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PROCEDURAL JUSTICE AND SUPERVISORS' PERSONAL POWER BASES: EFFECTS ON EMPLOYEES' PERCEPTIONS OF PERFORMANCE APPRAISAL SESSIONS, COMMITMENT, AND MOTIVATION

HERMAN STEENSMA
Leiden University, The Netherlands

ELLEN VISSER
Content–The Hague, The Netherlands

ABSTRACT

Employees ($N = 178$) completed a questionnaire to evaluate performance appraisal sessions. Hypotheses derived from procedural justice theories were confirmed. Neutrality, standing, trust, and accuracy of information correlated positively with perceived procedural justice of PA sessions. Quality of outcomes of PA sessions also co-varied with perceived fairness. Moreover, personal power bases of supervisors (expert power, referent power) contributed to employees' procedural justice perceptions. Perceived procedural justice correlated, as predicted, positively with three outcome variables: satisfaction with PA session; organizational commitment; and motivation.

Performance appraisal (PA) systems belong to the most important human resource management instruments in organizations. These systems are used for a variety of reasons. There is a long list that includes twenty common uses of PA [1]. However, most authors seem to agree that applications of PA cluster around a few major uses [2-4]. Good PA systems should provide valuable information about the development of employees. PA systems may enhance the effectiveness of human resource decisions and offer much potential for satisfying employees'

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needs. For instance, to improve their performance employees need to get meaningful, accurate feedback. Performance appraisal also is frequently used to allocate merit pay, to justify promotions, and to assess the training needs of employees. Moreover, PA systems may be used for legal purposes: Accurate documentation of performances can be used in a court case to defend painful decisions [5].

It is expected that the use of a good PA system has several positive effects. Better decisions, higher satisfaction and motivation among the workers, a stronger commitment to the organization, and last but not least higher organizational effectiveness are the results expected from using PA systems. But what, then, are the characteristics of a "good" PA system? Several answers have been given to this question. The traditional way is to use techniques and methods developed by experts in the field of psychological testing. Numerous approaches exist to the evaluation of work performance. These approaches can be broken down into five classes of information:

1. Performance measures, such as productivity counts;
2. Personnel data, such as rate of absenteeism;
3. Self-assessments and peer ratings;
4. Supervisor evaluations, such as graphic rating scales, behaviorally-anchored rating scales (BARS), behavior observation scales, and forced-choice scales;
5. A class combining several of these approaches, such as the 360-degrees feedback method, i.e., a method in which ratings from several sources—supervisors, subordinates, peers, self, and sometimes even organization's clients—are combined [6-11].

It is obvious, of course, that psychometric experts have a lot to offer. However, that's not enough. In the field of personnel selection, interest in applicant reactions has recently increased, in particular since the pioneering studies of Gilliland and Steiner [see, e.g., 12-15]. Studies focusing on applicant reactions to selection techniques suggest that perceived selection fairness is related to such outcomes as organizational attractiveness, intention to accept job offers, and in general favorable reactions toward the selection methods. Moreover, those who are familiar with Total Quality Management know that qualitative criteria such as subordinates' satisfaction with management systems and the factors contributing to these reactions of subordinates should be used as important criteria to measure the quality of such systems [16]. This leads to the new question: What are the determinants of satisfaction with PA?

In an earlier study we had demonstrated that procedural justice criteria such as having "voice" and receiving adequate information beforehand contribute to employees' satisfaction with PA sessions. But although procedural justice was valued highly, we found that people are also motivated by selfishness, manifesting itself in the form of self-serving attributions and perceptions [17].

In the present study, we used a more refined procedural justice model to predict employees' satisfaction with PA sessions. Moreover, the outcome of the PA

session was included as a potential predictor of satisfaction—a predictor implied by self-serving motivation models. We also studied the effects of personal power bases of the supervisor who is talking with the subordinate about past performance, and the performance expected in the near future. And, finally, we took a closer look at some other variables possibly affected by the quality of PA sessions: work motivation and commitment to the organization. First, we present a brief history of procedural justice research. Then, the refined model will be presented, and several hypotheses will be derived.

A BRIEF HISTORY OF PROCEDURAL JUSTICE RESEARCH

Most social justice studies can be categorized in two broad categories. In the beginning, almost all studies focused on distributive justice. The central topic of distributive justice is how and why allocations of outcomes result in perceptions and feelings of (un)fairness, and the consequences of feelings of (in)justice are studied, too. [For early reviews, see 18-21.] Three norms of distributive justice are frequently used to allocate outcomes, and to evaluate the allocation of outcomes: equity, equality, and the need principle. The equity norm states that allocations should be given proportional to the inputs of individuals, while the need principle prescribes allocations according to individual needs. The equality principle prescribes equal allocations to all individuals. Application of the norms seems to be dependent upon the characteristics of situations and social relationships between the persons involved [22].

The second broad category of studies focuses on procedural justice. The central hypothesis is that the way a decision is made influences people's reactions to that decision. Thibaut and Walker were the first to demonstrate that procedures used to arrive at a decision have profound effects on fairness judgments, independent of the favorability of the outcomes [23, 24]. Since the publication of their studies, a quarter of a century ago, many researchers have addressed issues of procedural justice. A number of models have been advanced to explain the procedural justice phenomenon. Some procedural justice researchers adhere to the instrumentality view: The better a procedure serves your interests, the more fair it is perceived to be. Thibaut and Walker made a distinction between two types of control. Decision control refers to control over the actual decisions that are made, while process control refers to control over the presentation of evidence (Thibaut and Walker studied procedural justice in legal settings). Process control is often equaled with the concept of voice, i.e., people have a say, they have the right to present their view on reality without having the formal power to make the decision [25]. Thibaut and Walker argue that people want control—either decision control or process control—because control is seen as instrumental to attaining desirable outcomes.

A highly practical model of procedural justice was presented by Leventhal [26]. Leventhal identified six important procedural justice rules, to be used in the context of outcome allocations. The first criterion is consistency: Allocation procedures must be applied consistently across people and over time. The bias suppression criterion states that personal self-interest and preconceptions of the allocator are not allowed to play a role. The accuracy rule prescribes that decisions should be based on accurate, good information. Correctability implies the existence of opportunities to ask for modification of decisions. Representativeness means that the concerns of all important subgroups and individuals are somehow represented in the allocation process. Finally, the ethicality rule says that the allocation process must be compatible with high ethical standards.

Since about fifteen years ago a new model of procedural justice has become popular: the relational or group value model, proposed by Tyler and Lind [27, 28]. This model does not focus on instrumentality, but on relationship issues. According to this model, procedures are evaluated for what they seem to indicate about how one is viewed by the group or the authority using the procedures. To the extent that a procedure is seen as indicating a positive relationship between the person and his/her group or authority, it is judged to be fair. However, procedures that appear to imply that a person has a negative relationship with an authority or institution are perceived as unfair by the person. In this relational model, three factors are seen as especially important for procedural fairness judgments: Trust, standing, and neutrality. Trust involves beliefs about the good intention of the authority (the group leaders, supervisors, managers). Authorities that act ethically and demonstrate concern for the needs of group members and consideration of the views of their subordinates can be trusted to try to behave fairly. Information about one's status position in a group (standing) is communicated by the treatment one receives. Dignified, respectful, and polite treatment implies that one is seen as a valuable member of the group, and such behavior is perceived as fair. Neutrality is neutral decision making, based on objective facts and honesty, and it involves the absence of bias or prejudice [27, 28]. The way you treat persons to whom outcomes are to be allocated is categorized by researchers such as Tyler and Lind (and others) as a form of procedural justice. However, some researchers distinguish explicitly between procedural (in)justice and interactional (in)justice [29, 30].

It will be clear by now that the experience of procedural fairness may be influenced by many aspects. Still, one more aspect should be added to the already long list of procedural justice criteria: giving adequate information to people. Keeping people well-informed is a necessary condition for the successful implementation of organizational changes and new policy [31]. However, this aspect of adequate notice or advance notice has been somewhat neglected by many researchers, although it should be mentioned that recently attention has been paid to this factor in several justice studies—and in particular, in studies that focused on performance appraisal [32-36].

PROCEDURAL JUSTICE AND PERFORMANCE APPRAISAL SESSIONS: A NEW MODEL

The general assumption underlying all procedural justice models is that certain aspects (control, trust, standing, neutrality, accuracy, et cetera) affect people's perception of procedural justice. Perceived procedural fairness, in turn, leads one to be satisfied, to feel committed (to the group and/or to the organization), and to have high performance motivation. It should be mentioned here that some researchers believe that there is a causal chain of events, with procedural criteria affecting perceived procedural justice, justice perceptions promoting satisfaction, and finally, satisfaction leading to commitment. However, while the first part of this model—from aspects to perceived procedural justice—is accepted by all theorists, there is far less agreement about the exact order of dependent variables following after the fairness perceptions. Therefore, we will study the effects of perceived (procedural) fairness on satisfaction, motivation, and organizational commitment without speculations about possible causal connections between satisfaction, motivation, and commitment.

But there's more that should be said about the predictors of perceived fairness. Justice researchers introduced the term fair process effect: Fair procedures may have beneficial effects on the evaluation of an unfair outcome [37]. The fair process effect, however, is just one way to overcome an initial injustice. The negative effects of unfair procedures may be somewhat improved by a fair end-state of allocations. This phenomenon was labeled the fair outcome effect [38]. Actually, there are four ways of overcoming initial injustices: compensation, justification, appreciation, and mitigation [39]. The lesson that can be learned from the advances in justice research is that perceptions of fair procedures may be influenced not only by the criteria of procedural justice, but also by the quality of the outcomes people receive. Therefore, outcomes are included as predictors in our model of procedural justice.

BASES OF POWER AND JUSTICE PERCEPTIONS

Social power is the potential to change the beliefs, attitudes, and behaviors of a person or group of persons. Social scientists usually distinguish between six bases of social power:

- reward power, or the ability to reward;
- coercive power, where the ability to punish is the basis for power;
- legitimate power, i.e., power resulting from having legitimate rights to influence others;
- referent power: A person toward whom people are highly attracted has referent power;
- expert power, varying with the knowledge or expertise;
- informational power, based on the information that influencing agents can present to the target of influence attempts [40, 41].

Some of these bases of power share similarities. Referent and expert power are two types of personal power that stem from the individual's personal attributes [40, 42, 43]. Legitimate, reward, and coercive power are all aspects of power sanctioned by an organization or by the influencing agent's position in the organization. Therefore, one may speak of position power. Finally, informational power shares characteristics with both position and personal power. Some authors have suggested that bases of power are related to the use of particular forms of influence tactics. Position power could lead to the use of the so-called hard--influence tactics, i.e., relatively controlling and coercive tactics, while soft-influence tactics may result from personal power bases [42, 44]. Hard-influence tactics will, in general, be experienced as disagreeable by the targets of influence attempts. This implies that the target-agent relationship may suffer from the use of hard-influence tactics, even though these tactics might have the effects that were intended by the actor. In particular when future interactions are to be expected with targets, agents will prefer the use of soft tactics, since soft tactics have positive effects on the attitudes and the motivation of the targets of influence attempts.

Managers and supervisors expect, of course, to have continuing interactions with most of their employees who participate in PA sessions. This gives those supervisors who have expert power and referent power an advantage: Their way of influencing subordinates is seen as "better" than the influence attempts of supervisors who rely on position power. During PA sessions, it seems best to create a situation in which position power does not interfere with the willingness to discuss all topics freely. The climate for such open discussions is served best by managers/supervisors who don't need to rely on their formal position: Agents with high amounts of expert power and referent power. Subordinates will feel that experts and supervisors with referent power have both the knowledge and the (informal) "right" to evaluate performance of subordinates and to discuss ways in which things can be done better.

THE NEW JUSTICE MODEL: HYPOTHESES

So far, our plea was to include both bases of personal power of supervisors, and the outcomes received by their subordinates as predictors in a model of the (perceived) procedural justice of performance appraisal sessions. However, there are already many standards or criteria of procedural justice, and it was not possible to study all those criteria in one study. When doing research in organizations, legitimate desires of managers and the Works' Council often function as constraints on the range of theoretical issues that can be combined in one research project. So, choices had to be made. Which criteria should be included in the present study? Nowadays, most procedural justice researchers use the relational model developed by Tyler and Lind [28] with standing, neutrality, and trust as the criteria of procedural justice. At the same time, the process control or "voice" effect is probably the most widely replicated finding in all procedural justice

studies published so far. Fortunately, the concept of trust is indicated by concern for needs and consideration of views, and this implies that Tyler and Lind's central concept of trust overlaps considerably with the concept of process control.

In our earlier study on perceptions of performance appraisal by employees and supervisors we had found that employees' satisfaction with PA sessions covaried positively with "voice" and with receiving adequate information beforehand. In that same study, we also wanted to test the effect of accuracy on satisfaction with the quality of PA. But since we could not gather data on accuracy of information, we had to use a proxy variable: The frequency of PA sessions. It was predicted that frequency of PA covaries positively with satisfaction with the quality of PA, and that hypothesis was supported by our data [17]. In the present study there was no need to use a proxy variable for accuracy, and therefore it was decided to include accuracy as an independent variable to be studied as a predictor of (perceived) procedural justice.

So, besides the three criteria of the Tyler and Lind model, and the criterion of accuracy, the new model of procedural justice of PA sessions also includes the personal power bases (expert power and referent power) of the supervisor responsible for PA sessions. Moreover, the outcomes received by employees as a result of the PA session also have predictive value for the perception of procedural justice. The new model is represented in Figure 1.

Several hypotheses may be derived from this new procedural justice model:

Hypotheses 1a-d: The higher the levels of a) neutrality, b) trust, c) standing, and/or d) accuracy are during PA sessions, the higher the perceived procedural justice of the PA session will be.

Hypothesis 2: The more positive the outcomes of a PA session are, the higher the perceived procedural justice of that session will be.

Hypothesis 3a-b: The more a) expert power and/or b) referent power supervisors have, the higher their subordinates' perceived procedural justice evaluations of PA sessions will be.

Hypotheses 4a-c: The higher the (perceived) procedural justice of PA sessions is, the higher a) subordinates' satisfaction with the PA session, b) organizational commitment, and c) the motivation of subordinates will be.

METHODOLOGY

Participants

A sample was drawn from employees of the Dutch Treasury Department. From the 399 employees who were approached, 178 participated (response rate: 45 percent). Most participants were men (67 percent). There were no significant differences between men and women in their answers. Therefore, the data were

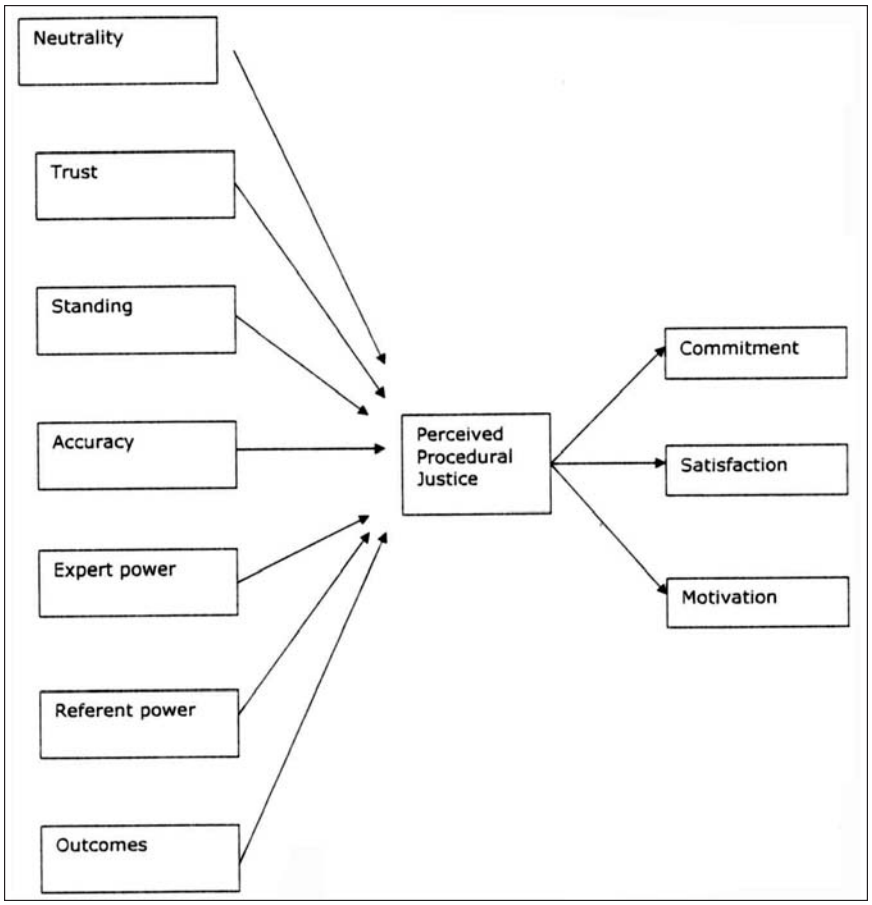

Figure 1. The model of procedural justice.

combined. Nearly 10 percent of respondents were younger than 30 years; 45 percent were in the age category from 30-39, while 34 percent were 40-49 years old, and 11 percent were 50 years or older.

Questionnaires

Respondents had to fill out a questionnaire with items about PA sessions, several procedural justice aspects, outcomes, personal power bases of supervisors who administer the PA session, motivation, satisfaction, commitment, and a few demographic variables. Some variables of the New Procedural Justice Model were measured with only one item of the questionnaire. In most cases, however,

variables were measured using sumscores: Scores on the items measuring the variable were summed, and the sumscore was divided by the number of items.

Variables

Neutrality was measured by three items. A five-point scale format was used. A sample item reads as follows: "How fair is the way your supervisor is administering the PA session for all subordinates involved?" (5-point scale from 1 = very unfair, . . . 5 = very fair)

Trust was measured by three items. A sample item reads as follows: "To what extent did your supervisor try to show concern for your needs?" (5-point scale)

Standing was measured by two items. An example: "How politely were you treated by your supervisor?" (5-point scale)

Accuracy was measured by three items. A sample item: "To what extent was the PA session discussion based on facts?" (5-point scale)

Expert power was measured by five items. For all items, a five-point scale was used from "fully disagree," . . . "fully agree." A sample item reads as follows: "My supervisor is very competent in his field."

Referent power was measured by five items. Again, a five-point scale was used from fully disagree . . . fully agree. A sample item reads as follows: "I admire my supervisor."

Outcome of the PA session was measured by the item: "How good was the outcome of your PA session?" (5-point scale, from 1 = very bad to 5 = very good)

Procedural Justice

(Perceived) procedural justice was measured by the item: "How fair were the procedures used to administer the PA session?" (5-point scale, from 1 = very unfair to 5 = very fair)

Organizational Commitment

(Organizational) commitment was measured by the item: "To what extent do you feel commitment to the organization?" (5-point scale, from 1 = don't feel committed at all to 5 = feel very strongly committed)

Satisfaction with the PA session was measured by 5 items with a 5-point scale format. A sample item reads as follows: "In all, how satisfied are you with the way in which the PA session was administered?" (5-point scale, from 1 = very dissatisfied to 5 = very satisfied)

Motivation was measured by the item: "To what extent are you willing to make more effort than, strictly speaking, is necessary?" (5-point scale, from 1 = not at all willing to 5 = very willing)

RESULTS AND DISCUSSION

Mean scores and standard deviations of the scores on all variables are presented in Table 1. For the multiple-item additive scales, the Cronbach's alpha reliability coefficients were computed. These reliability coefficients are presented in the fifth column of Table 1. Cronbach's alpha is the most widely used reliability coefficient and is a measure of internal consistency. From Table 1 it can be seen that all Cronbach's alpha reliability coefficients were higher than .80. This implies that all additive scales were highly reliable "good" measures [45, 46]. Table 1 also shows that for all variables, mean scores are rather positive: All means are (slightly) above the theoretical midpoint of the scale.

Table 2 summarizes the Pearson Correlation Coefficients between all variables of the model of procedural justice of performance appraisal sessions. It can be seen that all correlations are positive. Moreover, almost all correlations reach the level of statistical significance, with only two exceptions: The correlation between expert power of supervisor and motivation of subordinate ($r = .10$), and the correlation between outcomes of the performance appraisal session and organizational commitment ($r = .13$). All other correlations are statistically significant, with significance levels from $p < .05$ to $p < .001$.

Hypotheses 1a-d were strongly supported by the research data: The level of perceived procedural justice correlated positively with the four procedural criteria of neutrality, trust, standing, and accuracy. Both the predictors borrowed from

Table 1. Means, Standard Deviations, and Cronbach's Alpha Reliability Coefficients

Variable	*N* items	Mean score	Standard deviation	Cronbach's alpha
Neutrality	3	3.77	.76	.83
Trust	3	3.70	.80	.83
Standing	2	4.09	.79	.82
Accuracy	3	3.38	.83	.84
Expert power	5	3.68	.82	.89
Referent power	5	3.32	.92	.92
Satisfaction	5	3.85	.80	.90
Outcome	1	3.82	.91	—
Org. commitment	1	3.99	.78	—
Motivation	1	4.13	.66	—
Procedural justice	1	3.76	.94	—

Table 2. Pearson Correlations between Variables

Variable	Neutrality	Trust	Standing	Accuracy	Expert power	Referent power	Outcomes	Procedural justice	Satisfaction	Commitment	Motivation
Neutrality	1.00	.80***	.71***	.71***	.63***	.66***	.53***	.76***	.72***	.31***	.19*
Trust		1.00	.78***	.78***	.64***	.69***	.62***	.78***	.76***	.27***	.23**
Standing			1.00	.65***	.60***	.64***	.54***	.68***	.75***	.33***	.19*
Accuracy				1.00	.62***	.71***	.57***	.73***	.74***	.37***	.26**
Expert power					1.00	.88***	.46***	.58***	.68***	.32***	.10
Referent power						1.00	.49***	.61***	.69***	.36***	.21**
Outcomes							1.00	.61***	.69***	.13	.28***
Procedural justice								1.00	.76***	.22**	.20**
Satisfaction									1.00	.33***	.22**
Commitment										1.00	.30***
Motivation											1.00

*$p < .05$
**$p < .01$
***$p < .001$

the relational model of procedural justice [28], and the accuracy criterion [26] demonstrated their value in promoting feedings of justice in subordinates who evaluated performance appraisal sessions. In an earlier study we had used a proxy variable to study the effect of accuracy. That proxy variable, frequency of PA session, covaried positively with the satisfaction with the quality of PA sessions [17]. In the present study we used a far more direct measure of accuracy. This direct measure correlated very strongly with the perceived procedural justice ($r = .73$, $p < .001$), and, as can be seen in Table 1, the correlation of accuracy (direct measure) with satisfaction with PA sessions was very high too ($r = .74$, $p < .001$). Actually, the correlation of accuracy with satisfaction was higher in the present study than in our former study, where the proxy measure had correlated $r = .31$ ($p < .01$) with satisfaction.

Hypothesis 2 was also supported. The better the outcome of the PA session was, the more fair the procedure had been, according to the employees. This is a very interesting result, since it demonstrates that outcomes really matter, even when people evaluate the fairness of procedures instead of the fairness of distributions. Outcomes can be used to redress unfairness caused by procedures; likewise, procedures can be used to overcome an initial unfair distribution of outcomes [37-39]. Of course, it's always better to strive for procedural and distributive justice at the same time. The importance of outcomes points to the conclusion that it is perfectly possible for people to be motivated by two social laws that seem to be incompatible with each other at first sight. The first law is that people are motivated by selfishness, and therefore will strive for a maximum number of outcomes. The second law is that people are motivated by considerations of fairness. Apparently (but this is no surprise), mental mechanisms can be very complex.

Hypotheses 3a-b were supported, as can be seen in Table 2. Expert power and referent power correlated positively with procedural justice of PA sessions: $r = .58$ ($p < .001$), respectively, $r = .61$ ($p < .001$). Feelings of (procedural) fairness can be enhanced by supervisors who have personal power bases at their disposal. This is an important finding. The implication is clear. Employees accept judgments and appraisals from supervisors with expert knowledge and from supervisors who have "charismatic" personality characteristics. Performance appraisal systems are used frequently in organizations, and for many reasons, as was described in the introduction. But to get the best results with PA systems, it is not sufficient to pay attention to procedural criteria. The supervisors responsible for evaluating their subordinates in PA sessions preferably should score high on personal bases of power.

All predictors of perceived procedural justice correlated more or less strongly with one another (see Table 2). Therefore, the high correlation of a predictor with the perceived justice of a PA session can partly be explained by the correlations with all other relevant predictors. It is possible to remove this "common" part to study the "unique" contribution of a predictor, i.e., the contribution of a particular

predictor to the perception of procedural justice that cannot be explained by the common ground that this predictor shares with the other predictors. Multiple regression analysis was used to get more insight into the unique contributions of all predictor variables. The results of the multiple regression analysis (method: enter) are presented in Table 3.

Neutrality, trust, accuracy, and outcomes pop up as the variables with the highest unique contributions to the evaluation of procedural fairness. Together, these four predictors explain 71 percent of the variance of procedural justice.

Combining all seven predictors in one multiple regression analysis resulted in nonsignificant regression weights for expert power, referent power, and the "standing" criterion. To prevent misunderstandings, it should be stressed that this does *not* mean that these variables are not really important. When the intention of researchers is to explain as much variance as possible with the smallest number of predictors, the multiple regression method does a very good job. Or, stated differently, multiple regression analysis results in a parsimonious statistical model of reality. However, in real life predictors often *are* correlated with one another, and they are not independent from each other as is "artificially" the case in multiple regression analysis, where the predictors are made to correlate zero with one another. To give an example: In the real world it would be very strange for the "standing" criterion of procedural justice to have no correlation at all with the criteria of trust and neutrality.

Finally, the results of the present study supported hypotheses 4a-c. Perceived procedural justice of PA sessions correlated positively with a) subordinates' satisfaction with the PA session, b) organizational commitment, and c) the motivation of subordinates to perform well. The strongest correlation was found with satisfaction ($r = .76$, $p < .001$); correlations between procedural justice and commitment, respectively motivation, though significant, were lower

Table 3. Summary of Multiple Regression Analysis Results

Variable	β	*t*-Value	Significant *t*-value
Neutrality	.33	4.495	.000
Trust	.24	2.579	.011
Standing	.07	.937	N.S.
Accuracy	.20	2.684	.008
Expert power	.05	.559	N.S.
Referent power	–.08	–.828	N.S.
Outcomes	.15	2.740	.007

N.S. = not significant.

(.22, $p < .01$ and .20, $p < .01$). This difference in strength of correlations can be explained in two ways. First, there is a rather high "correspondence" between the measures of satisfaction with PA session and justice of PA session [47]. Both satisfaction and procedural justice are connected to the same entity: PA sessions, while the distance to PA sessions is longer for the measures of, respectively, commitment and motivation. The second explanation focuses on the number of items on each scale. In the present study, the satisfaction measure was obtained by combining five items, while motivation and commitment were "single item measures." Adding items to a test generally results in a more reliable measure (provided that these items correlate positively with the scale items), and higher reliability of scores on variables leads to an increase of correlation. Therefore, one may expect a higher correlation between procedural justice of PA sessions and the multiple-item measure of satisfaction than between procedural justice of PA sessions and single-item measures (all other things being equal).

According to the theoretical model presented in Figure 1, (perceived) procedural justice functions as a mediator variable between, on the one hand, justice criteria, personal power bases and outcomes, and on the other hand, the highly desirable dependent variables commitment, satisfaction, and motivation. A mediator variable meets three conditions: a) variations in the independent variable significantly account for variations in the mediator; b) variations in the mediator significantly account for variations in the dependent variable; and c) a previously significant path between independent variable and dependent variable either disappears (perfect mediation) or significantly decreases (partial mediation) when the causal paths between, respectively, independent variable and mediator, and between mediator and dependent variable are controlled [48]. Each mediational model with three variables (independent variable or predictor; mediator; dependent variable or "outcome variable") can be tested by estimating three regression equations. Since most dependent variables in real life situations have multiple causes, it is often found that mediators significantly decrease the strength of direct paths, but do not eliminate the direct effects of independent variables on outcomes altogether. And this partial mediation is exactly what we found in the present study for the majority of the relations.

CONCLUSIONS

Our hypotheses were all confirmed. The model that was developed out of the procedural justice literature seems to be a fruitful one. In particular, criteria from the relational model of procedural justice may contribute to positive perceptions of PA sessions by subordinates. But this is only a part of the story, for outcomes play an important role, too. Moreover, perceptions of procedural justice are enhanced when the supervisors score high on personal power bases: expert power and referent power.

Organizations may profit from these findings by designing PA systems and PA sessions that meet the criteria of procedural justice and that offer desirable outcomes. Organizations should also pay attention to the selection of supervisors, and promotions to higher positions in the organizational hierarchy preferably should be based at least partly on the personal power bases of candidates and applicants for these positions. The results of such fair PA systems and of the PA sessions guided by attractive supervisors who rely on personal power bases are very positive. Moreover, one may speak of a win-win situation: Both the organization and the employees will profit strongly.

As was discussed in the section on results, our research points to the conclusion that people are motivated by two social "laws": selfishness and considerations of fairness. We now may add the observation that organizations which use fair PA procedures not only get good, valuable information, but at the same time succeed in promoting feelings of satisfaction, commitment and motivation of their employees. Fairness pays!

ENDNOTES

1. J. N. Cleveland, K. R. Murphy, and R. E. Williams, Multiple Uses of Performance Appraisal: Prevalence and Correlates, *Journal of Applied Psychology*, *74*, pp. 130-135, 1989.
2. T. A. Judge and G. R. Ferris, Social Context of Performance Evaluation Decisions, *Academy of Management Journal*, *36*, pp. 80-105, 1993.
3. T. J. Maurer and B. A. Tarulli, Acceptance of Peer/Upward Performance Appraisal Systems: Role of Work Context Factors and Beliefs about Managers' Development Capability, *Human Resource Management*, *35/2*, pp. 217-241, 1996.
4. B. D. Cawley, L. M. Keeping, and P.E. Levy, Participation in the Performance Appraisal Process and Employee Reactions: A Meta-analytic Review of Field Investigations, *Journal of Applied Psychology*, *83*, pp. 615-633, 1998.
5. W. F. Cascio, *Applied Psychology in Personnel Management* (3rd ed.), (Englewood Cliffs, N.J.: Prentice-Hall, 1987).
6. R. M. Guion, *Personnel Testing* (New York: McGraw-Hill, 1965).
7. M. M. Harris and J. Schaubroeck, A Meta-analysis of Self-supervisor, Self-peer, and Peer-supervisor Ratings, *Personnel Psychology*, *38*, pp. 43-62, 1988.
8. P. M. Muchinsky, *Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology* (3rd ed.) (Chicago, Ill.: Dorsey Press, 1990).
9. G. P. Latham and K. N. Wexley, *Increasing Productivity through Performance Appraisal* (Reading, Mass.: Addison-Wesley, 1981).
10. G. J. Greguras and C. Robie, A New Look at Within-Source Interrater Reliability of 360-Degree Feedback Ratings, *Journal of Applied Psychology*, *83*, pp. 960-968, 1998.
11. R. D. S. Smither, *The Psychology of Work and Human Performance* (2nd ed.) (New York: Harper-Collins, 1994).
12. S. W. Gilliland, The Perceived Fairness of Selection Systems: An Organizational Justice Perspective, *Academy of Management Review*, *18*, pp. 694-734, 1993.

13. S. W. Gilliland, Effects of Procedural and Distributive Justice on Reactions to a Selection System, *Journal of Applied Psychology*, *79*, pp. 691-701, 1994.
14. D. D. Steiner and S. W. Gilliland, Fairness Reactions to Personnel Selection Techniques in France and the United States, *Journal of Applied Psychology*, *81/2*, pp. 134-141, 1996.
15. D. D. Steiner and S. W. Gilliland, Procedural Justice in Personnel Selection: International and Cross-Cultural Perspectives, *International Journal of Selection and Assessment*, *9*, nrs. 1/2, pp. 124-137, 2001.
16. S. K. Ho, *TQM, An Integrated Approach—Implementing Total Quality Through Japanese 5-S and ISO 9000* (London, UK: Kogan Page, 1995).
17. H. Steensma and L. Otto, Perception of Performance Appraisal by Employees and Supervisors: Self-Serving Bias and Procedural Justice, *Journal of Collective Negotiations in the Public Sector*, *29/4*, pp. 307-319, 2000.
18. J. S. Adams, Inequity in Social Exchange, in L. Berkowitz (ed.), *Advances in Experimental Social Psychology, Vol. 2* (pp. 267-299) (New York: Academic Press, 1965).
19. L. Berkowitz and E. Walster (eds.), *Equity Theory: Toward a General Theory of Social Interaction. Advances in Experimental Social Psychology, whole Vol. 9* (New York: Academic Press, 1976).
20. G. Mikula (ed.), *Justice and Social Interaction* (Bern: Huber, 1980).
21. E. Walster, G. W. Walster, and E. Berscheid, in collaboration with W. Austin, J. Traupmann, and M. K. Utne, *Equity, Theory and Research* (Boston, Mass.: Allyn and Bacon, 1978).
22. T. Schwinger, Just Allocation of Goods: Decisions Among Three Principles, in G. Mikula (ed.), *Justice and Social Interaction* (pp. 95-125) (Bern: Huber, 1980).
23. J. W. Thibaut and L. Walker, *Procedural Justice: A Psychological Analysis* (Hillsdale, N.J.: Erlbaum, 1975).
24. J. W. Thibaut and L. Walker, A Theory of Procedure, *California Law Review*, *66*, pp. 541-566, 1978.
25. R. Folger, Distributive and Procedural Justice: Combined Impact of "Voice" and Improvement on Experienced Inequity, *Journal of Personality and Social Psychology*, *35*, pp. 108-119, 1977.
26. G. S. Leventhal, What Should Be Done with Equity Theory? New Approaches to the Study of Fairness in Social Relationships, in K. Gergen, M. Greenberg, and R. Willis (eds.), *Social Exchange, Advances in Theory and Research* (pp. 27-55) (New York: Plenum Press, 1980).
27. E. A. Lind and T. R. Tyler, *The Social Psychology of Procedural Justice* (New York: Plenum Press, 1988).
28. T. R. Tyler and E. A. Lind, A Relational Model of Authority in Groups, in M. Zanna (ed.), *Advances in Experimental Social Psychology*, *Vol 25* (pp. 115-191) (San Diego, Calif.: Academic Press, 1992).
29. R. J. Bies and J. S. Moag, Interactional Justice: Communication Criteria of Fairness, in R. J. Lewicki, B. H. Sheppard, and M. H. Bazerman (eds.), *Research on Negotiation in Organizations*, *Vol. 1* (pp. 43-55) (Greenwich, Conn.: JAI Press, 1986).
30. J. M. Brett, Commentary on Procedural Justice Papers, in R. J. Lewicki, B. H. Sheppard, and M. H. Bazerman (eds.), *Research on Negotiation in Organizations*, *Vol. 1* (pp. 81-90) (Greenwich, Conn.: JAI Press, 1986).

31. A. Fokker and H. Steensma, Procesrechtvaardigheid van Organisatieveranderingen, in H. Steensma (ed.), *Trends in Organisatieverandering* (pp. 124-145) (Utrecht: Lemma, 1999).
32. J. Greenberg, Determinants of Perceived Fairness of Performance Evaluation, *Journal of Applied Psychology*, *71*, pp. 340-342, 1986.
33. R. Kanfer, J. Sawyer, P. C. Earley, and E. A. Lind, Fairness and Participation in Evaluation Procedures: Effects on Task Attitudes and Performance, *Social Justice Research*, *1*, pp. 235-249, 1987.
34. R. Folger, M. A. Konovski, and R. Cropanzano, A Due Process Metaphor for Performance Appraisal, in B. M. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior* (pp. 129-177) (Greenwich, Conn.: JAI Press, 1992).
35. M.S. Taylor, K. B. Tracy, M. K. Renard, J. K. Harrison, and S. J. Carroll, Due Process in Performance Appraisal: A Quasi-Experiment in Procedural Justice, *Administrative Science Quarterly*, *40*, pp. 495-523, 1995.
36. R. Cropanzano and M. L. Randall, Advance Notice as a Means of Reducing Relative Deprivation, *Social Justice Research*, *8/2*, pp. 217-238, 1995.
37. R. Folger, D. Rosenfield, J. Grave, and L. Corkran, Effects of "Voice" and Peer Opinions on Responses to Inequity, *Journal of Personality and Social Psychology*, *37*, pp. 2253-2261, 1979.
38. K. van den Bos, R. Vermunt, and H. Wilke, The Relationship Between Procedural and Distributive Justice: What Is Fair Depends More on What Comes First than on What Comes Next, *Journal of Personality and Social Psychology*, *72*, pp. 95-104, 1997.
39. R. Vermunt and H. Steensma, Stress and Justice in Organizations: An Exploration into Justice Processes with the Aim to Find Mechanisms to Reduce Stress, in R. Cropanzano (ed.), *Justice in the Workplace, From Theory to Practice*, *Vol. 2* (pp. 27-48) (Mahwah, N.J.: Lawrence Erlbaum, 2001).
40. J. R. P. French and B. H. Raven, The Bases of Social Power, in D. Cartwright (ed.), *Studies in Social Power* (pp. 150-167) (Ann Arbor, Mich.: Institute for Social Research, 1959).
41. B. H. Raven, A Power Interaction Model of Interpersonal Influence: French and Raven Thirty Years Later*, Journal of Behavior and Personality*, *7*, pp. 217-244, 1992.
42. L. Atwater and F. J. Yammarino, Bases of Power in Relation to Leader Behavior: A Field Investigation, *Journal of Business and Psychology*, *11*, pp. 3-22, 1996.
43. G. Yukl and C. M. Falbe, The Importance of Different Power Sources in Downward and Lateral Relations, *Journal of Applied Psychology*, *76*, pp. 416-423, 1991.
44. H. Steensma and F. van Milligen, Bases of Power, Procedural Justice, and Outcomes of Mergers: The Push-and-Pull Factors of Influence Tactics, *Journal of Collective Negotiations in the Public Sector*, *30*/2, pp. 113-134, 2003.
45. P. de Heus, R. van der Leeden, and B. Gazendam, *Toegepaste Data-Analyse* [Applied Data Analysis] (Utrecht: Lemma, 1995).
46. J. C. Nunnally, *Psychometric Theory* (2nd ed.) (New York: McGraw-Hill, 1978).
47. I. Ajzen and M. Fishbein, Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research, *Psychological Bulletin*, *84*, pp. 888-918, 1977.

48. R. M. Baron and D. A. Kenny, The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations, *Journal of Personality and Social Psychology*, *51*, pp. 1173-1182, 1986.

Direct reprint requests to:

Dr. Herman Steensma
Department of Social and Organizational Psychology
Leiden University
P.O. Box 9555
2300 RB Leiden
The Netherlands
e-mail: steensma@fsw.leiden.univ.nl