

Interactional, Formal, and Distributive Justice in the Workplace: An Exploratory Study

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ABSTRACT. Researchers have suggested that procedural justice is a more important determinant of most organizational outcomes than distributive justice. Following recent theoretical developments on justice perceptions, we investigated the different effect on outcomes of two components of procedural justice, namely, interactional justice and formal procedures, as well as distributive justice. In a vignette manipulation, 213 full-time Canadian students perceived that interactional justice influenced trust in management, affective commitment, and withdrawal behaviors. Formal procedures influenced only trust in management, and distributive justice did not influence any of the three outcomes.

ONE MAJOR ISSUE to which organizational psychologists have historically directed their attention is compensation, whether it be the systems used to compensate employees or the nature and consequences of pay satisfaction (Locke, 1983). One aspect relevant to compensation that has received considerable attention recently is the perceived fairness of compensation, or distributive justice. Distributive justice is different from procedural justice, which reflects the fairness of the procedures used in determining outcomes. In this context, distributive and procedural justice are often referred to as organizational justice.

In general, research on organizational justice has been guided by the notion that employees who believe they are treated fairly will be favorably disposed toward the organization and engage in prosocial behavior on behalf of the organi-

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zation. Some data exist to support this view (Folger & Konovsky, 1989; Fryxell & Gordon, 1989; Greenberg, 1990). Nevertheless, different consequences follow from procedural and distributive justice. First, findings from studies on organizational justice consistently show that when employees perceive the *procedures* as fair, they are less concerned about what might otherwise be perceived as unfair *outcomes* (Cropanzano & Folger, 1989; Folger & Martin, 1986; Greenberg, 1987). Second, somewhat different consequences accrue to procedural and distributive justice. While both predict attitudes toward pay increases and allocation of rewards, only procedural justice affects employee attitudes toward the organization in general and its legitimate officers (Folger & Konovsky, 1989; Konovsky, Folger, & Cropanzano, 1987; McFarlin & Sweeney, 1992) as well as turnover (Greenberg, 1990).

The justice literature suggests, however, that procedural justice does not simply reflect the existence of fair procedures. Equally important is the way in which the procedures are implemented (i.e., formal procedures vs. interactional justice, respectively; Bies, 1987). This distinction may have important consequences, because one recent study has shown that interactional justice is more important than formal procedures in determining employees' behavior in organizations (Moorman, 1991). Other research has not differentiated between interactional justice and formal procedures, referring instead to procedural justice. However, an examination of research on organizational justice shows that these two concepts have been confounded in manipulations of procedural justice, and some of the strongest effects attributed to procedural justice may have emerged when interactional justice rather than formal procedures were manipulated (Greenberg, 1990).

In this study, we examined how distributive justice, interactional justice, and formal procedures affect different organizational outcomes. There are sufficient prior studies from which it can be predicted that procedural justice in general will be associated with employee attitudes toward, and trust in, management. To the extent that fair procedures give employees a feeling of control (Brett, 1983), procedural justice would be associated with employees' feelings of job security. Greenberg (1990) suggested that perceptions of procedural justice will be strongly related to turnover. And based on the notion that fair procedures by themselves are insufficient if not implemented appropriately, consistent with Moorman's (1991) recent findings, we predicted that interactional justice will exert greater effects on the outcomes under consideration than formal procedures.

We used a vignette manipulation to investigate whether distributive justice, interactional justice, and formal procedures exert different effects. Vignettes afford the researcher greater control over internal validity, which is important in the initial stages of researching any topic. After any effect is reliably demonstrated, research can then turn to issues of external validity (generalizability).

Pilot Study

Before conducting the main study, the reliability of the vignettes was assessed with 10 volunteer Canadian students from a third year course on organizational psychology, none of whom had received any lectures on organizational justice. Formal, interactional, and distributive justice, each consisting of two levels (high and low), were combined factorially, resulting in eight different vignettes. For ecological validity, the content of the vignettes closely paralleled the field situation described by Greenberg (1990) in his study of the consequences of making pay cuts in different ways. Unlike Greenberg, we specifically differentiated between formal procedures and interactional justice. The vignettes read as follows:

Tom is an employee of company X, which produces small mechanical parts for the aerospace and automotive industries. Company X has just unexpectedly lost two large manufacturing contracts and is currently arranging short-term strategies to deal with this situation. After (low formal justice: "comprehensive discussion among senior management, the company announced during a special meeting for all employees") (high formal justice: "negotiations between management and the union, senior management and union representatives met with all the employees, explained the need for some action, and jointly announced") that there would be wage and salary cuts of (low distributive justice: "20%") (high distributive justice: "10%") across the board for the next 10 weeks, when new manufacturing contracts were expected to be signed. After this announcement, Tom and his co-workers met (low interactional justice: "briefly with their supervisor, who repeated the need for the cost cutting measures") (high interactional justice: "with their supervisor for an hour and had an open and honest discussion about the need for cost cutting measures, during which the supervisor listened to their concerns").

Each subject read each vignette and responded to the following manipulation checks, each of which directly tested the three types of justice: "The wage cuts were appropriate given the unusual circumstances the company is facing" (distributive justice); "The decision making process leading to the wage cuts was appropriate" (formal justice); and "Tom's supervisor showed concern for the subordinates" (interactional justice).

Paired *t* tests showed that the manipulations associated with both the formal procedures, high condition, $M = 4.92$, low condition, $M = 3.36$; $t(54) = 3.5$, $p < .05$, and interactional justice, high condition, $M = 5.36$, low condition, $M = 2.57$; $t(54) = 9.78$, $p < .01$, vignettes were reliable. However, this was not the case with the distributive justice manipulation, high distributive justice, $M = 4.24$, low distributive justice, $M = 3.96$; $t(54) = .57$, $p > .05$. The difference between these two conditions was therefore expanded in the main study to a 10% reduction in wages (high distributive justice) versus 25% reduction in wages (low distributive justice). Other than this, the vignettes remained the same for the main study.

Method

Subjects and Procedure

Of the 213 full-time Canadian students who volunteered for this study, 114 were undergraduate psychology students and 99 were students enrolled in an MBA program. The mean age of the sample (which was 60% women) was 22.77 years ($SD = 4.41$, age range = 16 to 38). Psychology students were significantly younger than their business school counterparts: 19.29 years, $SD = 1.36$ versus 26.71 years, $SD = 3.17$; $t(205) = 21.42$, $p < .01$. As a result, age was controlled statistically in all subsequent analyses. Each participant received only one of the eight vignettes handed out in systematic order so that no students sitting next to each other read the same vignette.

Questionnaires

Items for the affective commitment and trust in management were adapted from existing scales. Thus, we used two items from Allen and Meyer's (1990) Affective Commitment subscale ("Tom does not feel emotionally attached to this company" and "Tom does not feel a strong sense of belonging to this company," both reverse coded), and three items from Cook and Wall's (1980) Trust in Management Scale ("Management at Tom's company is sincere in its attempt to meet the workers' point of view," "Tom would feel quite confident that the company will always try and treat him fairly," and "Tom's management would be quite prepared to gain advantage by deceiving the workers," with the last item reverse coded). In addition, we created two items to assess withdrawal from the organization. "Tom is likely to respond to these circumstances in the following ways: increased absenteeism; tardiness (arriving late for work). All items were assessed on a 7-point scale ranging from *strongly agree* to *strongly disagree*, and the internal consistency of the three scales was satisfactory: Affective Commitment $\alpha = .82$, Trust in Management $\alpha = .71$, Withdrawal $\alpha = .90$.

Because respondents' attitudes towards unions might confound their impression of the fairness of layoffs (Mellor, 1992), we used two items from Brett's (1980) attitudes to unions questionnaires ("I believe unions are becoming too strong" [reverse coded] and "Taking everything into consideration, my overall attitude toward unions is favorable"; $r = .58$). Respondents' own union attitudes were then used as a covariate in all subsequent analyses.

Manipulation Check

Because the vignettes were somewhat changed, we again administered the three items to verify the experimental manipulation, and we included a one-item validity check. Greenberg (1990) had shown that employee theft increases as a function

of the procedural justice inherent in the way pay cuts are implemented, but employee theft is unrelated to distributive justice. Thus, we also asked respondents the extent to which they believed Tom would become involved in employee theft ("To what extent is Tom likely to take company property such as pencils and equipment without permission?"). We explicitly avoided the term "employee theft" because of any social desirability connotations. Based on Greenberg's (1990) findings, for the vignette situations to be valid, respondents should be more likely to perceive employee theft as related to low formal and interactional justice but to be unrelated to distributive justice.

Again, the vignettes proved reliable: High interactional justice was associated with perceptions of greater concern for Tom by his supervisor, $M = 4.20$, versus $M = 2.97$; $t(211) = 6.68$, $p < .01$. In contrast to the low formal justice condition, students reading the high formal justice condition believed the decision making process leading to the wage cuts had been fairer, $M = 4.13$ versus $M = 3.01$; $t(211) = 5.42$, $p < .01$. Wage cuts of 10% (high distributive justice) were seen as more fair than wage cuts of 25% (low distributive justice), $M = 3.66$ versus $M = 3.26$; $t(211) = 2.06$, $p < .05$.

The manipulations were valid in that there were significant differences in the extent to which theft was perceived to be a likely outcome for individuals in high versus low interactional justice, $M = 4.61$ versus $M = 4.13$, $t(209) = 2.39$, $p < .01$; the results for formal procedures approached significance, $M = 4.51$ versus $M = 4.23$, $t(209) = 1.33$, $p < .1$, but no significant differences emerged for distributive justice ($p > .1$).

Results

We computed a three-way multivariate analysis of covariance (MANCOVA) with age and union attitudes as covariates to assess the effects of the three justice conditions on trust in management, withdrawal behaviors, and affective commitment. Neither the three-way interaction, Pillai's exact $F(4, 188) = .40$, $p > .05$, nor any of the following two way multivariate interactions: Interactional \times Distributive Justice, Pillai's exact $F(4, 188) = 2.41$, $p > .05$; Formal \times Distributive Justice, Pillai's exact $F(4, 188) = .42$, $p > .05$; Formal \times Interactional Justice, Pillai's exact $F(4, 188) = .41$, $p > .05$, were significant. Although the MANCOVA main effect associated with distributive justice was not significant, Pillai's exact $F(4, 188) = 1.15$, $p > .05$, both the multivariate main effects associated with formal procedures, Pillai's exact $F(4, 188) = 6.80$, $p < .001$, and interactional justice, Pillai's exact $F(4, 188) = 7.81$, $p < .001$, were statistically significant. Accordingly, the univariate F values associated with each of these two main effects were examined to understand the meaning of the significant main effects.

After controlling for the effects of age and union attitudes, interactional justice exerted significant main effects on withdrawal behaviors, $F(1, 189) = 13.83$, $p < .001$, trust in management, $F(1, 189) = 8.05$, $p < .01$, and affective commit-

TABLE 1
Adjusted Means for the Effects of Formal, Interactional and Distributive Justice on
Withdrawal Behaviors, Trust in Management and Affective Commitment

Variable	Formal		Interactional		Distributive	
	High	Low	High	Low	High	Low
Withdrawal	8.15	8.73	7.78	9.12	8.40	8.45
Trust in management	12.98	11.05	12.62	11.42	12.26	11.82
Affective commitment	7.93	7.43	8.22	7.15	7.52	7.85

ment, $F(1, 189) = 15.50, p < .001$. Formal procedures influenced trust in management, $F(1, 189) = 20.18, p < .001$, but did not influence withdrawal behaviors, $F(1, 189) = 2.57, p > .05$, or affective commitment, $F(1, 189) = 3.59, p > .05$. Distributive justice did not have a significant effect on any of these three outcomes (Table 1).

Discussion

The results provide some support for differentiating between distributive and procedural justice. Like previous studies, procedural justice was shown to be a more significant predictor of organizational attitudes inasmuch as it predicted a greater number of outcomes; indeed, distributive justice did not have any significant effect on trust in management, affective commitment to the organization, or withdrawal behaviors.

Unlike most previous studies that examined procedural justice as a unidimensional construct, this research went further by examining the separate effects of interactional justice and formal procedures. The results pertaining to interactional justice were consistent: withdrawal behaviors, trust in management, and affective commitment to the organization were all seen to be influenced by interactional justice. In contrast, only trust in management was influenced by formal procedures. Previous findings suggesting the superiority of formal justice may have been attributable to interactional justice rather than to formal procedures. Certainly, future research should focus on disentangling the possible effects of interactional justice and formal procedures.

The use of vignettes are cause for some concern. One is the fact that actual behavior or attitudes are not studied. Instead, respondents are asked to speculate as to how they or some hypothetical individual (as was the case in this study) would be perceived to behave under certain conditions. Associated with this is the fact that vignettes typically maximize internal validity but are low in external validity or generalizability. Our study was designed to replicate Greenberg's (1990) field study, which showed the likelihood of theft occurring as a function

of perceived procedural injustice; together with Greenberg's study showing such as association, our findings concerning the possible effects of procedural justice in general, and interactional justice in particular, do achieve some level of generalizability.

If our findings are replicated in further research, especially field research, some conceptual and practical implications emerge. From a conceptual perspective, procedural justice would appear to be a more important concern in predicting behavior than distributive justice. More important is the fact that the effects of procedural justice itself need to be dismantled: Interactional justice may be a more important component of procedural justice than formal procedures.

Practical implications also emerge for the management of organizational behavior. Although calls continue to be made for attention to be paid to both distributive and procedural justice, organizations would be well advised to focus not only on outcomes and formal procedures but also on the perceived justice inherent in interpersonal interactions between employees and their supervisors or managers.

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