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Procedural Justice and Personality Testing

AN EXAMINATION OF CONCERN AND TYPICALITY

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Research in selection examines how organizational justice principles may influence applicants' reactions to selection procedures. This article extends this research by examining how two aspects of procedures—interpersonal treatment and social comparison information—affect reactions to a personality testing. The results of two studies demonstrate that interpersonal treatment (expression of concern for applicants' feelings) and social comparison information (description of testing as either typical or experimental) interact to affect test-takers' reactions. When concern was expressed and personality testing was described as typical, individuals responded less positively. However, when no concern was expressed, evaluations were more positive when testing was described as typical. The implications for organizational justice research and selection research are discussed.

Keywords: organizational justice; selection; applicant reactions; social comparisons

In the past several years, research has examined how justice principles may affect applicant responses to selection procedures (Gilliland, 1993, 1994; Ployhart & Ryan, 1997, 1998; Ployhart, Ryan, & Bennett, 1999; Singer, 1993). This research is particularly relevant in the area of personality testing. The use of personality inventories reveals that applicants often respond negatively to such testing. In this study, we examine how perceptions of procedural fairness might influence individuals' affective responses to the use of personality tests for selection purposes.

In recent years, organizational researchers have reconsidered the role of personality in employee selection. Reviews and meta-analyses by Barrick and Mount (1991a), Hogan, Hogan, and Roberts (1996), Hough, Dunnette,

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502

Eaton, and Kamp (1990), Schneider, Hough, & Dunnette (1996), Tett, Jackson, and Rothstein (1991), and Viswesvaran, Ones, and Schmidt (1992) have established the job-relatedness of various personality facets for various dimensions of job performance. Additionally, several studies have shown that personality inventories provide unique predictive ability independent of other selection methods such as cognitive ability measures (Day & Silverman, 1989; Rosse, Miller, & Barnes, 1991; Schippmann & Prien, 1989) and assessment centers (Goffin, Rothstein, & Johnston, 1996).

Despite this body of evidence, a number of obstacles to wider use of personality testing remain. One of the most serious is a lack of acceptance by job applicants. Smither, Reilly, Millsap, Pearlman, and Stoffey (1993) report that managers perceived personality testing to be among the least job related of selection techniques. Research consistently demonstrates that applicants respond less favorably to personality testing than other forms of selection (Jones, 1991; Rosse, Miller, & Stecher, 1994; Rynes & Connerly, 1993; Stone, Stone, & Hyatt, 1989). For example, Stone et al. (1989) found that personality tests were perceived as more invasive of privacy than most typical selection procedures (i.e., application blanks, interviews, work samples, physical and mental ability tests); only background checks, medical exams, drug tests, and honesty tests were seen as more invasive. In a similar study, Jones (1991) found only voice stress analysis, urinalysis, blood tests, polygraphy, and genetic testing to be more unpopular. Paramount among applicants' concerns is a sense that standardized personality tests are an invasion of privacy and that they depersonalize the selection process by reducing one's complex personal nature to a set of objective scores. It was just this kind of concern that led to the frequently cited *Soroka v. Dayton-Hudson* case in which the plaintiffs argued that a personality inventory was an undue invasion of privacy.

These negative reactions to personality testing are important because research indicates that applicants' reactions to recruitment and selection procedures influence a variety of important outcomes, including applicants' attitudes toward prospective employers (Macan, Avedon, Paese, & Smith, 1994; Ployhart et al., 1999; Rynes, 1991; Rynes, Bretz, & Gerhart, 1991; Smither et al., 1993; Smither, Millsap, Stoffey, & Reilly, 1996), applicants' motivation to do well (Arvey, Strickland, Drauden, & Martin, 1990), withdrawal from the applicant pool (Rynes et al., 1991), applicants' self-efficacy (Gilliland, 1994; Ployhart & Ryan, 1997), lawsuits (Bible, 1990), job choice intentions (Liden & Parsons, 1986; Macan et al., 1994; Schmitt & Coyle, 1976; Turban & Keon, 1993), and loyalty to the employer after having been hired (Crant & Bateman, 1989, 1990; Smither et al., 1996). These negative

reactions can be a particular concern for personality inventories because they generally have less face validity than other personnel selection tools.

These findings pose a dilemma for proponents of pre-employment personality assessment. Personality tests may provide relevant information that benefits the organization yet may be poorly received by applicants, thereby causing negative organizational consequences. Cropanzano (1994) has described this predicament as the “justice dilemma”—a general trend in which valid personnel selection tools are perceived to violate principles of fairness. Finding a way to enhance applicants’ reactions to personality testing could not only reduce the problems we have described but could also provide direct benefits. If applicants feel the selection process is fair, they are more likely to feel good about the organization even if they are not hired (Gilliland, 1994; Ployhart & Ryan, 1998). Because the applicant may be a consumer of the organization’s goods or services, or may be in a position to recommend the firm to other consumers or job searchers, having applicants finish the job search process with a positive impression is a desirable end in itself.

Given the importance of perceived justice in a wide variety of other organizational domains (see Cropanzano & Greenberg, 1997, for a review), it is not surprising that researchers have examined the effects of perceived fairness in a selection context. Although this selection research replicates many of the justice effects found in other areas, it also reveals some differences. For example, replicating the typical process-by-outcome interaction found in justice literature, Gilliland (1994) found that procedural justice mattered when individuals received unfavorable outcomes, that is, when applicants were rejected. Also consistent with previous justice research, Gilliland found that providing applicants with explanations for their rejection increased positive outcomes, in this case the likelihood that they would recommend the project to others or apply for a similar project in the future. However, explanations did not affect perceptions of procedural fairness and had a negative effect on performance quality for successful applicants—both findings contrary to justice predictions.

In a study of graduate program applicants, Ployhart and Ryan (1997) found that applicants evaluated the selection experience more favorably when they believed the procedures were fair. However, unlike Gilliland (1994) and most justice research, the results were stronger when the applicants received a fair outcome than when they received an unfair outcome. In a subsequent longitudinal study, Ployhart and Ryan (1998) examined the effect of positive rule violation (i.e., procedural violations that were advantageous to applicants) and perceptions of fairness. They found positive rule

violation and rule satisfaction (i.e., adherence to procedures) were perceived as equally fair (and more fair than procedural violations that were disadvantageous to the applicant). Additionally, positive rule violation and rule satisfaction have similar effects on outcome variables (intentions to recommend the job to others, intention to participate in similar selection procedures in the future). However, Ployhart and Ryan (1998) did not find the traditional process-by-outcome interaction in this study, either. Rather, applicants' intentions were lowest and their self-perceptions were least favorable when the process was perceived as unfair and the outcome was perceived as fair.

Most recently, Ployhart et al. (1999) examined the effect of explanations on individuals' reactions to selection decisions. They found that explanations generally enhanced perceptions of fairness and perceptions of the organization, but the type of information provided and the sensitivity of the explanation influenced the magnitude of that effect. Procedural explanations that focused on how the decision was made (e.g., consideration of test scores, work sample) and personal explanations that provided information about the individual's relative performance on these dimensions were evaluated more favorably than an explanation that focused on the organization's desire to select a diverse workforce. Sensitivity increased the perceived fairness of all explanations and enhanced perceptions of the organization. However, the diverse workforce justification alone (without a sensitive presentation) resulted in the lowest evaluations—lower than a control group that received no explanation.

In general, the research on organizational justice and selection procedures suggests that although justice may provide useful principles for improving the perceived fairness of the selection experience, the application of justice principles to selection procedures is not a straightforward process. In this article, we continue to examine the relationship between selection procedures and justice and attempt to understand the complexity of this relationship. Specifically, we examine how two variables from the organizational justice literature—interpersonal treatment by the administrator and how typical test use is—may affect applicants' reactions to personality testing. As described below, we believe that both of these variables play an important role in individuals' assessments of the fairness of personality testing. The first, interpersonal treatment, has been examined in some previous empirical research on selection and justice (Ployhart & Ryan, 1998). The second, typicality, has only received theoretical attention. Our study considers both the independent and interactive effects of these constructs.

In addition to increasing our understanding of the perceived fairness of selection, the study also seeks to extend work on interactional justice.

Previous research on interactional justice has examined the boundary conditions for one interactional justice component—the effectiveness of explanations (Conlon & Murray, 1996; Conlon & Ross, 1997; Ployhart et al., 1999; Shapiro, Buttner, & Barry, 1994). In this study, we consider boundary conditions for interpersonal sensitivity, the other component of interactional justice, and develop competing hypotheses for the effects of interpersonal treatment and social comparisons on reactions to personality testing.

ORGANIZATIONAL JUSTICE AND PERSONALITY TESTING

Early procedural justice research focused on the structural aspects of procedures (e.g., voice opportunities, consistency, opportunity for appeals). Recent research has focused on the “social side” of procedural justice. The distinction between structural and social aspects of procedural justice was first made by Bies and Moag (1986), who used the term *interactional justice* to capture the quality of interpersonal treatment the target receives from the decision maker. Although there is debate about whether interactional justice is an independent form of organizational justice (Bies, 2001; Cropanzano & Prehar, 1999; Malatesta & Byrne, 1997; Masterson, Lewis, Goldman, & Taylor, 2000; Moya, Masterson, & Bartol, 1997) or if it can be subsumed under the procedural justice umbrella (Brockner & Wiesenfeld, 1996; Cropanzano & Greenberg, 1997; Greenberg, 1993b), researchers agree that interactional justice has two components: procedural explanations (i.e., providing a rationale for why a decision was made) and interpersonal sensitivity (i.e., demonstrating concern for the individual, treating individuals with respect).

There is substantial empirical support for the effect of interpersonal treatment on individuals’ reactions to procedures. Brockner and Greenberg (1990) found that interpersonal treatment can influence the procedural fairness judgments of “survivors” regarding how employees were laid off. Tyler (1988) found interpersonal treatment to be among the most important attributes individuals listed in describing the fairness of their interactions with police. Lind (1992) asked attorneys and litigants to rate the fairness of arbitration awards and found that “relational” factors were substantially more important than either structural factors (i.e., decision and process control) or the outcome of the hearing. Greenberg (1993a, 1994) demonstrates that sensitive interpersonal treatment increases perceptions of fairness and reduces organizationally dysfunctional behavior (e.g., theft).

In the area of selection, interpersonal treatment has also received attention. Gilliland (1993) suggests that interpersonal treatment will directly influence individuals’ perceptions of the fairness of a selection procedure.

Ployhart et al. (1999) varied sensitivity through the personalization and the concern expressed in employment decision letters. They found that increased sensitivity increased the perceived fairness of the selection decision. We suggest that these results also apply to personality testing. If the person who administers the test expresses concern about applicants' feelings that some of the questions may seem very personal, applicants' concerns may be alleviated and their sense of fairness enhanced. Based on this logic, we suggest the following hypothesis:

Hypothesis 1: Individuals will react more positively to the use of personality tests for selection when the test administrator expresses concern about the individual's feelings when the personality inventory is administered than when no concern is expressed.

A second feature of the social context that may influence how an individual reacts to personality testing involves social comparison processes. Mastrangelo (1997) suggests that negative applicant reactions to invasive selection procedures may dissipate as these procedures become more common in organizations. Under these conditions, individuals will come to expect the use of these techniques and will view them as acceptable. Thus, social comparisons are expected to affect the perceived fairness of personality testing.

Substantial research demonstrates the importance of social comparisons for distributive justice judgments (Adams, 1965; Goodman, 1974; Greenberg, 1988). However, only two studies have directly tested the impact of social comparisons on judgments of procedural justice. Both demonstrate that individuals use social comparisons to determine the fairness of the procedures to which they are subjected (Ambrose, Harland, & Kulik, 1991; Grienberger, Rutte, & van Knippenberg, 1997).

Ambrose et al. (1991) suggest that social comparisons are particularly important when there is ambiguity about the appropriate evaluation of a procedure (e.g., the procedure is novel or multiple alternative procedures exist). For most individuals, the use of personality tests as part of selection is a novel experience. Therefore, applicants may use information regarding whether or not other individuals in similar settings are subject to such testing in determining the fairness of the procedure. Therefore, we suggest the following hypothesis:

Hypothesis 2: Individuals will react more positively to the use of personality tests for selection when they are told that personality testing is typical than when it is presented as experimental.

It is tempting to suggest that all an organization need do to overcome perceptions of unfairness during the selection process is to show applicants that they are concerned about them or to defend the personality testing as a common practice that many applicants experience. However, interpersonal sensitivity is a complex construct. For example, in the Greenberg (1993a, 1994) studies, the decision maker both acknowledged that the decision will cause or has caused the target discomfort and expressed concern or sympathy about the discomfort. In Greenberg's (1993a, 1994) cases, there was little ambiguity in individuals' minds about the favorableness of the decisions (either to reduce pay or to impose a ban on smoking). In contrast, with personality testing there is considerably more ambiguity inasmuch as most applicants have limited knowledge of what a personality test involves. In this circumstance, having an organizational representative express concern prior to taking the test could backfire by implying that the test administrator believes there is a *reason* to be concerned.

How individuals react to an expression of concern may be influenced by other information they have about the testing procedure. There is a possibility that expressions of concern and social comparison information may interact. If testing is described as typical and the administrator demonstrates that he or she is concerned about the applicant's feelings prior to administering the test, this may be perceived as an acknowledgment that he or she knows that the test will make applicants uncomfortable but requires them to take the test anyway. The administrator may be perceived as disregarding the interests of the applicants. Thus, concern in conjunction with social comparison information may cause individuals to respond more negatively. Rather than main effects, we may see an interaction between concern and typicality. We suggest as an alternative to Hypothesis 1 and Hypothesis 2 the following:

Hypothesis 3: Individuals will respond more negatively when the test administrator expresses concern and testing is described as typical than when the administrator expresses concern and the testing is described as experimental.

Our final hypothesis stems from Lind's (1995; Lind, Kulik, Ambrose, & deVera, 1993) proposal that the manner in which a person is treated creates a global impression about the person or organization administering the treatment—a fairness heuristic. This global impression operates as a cognitive shortcut for individuals to form opinions and expectations about how the decision maker will treat one in the future. Based on this work, we predict the following:

Hypothesis 4: Individuals' reactions to the personality testing procedure will generalize to reactions to the organization in general.

In designing a study to test these hypotheses, we sought to overcome two disadvantages of many studies of applicant reactions to personality tests. The first limitation is asking respondents to describe their reactions to a procedure they have never actually experienced, such as asking people how they *think* they'd react if asked to complete a personality inventory. Kravitz, Stinson, and Chavez (1994) found that reactions of individuals who had not experienced various selection procedures were significantly different from those who had. The second design factor was to create a situation in which respondents believe that the results of the personality inventory would actually be used as part of a decision that is important to them.

STUDY 1

METHOD

Participants. Seventy students in an MBA program at a large western university participated in the study. Except for students who were absent, this constituted the entire 1st-year class. Forty-nine of the students were male. On average, the participants were 27 years old and had 4.3 years of full-time work experience.

Design. The study was a 2 (typicality: typical vs. experimental) \times 2 (concern: concern vs. no concern) factorial design. Both manipulations were between-subjects factors.

Stimulus materials and procedures. An important consideration in designing this experiment was to ensure that participants took seriously the process of completing the personality inventory. Unless the process seemed realistic and included salient consequences, the generalizability of our results to job applicants would be suspect. To accomplish this objective, a representative of the MBA program office administered all questionnaires. The 35-year-old male representative told the participants that their scores on the personality inventory would be one of the factors that would decide who would receive summer internships.

Internships were regarded as extremely valuable. The MBA program was designed such that students would do a summer internship after their 1st year.

At the time of this study, there were substantially more students seeking internships than there were internships available. Additionally, as the MBA program was a full-time, lock-step day program, none of the students were currently employed on a full-time basis. Part-time work was also discouraged while students were in the program. This increased the importance of obtaining a summer internship.

The personality inventory was administered during class time in one of the required MBA courses. (The MBA program is lock-stepped, so that all students were randomly assigned to one of two sections of the course.) At the end of the session, the students were completely debriefed; comments by students during the debriefing confirmed that they believed that their scores on the personality measure would affect their chances of receiving an internship. Because internships are regarded as valuable and difficult to obtain, their test performance was salient to them.

The personality measure used was the Personal Characteristics Inventory (PCI). This inventory has been developed as a measure of the Big 5 personality dimensions that is well suited for employment selection purposes. It consists of 172 agree/disagree questions; test items were specifically designed to enhance face validity for employment decisions. Information on its development and psychometric properties can be found in Barrick and Mount (1991b).

The concern manipulation occurred during the introduction of the PCI. Our manipulation is similar to that used by Greenberg (1993a, 1994) and Ployhart et al. (1999). It both acknowledged a (potential) problem and expressed sympathy for the test takers. In the concerned condition, in one of the two sections of the course, the individual administering the PCI acknowledged that some of the questions might seem personal and expressed concern about causing the participants to feel uncomfortable. The other course section served as the no concern condition. In the no concern condition, no acknowledgment or concern was expressed.

Typicality was manipulated in the written instructions to the PCI. In the typical condition, the cover sheet to the PCI informed participants that the MBA program was "following the lead of other Big Twelve and Big Ten institutions by using a personality inventory as part of the internship screening process." In the experimental condition, participants were told that the use of the personality inventory as part of the internship screening process was experimental. The typicality manipulation was randomly distributed in each class. Thus, the participants were nearly equally distributed across conditions ($n = 18, 14, 19, 19$ for the concern-typical, concern-experimental, no concern-typical, no concern-experimental conditions, respectively).

After students completed the PCI (and before they were debriefed), the representative from the MBA office asked them to complete a second questionnaire. This questionnaire was described as an opinion survey that assessed attitudes about a wide range of topics related to the MBA program. Because they were the first class in a radically revised MBA curriculum, being asked to complete such a survey did not seem unusual to them; in fact, they had completed a similar survey a few months earlier. In addition to “filler” items intended to disguise its purpose, the survey contained several 7-point Likert-type scales that served as dependent measures for this study. After completing the survey, students were debriefed.

Dependent measures and manipulation checks. To assess reactions to testing, we assessed three aspects of the procedure: perceptions of interpersonal treatment (how fairly they were treated by the test administrator and how satisfied they were with the test administrator’s treatment), perceptions of the internship selection procedure (how fair the internship selection procedure was and how satisfied they were with the procedure by which internships are determined), and perceptions of the test (how fair the personality test was). Participants rated each of these items on a 7-point Likert-type scale (1 = *very unfair or very dissatisfied*; 7 = *very fair or very satisfied*). We combined these three aspects to form a scale that assessed reactions to the testing procedure (coefficient alpha = .64).

The participants also responded to 11 items that rated their satisfaction with features of the MBA program (e.g., orientation, program administration, faculty, courses, student groups). These items were combined to form the satisfaction with the MBA program scale (coefficient alpha = .78).

The opinion survey also contained a manipulation check for concern. Participants rated whether the administrator had acknowledged the personal nature of the inventory and how concerned about them the test administrator had been.

RESULTS

Descriptive statistics are reported in Table 1. The correlation between reactions to testing and satisfaction with the MBA program was significant ($r = .46, p < .01$).

T tests were conducted on the acknowledgment and concern items designed to assess the concern manipulation. An examination of the means for the acknowledgment item indicates that participants noted that the test

TABLE 1
Descriptive Statistics for Study 1 and Study 2

	Study 1		Study 2	
	M	SD	M	SD
Reactions to testing	4.42	1.11	5.02	0.77
Satisfaction with MBA program	5.05	0.69	5.40	0.60

TABLE 2
Study 1: Cell Means for Significant Interactions

	Typical	Experimental
Reaction to testing process		
Neutral	4.85	4.51
Concern	3.63	4.80
Satisfaction with MBA program		
Neutral	5.27	4.97
Concern	4.75	5.22

administrator acknowledged the personal nature of the test items. In the concern condition, the mean ($M = 6.63$) was significantly higher than in the no concern condition ($M = 1.95$), $t(65) = -17.32$, $p < .001$. The second manipulation check item, asking if the test administrator had seemed concerned about them, also showed significant differences between the two groups, $t(64) = -2.22$, $p < .05$. Respondents in the concern condition rated the test administrator as significantly more concerned ($M = 3.90$) than respondents in the no concern condition ($M = 3.00$).

Hypotheses 1 and 2 predicted main effects for the concern and typicality variables on reactions to the personality testing. Hypothesis 3 suggested these variables would interact. Analysis of variance revealed no main effects for either of the independent variables. (For reactions to the procedure, $F_{(1,37)} = 1.60$ and 1.27 for concern and typicality, respectively. For satisfaction with the MBA program, $F_{(1,57)} = .60$ and $.25$ for concern and typicality.) However, a consistent and meaningful pattern of interactions did emerge, supporting both Hypothesis 3 and Hypothesis 4. Significant interactions were found for participants' reactions to the procedure, $F_{(1,37)} = 4.20$, $p < .05$, and satisfaction with the MBA program, $F_{(1,57)} = 4.84$, $p < .05$.

Cell means for the interactions are in Table 2 and the interactions are plotted in Figure 1. The pattern of ratings for the interactions was the same for each variable. As predicted in Hypothesis 3, when the administrator

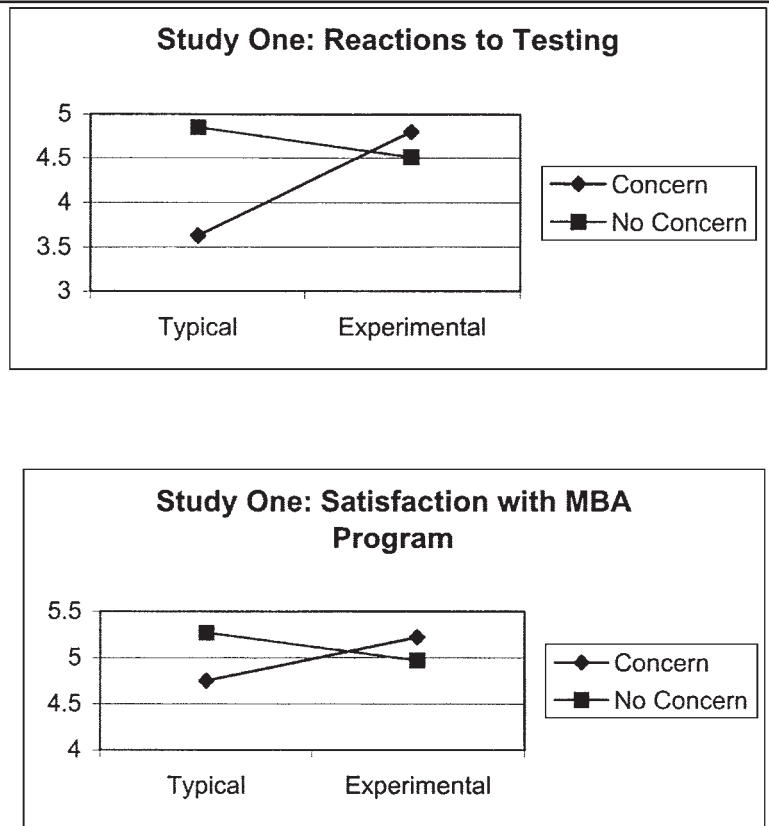


Figure 1: Mean Levels of Participants' Reactions for No Concern and Concerned Conditions (Study 1)

expressed concern and the personality inventory was described as typical, applicants perceived the procedure as less fair than when the administrator expressed concern and the testing was described as experimental. In the no concern condition, testing described as typical was judged more favorably for reactions to testing than testing described as experimental. A similar pattern emerged for satisfaction with the MBA program.

DISCUSSION

These results suggest that concern and information about typicality do affect individuals' reactions to the use of a personality test in selection.

However, rather than main effects, the analyses revealed a consistent pattern of interactions in which expressions of concern had no effects when testing was described as experimental but negatively affected reactions when the testing was described as typical.

Previous research in organizational justice demonstrates that the expression of concern increases the perceived fairness of the procedure (Greenberg, 1993a, 1994). However, when paired with information that suggested the administrator knew the likely effect of the procedure, expressions of concern appear to send a message that the test administrator is actually less sensitive to applicants, requiring them to complete the personality inventory despite the awareness that its content will make them uncomfortable.

These results are consistent with the Ambrose et al. (1991) study, in which participants seemed to use the procedural information and social comparison information together to make attributions about the decision maker's behavior. These attributions then colored their perceptions of fairness. A similar process appears to occur in the current study. When both pieces of information suggest the administrator is disregarding the participants' interests (acknowledges the potential problem [concern], has information demonstrating there is a problem [typicality], and ignores it), participants respond negatively. When the information suggests the administrator is sensitive to their interests (acknowledges the potential problem [concern] but may not have sufficient information to be sure [experimental]), participants respond more positively.

Results of Study 1 support our suggested interactive effect of concern and typicality. However, an examination of the absolute magnitude of the concern manipulation suggests that although statistically significant, respondents may not have perceived the MBA representative as having been very concerned about them. Individuals in the concern condition reported the representative was more concerned than in the no concern condition ($M = 3.9$ and 3.0 , respectively). However, the representative was rated at about the midpoint on the scale. Thus, Study 1 may represent a weak expression of concern. It may be that a stronger expression of concern would eliminate the interactive effect we predict. To assess this possibility, we replicated the study strengthening our manipulation of concern.

STUDY 2

The method for Study 2 was essentially the same as that used in Study 1, except that we employed a stronger manipulation of concern. The results

from Study 1 suggest our speculation about the interactive effects of concern and typicality was correct. Thus, in Study 2 we predict only an interaction for typicality and concern. We suggest the following hypothesis:

Hypothesis 1: Individuals will respond more negatively when the test administrator expresses concern, and the testing is described as typical than when the administrator expresses concern and the testing is described as experimental. When the administrator expresses no concern, individuals will respond more positively when the testing is described as typical than when it is described as experimental.

Additionally, based on the work by Lind (1995; Lind et al., 1993) on the fairness heuristic and the results of Study 1, we suggest the following:

Hypothesis 2: Individuals' responses to the personality testing procedure will generalize to perceptions of fairness and to judgments of satisfaction with the employer in general.

METHOD

Participants. Sixty-nine students in an MBA program at a large western university participated in the study. Forty-six of the students were male. On average, the participants were 27 years old and had 4.3 years of full-time work experience. Except for students who were absent, this comprised the 1st-year MBA class for the year following Study 1.

Design. The study was a 2 (typicality: typical vs. experimental) \times 2 (concern: concern vs. no concern) factorial design. Both manipulations were between-subjects factors.

Stimulus materials and procedures. As in Study 1, participants were told that the personality test would be used in selecting individuals for summer internships. A representative of the MBA office administered all questionnaires 2 days before a widely publicized session for the 1st-year MBAs on the summer internship program. Once again, the personality inventory was administered during class time in one of the required MBA courses. As in Study 1, the students were completely debriefed at the end of the session. Because of the lock-step nature of the MBA program, there is very limited interaction between the 1st- and 2nd-year students; thus, there is little chance that the MBA class in Study 1 discussed their previous experience with the new class. Comments by students during the debriefing confirmed that they believed that their scores on the personality measure would affect their

chances of receiving an internship and that they had no prior knowledge about the study.

The concern manipulation occurred during the introduction of the PCI. In one of the two course sections, the individual administering the PCI acknowledged that some of the questions might seem personal and apologized about causing the participants to feel uncomfortable. Although the wording of the acknowledgment was similar to Study 1, for this study the test administrator repeated the apology and stressed concern for the students. This course section served as the concern condition. The other course section served as the no concern condition. In the no concern condition, no acknowledgment or concern was expressed. The typicality manipulation was identical to that in Study 1. Again, the participants were nearly equally distributed across conditions ($n = 18, 16, 16, 19$ for the concern-typical, concern-experimental, no concern-typical, no concern-experimental conditions, respectively). After students completed the PCI, the representative from the MBA office asked them to complete a second questionnaire. This questionnaire was described as an opinion survey that assessed attitudes about a wide range of topics related to the MBA program. This MBA class was the second class of the new MBA program. This class was not as widely surveyed as the first class, but they had completed several similar surveys. None of the students expressed any suspicion about the opinion survey.

Dependent measures and manipulation checks. The questionnaire contained the same items used in Study 1. Respondents rated their reactions to testing (coefficient alpha = .58) and satisfaction with the MBA program (coefficient alpha = .67).

RESULTS

Descriptive statistics are reported in Table 1. The correlation between reactions to testing and satisfaction with the MBA program was significant ($r = .49, p < .01$).

T tests were conducted on the acknowledgment and concern items designed to assess the concern manipulation. An examination of the means for the acknowledgment item indicates that participants did note that the test administrator acknowledged the personal nature of the test items. In the concern condition the mean ($M = 6.74$) was significantly higher than in the no concern condition ($M = 2.63$), $t(65) = -12.10, p < .001$.

The second manipulation check item, asking if the test administrator had seemed concerned about them, also showed significant differences between the two groups, $t(63) = -5.80, p < .001$. Unlike Study 1, participants in the

TABLE 3
Study 2: Cell Means for Significant Interactions

	<i>Typical</i>	<i>Experimental</i>
Reaction to testing process		
No concern	5.17	4.85
Concern	4.73	5.50
Satisfaction with MBA program		
No concern	5.63	5.03
Concern	5.50	5.54

concern condition had substantially higher mean scores ($M = 5.47$) than those in the no concern condition ($M = 3.20$).¹

We expected the concern and typicality variables to interact to affect reactions to the personality testing and that these effects would generalize to the measure of satisfaction with the MBA program. As predicted, ANOVAs revealed a consistent pattern of interactions. Additionally, an unexpected main effect was found. Typicality had a main effect for satisfaction with the MBA program, $F_{(1,58)} = 3.81, p < .05$. Participants were more satisfied with the MBA program when testing was described as typical ($M = 5.57$) than when it was described as experimental ($M = 5.26$). However, these main effects must be considered in the context of the significant interactions.

The analyses revealed significant interactions for reactions to testing, $F_{(1,58)} = 4.67$, and satisfaction with the MBA program, $F_{(1,58)} = 4.95, p < .05$. Cell means for the interactions are shown in Table 3. The interactions are depicted graphically in Figure 2. The pattern of means is as predicted. Individuals in the concern-typical condition provided lower ratings than individuals in the concern-experimental condition. Individuals in the no concern-typical condition provided higher ratings than individuals in the no concern-experimental condition. However, although the pattern is as predicted, planned comparisons revealed that the means in the concern conditions were only marginally significantly different from one another for reaction to testing and not significantly different from one another for satisfaction with the MBA program. In contrast, the means in the no concern condition were significantly different for satisfaction with the MBA program but not for reactions to testing.

DISCUSSION

Study 2 was designed to examine if the interactive effect of concern and typicality that were revealed in Study 1 persisted when there was a stronger

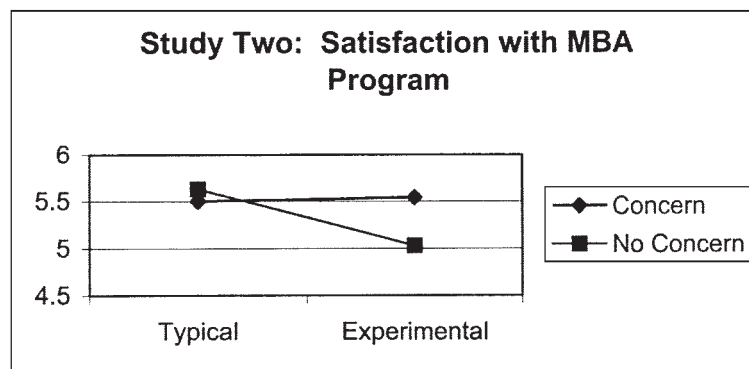
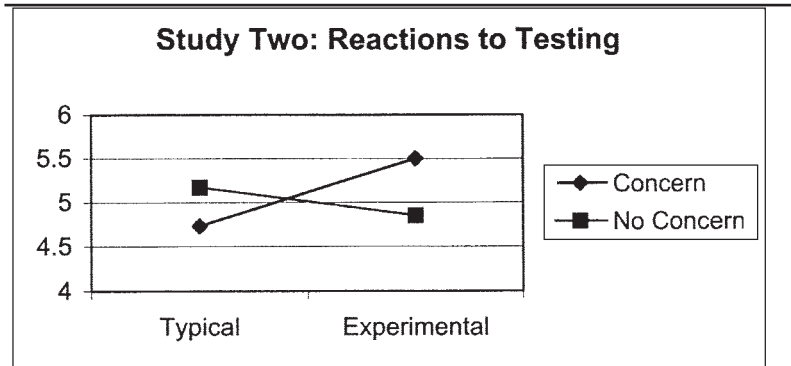


Figure 2: Mean Levels of Participants' Reactions for No Concern and Concerned Conditions (Study 2)

expression of concern. A clear pattern of interactions was found in both studies. Consistent with our predictions, individuals in the concern-typical condition generally reported more negative reactions than individuals in the concern-experimental condition. Individuals in the no concern-typical condition reported more positive reactions than individuals in the no concern-experimental condition.

An examination of these interactions across both studies shows mostly similarities. For both the weak and strong expressions of concern, the typical condition received less positive ratings than the experimental condition. The

primary difference lies in the interactions for satisfaction with the MBA program. Here there is little difference between the concern-typical and concern-experimental condition. Thus, we might speculate that with a stronger expression of concern, the negative affect associated with a specific procedure is less likely to generalize to other aspects of the organization.

In general, these results are consistent with Greenberg and McCarty's (1990) and Conlon and Ross's (1997) findings. Individuals respond more negatively when a decision maker acknowledges a problem but apparently intends to take no action to change the situation.

CONCLUSION

We began doing research in this area because we were interested in how justice principles might affect applicants' reactions to personality testing. Our results show that application of procedural justice theories may be useful in this regard, but they also underscore the complexity involved in understanding individuals' reactions to procedures. Much research to date suggests a straightforward relationship between concern and positive reactions to procedures. Our results suggest that the manner and context in which concern is conveyed plays an important role in how it is received.

The consistent pattern of interactions suggests that under some conditions, concern may result in lower ratings of fairness than no expression of concern. Study 2 revealed that a strong expression of concern can increase the relative perceptions of fairness ($M = 4.42$ for Study 1, 5.02 for Study 2). However, in both studies, when the procedure is described as typical, acknowledging and apologizing for the invasiveness of the test led to less favorable reactions to testing.

Most of the research on applicant responses to personality testing has not studied reactions of actual applicants who complete a personality inventory they believe will be used to make selection decisions. One of the strengths of our studies is that they assess the reactions of individuals who have both completed the personality inventory and believe it will be used for selection purposes. This is particularly important because research on applicant reaction demonstrates that responses differ between individuals who have had experience with the procedures used in selection and those who have not experienced the procedures (Kravitz et al., 1994). We also assessed perceptions of fairness prior to any information about outcomes being provided. Much research on selection assesses perceived fairness following selection decisions. However, as Ployhart and Ryan (1998) demonstrate, the relationship between procedural fairness and distributive fairness in selection is complex

and it is useful to consider perceptions of fairness at multiple times in the selection process. Prehire procedural fairness can affect applicants' decision to remain in the applicant pool.

Of course, there are a number of limitations to this study. First, for each experiment we collected our data in a single session. Lind's (1992) discussion of the fairness heuristic describes an ongoing effect on organizational interactions. We were unable to assess the long-term impact of the effect we see in our study. Additionally, our sample size is relatively small and although our participants believed their scores would be used as part of the internship selection procedure, the process was not the same as it would be in job selection. We also note that the reliability for our reaction to testing measure is somewhat lower than is desirable. Low reliabilities can make effects more difficult to detect; they also indicate the measure is less precise than it might be. We also did not have a manipulation check for typicality. The results suggest that this manipulation was effective, as a coherent pattern of differences exists. But we do not know for certain that all individuals were cognizant of this manipulation. Again, this could affect the strength of our results. Finally, although a strong and consistent pattern of interactions was demonstrated in Study 1, the differences between the means were not always significant. We have speculated about the patterns. However, caution is required in the interpretation of the effects.

Nonetheless, we believe these studies make two important contributions. First, in terms of organizational justice, the studies suggest important boundary conditions for the effectiveness of expressions of concern. One boundary condition may have to do with the evaluative ambiguity of a procedure or decision about to be experienced. Being told that you are being laid off or given a pay cut is pretty clearly unfavorable for most employees, and prior studies show that expressions of concern by the decision maker seem to soften the blow of such outcomes. But our results show that expressions of concern may have the opposite effect when outcome favorability is ambiguous. This is a finding deserving of replication in other settings.

A second boundary condition for concern suggested by our data relates to weak expressions of concern. Across all conditions in both studies, the most negative reactions by far occurred when the test administrator acknowledged that people might not like the test but was perceived as not really caring that they felt that way (i.e., the concern-typical condition in Study 1). Procedural justice researchers have noted that the decision maker's consideration and concern must be perceived as sincere to enhance the perceived fairness of procedures (Bies, 1987; Bies & Moag, 1986; Greenberg & Ormstein, 1983; Tyler & Bies, 1989). Our results are also consistent with those of Baron (1985, 1988), who demonstrated that when individuals perceived an

opponent's external attributions to be insincere, they respond more negatively to their opponent and intend to behave less constructively in future interactions with their opponent than when a sincere attribution is made.

Similarly, Greenberg and McCarty (1990) note that apologies may actually serve to anger individuals when there is no indication that the individual apologizing plans to take action to change the situation for which he or she is apologizing. This is consistent with our results and the situation our participants experienced. The pairing of typicality with our manipulation of concern created a condition in which it was clear individuals were expected to endure personality testing even though the administrator knew it might make them uncomfortable. A "hollow" apology with no attempt to remedy the situation served to increase dissatisfaction with the process.

As Greenberg (1995) noted, applications of organizational justice to different contexts help us to refine the theory and learn about its generality. Previous research has identified some of the boundary conditions for explanations; we recommend more consideration of these boundary conditions for expressions of concern. What is particularly challenging about research on concern is that individuals' perceptions are likely to be influenced not only by what an individual says or does but by the manner in which the statement or action is made. Vocal tone, facial expressions, posture, and other paralinguistic cues may be subtle yet important influences on individuals' perceptions of concern.

From a selection perspective, the results demonstrate the importance of considering how individuals' perceptions of the fairness of personality testing may influence their reactions to organizations. Both studies demonstrated that attributes of the testing procedure not only affected reactions to the procedure itself but also generalized to perceptions of other aspects of the organization. As recent legal action demonstrates, the use of personality tests can create dissatisfaction in applicants. Moreover, both selection research (Bible, 1990) and justice research (Bies & Tyler, 1993; Lind, 1997) demonstrates that individuals' reactions to procedures influences the likelihood that they will undertake litigation. If the perceived unfairness of personality testing generalizes to other aspects of the organization, it raises the possibility that the problem may be doubly explosive, perhaps influencing individuals' propensity to sue for other organizational actions.

Our finding that individuals' perceptions of fairness generalize to the organization may be particularly important in the context of selection because individuals' views have both short-term (e.g., acceptance of a job offer) and long-term (e.g., commitment) implications. Organizational researchers have only begun to explore the range of procedural, contextual,

and interactional factors that may affect reactions to personality testing and other employment procedures. For selection research, as evidence accumulates that personality assessment and other controversial procedures can play an important role in personnel selection, it becomes essential to isolate the key factors that influence their acceptability to applicants. This study is one step in increasing our understanding of how principles of justice can improve the acceptability of such procedures.

NOTE

1. The means for the manipulation checks and dependent measures are slightly higher in Study 2 than Study 1. For the dependent measures, this is not surprising if the stronger manipulation of concern resulted in higher perceptions of fairness and satisfaction. However, to ensure that the participants in Study 2 were not simply more favorable than those in Study 1, we conducted *t* tests between the no concern conditions for the manipulations and dependent measures. These conditions should be equivalent. The *t* tests indicate that there are not significant differences for acknowledging the personal nature of the items, $t(53) = 1.77$, for concern, $t(64) = .54$, reactions to testing, $t(41) = 1.39$, or satisfaction with the MBA program, $t(68) = -.19$. This finding, combined with the other similarities between the samples for the two studies suggests the groups are comparable.

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526 GROUP & ORGANIZATION MANAGEMENT

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