Do Procedural Justice Perceptions in a Selection Testing Context Predict Applicant Attraction and Intention Toward the Organization?

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This study examines the effects of procedural justice perceptions on outcomes in an actual selection context with applicants taking a general mental ability test to gain employment as utility meter readers. Applicant attraction and intention related to the organization were measured at 3 time periods. This allowed us to control for initial levels of outcome variables and the pass–fail result when assessing procedural justice effects. Procedural justice perceptions modestly predicted organizational attractiveness and intention prior to pass–fail feedback. However, the procedural justice effects on these outcomes were diminished after controlling for the pass–fail result. Either changes in R^2 or regression coefficients associated with procedural justice perceptions failed to achieve significance for all outcomes. We discuss the implications of these findings for procedural justice research and for employment managers.

With many organizations using written ability tests for hiring (Rowe, Williams, & Day, 1994), applicant reactions to such tests are highly relevant to organizational research (Smither, Reilly, Millsap, Pearlman, & Stoffey, 1993). Despite the notable validity and utility of written ability tests (Hunter & Hunter, 1984), more than one third of Americans seem to have unfavorable attitudes toward such tests (Schmit & Ryan, 1997). For instance, cognitive ability tests are

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often seen as less fair than interviews, résumé evaluations, or work samples (Rynes & Connerley, 1993; Steiner & Gilliland, 1996), but more fair than personality or honesty tests (Steiner & Gilliland, 1996; cf. Chan, 1997; Rosse, Miller, & Stecher, 1994).

An important question for managers and researchers is whether such perceptions of fairness in an employment-testing situation affect applicant outcomes important to the organization (e.g., Macan, Avedon, Paese, & Smith, 1994). In the past, several methodological shortcomings inhibited the definitive answering of this question (Bauer, Maertz, Dolen, & Campion, 1998). Addressing these shortcomings, Bauer et al. found that the influence of procedural justice perceptions on organizational attractiveness and intention toward the organization were significant when controlling for initial levels of these outcomes, but diminished when pass–fail result was controlled statistically. Bauer et al. suggest that procedural justice perceptions may not have a significant effect on criteria after applicants learn whether they passed or failed an employment test. Managers are unlikely to change a test's pass–fail criterion simply to accommodate applicant reactions. Thus, the Bauer et al. findings suggest that increasing the perceived fairness of selection testing might be ineffective for improving post-feedback applicant attraction and intention toward the organization, outcomes important to managers. This suggestion is rather controversial, given the considerable effort devoted to studying procedural justice in selection settings (e.g., Bauer et al., 2001; Gilliland, 1993).

The Bauer et al. study is the only published study to suggest that the effects of the selection (pass–fail) result may "wash out" the effects of procedural justice perceptions on organizational outcomes. Other studies have demonstrated consistently the importance of procedural justice perceptions on criteria, even considering the distributive outcome (e.g., Bies, Martin, & Brockner, 1993; Brockner et al., 1994; Folger & Konovsky, 1989; Gleason & Roberts, 1997). In fact, Bauer et al. (2001) found that the higher order factors (not scales) of social and structural procedural justice predicted intention to recommend the organization, even after controlling for pass–fail result on a cognitive ability test.

However, Bauer et al. (2001) used students applying for a fictitious job in a fictitious organization. The outcome of passing versus failing had no tangible costs for the respondent, and it could have been discounted easily as only part of an experiment. Thus, the pass–fail outcome was not as powerful an influence on criteria as it would have been in an actual employment test. Therefore, only a study with actual job applicants can fairly test the incremental effect of procedural justice perceptions beyond the effect of pass–fail outcome. If research is to accept or refute the suggestion of Bauer et al. (1998) that procedural justice perceptions regarding general mental ability employment tests may not matter after the selection outcome is considered, their study must be replicated in other samples of actual applicants.

The main purpose of the present study is to reexamine the somewhat controversial findings of Bauer et al. (1998) in another sample of actual job applicants taking a cognitive ability test. However, there are several important differences between Bauer et al.'s study and this study.

First, the present study examines a blue-collar sample of meter readers, as opposed to a white-collar sample of entry-level accountants. Blue-collar workers may have different reactions to management processes than will white-collar employees (e.g., Ganster & Dwyer, 1995). Moreover, the perceived fairness of a selection device may depend on the job or occupation for which it is being used (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001; Elkins & Phillips, 2000). Thus, cognitive ability tests may be seen as more or less fair for hiring different job types (blue-collar vs. white-collar). This may be because blue-collar jobs require relatively less formal education and thus less exposure to written testing in general. Also, firms hiring for less complex blue-collar jobs may utilize cognitive ability testing less often than when hiring for more complex white-collar positions. This relative lack of exposure to written testing could negatively affect self-efficacy for such testing among blue-collar employees (Gist & Mitchell, 1992). Lower self-efficacy or lower confidence for taking written cognitive ability tests could make blue-collar applicants more suspicious and more sensitized to justice concerns when taking such tests (e.g., Gilliland, 1994), especially when a job offer depends on their test performance. This could possibly create more variance in their justice perceptions than for white-collar employees who have more exposure, confidence, and perhaps more acceptance of cognitive ability tests for hiring. This line of argument, although speculative, suggests a possibility that we could find stronger procedural justice effects in this blue-collar sample than were found in Bauer et al.'s (1998) white-collar sample.

Second, we explore the relationships between procedural justice perceptions and two additional applicant outcome variables that are relevant to organizations and that were not included in Bauer et al. (1998). Gilliland's (1993) theoretical framework includes several organization-related intentions that should be predicted by procedural justice, including job-acceptance intention. Managers are likely to be interested in customer-oriented intentions as well. Thus, we examine the effects of procedural justice perceptions on outcomes not included in Bauer et al.: (a) intention to accept a job offer, and (b) intention to use and recommend the company's services. However, we do not include self-efficacy and general perceptions of testing fairness from Bauer et al.. We are not as interested in these outcomes because effects of procedural justice on them were not washed out by controlling for the pass–fail result and because these outcomes have less direct implications for management. Also, the effects of procedural justice on these outcomes have been well established in several other studies (Gilliland, 1994; Lounsbury, Bobrow, & Jensen, 1989).

Third, we examine a selection process wherein the written ability test is essentially the last hurdle in the selection process. In this study, over 95% of those who passed the test were hired; only a physical exam followed the test. In Bauer et al. (1998), there was at least one more formal interview hurdle in the selection process before hiring decisions were made. In this case, reported levels of organizational attraction and intention toward the organization may not carry over until after the selection decision. In fact, the next selection hurdle may have affected these outcomes. Applicants' reactions following the final selection decision are most likely to affect their future behavior with respect to the organization. Thus, this study examines the effects of procedural justice on potentially more relevant reactions.

Literature Review

Applicants generally favor selection procedures that are seen as fair (e.g., Kluger & Rothstein, 1993; Ployhart & Ryan, 1998; Rynes & Connerley, 1993; Steiner & Gilliland, 1996). Perceptions that selection procedures are fair may enhance evaluations of the organization's attractiveness and positively influence applicant intentions (Judge, Blancero, Cable, & Johnson, 1995; Macan et al., 1994; Schmit & Ryan, 1997; Smither et al., 1993). However, past studies on the effects of procedural justice perceptions in selection contexts often contained methodological shortcomings. For instance, initial levels of the outcomes may not have been controlled (Rynes & Connerley, 1993). Without such control, it is impossible to distinguish procedural justice effects from individual differences on the outcomes. Also, in much of the prior literature, the selection outcome itself has not been controlled when assessing the effects of procedural justice. In real selection situations, efforts can be made to enhance procedural justice perceptions, but the pass–fail outcome cannot be adjusted to accommodate applicant reactions. Thus, procedural justice perceptions are important to the extent that they have an impact on criteria beyond the effect of the pass–fail decision itself. The question becomes whether applicant procedural justice perceptions predict criteria when initial criterion levels and pass–fail outcome are controlled. The findings of Bauer et al. (1998) provide a preliminary answer to this question.

Using Gilliland's (1993) theoretical framework to define procedural justice, Bauer et al. (1998) determined that five of his justice rules were salient to the employment testing situation: (a) information about the test and how it is used, (b) chance to perform by showing relevant abilities during testing, (c) good treatment at the test site, (d) consistency in test administration, and (e) job relatedness of the test. Controlling for initial (Time 1) measures of the criterion variables, Bauer et al. found that the procedural justice dimensions "information known about the test" and "treatment at the test site" were positively related to both

organizational attractiveness and intention toward the organization. Likewise we hypothesize the following:

> *Hypothesis 1.* Procedural justice perceptions will be related positively to organization-related outcomes, controlling for Time 1 levels of outcomes.

Bauer et al. (1998) found that pass–fail result was related more strongly to organization-related outcomes than were procedural justice perceptions. When procedural justice perceptions were entered into a regression analysis after the pass–fail result, only one of the five procedural justice coefficients was significant (for organizational attractiveness), perceived job relatedness. None of the procedural justice perceptions predicted intention toward the organization. The authors speculated that the pass–fail result may wash out the effects of procedural justice on organization-related outcomes in an employment testing setting. However, we utilize a blue-collar sample, examine additional organization-related outcomes, and examine outcomes at a later stage of selection that may be more relevant. For these reasons and because other evidence on procedural justice (e.g., Bauer et al., 2001) seems contrary to Bauer et al. (1998), we hypothesize an effect for procedural justice on organization-related outcomes, even after controlling for pass–fail result.

> *Hypothesis 2.* After controlling for pass–fail result and Time 1 levels of outcomes, procedural justice perceptions will be related positively to organization-related outcomes.

Method

Sample and Setting

Participants were 287 applicants for a meter-reader position in a large private utility organization in the western United States. Matched surveys across three time periods were obtained for 170 applicants. This final sample consisted of 74% men and 86% women. The sample had approximately equal numbers of Caucasian (32%), African American (31%), and Hispanic (27%) applicants; the rest were from other ethnic groups. Mean age was 33.0 years. Of the sample, 67% had a high school diploma or equivalent, 21% had a 2-year college degree, and 8% had a bachelor's degree.

Procedure

Three questionnaires were administered to several groups of applicants at three different times during a daylong selection process. Each group of applicants

started the process in the midmorning with an orientation to the hiring process. At the end of this overview, they were informed about the research study and (if they chose to participate) were given Time 1 (pre-testing, pre-feedback) questionnaires. At this time, applicants were assured that surveys would be used for research purposes only and would not influence the hiring process in any way. Participants were told that those who completed all three measures would be entered into drawings for a portable stereo player and tickets to an amusement park. Immediately after participants had completed the questionnaire, the test administrator gave brief instructions and administered a written selection test battery measuring cognitive ability. This test battery involved two 5-min subtests measuring quantitative and verbal ability. Neither the researchers nor the applicants were informed about a cutoff score for passing the test.

After a short break (within 15 to 20 min of finishing the test), Time 2 (post-testing, pre-feedback) questionnaires were administered to applicants who chose to take it (3 participants from Time 1 did not). Procedural justice perceptions were measured at Time 2. After Time 2 measures, applicants were informed that they could find out their pass–fail results after 1 hr or so (sometimes it was longer). Applicants were allowed to wait for their results in a waiting area where they could potentially interact with other applicants or were allowed to leave the premises.

After applicants were informed of their pass–fail result (not their raw score), Time 3 (post-testing, post-feedback) questionnaires were administered to applicants who chose to take it (114 participants from Time 2 did not). Those who passed the test moved on to take a final stationary bicycle test. Those who passed this physical ability test (over 95%) were hired.

Measures

Procedural justice perceptions. Bauer et al. (1998) developed scales based on five of Gilliland's (1993) procedural justice rules. These were also used in the current study. The 5-point response scale ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Information known about the test was measured using three items (e.g., "I understood how this test would affect hiring"). Chance to perform on the test was measured using three items (e.g., "I think that this test gave me a chance to prove myself"). Treatment at the test site was measured using three items (e.g., "I was treated politely during the testing"). Consistency of test administration was measured using two items (e.g., "All applicants were treated the same during the testing"). Finally, job relatedness of the test was measured using three items (e.g., "The questions on this test are directly related to the job").

Outcomes. Outcome variables were measured at all three points in time. Four organization-related outcomes were included. Organizational attractiveness was

measured using three items (e.g., "This organization is one of the best places to work") from Macan et al. (1994) and Smither et al. (1993). Intention toward the organization was comprised of three items (e.g., "I intend to encourage others to apply for a job with this company"), also based on Macan et al. and Smither et al.. Service intentions were measured using two items (i.e., "I intend to use/recommend this company's services"). Intention to accept a job offer was assessed with one item asking whether the applicant intended to accept a job with this company if offered.

Pass–fail result. This variable was coded 1 if the applicant earned a passing score and 0 if the applicant earned a failing score.

Results

Table 1 contains means, standard deviations, and scale reliabilities where applicable. With the exception of the scale "job relatedness of the test," the alpha coefficients were above .70, indicating acceptable internal consistency reliability. Two factor analyses were conducted using an oblique rotation, one with the procedural justice items and one with the outcome items. These analyses show that the items for each scale loaded on their own factors without significant cross-loadings, and only two scale items had loadings below .40 on their factors. Because each scale comprised a single factor and the reliabilities were generally acceptable, the scales were used as proposed. Table 2 presents correlations among all study variables. Hypotheses were tested using hierarchical regression analyses.

Hypothesis 1

We hypothesized that procedural justice perceptions will relate positively to organization-related outcomes, controlling for Time 1 levels of outcomes. Table 3 presents the results from the regressions with all procedural justice measures and Time 1 controls predicting Time 2 outcomes. Table 4 presents the same analyses predicting Time 3 outcomes.

Analyses at Time 2 reveal that the average change in R^2 for adding procedural justice perceptions to the regression equation was 6%. Specifically, information known about the test predicted organizational attractiveness, and treatment at the site predicted intention toward the organization in both Bauer et al. (1998) and the current study. Also, consistency of test administration predicted intention toward the organization and intention to accept a job offer. Chance to perform predicted service intention. Treatment at the test site predicted intention to accept a job offer. At Time 3, the average change in R^2 for adding procedural justice perceptions was 5%. Chance to perform predicted organizational attractiveness and service intention. Treatment at the site predicted intention toward the organization. These results provide support for Hypothesis 1.

Table 1

Means, Standard Deviations, and Scale Alphas

Variable	*M*	*SD*	Coefficient α
Independent variable			
Information known about the test (T2)	3.67	0.69	.74
Chance to perform on the test (T2)	3.18	0.87	.83
Treatment at test site (T2)	4.08	0.62	.71
Consistency of test administration (T2)	4.42	0.67	.94
Job relatedness of test (T2)	3.02	0.73	.65
Pass–fail feedback	0.40	0.49	—
Dependent variable			
Organizational attractiveness (T1)	3.66	0.64	.78
Intention toward the organization (T1)	4.01	0.69	.84
Intention to use services (T1)	4.04	0.72	.87
Intention to accept job offer (T1)	4.58	0.63	—
Organizational attractiveness (T2)	3.61	0.64	.82
Intention toward the organization (T2)	3.93	0.67	.89
Intention to use services (T2)	3.94	0.67	.84
Intention to accept job offer (T2)	4.36	0.68	—
Organizational attractiveness (T3)	3.58	0.69	.87
Intention toward the organization (T3)	3.86	0.72	.91
Intention to use services (T3)	3.84	0.72	.86
Intention to accept job offer (T3)	4.24	0.74	—

Note. For Time 1 (T1) variables, *n*s = 279 to 287; for Time 2 (T2) variables, *n*s = 272 to 283; for Time 3 (T3) variables, *n*s = 166 to 170.

Hypothesis 2

In Time 3 regressions, 64% of the participants passed the test. As in Bauer et al. (1998), the effect of procedural justice perceptions on organization-related outcomes were weaker after pass–fail was controlled (Table 5). For organizational attractiveness, procedural justice perceptions (as a set) contributed significantly to variance explained (4%) after controlling pass–fail outcome, but none of the coefficients achieved significance. Because no coefficient was significant and the practical significance of a 4% increase in variance explained is

questionable, we conclude that the findings for organizational attractiveness do not support Hypothesis 2 in a meaningful way. For each of the three intention outcomes, procedural justice perceptions (as a set) did not contribute significantly to variance explained when controlling for pass–fail result, but two coefficients were significant. Treatment at the test site predicted intention toward the organization, and information known predicted intention to accept a job offer. Thus, Hypothesis 2 was supported only very weakly, and the findings of Bauer et al. were largely replicated.

Discussion

Controlling for initial outcome levels, four out of five procedural justice perceptions were significantly related to at least one organization-related outcome, and all four outcomes related to at least one of the procedural justice perceptions. Specifically, information known about the test predicted organizational attractiveness, and treatment at the site predicted intention toward the organization in both Bauer et al. (1998) and the current study. Evidently, feelings that one has been informed about the test reflect well on the organization such that it is more attractive to the applicant, at least temporarily. Feeling that one has been treated well at the test site may increase applicant intention to recommend the organization to other applicants. These two studies suggest that managers may want to make sure that test preparation/introduction for applicants is clear and complete, and that treatment of all applicants during the testing process is friendly and respectful. The current findings also indicate that consistency of test administration predicted intention toward the organization and intention to accept a job offer. Treatment at the test site predicted intention to accept a job offer. Chance to perform predicted organizational attractiveness and service intention.

After pass–fail result was controlled statistically, the findings were considerably weaker. There is some marginal evidence that procedural justice perceptions may affect organizational attractiveness, which may affect subsequent behaviors relevant to the organization (Rynes & Barber, 1990), but no individual coefficient achieved significance. With respect to intentions, 2 of 15 coefficients were significant, but as a set, procedural justice perceptions did not explain significant variance in any intention outcome. The general pattern of findings is clear and consistent with Bauer et al. (1998): (a) one or more of the five procedural justice perceptions predict organization-related outcomes before pass–fail feedback is given; but (b) procedural justice perceptions have marginal or no effect on applicant attraction and intention after the pass–fail outcome is controlled. Evidently, using a blue-collar versus a white-collar sample, adding outcome variables, and examining more final measures of outcomes (later in the hiring process) did not greatly change the results from those found in Bauer et al.

Table 2

Correlations for Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Information known about the test	—																
2. Chance to perform on the test	.50*	—															
3. Treatment at the test site	.27*	.28*	—														
4. Consistency of test administration	.29*	.21*	.51*	—													
5. Job relatedness of the test	.54*	.64*	.20*	.12*	—												
6. Pass–fail result	.08	.20*	.08	.04	.15*	—											
7. Organizational attractiveness (T1)	.19*	.14*	.20*	.17*	.07	-.03	—										
8. Intention toward the organization (T1)	.20*	.17*	.31*	.32*	.13*	-.08	.63*	—									
9. Service intention (T1)	.16*	.15*	.22*	.36*	.08	-.02	.50*	.76*	—								

10. Intention to accept a job offer (T1)	.15*	.08	.26*	.44*	.01	.06	.34*	.53*	.51*	—							
11. Organizational attractiveness (T2)	.33*	.23*	.33*	.25*	.22*	-.04	.67*	.53*	.42*	.20*	—						
12. Intention toward the organization (T2)	.33*	.24*	.37*	.36*	.16*	.07	.49*	.62*	.51*	.36*	.65*	—					
13. Service intention (T2)	.25*	.28*	.26*	.34*	.16*	.02	.43*	.52*	.62*	.32*	.57*	.72*	—				
14. Intention to accept a job offer (T2)	.27*	.12*	.36*	.43*	.08	.07	.35*	.41*	.33*	.51*	.42*	.59*	.54*	—			
15. Organizational attractiveness (T3)	.41*	.31*	.24*	.24*	.22*	.13	.71*	.54*	.39*	.25*	.78*	.59*	.47*	.38*	—		
16. Intention toward the organization (T3)	.34*	.31*	.34*	.33*	.22*	.21*	.47*	.64*	.47*	.36*	.54*	.76*	.58*	.46*	.73*	—	
17. Service intention (T3)	.27*	.30*	.19*	.29*	.19*	.17*	.39*	.47*	.61*	.29*	.49*	.62*	.82*	.40*	.57*	.72*	—
18. Intention to accept a job offer (T3)	.31*	.24*	.26*	.26*	.15*	.28*	.31*	.37*	.25*	.45*	.37*	.51*	.34*	.55*	.57*	.68*	.50*

Note. Pairwise deletion of cases was used for correlations, so sample sizes differ across times. For Time 1 (T1) variables, *n*s = 279 to 287; for Time 2 (T2) variables, *n*s = 272 to 283; for Time 3 (T3) variables, *n*s = 166 to 170.
*$p < .05$.

Table 3

Hierarchical Regression Analysis at Time 2

	β	R^2	ΔR^2	F
Organizational attractiveness				
Step 1: Perception (T1)		.53		190.01**
Organizational attractiveness	.65**			
Step 2: Procedural justice (T2)		.59	.06	4.80**
Information known about test	.16**			
Chance to perform	.03			
Treatment	.08			
Consistency	.03			
Job relatedness	.02			
Overall equation				38.69**
Intention toward the organization				
Step 1: Perception (T1)		.46		144.12**
Intention toward the organization	.58**			
Step 2: Procedural justice (T2)		.53	.07	4.83**
Information known about test	.03			
Chance to perform	.09			
Treatment	.16**			
Consistency	.13*			
Job relatedness	-.08			
Overall equation				30.55**
Service intention				
Step 1: Perception (T1)		.52		178.10**
Service intention	.68**			
Step 2: Procedural justice (T2)		.55	.03	2.14
Information known about test	-.05			
Chance to perform	.15*			
Treatment	.08			
Consistency	.04			
Job relatedness	.01			
Overall equation				33.08**

(*table continues*)

Table 3 (Continued)

	β	R^2	ΔR^2	F
Intention to accept job offer				
Step 1: Perception (T1)		.37		100.52**
Intention to accept job offer	.50**			
Step 2: Procedural justice (T2)		.45	.08	4.71**
Information known about test	.11			
Chance to perform	-.08			
Treatment	.15**			
Consistency	.15*			
Job relatedness	-.01			
Overall equation				21.93**

Note. T1 = Time 1, T2 = Time 2. n = 170. Significance levels for regression coefficients are one-tailed.
*$p < .05$. **$p < .01$.

Because managers will probably not adjust pass–fail cutoffs or alter hire/no-hire decisions simply to influence applicant reactions, the current results along with Bauer et al. (1998) call into question whether procedural justice perceptions in a selection context will have strong effects on post-selection reactions. In short, applicants who pass the test are likely to have positive reactions, and those who fail are likely to have negative reactions. The lesson for managers is that investing significant resources in trying to enhance justice perceptions will likely yield limited benefits. Still, based on significant justice effects on outcomes in other contexts, managers should err on the side of caution and try to make hiring procedures as fair as possible, especially because following procedural justice rules (Gilliland, 1993) often does not require a great expenditure of resources.

Future research should investigate why procedural justice perceptions might have limited incremental effects beyond the pass–fail result in selection contexts. For those not hired, the unpleasantness and the finality of failing a selection hurdle may cause them to completely avoid thinking about the selection procedures, as a defense mechanism. Alternatively, through self-serving bias (e.g., Chan, Schmitt, Jennings, Clause, & Delbridge, 1998), applicants may reason retrospectively that the procedures must have been unfair to arrive at the no-hire outcome, or applicants may make external attributions of unfair procedures to protect their self-esteem (Schroth & Shah, 2000). Either blocking out cognition about testing procedures or self-serving bias in attributions could blur the reactions to outcome and procedures into an overall negative reaction. This could

Table 4

Hierarchical Regression Analysis at Time 3

	β	R^2	ΔR^2	F
Organizational attractiveness				
Step 1: Perception (T1)		.50		170.17**
Organizational attractiveness	.65**			
Step 2: Procedural justice (T2)		.56	.06	4.44**
Information known about test	.10			
Chance to perform	.12*			
Treatment	.03			
Consistency	.03			
Job relatedness	.05			
Overall equation				34.41**
Intention toward the organization				
Step 1: Perception (T1)		.40		114.08**
Intention toward the organization	.55**			
Step 2: Procedural justice (T2)		.45	.05	2.94*
Information known about test	.05			
Chance to perform	.01			
Treatment	.12*			
Consistency	.05			
Job relatedness	.01			
Overall equation				22.48**
Service intention				
Step 1: Perception (T1)		.37		100.13**
Service intention	.57**			
Step 2: Procedural justice (T2)		.42	.05	2.78*
Information known about test	.01			
Chance to perform	.16*			
Treatment	.07			
Consistency	.03			
Job relatedness	.03			
Overall equation				19.80**

(*table continues*)

Table 4 (Continued)

	β	R^2	ΔR^2	F
Intention to accept job offer				
Step 1: Perception (T1)		.21		43.70**
Intention to accept job offer	.37**			
Step 2: Procedural justice (T2)		.26	.05	2.22*
Information known about test	.13			
Chance to perform	.11			
Treatment	.12			
Consistency	-.02			
Job relatedness	-.02			
Overall equation				9.61**

Note. T1 = Time 1, T2 = Time 2. $n = 170$. Significance levels for regression coefficients are one-tailed.
*$p < .05$. **$p < .01$.

reduce the incremental effects of procedural justice on subsequent attraction and intention for those who fail.

For those who pass, there is evidence that a favorable outcome more than procedural justice may lead to happiness and pride (Weiss, Suckow, & Cropanzano, 1999). In their happiness, those who pass may quickly accept procedures as adequately fair and forget about them. Passing would also encourage self-serving attributions of fair procedures and high ability (Schroth & Shah, 2000). Also, as the applicant is hired, procedural justice effects may weaken as further information about the job is obtained, like recruiter effects often do (e.g., Taylor & Bergmann, 1987). These factors would all tend to reduce the incremental effects of procedural justice beyond the pass–fail result. Future research should investigate these potential explanations.

In addition, the nature of the pass–fail or hire/no-hire decision is different from several other organizational decisions that have been studied. Unlike potentially continuous pay raises, performance ratings, or collective bargaining outcomes, the pass–fail outcome is dichotomous and relatively final. Applicants may see selection as a pure win–lose situation, dampening any ameliorating effects of fair procedures found in situations with multilevel outcomes. Moreover, in the selection context, there is not yet an ongoing relationship with the organization. For this reason, applicants may not have enough experience with the organization or an adequate frame of reference to judge procedural justice. This could make procedural justice perceptions of applicants more vague and

Table 5

Hierarchical Regression Analysis Controlling for Pass–Fail Feedback at Time 3

	β	R^2	ΔR^2	F
Organizational attractiveness				
Step 1: Perception (T1)		.50		170.17**
Organizational attractiveness	.66**			
Step 2: Feedback (T3)		.53	.03	10.71**
Pass–fail feedback	.12*			
Step 3: Procedural justice (T2)		.57	.04	2.96*
Information known about test	.11			
Chance to perform	.08			
Treatment	.02			
Consistency	.02			
Job relatedness	.05			
Overall equation				30.80**
Intention toward the organization				
Step 1: Perception (T1)		.40		114.08**
Intention toward the organization	.60**			
Step 2: Feedback (T3)		.48	.08	25.81**
Pass–fail feedback	.24**			
Step 3: Procedural justice (T2)		.51	.03	2.00
Information known about test	.05			
Chance to perform	.01			
Treatment	.11*			
Consistency	.03			
Job relatedness	.03			
Overall equation				23.58**
Service intention				
Step 1: Perception (T1)		.37		100.13**
Service intention	.58**			
Step 2: Feedback (T3)		.41	.04	11.43**
Pass–fail feedback	.16**			

(*table continues*)

Table 5 (Continued)

	β	R^2	ΔR^2	F
Step 3: Procedural justice (T2)		.44	.03	1.71
Information known about test	.01			
Chance to perform	.11			
Treatment	.07			
Consistency	.02			
Job relatedness	.04			
Overall equation				18.43**
Intention to accept job offer				
Step 1: Perception (T1)		.21		43.70**
Intention to accept job offer	.38**			
Step 2: Feedback (T3)		.27	.06	13.64**
Pass–fail feedback	.22**			
Step 3: Procedural justice (T2)		.31	.04	1.86
Information known about test	.14*			
Chance to perform	.03			
Treatment	.11			
Consistency	-.02			
Job relatedness	-.01			
Overall equation				10.21**

Note. T1 = Time 1, T2 = Time 2, T3 = Time 3. $n = 170$. Significance levels for regression coefficients are one-tailed.
*$p < .05$. **$p < .01$.

tentative than those of employees. Thus, applicants' procedural justice perceptions may be less predictive of intention and behavior than current employee perceptions. Future research should investigate applicant versus employee differences in perceptions of procedural justice and the relative potency of procedural justice between situations where the distributed outcome is dichotomous versus multilevel/continuous. A tentative hypothesis might be that the ameliorating effects of procedural justice in the face of a negative outcome (e.g., Folger & Konovsky, 1989) are weaker in the case of a dichotomous versus multilevel outcome, and are weaker for applicant versus employee samples.

Researchers also must investigate the impact of procedural justice perceptions on several other important behavioral criteria for those who fail: propensity

to seek legal redress, speaking negatively about the company, and actively discouraging people from applying or using company services. For those who are hired, the impact of procedural justice in selection on organizational commitment, task performance, and organizational citizenship behavior should be investigated longitudinally. Until research on such criteria is conducted, managers cannot presume that the influence of procedural justice perceptions in this context is negligible.

Other areas for future research are suggested by the limitations of the current study. The present study did not attempt to manipulate procedural justice perceptions. One of the most pressing questions for research on applicant reactions is whether management interventions can increase perceptions of procedural justice. Another is whether such increases would have a significant effect on organization-related outcomes. Answering these questions would require a field experiment including interventions designed to increase procedural justice. An example would be orientation training prior to testing that explains the procedures of taking the test, the reliability of the test, its job relatedness, its past success in determining good performers, how it is used to make hiring decisions, and how it is more fair than other procedures (e.g., interviews, references).

Another limitation is that we only investigated perception-based criteria. We did not examine the effects of procedural justice on relevant behavioral criteria for those hired (e.g., job performance, citizenship behavior, turnover) and for those not hired (e.g., applicant dropout rate, EEOC complaints, change in company service use, company-related criticism). Unfortunately, we were unable to collect these behavioral measures. Our inability to obtain such behavioral criteria and our failure to manipulate justice perceptions is a definite limitation to the overall contribution of the present study. In addition, we collected all of the measures on the same day. Because of practice or consistency effects, this could have inflated correlations between measures of the same outcome across time periods more than would be expected if measures were taken weeks apart. With this design, controlling for Time 1 levels in each regression may have limited the variance to be predicted and significant effects more than if there were considerable time between measures. In short, there is a good possibility that our results may not generalize to selection processes that take weeks to unfold. Fortunately, many other jobs do have relatively short (1 to 2 days) selection processes. Finally, although we have no direct evidence of this, demand characteristics causing a positive bias in responses could have been a problem if participants thought (despite what they were told to the contrary) that their responses might influence the hiring decisions.

Despite these limitations, we have contributed to the procedural justice literature by conducting a field investigation in an employment testing setting, controlling for initial levels of criteria and pass–fail result to better understand the effects of procedural justice perceptions. We generally replicated the somewhat controversial findings of Bauer et al. (1998) in a blue-collar sample,

including additional intention outcomes. Procedural justice perceptions generally related to organization-related criteria, controlling for initial criterion levels, but the pass–fail result diminished or negated the effects of procedural justice perceptions on organization-related outcomes. Hopefully, these findings and our discussion of them will help stimulate continued research on procedural justice in the selection context.

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