PERCEPTION OF PERFORMANCE APPRAISAL BY EMPLOYEES AND SUPERVISORS: SELF-SERVING BIAS AND PROCEDURAL JUSTICE

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ABSTRACT

Employees (N = 78) and supervisors (N = 33) completed a questionnaire to evaluate Performance Appraisal (PA) sessions. Hypotheses derived from procedural justice theory were confirmed. Employees' satisfaction with PA sessions covaried with "voice" and with receiving adequate information beforehand. Good conversational techniques of supervisors enhanced satisfaction with PA. Data also demonstrated the predicted self-serving bias of supervisors. Supervisors perceived that they used more participative leadership and had better conversational techniques than the subordinates perceived. Supervisors also had a more positive perception of the number of topics that were discussed in PA sessions.

Performance appraisal (PA) systems are frequently used in organizations for a variety of reasons [1-3]. These systems belong to the most important human resource management instruments in organizations. Good PA systems 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’ needs, such as the need for (performance) feedback. As for the effectiveness of decisions, PA is frequently used to allocate merit pay and to justify promotions. Assessment of training needs is one of the goals frequently mentioned. And there’s even more: Performance documentation may be used...
for legal purposes. In general, it is expected that the use of a good PA system has only positive effects: better decisions, higher satisfaction and motivation among the workers, a stronger commitment to the organization, and finally—and not surprisingly, with all the outcomes mentioned so far—higher organizational effectiveness. But this list of positive effects raises an important question: What are the characteristics of a “good” PA system?

There are several ways to answer this question. The traditional way is to use techniques and methods developed by experts in the field of psychological testing. It is obvious that psychometric experts have a lot to offer. However, that’s not enough. Qualitative criteria such as subordinates’ satisfaction with PA systems and the factors contributing to these reactions of subordinates should not be neglected. Satisfaction is seen as one of the most important criteria of Total Quality Management [4]. So here we have a new question: What are the determinants of satisfaction with PA?

To answer this question, let’s take a closer look at what’s happening in a typical PA session. A supervisor is talking with a subordinate about past performance, performance to be expected in the near future, and several other topics, all having to do with the workplace, the worker, and the organization. Although some systems are not formally connected with decisions on salary increase, most employees perceive that performance appraisals somehow may influence the allocation of outcomes that are important to them (and pay is only one of these). It is well known from the literature that satisfaction of people in situations where outcomes are allocated is heavily influenced by the procedures used in such situations. To be more exact, procedural justice heavily influences the satisfaction of people, the PA systems that use fair procedures should covary with high satisfaction among employees [see, for example, 5-8].

What, then, are the criteria of procedural justice? To answer this question, a brief history of procedural justice research is presented.

A BRIEF HISTORY OF PROCEDURAL JUSTICE RESEARCH

Thibaut and Walker were the first to demonstrate that procedures used to arrive at a decision have profound effects on fairness judgments [9, 10]. Since the publication of their studies, many researchers have addressed issues of procedural justice. A number of models have been advanced to explain the procedural justice phenomenon. Some researchers adhere to the “instrumentality” view: the better a procedure serves your interests, the more fair it is perceived to be. So, the key characteristic in this case is the distribution of control. Thibaut and Walker advanced an instrumental model of procedural justice, in which a distinction is made between two types of control. Decision control refers to control over the actual decisions that are made. Process control is a somewhat “weaker” form of control, and refers to control over the presentation of evidence (the first studies...
were done in legal settings). Process control is often equaled with the concept of “voice”: People have a say, they are allowed to present their view on reality without having the right to take the formal decision [11]. According to Thibaut and Walker, people want control—either decision control or process control—because control is seen as instrumental to attaining the outcomes they desire [11].

A highly practical model of procedural justice was presented by Leventhal [12]. Leventhal identified six important procedural justice rules, to be used in the context of outcome allocations. The first criterion is *consistency*, i.e., allocation procedures must be applied consistently, both 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 good information. The criterion of *correctability* implies the existence of opportunities to appeal and 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 and the allocation rules must be compatible with high ethical standards. Follow these rules, Leventhal says, and the final allocation of outcomes will advance the goals of the group [12].

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 [13, 14]. This model does not focus on instrumentality, but on relationship issues and especially on perceptions of the relationship between authorities and those group members who are subject to decisions made by authorities. This relational model suggests that procedures are evaluated for what they seem to indicate about how one is viewed by the group or the authority using the procedures. Procedures have implications for feelings of self-worth and for beliefs about the fair and proper functioning of the group and/or the authority. To the extent that a procedure is seen as indicating a positive relationship between the person and his 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. 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). Authorities that act ethically and demonstrate concern for needs of group members and consideration of 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, full member of the group and such behavior is seen as fair. Neutrality involves the absence of bias or prejudice, neutral decision making that is based on objective facts and honesty [13, 14].

Apparently, the way you treat persons to whom outcomes are to be allocated is categorized by researchers such as Tyler, Lind (and others) as a form of procedural
justice. Some researchers distinguish explicitly between procedural (in)justice and interactional (in)justice [15, 16].

The experience of procedural fairness may be influenced by many aspects, and one of the most important aspects has not been mentioned so far: Giving adequate information to people. It is a well-known fact in organizational change projects that keeping people well-informed is a necessary condition for the successful implementation of changes [17]. Still, 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 studies—in particular, in studies that focused on performance appraisal [5-8, 18].

In this brief history of procedural justice research, we have described and detailed several standards of procedural justice. It should be clear that departures from such standards lead to major undesirable situations and especially to strong feelings of injustice. The most likely consequences of such departures are dissatisfaction, lack of motivation, and low commitment to the organization, the group, and the authority.

In the present study we focused on satisfaction. The general hypothesis is, of course, that departures from procedural justice standards lead to lower satisfaction with performance appraisal systems. However, there are many standards of procedural justice, and it was impossible to study all those aspects. Our study was done to evaluate a recent modification of a PA system in a large Dutch organization, and the legitimate desires of managers and the Works’ Council functioned as constraints on the range of theoretical issues that could be combined in one research project without creating problems of acceptance by supervisors and employees. So, we had to make choices. Which criteria should be included in the study? The process control effect is probably the most widely replicated finding in all studies published so far [14]. Therefore, it seemed wise to select the aspect of “voice.” In PA sessions more voice is given to employees by supervisors with a participative leadership style. Note that, actually, this implies more or less the combination of voice with some form of interactional justice. Therefore, our first hypothesis was:

Hypothesis 1: The more participative the leadership style of supervisors is during PA sessions, the higher their subordinates’ satisfaction with the quality of PA will be.

For all PA sessions, it is true that it is not always easy to discuss some subjects, even though they are very relevant. But some supervisors seem to be rather successful in handling difficult topics of conversation, while other supervisors are afraid of discussing such topics. But one cannot neglect such difficult topics without lowering the quality of the PA. So, supervisors with good conversational techniques and social skills in general will do a better job when doing PAs than do the supervisors with fewer conversational skills. Hence, our second hypothesis:
Hypothesis 2: The better the (perceived) conversational techniques of their supervisor are, the more satisfied with the quality of PA subordinates will be.

In the organization where we did our research, not all employees had received information about the PA system beforehand. Since timely, adequate notice is an important aspect of procedural justice, we may hypothesize:

Hypothesis 3: The satisfaction with the quality of the PA is higher for employees who had received information about PA beforehand than for employees who were not informed beforehand.

We could not gather data on the accuracy of the information exchanged between a supervisor and his subordinate during PA sessions. However, a proxy variable may be used: the frequency of PA sessions. Brief, one may reason as follows. To be well-informed, PA sessions should be held regularly, at least once or twice a year. Regularity is a sign that PA is treated seriously, is seen as important by management, and therefore will be done in a technically good, careful way. Also, feedback should be timely to be effective, and with very large time intervals between two sessions, feedback will tend to be both too late and too inaccurate. Therefore, though admittedly the frequency with which PA sessions are held is only a rough proxy, the following hypothesis was believed to be true:

Hypothesis 4: Frequency of PA covaries positively with the satisfaction with the quality of PA.

Up to now, we have focused on the satisfaction and perceptions of employees. But what about the perceptions and satisfaction of their supervisors? The differences between perceptions and satisfaction of supervisors and their subordinates are almost always neglected in the research on PA. Our study was designed to shed more light on this problem. First, we will discuss some findings of attribution researchers. Subsequently, these findings will be used to derive some hypotheses about perceptual and attributional differences between supervisors and subordinates.

ATTRIBUTIONS, PERCEPTIONS, AND DIFFERENCES BETWEEN GROUPS

Both in organizations and in society, it is important to understand why and how people will react to events. This understanding is enhanced by knowing how and why causes are attributed to events. People may be viewed as information processors. Information processing leads to the formation of causal explanations. These attributions are the basis for determining attitudes and behavioral responses to the events and to the persons who are involved in these events. However, information processing is influenced and moderated by several
factors [19]. Almost all perceptions are partly cognitive “constructions” [20]. The role of cognitive construction grows stronger in cases where information is ambiguous.

Attributional processes are moderated by a self-serving bias: People have a tendency to take credit for good outcomes, but they deny responsibility for negative events and outcomes [21]. This attributional bias has been observed also at the aggregate level of perceived characteristics of groups, leading to the phenomenon of in-group favoritism [22, 23]. Often, the perception of reality amounts to a “social construction” [24]. Social constructions differ from one group to another, and may create a high potential for social conflicts between those groups, particularly because the effects of the self-serving bias are often very visible.

Now let’s take a closer look at the two parties playing a role in PA: employees and their supervisors. In organizations, managers and supervisors are held responsible for the work environment and for the quality of discussions during formal PA sessions. In organizations where PA is part of a more general human resource management policy, the participative leadership style is in general seen as desirable and valuable, in particular in PA sessions. Therefore, combining the self-serving bias principle with the principle of the social construction of reality, our hypothesis is:

**Hypothesis 5:** Employees perceive the leadership style of supervisors during PA sessions as less participative than do the supervisors.

The quality of a PA session is also partly dependent on the communicative, social skills of the supervisor, and in particular on his/her conversational techniques. Hence:

**Hypothesis 6:** Employees perceive the conversational techniques applied by their supervisor during PA sessions as less successful than do the supervisors.

The new PA system in the organization where this study was done was a system that, formally, was not connected with decisions on salary increase. During a task performance evaluation and appraisal session, a subordinate and his/her direct supervisor should discuss several topics. It was expected by top management that supervisors should discuss the following topics with their subordinates: reasons for PA; agenda of PA session; content of job; performance (past); goal setting and future performance; cooperation with colleagues of subordinate; cooperation with supervisor; leadership style and performance of supervisor as perceived by subordinate; work environment; opportunities for growth and promotion; job demands (workload); and, finally, wishes for and possibilities of training and development. As supervisors are responsible for organizing and “running” the PA session, they have a personal interest in doing a “good job,” i.e., discussing all
those topics with their subordinates, even though this may be somewhat painful at times. Assuming that the self-serving bias principle will color the perceptions of supervisors, we may formulate Hypothesis 7 as follows:

Hypothesis 7: Supervisors perceive that more topics of PA have been discussed during PA sessions than do the subordinates.

So far, the self-serving bias hypotheses and hypotheses one through four have been derived from theory. But we don’t want to exclude pure common sense. Common sense permits us to qualify (or specify) out first two hypotheses somewhat. It was predicted that participative leadership covaries positively with subordinates’ satisfaction. But what about the satisfaction of the supervisors? “Voice” is something that is more or less given to subordinates by their supervisors. So, voice enlarges the sum of outcomes for subordinates, but perhaps giving voice to others is not very satisfying to the supervisors. This implies:

Hypothesis 8: That the correlation between participative leadership and satisfaction with the quality of PA is lower (or even absent) in the group of supervisors compared with the group of subordinates.

As for the relationship between satisfaction and conversational techniques, it is not simple to predict the relative strength of the correlation in the group of supervisors compared with the group of subordinates. Both supervisors and subordinates may profit much from good social and conversational skills of the supervisor during PA sessions. Therefore, it seems best to explore this empirically.

METHODOLOGY

Participants

A stratified sample was drawn from supervisors and their subordinates in a large Dutch organization. From the 50 supervisors who were approached, 33 agreed to participate (response rate: 66 percent), while 78 of 150 subordinates participated (52 percent). Most participants were men (subordinates: 82 percent; supervisors: 91 percent; these percentages reflect the organizational population rather well). There were no significant differences between men and women in their answers. Therefore, their data were combined.

The privacy rules of the organization excluded the possibility of matching data of a subordinate with data of his/her supervisor. Differences between supervisors and subordinates had to be studied at the aggregate level of the groups.

Questionnaires

Respondents had to fill out a questionnaire with items about PA. There were two versions: a questionnaire for supervisors and a questionnaire for
subordinates. However, where possible, items were identical. Some items were slightly different, to reflect the differing perspectives of supervisors and subordinates. For example, one of the items measuring conversational techniques reads as follows:

In a PA session I know how to come to the core of a problem (supervisor version);

In a PA session my supervisor knows how to come to the core of a problem (subordinate version).

Many items had a local, organization-specific character, and are of lesser relevance to the theoretical issues discussed in the present study. Therefore, (answers to) those items will not be presented here.

Variables

*Satisfaction with the quality of the PA sessions* was measured by the item:

In general, I am satisfied with the quality of the PA sessions. (five-point scale, from “strongly disagree” ... “strongly agree”)

*Participative leadership* was measured by seven items. A sample item reads as follows:

The PA session is characterized by a climate of equality. (five-point scale, from “strongly disagree” ... “strongly agree”) Scores were summed and divided by the number of items answered.

*Quality of conversational techniques* was measured by four items. Again, a 5-point scale was used from “strongly disagree” ... “strongly agree.” Scores were summed and the sumscore was divided by the number of items (for a sample item, see the section on Questionnaires).

*Topics.* The questionnaire presented the respondents with a list of topics that, in principle, could/should be discussed during PA sessions. Respondents had to tick yes or no to indicate whether a topic had been discussed in PA sessions.

*Adequate notice/adequate information.* Subordinates were asked to indicate whether they had received information on the PA system before they participated in the first PA session (yes-no item).

*Frequency.* Subordinates were asked to indicate how often they participated in PA sessions.

RESULTS AND DISCUSSION

The perception of subordinates that their supervisor demonstrates participative leadership during PA sessions correlates positively with their satisfaction with the quality of the performance appraisal sessions: \( r = .77 \). This is a highly significant
result \((p < .001)\) and implies support for our first hypothesis. Satisfaction with PA may indeed be improved significantly by giving workers a say ("voice"). The satisfaction of employees with PA quality also grows when supervisors are skilled in good conversational techniques: \(r = .75, p < .001\). So, Hypothesis 2 is strongly supported, too. Apparently, it is useful to apply good conversational techniques. This finding may be used in the design of new PA systems. Part of the design should be devoted to courses in participative leadership and conversational techniques during PA sessions; courses are to be followed by the supervisors who are responsible for the PA sessions.

Hypothesis 3 was supported. Employees \((N = 20)\) who had received information about the new PA system beforehand were more satisfied with the quality of the PA sessions than were those employees \((N = 49)\) who had not been informed \((t = 2.37; p < .02)\). Again, there is a lesson to be learned by designers of PA systems: adequate notice is essential, as was predicted by using the procedural justice theory.

The frequency with which PA sessions are held was used as a proxy variable for accuracy. As was predicted by Hypothesis 4, frequency correlates with subordinates’ satisfaction with the quality of PA sessions \((r = .31; p < .01)\). So, it seems best to hold PA sessions on a regular basis, even though one should not exaggerate things. Once or twice a year makes sense, but a very high frequency may lead to diminishing (or even negative) returns and outcomes.

Mean scores and standard deviations of the scores on the scale of participative leadership during PA sessions are presented in Table 1.

Table 1 supports Hypothesis 5. Supervisors clearly demonstrate a self-serving bias. They perceive and believe that they show a highly participative style of leadership. Participative leadership as perceived by the subordinates scores only slightly above the neutral level, however. Perceptions of communicative skills and conversational techniques show a similar picture. Again, while subordinates perceive the quality of the conversational techniques of their supervisors as close to neutral, the supervisors themselves perceive a much better score. This supports Hypothesis 6, of course.

Our third self-serving bias hypothesis focused on the topics to be discussed in the PA sessions. The relevant research data are summarized in Table 3.
Apparently, supervisors perceive that they approach the criteria for good PA sessions rather well. About 80 percent or more of all supervisors indicated they discussed the topics that—according to instructions of top management—should be discussed during PA sessions. However, employees had a less rosy perception: In all cases, for all topics, the percentage of yes (meaning the topic was discussed in session) responses was (far) lower in the group of employees. This is a statistically very significant result \( (p = .00024) \).

Taken together, the results of testing Hypotheses 5-7 point to the conclusion that reality, as perceived by people, is constructed partly by their social environment. Perception is somehow a construction, and this construction depends on the group or social category of which one is a member. In earlier studies, focusing on failing behavior [25], and attributions of responsibility for occupational accidents [26], we found experimental evidence for similar conclusions. There are several reasons why groups differ in their perceptions and attributions. Formal training, daily routine, and informal socialization may be important. However, as was predicted

<table>
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<tr>
<th>Mean Score</th>
<th>S.D.</th>
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<tbody>
<tr>
<td>Supervisors ((N = 32))</td>
<td>3.947</td>
</tr>
<tr>
<td>Subordinates ((N = 69))</td>
<td>3.167</td>
</tr>
</tbody>
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\* \(t = 4.56, df 99, p < .001\)

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<thead>
<tr>
<th>Employees ((N = 78))</th>
<th>Supervisors ((N = 33))</th>
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<tbody>
<tr>
<td>1. Reasons for PA</td>
<td>63</td>
</tr>
<tr>
<td>2. Agenda</td>
<td>60</td>
</tr>
<tr>
<td>3. Content of job</td>
<td>68</td>
</tr>
<tr>
<td>4. Performance</td>
<td>81</td>
</tr>
<tr>
<td>5. Goal setting/future performance</td>
<td>65</td>
</tr>
<tr>
<td>6. Cooperation with colleagues</td>
<td>72</td>
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<tr>
<td>7. Cooperation with supervisor</td>
<td>71</td>
</tr>
<tr>
<td>8. Quality/performance of supervisor</td>
<td>54</td>
</tr>
<tr>
<td>9. Work environment</td>
<td>73</td>
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<tr>
<td>10. Opportunities for growth/promotion</td>
<td>46</td>
</tr>
<tr>
<td>11. Job demands (workload)</td>
<td>64</td>
</tr>
<tr>
<td>12. Training and development</td>
<td>67</td>
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and supported by the data of our present study, self-serving bias can explain some of the results. We derived an ad hoc hypothesis on the basis of common-sense reasoning and Hypothesis 8 was strongly supported by the research data. The correlation between participative leadership during PA sessions and satisfaction with the quality of these sessions, as experienced by subordinates, was highly significant: \( r = .77 \) (\( p < .000 \)). But in the group of supervisors the relationship between participative leadership and satisfaction with experienced quality of PA sessions was totally absent: \( r = .01 \) (N.S.).

As for the relationship between satisfaction and conversational techniques of supervisors, there was an interesting between-groups difference. The correlation between the two variables was very strong in the group of subordinates (\( r = .75; p < .000 \)), while the relationship, though statistically significant, reached a more moderate level in the group of supervisors (\( r = .44; p < .01 \)). The difference in strength is significant (\( z \)-deviate = 2.24; \( p < .025 \)).

**CONCLUSION**

Our hypotheses were all confirmed. The perspective that was developed out of the procedural justice literature seems to be a fruitful one. In particular, the presentation of adequate information beforehand contributes to satisfaction with PA sessions and systems. And it is clear that giving voice to subordinates has a positive effect on their attitudes toward PA. This can’t be very surprising, though. A meta-analytic review of field investigations had already demonstrated the existence of a strong positive relationship between participation in the PA process and satisfaction with PA systems and sessions [3]. One may expect recently developed methods of PA (for example, the 360° feedback system) that give employees a say will be associated with benefits to both the organization and the employees. Good conversational techniques of supervisors were related both to employee satisfaction with PA and to the satisfaction of the supervisors. The implication is clear: Supervisors should hone their social and conversational skills. But no matter how skilled the supervisors are, and no matter how fair the procedures are, there always will be the problem of the social construction of reality. The present research demonstrates that large differences may exist between perceptions of supervisors and their subordinates. Perhaps this is the most important contribution of our study to the field of PA research. Since groups may differ in their social constructions of reality, conflicts may arise rather easily. The self-serving bias is a strong determinant of perceptions of people.

In all, our research points to the conclusion that two social laws are true at the same time. The first law is that perceptions and attitudes are colored by a self-serving bias. So, people are motivated by selfishness. At the same time, however, it cannot be denied that procedural justice is valued highly and will lead to satisfaction. So, people are also motivated by considerations of fairness.
The coexistence of two such conflicting laws deserves to be studied in more
detail—and that’s exactly what we intend to do in the near future.

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