

# Relationship Between Organizational Justice and Organizational Citizenship Behaviors: Do Fairness Perceptions Influence Employee Citizenship?

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Although the study of organizational justice has increased markedly in the past few years, little work has focused on the relationship between justice perceptions and extrarole behaviors. This study examined the relationship between perceptions of fairness and organizational citizenship behaviors in a sample drawn from two firms in the midwestern United States. A theoretical basis for a relationship between fairness and citizenship was drawn from equity theory and other theories of social exchange. Structural equation analysis with LISREL 7 found support for four hypotheses, including support for a relationship between perceptions of procedural justice and four of five citizenship dimensions. Conversely, perceptions of distributive justice failed to influence any dimension of citizenship. Implications for the relationship between procedural justice and citizenship are discussed.

In an article assessing the past, present, and future states of research on organizational justice, Greenberg (1990b) suggested that organizational justice research may potentially explain many organizational behavior outcome variables. Organizational justice is the term used to describe the role of fairness as it directly relates to the workplace. Specifically, organizational justice is concerned with the ways in which employees determine if they have been treated fairly in their jobs and the ways in which those determinations influence other work-related variables. Two sources of organizational justice are routinely cited: distributive justice, which describes the fairness of the outcomes an employee receives; and procedural justice, which describes the fairness of the procedures used to determine those outcomes (Folger & Greenberg, 1985). In essence, the belief of researchers who support the value of organizational justice is that if employees believe they are treated fairly, they will be more likely to hold positive attitudes about their work, their work outcomes, and their supervisors. As evidence for the relationship between procedural and distributive justice and a variety of organizational variables, Greenberg (1990b) cited studies by Alexander and Ruderman (1987), Folger and

Konovsky (1989), Fryxell and Gordon (1989), and Gordon and Fryxell (1989).

One research direction that has been recommended but not fully exploited is research on the relationship between justice perceptions and work behavior (Greenberg, 1990b; Lind & Tyler, 1988). Both early and more recent work on equity theory (Adams, 1965; Greenberg, 1988a, 1989) has shown that employee job performance may increase or decrease in relation to perceptions of inequitable outcomes. However, because job performance is often heavily influenced by situational contingencies, finding an effect of employee attitudes like perceptions of fairness has been difficult (Organ, 1977).

A more fruitful avenue through which relationships between perceptions of fairness and employee behavior might be found includes more nontraditional types of job behavior. These nontraditional behaviors are on-the-job behaviors that are not usually captured by traditional job descriptions and thus are more likely to be under personal control (Organ, 1977). One such example of nontraditional job behavior is organizational citizenship behavior (OCB). OCBs are defined as work-related behaviors that are discretionary, not related to the formal organizational reward system, and, in the aggregate, promote the effective functioning of the organization (Organ, 1988a). A five dimensional model of OCB includes altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. Organ has suggested that OCB should be considered an important component of job performance because citizenship behaviors are part of the spontaneous and innovative behaviors noted by Katz and Kahn (1966) as being instrumental for effective organizations.

The purpose of this research was to test for relationships between organizational justice and organizational citizenship behavior. Specifically, causal modeling was used to assess causal paths from justice perceptions to the five dimensions of organizational citizenship. Evidence for such causal paths could

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then be cited as support for a relationship between organizational justice and specific job behaviors.

### Relationship Between Justice and Citizenship

The basis for Organ's view that perceptions of fairness are related to OCB can be found in his reinterpretation of the relationship found between job satisfaction and organizational citizenship. Organ (1988a, 1988b, 1990) suggested that the empirically supported relationship between job satisfaction and OCB may be better described as one reflecting a relationship between perceptions of fairness and OCB. On the basis of a review of the life satisfaction literature and a review of current job satisfaction measures, Organ (1988b) proposed that the cognitive component of job satisfaction that appears to be related to OCB probably reflects the influence of perceptions of fairness. Furthermore, when job satisfaction and perceptions of fairness are measured together, Organ (1988a) noted that "the latter [to the degree it more cleanly taps cognition] will explain the more variance in OCB" (p. 36). This conclusion suggests that, if job satisfaction and perceptions of fairness were both measured, perceptions of fairness, and not job satisfaction, would be related to OCB.

Given then that job satisfaction may be made up of a large fairness component, why would fairness itself be related to OCB? In his recent work, Organ (1988b, 1990) suggested two reasons why fairness could predict citizenship. First, Adams (1965) proposed in equity theory that conditions of unfairness will create tension within a person, which he or she will attempt to resolve. Organ (1988a) suggested that OCB could be considered an input for one's equity ratio and that raising or lowering one's level of OCB could be a response to inequity. Organ (1988b) went further by pointing out that changing OCB could be the strategy of choice because OCB is discretionary and lies outside of formal role requirements. Therefore, a change in OCB in response to inequity would very likely be safer than trying to change behavior in line with formal role requirements and, if not safer, at least would be directly under personal control.

A second reason why perceptions of fairness could be related to OCB originates from Blau's (1964) definition of a difference between economic and social exchange. Organ (1988b) believed that fairness perceptions may influence OCB by prompting an employee to define his or her relationship with the organization as one of social exchange. Because social exchange exists outside strict contracts, the exchange tends toward ambiguity, allowing for discretionary, prosocial acts by the employee. Organ (1988b) wrote "the inherent ambiguity of such a system frees the individual to contribute in discretionary fashion without thinking that this will be acquiescence to exploitation" (p. 553). Therefore, if employees consider themselves in conditions of social exchange, they may be more likely to exhibit OCB.

Central to this idea that citizenship may be part of social exchange is the relative ease or difficulty of exchanging social rewards. Foa and Foa (1974, 1980) noted that not all social rewards are equally exchangeable and established a resource configuration representing the relative likelihood that specific resources might be exchanged. Those resources that are proximal

in structure are the ones most likely to be exchanged for each other.

The value of OCB is that specific acts of citizenship can be described as examples of either information resources or service resources. Because these two resources are opposite each other in Foa and Foa's (1974, 1980) configuration, the other four resources are proximal in some way to OCB. Therefore, OCB appears to be a reasonable and likely way in which an employee can exchange the social rewards brought on by perceptions of fairness.

Some empirical support exists for the influence of perceptions of fairness on OCB. Studies by Dittrich and Carroll (1979) and Scholl, Cooper, and McKenna (1987) found that perceptions of job equity and pay equity were significantly correlated with extrarole behavior. In addition, Konovsky & Folger (1991) presented preliminary evidence for a relationship between procedural justice and altruism. Finally, recent work by Farh, Podsakoff, and Organ (1990) specifically studied the relationship between fairness, satisfaction, and OCB. Though fairness was measured indirectly from reports of leader contingent reward behavior, leader supportiveness, and participative leader behavior, fairness was found to be related to a two-factor model of OCB.

In summary, the studies by Dittrich and Carroll (1979), Scholl et al. (1987), Konovsky and Folger (1991) and Farh et al. (1990) and the conceptual rationale proposed by Organ (1988a, 1988b, 1990) provide support for a relationship between perceptions of fairness and OCB. The purpose of this study was to test the relationship between perceptions of organizational justice (in the form of distributive justice and procedural justice) and dimensions of citizenship behavior. Causal models containing paths between dimensions of fairness and OCB were tested. In addition, because of Organ's (1988a) suggestion that the relationship between job satisfaction and OCB may reflect instead a relationship between perceptions of fairness and OCB, causal paths between the dimensions of fairness and job satisfaction, and job satisfaction and OCB were also tested. The specific hypotheses were as follows:

1. When the effects of perceptions of organizational justice on OCB are controlled, job satisfaction will not influence the dimensions of OCB.
2. Perceptions of organizational justice will positively influence the dimensions of OCB.
3. Perceptions of organizational justice will positively influence job satisfaction.

One final point of interest in this study was the possible causal relationship between procedural and distributive justice. Even though relatively high correlations have been reported between distributive and procedural justice, most work with organizational justice has not explored any causal relationship between the two. For example, Folger and Konovsky (1989) tested for differential effects between procedural and distributive justice, but they looked at each fairness source separately.

However, some theoretical evidence exists for a causal relationship between procedural and distributive justice. For example, Leventhal (1980) suggested that procedural justice perceptions influenced subsequent perceptions of distributive justice. He wrote

An individual readily evaluates the fairness of procedural components, and . . . such evaluations affect the perceived fairness of the final distribution of reward. If the procedures are seen as fair, then the final distribution is likely to be accepted as fair even though it may be disadvantageous. (p. 36)

Also, Greenberg (1987) found that when outcomes were considered low (unfair), just procedures prompted an increase in the mean perceived fairness rating of an outcome. Conversely, a fair procedure was perceived as fair regardless of the outcome level. Taken together, these findings suggest that a causal path from procedural justice to distributive justice may be appropriate. Therefore, Hypothesis 4 was as follows:

4. Perceptions of procedural justice will positively influence perceptions of distributive justice.

## Method

### Participants and Settings

The sample for this project was drawn from the employees of two medium-sized companies in the midwestern United States. The first, Company A, applies paints and other coatings to rolled steel. The second, Company B, manufactures paints and other types of coatings, some of which are used in the processes developed by Company A. These companies exist in a supplier-client relationship. Because of the nature of this study and pending labor negotiations, only the exempt and nonexempt salaried employees from the companies were included in the study.

Data were collected in Company A by holding meetings with groups of employees and asking them to complete a questionnaire containing the justice and satisfaction scales. Data were collected in Company B by sending the surveys through the company mail system and having the respondents mail the completed surveys directly to the researcher. In both companies, employee citizenship behaviors were measured separately by asking the supervisors to complete an OCB survey and send it directly to the researcher.

Because of the different data-collection procedures, the response rates from the two companies differed. Company A reported an employee response rate of 98% and a managerial response rate of 81%, whereas Company B reported an employee response rate of 65% and a managerial response rate of 55%. Although there was no way to compare respondents with nonrespondents in Company B, archival data collected by the human resources office did show that the composition of respondents was similar to the breakdown of total employees by gender, race, and age.

All in all, 169 employees from Company A and 101 employees from Company B completed the first survey. Managerial ratings were collected for 140 of the 169 Company A employees and 85 of the 101 Company B employees. When the two companies were combined, the final sample was 270 employee surveys and 225 surveys for which both employee responses and managerial ratings could be matched. These 225 matched surveys were used in all the subsequent analyses.

Beyond the difference in response rate, demographic differences between the two samples also existed. First, the majority of the sample from Company A was evenly divided between the clerical level (36%) and the department supervisor level (34%), and only 13% of the respondents could be considered upper management. Company B, on the other hand, was more evenly represented in terms of organizational level: 22% of the respondents were clerical workers, 29% were technical workers, and 34% were in upper management. Second, the majority of the sample from Company A had some college education (59%), but only 15% of the sample had completed a 4-year degree. Company B was more highly educated, with 41% of the respondents reporting the com-

pletion of at least a 4-year degree. Finally, over half (58%) of the respondents from Company A were paid an annual salary less than \$29,999; 55% of the respondents from Company B were paid an annual salary over \$30,000. This difference appears to reflect the inclusion of more upper-level managers in the sample from Company B.

### Measures

*Distributive justice.* Distributive justice was measured with the Distributive Justice Index, developed by Price and Mueller (1986). This recently developed six-item scale measures the degree to which rewards received by employees are perceived to be related to performance inputs. Each item asks for the degree to which the respondent believes that he or she is fairly rewarded on the basis of some comparison with education level, effort, performance, and so forth.

Work cited in Price and Mueller (1986) attests to the measure's psychometric properties. All reliabilities reported have been above .90, and the scale has shown discriminant validity in relation to job satisfaction and organizational commitment.

*Procedural justice.* The measure of procedural justice was a measure designed for this study. It consists of two factors, formal procedures and interactional justice, that were consistent with recent multidimensional models of procedural justice (Greenberg, 1990b; Tyler & Bies, 1990). Items tapping formal procedures were designed to measure the degree to which fair procedures are used in the organizations. These items originated from the rules of procedural justice developed by Leventhal (1980) and Leventhal, Karuza, and Fry (1980). For example, the items included in the scale focused on procedures designed to promote consistency, bias suppression, accuracy, correctability, representativeness, and ethicality. Some of the items included in this scale were based on the work of Folger and Konovsky (1989) and Konovsky and Folger (1989).

The second dimension of procedural justice, labeled *interactional justice*, was suggested by the work of Bies and colleagues (Bies, 1987; Bies & Moag, 1986; Tyler & Bies, 1990). These studies suggest that perceptions of procedural justice can originate from an organization's procedures and *from the way in which those procedures are carried out*. Bies found that the actions taken by managers as they enacted procedures and explained decisions were instrumental in determining if procedural justice existed. Therefore, I developed items to tap the fairness perceptions of the interactions that accompanied an organization's formal procedures.

Items for this factor included questions that focused on the interpersonal behavior of the supervisor. Specific items asked whether the supervisor was considerate and kind, whether the supervisor considered the employee's rights, and whether the supervisor dealt with the employee in a truthful manner. Also, to tap the importance of causal accounts to perceptions of fairness, I included items that measured the degree to which the supervisor adequately explained the decisions that were made. All told, two aspects of procedural justice were measured: the fairness of the formal procedures used, and the fairness of the interactions that enacted those formal procedures.

*Job satisfaction.* Job satisfaction was measured with Brayfield and Rothe's (1951) Job Satisfaction Scale. This scale is a global measure of job satisfaction that assesses the degree to which respondents agree or disagree with a series of evaluative statements. Price and Mueller (1986) reported reliability coefficients ranging from .78 to .99 and concluded that this scale has adequate validity and reliability.

*Organizational citizenship behavior.* OCBs were measured with the Organizational Citizenship Behavior Scale, recently developed by Podsakoff and MacKenzie (1989). This survey is a modified version of the measure used and validated by Podsakoff, MacKenzie, Moorman, and Fetter (1990). The items included in this scale were based on the definitions of the five dimensions of OCB described by Organ (1988a),

namely, altruism, courtesy, sportsmanship, conscientiousness, and civic virtue.

The psychometric properties of the earlier version of this scale were presented by Podsakoff et al. (1990). They reported reliabilities for each factor ranging from .70 for civic virtue to .85 for altruism. Confirmatory factor analysis showed evidence for a five-factor model, with a Tucker-Lewis fit index of .94.

This measure asks supervisors to rate the OCBs of subordinates. By definition, OCB contains a wide variety of behaviors, and only some may be within the purview of the supervisor. Therefore, it is probably best to have citizenship rated by a number of different sources. However, the firms participating allowed measures of citizenship to be taken only from supervisors.

Though it is always better to obtain ratings of OCB from a variety of sources, supervisors have been the source of choice in the literature (Bateman & Organ, 1983; Organ & Konovsky, 1989; Podsakoff et al., 1990; Smith, Organ, & Near, 1983). Williams (1988) specifically addressed the question of the source of OCB measures. First, he found that, when compared with co-workers, supervisors were able to provide relatively accurate and complete pictures of an employee's OCB. The supervisor ratings were more likely to distinguish between inrole and extrarole behavior and exhibited less variance in the factor structure of the citizenship dimensions. Second, Williams found little measurement difference between supervisor ratings and self-report ratings. However, when relationships between job attitudes and OCB are tested, self-reports may contaminate the relationships with common method variance. Therefore, using supervisors alone to measure citizenship appears to be a reasonable alternative.

### Data Analyses

The data were analyzed in two distinct steps. First, because two companies were used to generate this sample, a two-groups analysis with LISREL 7 was used to determine if the groups were similar enough to be combined for the subsequent data analyses. This test compares the covariance matrices from each group and determines through a chi-square test whether one or more sets of relationships exist between the variables. A nonsignificant chi-square indicates that a single model accounts for the covariance structures within each group (Jöreskog & Sörbom, 1989).

Second, a two-step approach for confirmatory factor analysis and structural equation modeling was followed (Anderson & Gerbing, 1988). This approach separates the analysis of a measurement model representing the relationships between individual indicators and latent variables from the analysis of the structural paths between the latent variables.

Of issue in a study involving a large number of variables is the limits imposed by the LISREL algorithm in the number of indicators that can be tested. Jöreskog and Sörbom (1986) noted that models that include more than 30 indicators are exceedingly difficult to fit even with strong theoretical support. Therefore, researchers are often impelled to specify models that include a mixture of single-item indicators and scale scores. Such an approach was taken here with the more established measures of job satisfaction and citizenship. First, confirmatory factor analysis was used to determine the fit of a five-factor model of citizenship, and these items were then included in the scale scores for the citizenship behaviors. Next, Brayfield and Rothe's Job Satisfaction Scale was analyzed with confirmatory factor analysis to determine the fit of a single dimension measuring job satisfaction. Finally, all these scale scores were included in an overall confirmatory factor analysis with the individual indicators of the three justice dimensions.

To include an adjustment for measurement error in the scale scores, I set the path from the latent variable to the indicator equal to the prod-

uct of the square root of the scale reliability and the scale standard deviation. The error variance was set equal to the variance of the scale score multiplied by 1 minus the reliability. This technique has been explained by Kenny (1979), Williams and Hazer (1986), and Jöreskog and Sörbom (1989) and has been shown to be a reasonable approximation for the error variance by Netemeyer, Johnston, and Burton (1990).

### Structural Equations Modeling

Two significance tests were used to assess the structural relationships between the justice dimensions and citizenship. The first consisted of comparing the change in chi-square associated with the restriction of certain paths to zero in a series of nested models (Anderson & Gerbing, 1988). Figure 1 shows the first model evaluated (Model 1), which contains paths from job satisfaction to OCB, organizational justice to OCB, organizational justice to job satisfaction, and procedural justice to distributive justice. From this saturated model, four nested models were evaluated: Model 2, which restricted the paths from job satisfaction to OCB, was used to test Hypothesis 1; Model 3, which restricted the paths from organizational justice to OCB, was used to test Hypothesis 2; Model 4, which restricted the paths from organizational justice to job satisfaction, was used to test Hypothesis 3; and Model 5, which restricted the paths from procedural justice to distributive justice, was used to test Hypothesis 4. Significant changes in the chi-square from Model 1 indicate general support for the significance of the restricted paths and their corresponding hypotheses.

Second, the significance of the individual paths in the best-fitting nested model was assessed to show which particular paths described the relationships found in the nested model. The significance of the individual paths showed which specific paths accounted for the significant change in chi-square and also showed whether the change was positive or negative.

## Results

### Two-Groups Analysis of Differences Between Companies

Scale scores for each OCB dimension, justice dimension, and job satisfaction were calculated to generate the covariance matrices for each company used in the two-groups analysis. Scale scores were used because the interest here was the difference between the variable-level constructs, not between single items. Because the specific factor structures of the variables were yet to be determined, the scale scores were based on the theoretical definitions of the dimensions of citizenship, justice, and job satisfaction.

The result of the two-groups analysis was a chi-square statistic that was not large enough to reject the null hypothesis that one general group accounted for both covariance matrices,  $\chi^2(45, N = 225) = 52.95, p > .05$ . Given this result, it was concluded that all subsequent analyses should be based on a combined sample of 225.<sup>1</sup>

<sup>1</sup> Because the two-groups analysis does not reject the null hypothesis that one population is accounting for the two samples, the samples were combined for the study. However, differences in demographics and measured variables existed, so it was decided to see if similar findings would be obtained in both samples. The full structural model and the best fitting structural model were run with each sample, and little real difference was found between samples. The only differences were in the significance levels of the paths from distributive justice to job satisfaction, formal procedures to job satisfaction, and formal procedures to distributive justice. The relationships between interactional justice and the OCB dimensions were found in both samples.

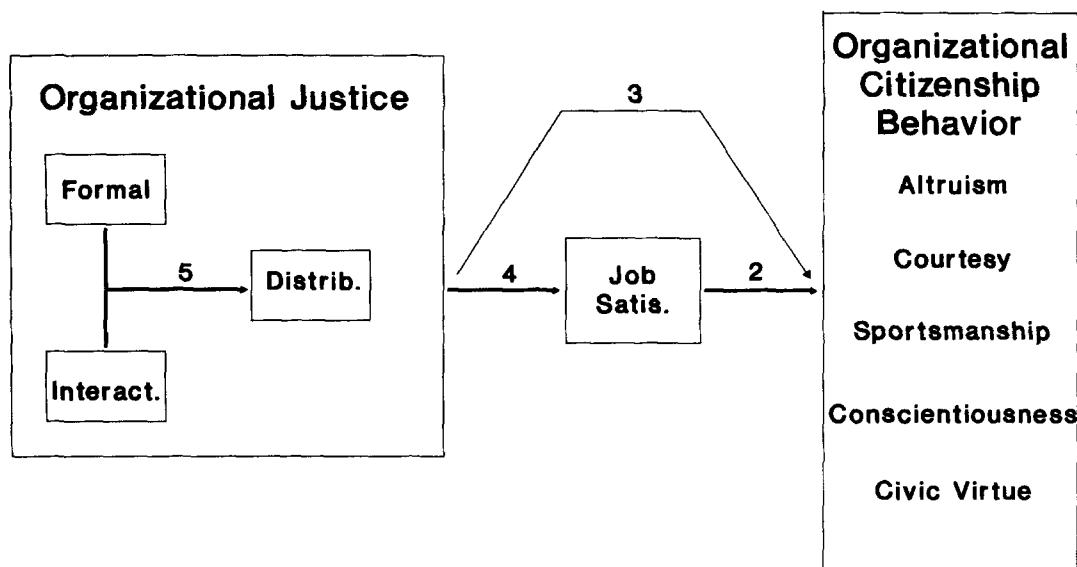


Figure 1. Theoretical relationships between organizational justice, job satisfaction, and organizational citizenship behavior and the nested models used to assess the significance of those relationships. (The path labeled 2 represents the paths restricted to zero in Model 2; the path labeled 3 represents the paths restricted to zero in Model 3; the path labeled 4 represents the paths restricted to zero in Model 4; and the path labeled 5 represents the paths restricted to zero in Model 5. In each model, if restriction of the paths to zero results in a significant difference in the chi-square, then support is indicated for reinstating those paths into the model. Distrib. = distribution; Satis. = satisfaction; and Interact. = interactive.)

### Confirmatory Factor Analysis for the Scale Scores

Confirmatory factor analysis was first used to determine which items should contribute to the scale scores in the measurement model representing the citizenship behaviors and job satisfaction. First, a five-factor model for citizenship was evaluated. In terms of goodness of fit, the test statistics used here offered conflicting evidence. The chi-square score for the measurement model indicated a poor fit,  $\chi^2(233, N = 225) = 554.16, p < .001$ . However, the comparative fit index (CFI; Bentler, 1990) and the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), which have been shown in Monte Carlo studies to be more resistant to sample size effects (Bentler, 1990; Marsh, Balla, & MacDonald, 1988), were .90 and .88, respectively. Although the TLI was below the .90 level considered the threshold for a good fit, the interest in maintaining a content-valid measure of citizenship suggested that accepting this marginal fit was appropriate.

Second, a unidimensional model for Brayfield and Rothe's (1951) Job Satisfaction Scale was evaluated. The confirmatory factor analysis of all 18 items resulted in a chi-square of 222.51 ( $df = 123, N = 225, p < .001$ ), a CFI of .93, and a TLI of .91. These factor analyses are available on request.

### Overall Confirmatory Factor Analysis

The results of the overall confirmatory factor analysis are reported in Table 1. This confirmatory model offered evidence for the convergent and discriminant validity of the nine latent variables in this study and also assessed whether this full model

fit the data as measured. Results suggesting convergent and discriminant validity showed that all the indicators had significant loadings on their hypothesized latent variables and that no significant cross loadings existed. Goodness of fit was indicated by a CFI of .97 and a TLI of .96. The chi-square for this measurement model was 320.55 ( $df = 216, N = 225, p < .001$ ).

### Descriptive Statistics

The means, standard deviations, and internal reliabilities for the scale scores are reported in Table 2. Of special interest in Table 2 are the reliabilities (Cronbach's alpha) of the three organizational justice scales. All three were over .90, indicating strong reliability. The reliabilities of the other measures used were also over the .70 minimum established by Nunnally (1978). Table 2 also reports two different correlations between the constructs in this study. Below the diagonal are the correlations calculated from scales scores for all the latent variables. Above the diagonal are the correlations as reported in the estimated  $\Phi$  matrix from the LISREL printout. These two sets of correlations offer partial support for the hypotheses in this study because significant correlations exist between the justice measures and the citizenship dimensions, the justice measures and job satisfaction, and procedural justice and distributive justice.

### Analyses of Nested Models

Both aggregate relationships in nested models and individual relationships between the variables were tested to determine the significance of paths between organizational justice, job

Table 1

*Overall Confirmatory Factor Analysis Model for Procedural Justice, Distributive Justice, Job Satisfaction, and Citizenship*

Item	$\lambda$
<b>Formal procedures</b>	
Procedures designed to . . .	
. . . collect accurate information necessary for making decisions.	.67
. . . provide opportunities to appeal or challenge the decision.	.80
. . . have all sides affected by the decision represented.	.84
. . . generate standards so that decisions could be made with consistency.	.87
. . . hear the concerns of all those affected by the decision.	.90
. . . provide useful feedback regarding the decision and its implementation.	.89
. . . allow for requests for clarification or additional information about the decision.	.86
<b>Interactional justice</b>	
Your supervisor considered your viewpoint.	.84
Your supervisor was able to suppress personal biases.	.77
Your supervisor provided you with timely feedback about the decision and its implications.	.73
Your supervisor treated you with kindness and consideration.	.86
Your supervisor showed concern for your rights as an employee.	.87
Your supervisor took steps to deal with you in a truthful manner.	.81
<b>Distributive justice</b>	
Fairly rewarded considering the responsibilities.	.85
Fairly rewarded in view of the amount of experience you have.	.82
Fairly rewarded for the amount of effort you put forth.	.91
Fairly rewarded for the work you have done well.	.92
Fairly rewarded for the stresses and strains of your job.	.90
Brayfield and Rothe's (1951) Job Satisfaction Scale	.93
<b>Organizational citizenship behaviors</b>	
Altruism	.90
Courtesy	.94
Sportsmanship	.93
Conscientiousness	.91
Civic virtue	.87

Note. Results are completely standardized.  $\chi^2$  (216,  $N = 225$ ) = 320.55; Tucker-Lewis index = .97; comparative fit index = .96. With the null model,  $\chi^2$  (276,  $N = 225$ ) = 4575.48.

satisfaction, and organizational citizenship. The results for the nested models analysis are reported in Table 3. The first model in Table 3 is the measurement model, which allows all the latent variables to correlate. The second model is Model 1, which substituted structural paths for correlations between job satisfaction and OCB, perceptions of justice and OCB, perceptions of justice and job satisfaction, and procedural justice and distributive justice. Correlations were maintained between the five OCB dimensions and also between the two dimensions of procedural justice because of the relatively high correlations between them and because of the lack of theoretical rationale for the presence of causal paths. Because either causal or correlational paths were measured between all latent variables, the chi-square and degrees of freedom were the same for this model and the measurement model.

Model 2 was evaluated to test Hypothesis 1: Job satisfaction

will not be related to citizenship behavior when perceptions of fairness are also measured. Model 2 differed from Model 1 in that the paths from job satisfaction to the citizenship dimensions were restricted to zero. Therefore, the change in chi-square between Model 1 and Model 2 reflects the effect of removing those paths and thus is a test of their significance to the model. As can be seen in Table 3, the change in chi-square for the change in 5 degrees of freedom was 9.69, which was not significant at the  $p = .05$  level. Thus, general support was found for Hypothesis 1.

Model 3 was evaluated to test Hypothesis 2: Perceptions of organizational justice will positively influence organizational citizenship. As reported in Table 3, the restriction to zero of the paths from justice to citizenship resulted in a change of chi-square (for a change of 15 degrees of freedom) of 41.55, which was significant at the  $p = .01$  level. Thus, general support was found for Hypothesis 2.

Model 4 was evaluated to test Hypothesis 3: Perceptions of organizational justice will influence job satisfaction. The change in chi-square resulting from the restriction of the justice to job satisfaction paths was 57.42 for a change of 3 degrees of freedom. This change in chi-square was significant at the  $p = .01$  level, supporting Hypothesis 3.

Finally, Model 5 was evaluated to test Hypothesis 4: Perceptions of procedural justice will influence perceptions of distributive justice. The change in chi-square resulting from the restriction of the paths from procedural justice to distributive justice was 97.88 for a change of 2 degrees of freedom. This change was significant at the  $p = .01$  level, offering support for Hypothesis 4.

### *Significance of Individual Paths*

Because of the results of the model comparisons, the hypotheses were also tested by evaluating the individual paths in the model. These tests allow for the determination of the direction of the effects as well as their significance. In Table 4, the parameter estimates for Model 2 are presented because this model was the best fitting of the nested models.

The results in Table 4 aid interpretation of the results of the nested-models comparison. For example, although support was found in the nested-models test for a relationship between perceptions of organizational justice and citizenship, the significance of the individual paths suggests that this relationship may be best explained as a relationship between interactional justice perceptions and four of the five OCB dimensions. Interactional justice predicted all the OCB dimensions but civic virtue, and distributive justice and formal procedures were not directly related. Conversely, the individual path analysis shows no need to reinterpret Hypotheses 3 and 4. All dimensions of organizational justice influenced job satisfaction, and both dimensions of procedural justice influenced distributive justice.

As a final check on the significance of the findings, a model containing only the significant paths in Model 2 was evaluated and compared with Model 1. This model resulted in a change in chi-square of 19.07 for a change of 16 degrees of freedom. This change was not significant at the  $p = .05$  level, lending support for the lack of significance of the excluded paths.

Table 2

*Means, Standard Deviations, Correlations, and Reliabilities for the Combined Sample*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Job satisfaction	3.70	0.49	(.86)	.38**	.38**	.43**	.08	.14*	.17*	.14*	.18*
2. Distributive justice	3.42	0.96	.37**	(.94)	.49**	.60**	.15*	.20*	.23**	.24**	.05
3. Formal procedures	3.88	1.37	.37**	.45**	(.94)	.66**	.10	.17*	.16*	.22**	.11
4. Interactive justice	3.68	0.82	.43**	.55**	.64**	(.93)	.18*	.34**	.29**	.32**	.08
5. Altruism	5.45	1.45	.08	.15*	.09	.16*	(.81)	.62**	.42**	.58**	.50**
6. Courtesy	5.48	1.08	.14*	.18*	.17*	.32**	.62**	(.88)	.57**	.58**	.42**
7. Sportsmanship	4.75	1.42	.17*	.22**	.16*	.29**	.42**	.57**	(.87)	.50**	.22**
8. Conscientiousness	5.62	1.15	.14*	.23**	.22**	.32**	.58**	.59**	.50**	(.83)	.41**
9. Civic virtue	5.57	0.82	.18*	.05	.11	.07	.50**	.43**	.22**	.41**	(.76)

Note. Reliabilities are reported along the diagonal. Estimated  $\Phi$  matrix is above the diagonal. Scale correlations are below the diagonal.

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

## Discussion

The purpose of this research was to examine the relationship between perceptions of fairness and OCBs. Through structural equation modeling, support was found for the four hypotheses pertaining to how perceptions of organizational justice influence an employee's reported citizenship behavior. The following is a discussion of the primary findings of this study.

### *Job Satisfaction and Organizational Citizenship*

Hypotheses 1 and 3 were included in this study to test whether job satisfaction is actually a primary antecedent of organizational citizenship. Though most work with citizenship has included job satisfaction as a cause, Organ (1988a, 1988b, 1990) stated that, because job satisfaction measures appear to include a large fairness component, job fairness measures may be more strongly related to OCB. In essence, the relationship between job satisfaction and OCB reported in the literature may be spurious and merely reflects the degree to which job satisfaction measures include job fairness. Support for this view was found here. When perceptions of fairness were measured separately from job satisfaction, job satisfaction was not related to citizenship.

### *Perceptions of Fairness and Organizational Citizenship*

Support was also found for a causal relationship between perceptions of organizational justice and OCB. This finding provided support for Organ's (1988b, 1990) view that the decision to behave as an organizational citizen may be a function of the degree to which an employee believes that he or she has been treated fairly by the organization. This result is consistent with equity theory in that employees who perceive unfairness may reduce the frequency or magnitude of their citizenship, whereas employees who believe they are fairly treated will see continued citizenship as a reasonable contribution to the system. This finding is also consistent with Organ's view that fairness may influence citizenship by allowing for a redefinition of the exchange between the organization and the employee from one of economic exchange to social exchange. If treated fairly, the employee may be less likely to believe that citizenship behavior outside his or her prescribed role is inappropriate and subject to exploitation.

However, a closer examination of the fairness to OCB link suggests that the *type* of fairness perception may have been important in predicting the occurrence of OCB. Even though a general relation was found, analyses of the individual relations between the three dimensions of fairness and OCB resulted in differential effects attributable to distributive justice, formal procedures, and interactional justice. In this case, interactional

Table 3

*Nested Model Comparisons*

Model	$\chi^2$	<i>df</i>	$\chi^2$ change	TLI	CFI
Measurement model	320.55	216	—	.96	.97
Model 1: Saturated model with all theoretical paths	320.55	216	—	.96	.97
Model 2: Job satisfaction $\rightarrow$ OCB	330.24	221	9.69	.96	.97
Model 3: Justice $\rightarrow$ OCB	362.10	231	41.55*	.96	.96
Model 4: Justice $\rightarrow$ job satisfaction	377.97	219	57.42*	.95	.96
Model 5: Procedural justice $\rightarrow$ distributive justice	418.43	218	97.88*	.94	.95
Null model	4,575.48	276	4,254.93*	—	—

Note. Difference scores were taken from  $\chi^2$  (216,  $N = 225$ ) = 320.55. TLI = Tucker-Lewis index; CFI = comparative fit index; OCB = organizational citizenship behavior.

\*  $p < .01$ .

Table 4  
*Parameter Estimates for the Paths in Model 2*

Path description	Unstandardized $\beta$	<i>T</i>	Standardized $\beta$
Distributive justice $\rightarrow$ job satisfaction	.107**	2.35	.195
Distributive justice $\rightarrow$ altruism	.099	0.84	.080
Distributive justice $\rightarrow$ courtesy	.005	0.50	.004
Distributive justice $\rightarrow$ sportsmanship	.148	1.03	.092
Distributive justice $\rightarrow$ conscientiousness	.103	0.87	.079
Distributive justice $\rightarrow$ civic virtue	-.060	-0.66	-.065
Formal procedures $\rightarrow$ distributive justice	.162*	2.20	.173
Formal procedures $\rightarrow$ job satisfaction	.078*	1.69	.151
Formal procedures $\rightarrow$ altruism	-.071	-0.60	-.061
Formal procedures $\rightarrow$ courtesy	-.118	-1.09	-.103
Formal procedures $\rightarrow$ sportsmanship	-.134	-0.93	-.089
Formal procedures $\rightarrow$ conscientiousness	.008	0.07	.006
Formal procedures $\rightarrow$ civic virtue	.072	0.78	.082
Interactive justice $\rightarrow$ distributive justice	.493**	5.86	.481
Interactive justice $\rightarrow$ job satisfaction	.139**	2.49	.246
Interactive justice $\rightarrow$ altruism	.245*	1.69	.194
Interactive justice $\rightarrow$ courtesy	.530**	3.96	.422
Interactive justice $\rightarrow$ sportsmanship	.477**	2.69	.290
Interactive justice $\rightarrow$ conscientiousness	.406**	2.79	.306
Interactive justice $\rightarrow$ civic virtue	-.034	-0.30	-.036

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

justice was the only dimension of fairness to significantly relate to organizational citizenship. Thus, employees who believed that their supervisor personally treated them fairly appeared to be more likely to exhibit citizenship behaviors.

#### *Differential Effects of Interactional and Procedural Justice*

Reasons for why interactional justice was the only source of justice found to relate to OCB may lie in the differences between interactional justice and formal procedures and in the differences between procedural justice in general and distributive justice. First, formal procedures were defined here as the degree to which fair procedures were present and used in the organization. The focus of the items in this scale was on the organization as a whole and the degree to which fair procedures were at least present. In comparison, interactional justice was defined as the fairness of the manner in which the procedures were carried out. The focus of this scale was on the degree to which the behavior of the supervisor enacted the formal procedures in a fair manner.

Relatively speaking, it seems reasonable to suggest that, in this sample, employees' impressions of the fairness of their interactions with their supervisors communicated more information to them regarding trust and equity than did the presence or absence of fair procedures. The jobs surveyed were mostly professional jobs in which interactions with superiors were frequent. Through such interactions, an employee could easily believe that the organization considered him or her important. Similar value could be communicated through formal procedures, but the actions of the supervisor are probably the most effective and compelling communicator of an employee's value (e.g., actions speak louder than words).

Three recent studies can be cited as support for the importance of supervisor interactions over the presence of formal

procedures. First, a study by Greenberg (1988b) on the importance of managing impressions of fairness found that supervisors were more likely to be seen as fair if they actively communicated that fairness through interactions rather than merely relying on actual fair behavior. Second, a study by Greenberg (1990a) on the incidence of employee theft found that employee theft increased with pay cuts, but that the theft rates were reduced when thorough and sensitive explanations of the pay-cut decisions were made by supervisors. The results of the present study are consistent with Greenberg's (1990a) study because employee theft could be considered a negative form of citizenship behavior.

Finally, support for the importance of interactions in an employee's decision to be a good citizen was reported by Podsakoff et al. (1990). In their study, trust in leadership was found to relate to citizenship behaviors and appeared to mediate a relationship between transformational leader behaviors and citizenship. Of the three sources of fairness tested in the present study, interactional justice appears to be the one most likely to influence an appraisal of supervisor trust because it focuses on the actions of the supervisor specifically.

Taken together, these results add to the growing realization that the interpersonal context of procedural fairness is a potent source of influence (Tyler & Bies, 1990). Perceptions of the fairness of the procedures used to determine outcomes may rise or fall depending only on the manner in which those procedures are enacted. Therefore, future studies of the influence of perceptions of fairness should include assessments of the contribution of fair interactions, as well as fair procedures and fair outcomes.

#### *Differential Effects of Procedural and Distributive Justice*

In terms of the differential relationship between procedural justice and distributive justice, similar support for the larger



relationship found between procedural justice and OCB has been reported by a number of studies (cf. Greenberg, 1990b). In studies comparing the two perceptions of fairness, procedural justice and distributive justice were found to predict different attitudes. Distributive justice predicted attitudes that related directly to the outcome in question, such as pay satisfaction (Folger & Konovsky, 1989), whereas procedural justice was related to evaluations of organizational systems, institutions, and authorities (Lind & Tyler, 1988). Folger and Konovsky also reported that procedural justice better predicted organizational commitment and trust in supervision than did distributive justice. Such findings prompted Lind and Tyler (1988) to conclude that procedural justice appears to be related to more general evaluations, whereas distributive justice appears to be related to evaluations of the specific outcomes in question.

To say that the results of this study are consistent with the results discussed above, one would need to believe that the decision to behave as an organizational citizen was more a result of a general positive evaluation of the organizational system, institution, and authorities evoked by procedural justice than an evaluation of the fairness of specific outcomes. Given that OCB and extrarole behavior have been found to be related to general job satisfaction (Bateman & Organ, 1983), organizational commitment (O'Reilly & Chatman, 1986), and supervisory commitment (Gregersen, 1989), this conclusion appears to be supported.

### Limitations

Because of the subjects, the analytical techniques, and the measures in this study, several limitations deserve mention. First, this sample, though coming from two companies, is unique enough to prompt concerns over generalizability. The two companies were both involved with the chemical industry in a city in the midwestern United States. In addition, both companies did not appear to have a strong problem with a lack of fairness. Perhaps the relationships found here would be different in a company in which a lack of fairness was more pervasive. Second, the methods used to gather and analyze the data limit confidence in the findings. The study was a cross-sectional study, yet causal relationships were inferred. As an analytic technique, LISREL is perhaps the most sophisticated method for making causal inferences. However, one must always note that causal inferences made from cross-sectional designs are never more than inferences.

An example of this limitation is that it would be possible to interpret the direction of causality between constructs in the opposite direction. For example, interactional justice may be related to the OCB dimensions not because interactional justice perceptions predisposed employees to perform citizenship behaviors, but because subordinates who were rated highly on citizenship were members of the in-group characterized by the vertical dyad linkage model of leadership (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975). Members of the in-group might be rated by managers more positively (high OCB) and, in turn, might rate their managers more positively (high interactional justice). A similar case could be made for the directionality of the relationship between distributive and procedural justice. Poor distribution could prompt employees to

question an organization's procedures, whereas a positive distribution could produce a halo effect so that organization procedures were seen as fair (Organ, 1988a).

Another limitation is that the relationships between the perceptions of fairness and between the perceptions of fairness and job satisfaction included common method variance. These variables were measured from one source (the employee) at one time, so any relationship that existed could be attributed to a response bias on the part of the respondent (because supervisors completed the OCB measure, common method bias was not a concern for those relationships). In practice, LISREL can be used to overcome this by modeling a method factor on which all indicators presented to the employees would load. This procedure was explained by Podsakoff et al. (1990).

### Managerial Implications and Directions for Future Research

The strongest implication of this study is that supervisors can directly influence employees' citizenship behaviors. The perception of fairness that originated from interactional justice was based on whether the supervisor correctly used the procedures that were designed to promote fairness and was based on the nature of the supervisor's behavior while enacting those procedures. If managers want to increase citizenship behavior among their employees, they should work to increase the fairness of their interactions with employees.

A corollary of this implication is that perceptions of fairness based on interactional justice may be the easiest perceptions of fairness to manage. Distribution of outcomes may be constrained by forces outside the manager's control. Similarly, the presence or absence of fair procedures may be a function of organization policy and not a manager's intentions. By comparison, the fairness of the interactions between managers and employees is often a matter of a manager's being sensitive to the interests of the employees and convincing them that it is in the manager's interest to be fair.

Because of the relationship between perceptions of fairness and OCB, future research should be concerned with studying the dynamics through which fairness perceptions render OCB appropriate. It was suggested here that citizenship may be related to interactional justice because the choice to be a citizen is based on a more general evaluation of the working atmosphere. However, a second way to interpret this could be to say that interactional fairness was important because the employee was deciding to exhibit behaviors that would benefit the supervisor. Because supervisors rated OCB, the OCBs measured were probably directed toward those supervisors. Employees were treated fairly by their supervisors and therefore performed citizenship behaviors that would benefit the supervisors. In essence, the decision to perform OCB could be the function of the evaluation of the fairness received from the target of that OCB.

Therefore, the causes of citizenship behavior could be defined by the target of the citizenship behaviors. Citizenship directed toward the supervisor should be related to interactional justice, a measure of the fairness of supervision. Citizenship directed toward the organization should be related to formal procedures, a measure of the fairness of the organization. Citizenship directed toward co-workers should then be related

to the fairness of treatment by co-workers. Williams (1988) found that OCB items could be factor analyzed on the basis of the target of behavior. He suggested two dimensions: OCBI to represent citizenship behavior directed toward individuals, and OCBO to represent citizenship behavior directed toward the organization. His substantive tests, however, did not support this distinction. Future research should assess whether the decision to behave as a good citizen depends on the target of that behavior.

### Conclusions

This research attempted to show that perceptions of fairness influence employees' decisions to behave as organizational citizens. The results indicate that fairness perceptions, particularly those derived from interactional justice, are instrumental in predicting the occurrence of citizenship. Therefore, managers should be aware of the benefits of behaving toward subordinates in a manner perceived as fair. Managers should be concerned with how they treat their employees because employees' perceptions of that treatment could affect the occurrence of citizenship behaviors.

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