07 .12 .16* .0006 .10 (.95) .13 .27* .20* .46* .37* .26* .33* .35* .36* .0115 .04 (.81) .51* .52* .21* .45* .24* .22* .23* .40* .0905 .11 (.81) .58* .30* .48* .31* .34* .32* .48*0712 .13 (.76) .31* .51* .21* .26* .26* .55* .04 .03 .16* 56* .43* .45* .50* .38*1016 .00 47* .58* .39* .54*0109 .34* 61* .71* .26*0401 .30* 56 .34*0112 .27* 56 .34*0112 .27*09

Fairness perceptions and attitudes toward the company

To control for pre-test attitudes (as recommended by Macan et al., 1994), the variance from pre-test ratings of attitudes toward the company (Questionnaire 1) were partialed out of post-test ratings of attitudes, and the residual used to examine our remaining hypothesized relationships. As shown in Table 4, the bivariate correlation between overall selection process fairness and attitude toward the company was significant (r = .38, p < .05).

Fairness Perceptions, Applicant Attitudes, and Outcomes

Simple correlations between attitudes toward the company (with pre-test variance partialed out) and each of the three outcomes (intentions to stay in the selection process, intentions to accept a job offer, and intentions to recommend the company to others) were also calculated. As expected, all three correlations were significant and are shown in Table 4.

Discussion

The research question guiding this study was, "Which characteristics of the selection test administration process most affect perceptions of overall fairness?" On the basis of the results shown in Table 2, it appears that the six procedural rules of quality of two-way communication, participation, transparency, interpersonal treatment, consistency of administration, and uncertainty reduction are all related to perceptions of fairness (roughly in that order of magnitude).

The payoff for pragmatists and administrators comes from examining the relationships between overall fairness and the attractiveness of the company as an employer. Consistent with Gilliland's (1993) model, fairness and company attractiveness are shown to be related, and the latter to be related to such important outcomes as deciding to stay in a prolonged selection process, intending to accept a job offer, and being willing to recommend the company to others—all important to companies seeking competitive edges in tight labor markets.

Furthermore, these relationships persist even when the variance from pre-test attitudes is taken out. Fairness perceptions even explain a significant amount of unique variance in attitudes when anticipated satisfaction with pay is considered at the same time. Money is apparently not everything.

The research is also significant because it involves actual job applicants making decisions that truly affect their lives and careers. Linking fairness perceptions to attitudes and outcome intentions in a real-world setting is relatively rare in the applicant reactions literature (Arvey and Sackett, 1993; Rynes, 1992, Truxillo et al., 2002).

Although this study's findings advance both theory and practice, one limitation involves the measurement of reactions to only one test administration. This was done so that applicants could focus their thoughts and limited time on one testing procedure and not be overwhelmed. Nonetheless, there may be compensatory relationships between tests in a multiple-hurdle process; one negative test experience

may be offset by another that was more pleasant. This does not seem to be a problem for our study, however. To ensure participants understood only to consider the one test they had just taken while responding to the surveys, we included an item on the second questionnaire. Results show that most (90%) reported that they did only refer to the one test. Removing the other 10% from analyses did not change any of the study's results. Nonetheless, differences in reactions to single-step and multiple-step selection systems are an interesting and understudied area (Maynard and Ryan, 1998), and should be studied in future research.

Finally, the conclusion that perceptions of fairness are related to the satisfaction of this study's six procedural justice rules is tempered by the possibility that the nature of the test itself (in terms of content and form) may be exerting some sort of influence on perceptions of the procedural justice rules. For example, high ratings of participation by those going through the selection interview may be due to the way the interview was administered, but it may also have to do with preexisting associations the applicant has about that particular procedure. Our establishment of the importance of test administration procedures in the field suggests an important direction for future research. Researchers should experiment with manipulating the levels of one or all of these six procedural justice rules. This is particularly important for quality of two-way communication, and participation, as these had the greatest relationships and the first two persisted after variance from job relatedness was removed.

The research question driving this research, however, has been whether the way in which tests are administered affects fairness perceptions and reactions. The results suggest that this is the case, but it remains to be seen the extent to which the procedural justice rules can vary independent of test type.

References

- Aamodt, M. G., & Peggans, D. (1988). Tactfully rejecting job applicants. *Personnel Administrator*, 33, 58-60.
- Arvey, R.D., & Sackett, P.R. (1993). Fairness in selection: Current developments and perspectives. In N. Schmitt & W. Borman (Eds.), *Personnel Selection in Organizations*, 171-202. San Francisco: Jossey-Bass.
- Bauer, T., Truxillo, D., Paronto, M., Weekley, Jeff., and Campion, M. (2004). Applicant reactions to different selection technology: Face-to-face, interactive voice response, and computer-assisted telephone screening interviews. *International Journal of Selection and Assessment*, 12, 135-148.
- Bauer, T., Truxillo, D., Sanchez, R., Craig, J., Ferrara, P., and Campion, M. (2001). Applicant reactions to selection: Development of the Selection Procedural Justice Scale (SPJS). *Personnel Psychology*, *54*, 387-419.
- Carless, S. (2003). A longitudinal study of applicant reactions to multiple selection procedures and job and organizational characteristics. *International Journal of Selection and Assessment*, 11, 345-351.
- Chan, D., & Schmitt, N. (2004). An agenda for future research on applicant reactions to selection procedures: A construct-oriented approach. International Journal of Selection and Assessment, 12, 9-23.

- Chan, D., Schmitt, N., Sacco, J. M., & DeShon, R. P. (1998) Understanding pretest and posttest reaction to cognitive ability and personality tests: Performance-reactions relationships and their structural invariance across racial groups. *Journal of Applied Psychology*, 83, 471-485.
- Gilliland, S. W. (1995). Fairness of the applicant's perspective: Reactions to employee selection procedures. *International Journal of Selection and Assessment*, 3, 11-19
- Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. *Journal of Applied Psychology*, 79, 691-701.
- Gilliland. S. W. (1993). The perceived fairness of selection systems: An organizational justice perspective. *Academy of Management Review*, 18, 694-734.
- Gilliland, S. W., Groth, M., Baker, R. C., Dew, A. F., Polly, L. M., & Langdon, J. C. (2001).). Improving applicants' reactions to rejection letters: An application of fairness theory. *Personnel Psychology*, *54*(3), 669-703.
- Greenberg, J. (1986). Determinants of perceived fairness in performance evaluations. *Journal of Applied Psychology*, 71, 340-342.
- Herriot, P. (1989) Selection as a social process. In Smith, M., & Robertson, I. T. (Eds.) *Advances in selection and assessment*. John Wiley & Sons: Chichester.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, *96*, 72-98.
- Iles, P. A., & Robertson, I. T. (1989). The impact of personnel selection procedures on candidates. In P. Herriot (Ed.), *Assessment and Selection in Organizations*, 257-271. Chichester, England: Wiley.
- Kluger, A. N., & Rothstein, H. R. (1993). The influence of selection test type on applicant reactions to employment testing. *Journal of Business and Psychology*, 8, 3-25.
- Kravitz, D. A., Stinson, V., Chavez, T. L. (1996). Evaluations of tests used for making selection and promotion decisions. *International Journal of Selection and Assessment*, 4, 24-34.
- Latham, G. P. & Finnegan, B. (1993). Perceived practicality of unstructured, patterned, and situational interviews. In Schuler, H., Farr, J.L., & Smith, M. (Eds.)

 Personnel Selection and Assessment. Hillsdale: Lawrence Erlbaum Associates.
- Lounsbury, J. W., Bobrow, W., & Jensen, J.B. (1989). Attitudes toward employment testing: Scale development, correlates, and "known-group" validation. *Professional Psychology: Research and Practice*, *5*, 340-349.
- Macan, T.H., Avedon, M. J., Paese, M. Smith, D. E. (1994). Effects of applicant reactions to cognitive ability tests and an assessment center. *Personnel Psychology*, 47, 715-738.
- Murphy, K.R. (1986). When your top choice turns you down: Effect of rejected offers on the utility of selection tests. *Psychological Bulletin*, *99*, 133-138.
- Maynard, D. C., Ryan, A. M. (1998). *Reactions to compensatory versus non-compensatory selection systems*. Paper presented at the 13th annual conference of the Society for Industrial Organizational Psychology convention, Dallas, TX.
- Powell, G. N. (1984). Effects of job attributes and recruiting practices on applicant decisions: A comparison. *Personnel Psychology*, *37*, 721-730.

- Rynes, S. (1993). When recruitment fails to attract: Individual expectations meet organizational realities in recruitment. In Schuler, H., Farr, J.L., & Smith, M. (Eds.) *Personnel selection and assessment*. Hillsdale: Lawrence Erlbaum Associates.
- Rynes, S., & Connerley, M. (1993). Applicant reactions to alternative selection procedures. *Journal of Business and Psychology*, 7, 261-277.
- Schuler, Heinz (1993). Social validity of selection situations: A concept and some empirical results. In Schuler, H., Farr, J.L., & Smith, M. (Eds.) *Personnel selection and assessment*. Hillsdale: Lawrence Erlbaum Associates.
- Singer, M.S. (1992). Procedural justice in managerial selection: Identification of fairness determinants and associations of fairness perceptions. *Social Justice Research*, *5*, 49-69.
- Smither, J.W., Millsap, R.E., Stoffey, R.W., Reilly, R.R., Pearlman, K. (1996). An Experimental test of the influence of selection procedures on fairness perceptions, attitudes about the organization and job pursuit intentions. *Journal of Business and Psychology*, 10, 297-318.
- Smither, J.W., Reilly, R.R., Millsap, R.E., Pearlman, K., and Stoffey, R.W. (1993). Applicant reactions to selection procedures. *Personnel Psychology*, *46*, 49-76.
- Steiner, D. D., & Gilliland, S. W. (1996). Fairness reactions to personnel selection techniques in France and the United States. *Journal of Applied Psychology*, 81, 134-141.
- Taylor, S.M., & Bergmann, T.J. (1987). Organizational recruitment activities and applicants' reactions at different stages of the recruitment process. *Personnel Psychology*, 40, 261-285.
- Thiboudeaux, H. & Kudisch, J. (2003). The relationship between applicant reactions, the likelihood of complaints, and organizational attractiveness. *Journal of Business and Psychology*, 18(2), 345-351.
- Thronton III, George (1993) The effect of selection practices on applicants' perceptions of organizational characteristics. In Schuler, H., Farr, J.L., & Smith, M. (Eds.) *Personnel selection and assessment.* Hillsdale: Lawrence Erlbaum Associates.
- Truxillo, D., Bauer, T., Campion, M. and Paronto, E. (2002). Selection fairness infromation and applicant reactions: A longitudinal field study. *Journal of Applied Psychology*, 87(6), 1020-1031.
- Truxillo, D., Steiner, D., and Gilliland, S. (2004). The importance of organizational justice in personnel selection: Defining when selection fairness really matters. *International Journal of Selection and Assessment, 12,* 39-53.
- Tissen, R. J. (1989). Selection as a social process: From scapegoat to golden hen? In Smith, M., & Robertson, I. T. (Eds.) *Advances in selection and assessment*. John Wiley & Sons: Chichester.
- Waung, M., & Brice, T. S. (2003). *The impact of a rejection communication on rejected job applicants*. Poster presented at the 18th annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

Appendix A¹

Survey Items Grouped by Dimension

Attitudes towards the company as an employer:

This is one of the best employers to work for.

I would like to work for this company more than other companies I could work for.

Participation:

The Test gave me the opportunity to demonstrate my qualifications.

The Test allowed me control over what information about me was gathered.

The Test gave me the opportunity to show what I'll really be able to do on the job.

Consistency:

I get the feeling that all applicants are treated the same during the testing process.

The Test is administered to all applicants in the same way.

Uncertainty Reduction:

I understood in advance what the testing process would be like.

I knew what today's testing would involve before I got here.

I had ample information about what would be going on today.

Interpersonal Treatment:

I was treated politely during the testing process.

The test administrators were considerate during the test.

The test administrators treated me with respect during the testing process.

I was satisfied with my treatment at the test site.

Transparency:

I understood what I needed to do in order to do well on the Test.

I understood how what I did on the Test would be evaluated.

I understood how the employer would determine good or bad performance on the Test.

Quality of Two-Way Communication:

The information about the company the test administrator gave was useful to me.

I had all my important questions about the job/company answered to my satisfaction.

I was able to get straight answers to all my questions.

Perceived Job Relatedness:

It would be clear to anyone that the Test is related to the job for which I am applying.

The content of the Test was clearly related to the job for which I am applying.

¹ This research was conducted before Bauer et. al. published their (2001) Selection Procedural Justice Scale.

A person who scored well on the Test would be a good employee.

Overall Fairness:

Overall, I think the testing process is fair.

So far, the testing has not been unfairly biased in any way.

Recommend the company to others:

Based on my experience with the examination today I would encourage others to apply for employment here.

Job Offer Acceptance Intentions:

I intend to accept a job offer from this company if it is made.

Return for further testing:

I intend to come back for more testing if asked to do so.

Anticipated satisfaction with pay:

I expect to be satisfied with my pay for this job

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