

## How do people react to negative procedures? On the moderating role of authority's biased attitudes <sup>☆</sup>

Jan-Willem van Prooijen <sup>a,\*</sup>, Kees van den Bos <sup>b</sup>, E. Allan Lind <sup>c</sup>, Henk A.M. Wilke <sup>d</sup>

<sup>a</sup> Department of Social Psychology, Free University Amsterdam, Amsterdam, The Netherlands

<sup>b</sup> Department of Social and Organizational Psychology, Utrecht University, The Netherlands

<sup>c</sup> Fuqua School of Business, Duke University, USA

<sup>d</sup> Department of Social and Organizational Psychology, Leiden University, Leiden, The Netherlands

Received 17 July 2004; revised 18 July 2005

Available online 27 December 2005

### Abstract

The authors focus on the effects an authority's apparent inconsistency between persons on judgments of relational treatment and procedural justice following negative procedures (i.e., procedures that people commonly regard as unfair). In Experiment 1, participants responded most negatively following a procedure that denied them, but granted another participant, an opportunity to voice an opinion when the intergroup context raised suspicions of bias (i.e., when both the experimenter and another participant were outgroup members). In Experiment 2, participants responded most negatively when the experimenter had expressed biased attitudes in favor of another participant, but this effect occurred only following procedures that denied participants a voice opportunity. We conclude that authority's biased attitudes help people to make sense of negative procedure information.

© 2005 Elsevier Inc. All rights reserved.

**Keywords:** Procedural injustice; Biased attitudes; Authority relations

Social justice is a key factor for understanding human behavior. A substantial body of research shows that people are influenced profoundly by the extent to which they perceive social situations as fair or unfair: People display a variety of positive and prosocial behaviors when they believe that justice has been done and they respond rather negatively to perceptions of injustice (Folger, 1984; Folger & Cropanzano, 1998; Lind & Tyler, 1988; Tyler & Lind, 1992). One dimension of social justice that has particularly strong effects

on people's perceptions and behaviors is procedural justice, which is usually defined as the perceived fairness of decision-making procedures (for overviews, see, e.g., Brockner & Wiesenfeld, 1996; Cropanzano, Byrne, Bobocel, & Rupp, 2001; Cropanzano & Folger, 1991; Folger & Cropanzano, 1998; Lind & Tyler, 1988; Tyler & Lind, 1992; Van den Bos & Lind, 2002; Van Prooijen, Van den Bos, & Wilke, 2004a). For instance, perceived procedural justice has been shown to enhance evaluations of relations with authorities, increase willingness to accept decisions, and improve task performance (for overviews, see, e.g., Lind & Tyler, 1988; Tyler & Lind, 1992). Ever since the path-breaking work of Thibaut and Walker (1975), the importance of procedural justice has been demonstrated in many different social and organizational settings (e.g., Cropanzano et al., 2001; Folger & Cropanzano, 1998; Lind & Tyler, 1988; Tyler & Lind, 1992; Van den Bos & Lind, 2002).

One of the most frequently replicated effects in procedural justice research is the finding that people respond more positively to procedures that allow them an opportunity to

<sup>☆</sup> Parts of this research were supported by the Netherlands Organization for Scientific Research (the NWO) project number 575-31-015, the American Bar Foundation, National Science Foundation Grants SBR-96-96244 and SES-99-06771, and a fellowship of the Royal Netherlands Academy of Arts and Sciences awarded to Kees van den Bos. E. Allan Lind had a visiting appointment at the University of Auckland during part of the project. We thank Jessica E. Halgren for her assistance in collecting the data of Experiment 1, and Ilja van Beest and Kate Hudson for their useful comments on previous versions of this paper.

\* Corresponding author.

E-mail address: [jw.van.prooijen@psy.vu.nl](mailto:jw.van.prooijen@psy.vu.nl) (J.-W. van Prooijen).

voice their opinion than to procedures that do not allow them such an opportunity, a finding often referred to as the “voice effect” (Folger, 1977; Folger, Rosenfield, Grove, & Corkran, 1979). Being allowed an opportunity to voice one’s opinion has positive effects on peoples’ reactions, even if exercise of voice cannot influence the outcomes that people subsequently receive (e.g., Lind, Kanfer, & Earley, 1990; Tyler, 1987). In the current paper, we focus on two types of reactions that have been found to be influenced by voice opportunities: procedural justice judgments and relational treatment evaluations. A number of studies have demonstrated that people who are allowed an opportunity to voice their opinion tend to rate the procedure as more fair and, in addition, think the authority regards them more positively, compared with people who are not allowed voice (e.g., Brockner & Wiesenfeld, 1996; Folger et al., 1979; Lind et al., 1990; Lind & Tyler, 1988; Lind, Tyler, & Huo, 1997; Tyler & Lind, 1992; Van den Bos & Lind, 2002; Van den Bos, Wilke, & Lind, 1998; Van Prooijen, Van den Bos, & Wilke, 2002, 2004b, 2005).

Recently, we have argued that people are more sensitive to negative procedures (defined here as procedures that people usually evaluate as unfair, for example because the procedures deny them voice opportunities) than to positive procedures (defined here as procedures that people usually evaluate as fair, for example because the procedures allow them voice opportunities). In other words, negative procedures exert stronger negative effects than positive procedures exert positive effects (Van den Bos & Van Prooijen, 2001). This effect may be related to general principles in human decision making and person perception (cf. Baumeister, Bratlavsky, Finkenauer, & Vohs, 2001; Kahneman & Tversky, 1979; Kanouse & Hanson, 1972; Skowronski & Carlston, 1989) which, as several authors have pointed out, lead people to be more strongly affected by unjust than by just events (e.g., Folger, 1984; Folger & Cropanzano, 1998; see also Brockner & Wiesenfeld, 1996; Van den Bos, Vermunt, & Wilke, 1997; Van den Bos & Van Prooijen, 2001). Although this is not to say that people are unaffected by positive procedures, it does suggest that there is good reason to concentrate research and theory on the effects that negative procedures may have on individuals. This focus on negative procedures is the general aim of the current article.

### **Bias and negative procedures**

In the current paper, we study a specific social factor that may influence the effects of negative procedures on people: The extent to which an authority is perceived to be biased (Leventhal, 1980; Lind & Tyler, 1988). Biases in thoughts or actions of authorities can, of course, undermine any legitimacy in decision-making processes. People tend to associate a biased authority with procedural injustice, as suggested by various procedural justice theories (Lind & Tyler, 1988; Tyler & Blader, 2004; Tyler & Lind, 1992). Probably the most influential procedural justice theory that has addressed the relationship between bias and procedural injustice is the relational model of authority (Tyler & Lind,

1992). This model assumes that people attach importance to the way they are treated by group authorities, because procedural justice is informative about the extent to which people are valued and respected members of their group. According to this model, bias is closely related to procedural injustice, because poor procedural treatment implies negative attitudes (and often bias) on the part of the authority. Specifically, the model argues that if people are treated rudely by authorities, they may infer that the authority is biased, and this in turn will lead to negative evaluations of subsequent procedures (Tyler, 1994).

However, we argue here that authorities can be biased in a number of different ways and that these different types of biases can have differing effects on the psychology of procedural justice. One type of bias has been studied by De Cremer (2004), who focused on Leventhal’s (1980) bias suppression rule. This procedural rule dictates that authorities should base decisions on an open and complete assessment of the facts, to assure accurate judgments. In two studies, De Cremer (2004) manipulated an authority’s bias by suggesting that the authority either did or did not act predominantly out of self-interest (Experiment 1) and by suggesting that the authority either had or did not have a priori expectations about participant’s task performance that could influence subsequent task evaluations in the biased condition (Experiment 2). The bias manipulation was crossed with a manipulation of procedural accuracy: the procedures used to gather information had either full information-gathering capacity or a truncated information-gathering capacity. The results of the De Cremer studies showed that procedural fairness judgments were influenced by procedural accuracy when the authority was perceived as unbiased, but were unaffected by the accuracy of procedures when the authority was perceived as biased. Specifically, in the biased decision maker condition, both accurate (positive) and inaccurate (negative) procedures were rated procedurally unfair. De Cremer (2004) reasoned that people assume that a biased authority is not trustworthy, and as a consequence of this negative impression, any subsequent action of the authority—even using accurate procedures—is evaluated negatively. These results thus suggested that bias, when defined as violations of Leventhal’s bias suppression rule, is used as a diagnostic tool to interpret subsequent events: People distrust a self-interested authority even if he/she uses procedures that are apparently fair. Perhaps in a situation like that created by the biased authority in the De Cremer study, people reason that a self-interested authority may strategically use ostensibly fair procedures to eventually serve self-interest.

But further analysis suggests that authorities can be biased in other ways when they are taking decisions that are relevant to recipients. For example, authorities can also be biased in the sense that the decision-maker shows inappropriate favoritism for one recipient over another, for example, because of common group memberships, friendships, or similarities linking the decision-maker to the favored recipient. Leventhal (1980) referred to authority’s

preference of one recipient over another as *inconsistency between persons*. In the current research, we focus on social cues that suggest this sort of inconsistency between persons. We propose that it is important to investigate this type of bias, because the impact of cues that suggest inconsistency between persons and reactions to procedures may be psychologically different from the psychological effects that follow from events that are related to Leventhal's (1980) bias suppression rule. More specifically, we will argue here that there is both theoretical and empirical support for the proposition that social cues that suggest inconsistency between persons exert a more complex effect than do other types of biases on people's justice-based evaluations.

Theoretically, the argument for differing effects for different types of bias turns on assumptions that people might make about how pernicious each type of bias is. Given the strength of the "myth of self-interest" (Miller & Ratner, 1996, 1998), biases that emerge from the self-interest of the decision maker are likely to be seen as strong enough to directly subvert even apparently fair procedures, as was seen in the De Cremer (2004) studies. On the other hand, bias in the form of shared group membership or other affective connections between the decision maker and one of the parties to the decision may well be seen as less certain to subvert fair process. For example, it may be that people assume that an authority who prefers one individual over the other (because group membership or for some other reason) may nevertheless be able to be a fair and objective decision-maker. After all, we all have multiple group memberships and we often manage to transcend biases they may entail as we make decisions that affect members of different groups. Instead of forcing a *presumption* of unfairness as seems to happen with self-interest biases, social cues that suggest inconsistency between persons create only a *suspicion* of unfairness, a suspicion that can be rebutted if the authority acts against the potential bias or confirmed if the authority acts in such a way as to confirm the bias.

An empirical demonstration of a complex effect of inconsistency between persons on people's reactions to negative events can be found in a study by Lind and Lissak (1985). In this study, the participants were disputants in a simulated court trial. The participants played the role of members of a company that was accused of having cheated to win a cash prize. If the participants' company was found guilty by the judge, the participants would lose their (real) cash prize. In the unbiased condition, the judge and the lawyers did not seem to know each other. In the biased condition, however, the judge and the plaintiff's lawyer acted in a way that gave rise to the impression that they were friends outside the experiment. The results showed that a biased judge led participants to view the decision-making process to be unfair if the verdict was guilty, but not if the verdict was innocent. The effect of the verdict manipulation was much weaker in the unbiased condition. These results suggest that the authority's biased attitudes were not regarded procedurally unfair by itself, but rather, bias enhanced the

interpretation of subsequent negative events (i.e., the verdict "guilty").

## The current research

### *Theoretical contribution*

In the current research, we elaborate on the question how social cues suggesting that an authority may be inconsistent between persons influence people's reactions to negative decision-making procedures. The Lind and Lissak study shows how the effects of this sort can be quite complex, and that early study provides a good reason for continuing our investigation of social fairness and person-inconsistency bias. There are however additional reasons for investigating this issue further. In the years since Lind and Lissak conducted their study, researchers in both social justice and social identity have come to understand that feelings of fairness and issues of relationship and social identity are very closely connected (see, e.g., Lind and Tyler, 1988, Chapter 10; Lord & Brown, 2003, Chapters 3 and 7; Van Knippenberg and Hogg, 2003). How the psychology of perceived favoritism and perceived fairness plays out in intra-group and inter-group settings is an area of clear theoretical and practical importance, but one that is far from being well understood.

This said, our focus here on negative procedures conceptually advances Lind and Lissak's (1985) work in several important ways. More specifically, whereas Lind and Lissak focused on the effects of bias on people's reactions to outcome (un)favorability, we focus on the effects of bias on people's reactions to negative procedures. This is a meaningful contribution, because outcomes and procedures exert profoundly different effects on people's justice judgments (Thibaut & Walker, 1975). Much more directly than unfavorable outcomes, negative procedures have often been associated with perceptions of procedural injustice. In fact, in the literature "negative procedures" (such as no-voice procedures) are frequently treated as if they could be equated with "unfair procedures" (e.g., Lind & Tyler, 1988; Tyler & Lind, 1992). Indeed, procedural justice research has revealed that people often evaluate negative procedures as rather unfair in many social situations (e.g., Folger et al., 1979; Lind et al., 1990; Tyler, 1987; Van den Bos, 1999; Van den Bos & Van Prooijen, 2001). These findings might lead to the assumption that people are relatively confident when concluding that negative procedures were unfair and that relational treatment was low. If this would be the case, there would be little latitude for social cues that suggest that an authority is inconsistent between persons to further decrease people's relational treatment evaluations and procedural justice judgments. Contrary to this assumption, it has been noted that unfairness judgments can be influenced by various types of social cues (e.g., Folger et al., 1979). We therefore propose that it is not entirely clear for people how to respond to negative procedures, and that information about inconsistency between persons therefore can enhance the interpretation of negative procedures.

One basic line of reasoning underlying the research reported here is that in many social settings people do not know with any certainty why authorities choose specific decision-making procedures (cf. Van den Bos et al., 1998). For example, if an authority does not allow an individual an opportunity to voice his or her opinion about matters under consideration it may often be unclear *why* the authority refused to listen to the individual's views, leading the individual to engage in attributional processes (cf. Cohen, 1982; Lind & Lissak, 1985). Was the authority trying to save time, for example, or was he or she trying to suppress dissent to facilitate a personal bias? As a consequence, we would argue, it is often unclear to people how to respond to apparently negative procedures, because the perceiver feels unwilling to offer a definitive judgment solely on basis of whether the procedure seems at first glance to be fair or unfair. When social cues suggest that an authority is likely to be biased, in the sense of being inconsistent between persons, however, these cues can provide additional insight into the reasons the authority chose negative procedures, and thus help people to gauge how negative their own reactions should be. Given that attributions of bias contravene moral expectations of impartiality (Folger & Cropanzano, 1998), we propose that people experience an apparently unfair procedure as being more extremely unfair when the authority is perceived to have a biased attitude in favor of another individual. Information that the authority has a biased attitude in favor of another individual clarifies the interpretation of subsequent negative procedures, and prompts people toward more negative relational treatment evaluations and procedural justice judgments. To test this line of reasoning we examined in two experiments the moderating role that authority's biased attitudes may have in people's reactions to negative procedures.

### *Overview of Experiments 1 and 2*

In both the experiments that we report in the current paper we investigated the general hypothesis outlined above, but, to enhance the extent to which the paper can be generalized to multiple settings, in each experiment we did so from a somewhat different angle. Although in both experiments we operationalized authority's biased attitudes as cues that could imply inconsistency between persons (Leventhal, 1980), in Experiment 1 this operationalization was framed within an intergroup context: The experimenter did vs. did not share a group membership with the participant and with another (bogus) participant. We will reason below that particularly a situation where both the authority and the other participant are outgroup members may raise suspicions that the authority may favor the other participant, that is, may be inconsistent between persons. Furthermore, in Experiment 1 all participants were subjected to the same negative procedure: All participants received a no-voice procedure, and were informed that the other participant received a voice procedure. In Experiment 2, we

extended on Experiment 1 by operationalizing inconsistency between persons more directly: Participants received explicit information that the experimenter favored one participant over the other. Furthermore, to investigate whether bias influences reactions to negative, and not to positive procedures, in Experiment 2 we manipulated whether or not participants were granted or denied the opportunity to voice their opinions. As the main dependent variable, in Experiment 1 we only focused on people's relational treatment evaluations in response to negative procedures. To test whether or not supportive evidence for our general hypothesis could be found on different types of reactions, in Experiment 2 we again measured relational treatment evaluations, but additionally also concentrated on people's procedural justice judgments. Using two somewhat different methodologies to test the same general hypothesis allowed us to establish the robustness of the findings.

### **Experiment 1**

Our first experiment was designed to test our line of reasoning in an intergroup context (cf. Huo, Smith, Tyler, & Lind, 1996; Smith & Tyler, 1997; Smith, Tyler, Huo, Ortiz, & Lind, 1998; Van Prooijen, Van den Bos, & Wilke, 2004b, 2005). More specifically, the experiment crossed a manipulation of whether the experimenter was said to be affiliated with the same or a different university as the participants with a manipulation of whether another participant in the session was said to be affiliated with the participant's university or the other university. All participants were subsequently subjected to the same negative procedure: All were informed that they would not be allowed an opportunity to voice their opinion and that the other participant was allowed such an opportunity (cf. Van den Bos & Lind, 2001). With our first experiment we thus focused on situations where an authority may be inconsistent between persons because of varying group memberships. That is, the authority might have a biased attitude because both the authority and the other participant are members of the same outgroup, relative to the perceiver. As a consequence, the authority may treat one individual more fairly than another. This situation that we focus on in Experiment 1 corresponds to a particular type of inconsistency bias that has been labeled "moral exclusion" by Opatow (1990). Opatow argued that social structures such as group memberships may form psychological boundaries across which general principles of fairness do not apply (Opatow referred to this as the scope of justice). As a consequence, people may be treated less fairly than others if they are outside the boundaries of these group memberships. The construct of moral exclusion is thus a natural focus in any study of bias in an intergroup context by suggesting that existing intergroup boundaries may result in unfair treatment.

We propose that in situations where both the experimenter and another participant are outgroup members, people may be more aware of the implications of a negative

procedure since in such situations differential applications of a negative procedure might imply that one is morally excluded (cf. Opatow, 1990). Because such selective group-based exclusion of fairness violates basic moral principles (Folger & Cropanzano, 1998), this might provoke stronger effects for negative procedures. We expected therefore that, in the experimental set-up described above, participants would show stronger negative reactions to negative procedures when they receive the procedure from an outgroup experimenter and when a more positive procedure is given to an outgroup other participant than would be the case if either the experimenter or the other (favored) participant were an ingroup member (Hypothesis 1).

Besides the above-mentioned reasons, we think it is interesting to test this hypothesis because it runs counter to the predictions of some theoretical analyses. Our hypothesis predicted that participants would be *more* strongly affected by negative procedures in conditions where the experimenter is an outgroup member than in conditions where the experimenter is an ingroup member. However, based on the relational model it can alternatively be argued that, because of social identity motives, ingroup members are more important to people than outgroup members because treatment by ingroup members are more informative about the extent to which the perceiver is valued as a group member (cf. Smith et al., 1998; Tyler & Lind, 1992). Following this logic, one would expect that people would be affected more by negative procedures in an ingroup context than in an outgroup context. As an alternative, therefore, one could hypothesize that participants would be more affected by negative procedures if they experience procedural inconsistency involving an ingroup experimenter and an ingroup other participant than if they confronted inconsistency involving an outgroup experimenter or an outgroup other participant (Hypothesis 1<sub>alt</sub>).

Relational treatment evaluations (i.e., the extent to which people believe that the authority regards them positively or negatively) are frequently used as dependent variables when people's reactions to procedures are investigated in an intergroup context (see, e.g., Huo et al., 1996; Lind & Tyler, 1988; Smith & Tyler, 1997; Smith et al., 1998; Ståhl, Van Prooijen, & Vermunt, 2004). Relational treatment evaluations tend to be strongly related to procedural justice judgments (Huo et al., 1996). The dependent variables in Experiment 1 consisted of two typically assessed relational treatment evaluations: the extent to which individuals tend to think the authority trusts them and the extent to which they believe the authority has respect for them (Tyler & Lind, 1992).

## Method

### Participants and design

One hundred and four students at Leiden University (77 women and 27 men) were randomly assigned to one of the conditions of the 2 (experimenter's categorization: ingroup vs. outgroup) × 2 (other participant's categorization:

ingroup vs. outgroup) factorial design. This design was balanced with 26 participants assigned to each of the four experimental conditions. The students participated in our experiment and answered the questions that constituted the dependent variables and the manipulation checks before or after participating in other, unrelated experiments. The experiments lasted a total of 1 h, and participants were paid 10 Dutch guilders for their participation in these experiments (1 Dutch guilder equaled approximately \$ 0.50 US at the time the present studies were conducted).

### Experimental procedure

The participants were invited to the laboratory to participate in research on how people perform tasks. On arrival at the laboratory, participants were asked to wait for the other participants in their session and for the scheduled start time of the experiment. Participants were asked whether they took classes at Erasmus University Rotterdam, or if they lived in Rotterdam. Participants were also asked if they had previously taken part in any other similar experiments conducted by the Social and Organizational Psychology Department at Leiden University. Affirmative answers to any of these questions would have disqualified a student from participating in the present experiment.

At the start of the experiment, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. Next to the monitor, participants found a piece of paper and a pen. In the cubicles, participants were given a brief introduction to the experiment and the tasks they were to complete. Participants were told that the computers were interconnected and that the experimenter could communicate with them by means of the computer network. The computers were used to present the stimulus information and to register the data.

In the first part of the instructions, participants were informed that the experiment was run by two experimenters, and that one experimenter was a staff member from Leiden University and that the other experimenter was a staff member from Erasmus University Rotterdam. This announcement was followed by the manipulation of experimenter's categorization. Participants were either informed that "today the study will be run by the experimenter from Leiden University" (experimenter ingroup condition) or "today the study will be run by the experimenter from Erasmus University Rotterdam" (experimenter outgroup condition). (In reality, however, all stimulus information was preprogrammed; an experimental procedure to which none of the participants objected upon debriefing.)

Participants were next told that they were to be paired with another student for the duration of the experiment, referred to as "Other." Participants learned that the research was being conducted in cooperation with two groups of students, one from Leiden University and the other from Erasmus University Rotterdam. Immediately following this statement was the manipulation of the other participant's categorization. Participants were either informed that "Other is a student at Leiden University"

(other participant ingroup condition) or “Other is a student at Erasmus University Rotterdam” (other participant outgroup condition). To ensure that our experimental manipulations were comparable to those of Smith and her colleagues (Smith & Tyler, 1997; Smith et al., 1998), during the computer program, participants were periodically asked to report their own university affiliation, the university affiliation of the other participant, and the university affiliation of the experimenter.

The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would practice the tasks for two minutes, after which time they would work on the tasks for ten minutes. Furthermore, participants were informed that after all participants had completed the experiment, a lottery would be held among all participants. The winner of this lottery would receive 100 Dutch guilders. (Actually, after all participants had completed the experiment, the 100 Dutch guilders were randomly given to one participant; a procedure to which none of the participants objected upon debriefing.) Participants were told that a total of 200 lottery tickets would be divided among all participants. Participants were further told that after the work round, the experimenter would divide some lottery tickets between them and Other. Six practice questions were posed to ensure comprehension of the lottery. If participants gave an incorrect answer to one of the questions, the correct answer was disclosed, and main characteristics of the lottery were repeated.

The experimental task that participants had to perform was then explained to them. Figures would be presented on the upper right side of the computer screen. Each figure consisted of 36 squares, and each square showed one of eight distinct patterns. On the upper left side of the computer screen, one of the eight patterns would be presented, and participants had to count the number of squares with this pattern in the figure on the right part of the screen. When participants had indicated the correct number of patterns in the figure on the right part of the screen, another figure and another pattern would be presented on the screen. In both the practice round and the work round, the number of tasks that the participant had completed (i.e., the number of figures that the participant had counted) in that round was presented on the lower right side of the screen. On the lower left side of the screen the time remaining in the present round was shown.

The practice round then began, after which the work round began. After the work round had ended, participants were told how many tasks they had completed in the work round, and to try to ensure that participants compared themselves to Other—the participant was informed that Other had completed an equivalent number of tasks (cf. Van den Bos et al., 1998). To assess whether participants thought of Other as a comparable person with respect to the tasks that were completed in the experiment, they were asked to indicate on 7-point scales to what extent Other did his or her best in the work round relative to the participant

him/herself (1 = *much worse*, 4 = *equally*, and 7 = *much better*), and to what extent Other was good in performing the tasks in the work round relative to the participant him/herself (1 = *much worse*, 4 = *equally*, and 7 = *much better*).

After this, participants were told that the experimenter would divide the lottery tickets between them and Other. Participants were asked to think for one minute about the percentage of lottery tickets that they should receive relative to Other, and to write down this percentage on the piece of paper next to the computer. Participants were informed that this piece of paper would be thrown away at the end of the experiment. Next, the experimenter informed all participants, by means of the computer network, that the experimenter would not ask them to type in their opinion about the percentage of tickets that they should receive relative to Other. Furthermore, all participants were told that the experimenter gave Other this opportunity to voice his or her opinion. (In reality, all stimulus information was preprogrammed.)

Participants then were asked questions pertaining to the dependent variables and the manipulation checks. All ratings were made on 7-point scales. To assess participants' relational treatment evaluations, two questions were asked: trust judgments were measured by asking participants if they felt the experimenter had trust in them (1 = *definitely not*, 7 = *definitely*), and respect evaluations were solicited by asking participants if they felt the experimenter had respect for them (1 = *definitely not*, 7 = *definitely*). Participants' answers to these two questions were strongly correlated ( $r = .66$ ,  $p < .001$ ), and were averaged to form an index of participants' relational treatment evaluations. As a check on the manipulation of experimenter's categorization, participants were asked to what extent they agreed with the statement that the experimenter was from Leiden University (1 = *strongly disagree*, 7 = *strongly agree*), and to what extent they agreed with the statement that the experimenter was from Erasmus University Rotterdam (1 = *strongly disagree*, 7 = *strongly agree*). To check for the manipulation of the other participant's categorization, participants were asked to what extent they agreed with the statement that Other was from Leiden University (1 = *strongly disagree*, 7 = *strongly agree*), and to what extent they agreed with the statement that Other was from Erasmus University Rotterdam (1 = *strongly disagree*, 7 = *strongly agree*). When the participants had answered these questions, and had completed the other experiments in which they were to participate, they were thoroughly debriefed and paid for their participation. During the debriefing, participants did not display signs that they were able to guess the hypotheses, making the possibility of demand effects unlikely.

## Results

### Manipulation checks

We conducted a  $2 \times 2$  multivariate analysis of variance (MANOVA) on the two checks of experimenter's categorization. Results showed only main effects of experimenter's

categorization at both the multivariate and univariate levels: multivariate  $F(2, 99) = 520.97, p < .001$ ; for the Leiden University item,  $F(1, 100) = 407.62, p < .001$ ; for the Erasmus University Rotterdam item,  $F(1, 100) = 933.62, p < .001$ . Participants in the experimenter ingroup condition agreed more with the statement that the experimenter was from Leiden University ( $M = 6.4$ ) than participants in the experimenter outgroup condition ( $M = 1.3$ ). Participants in the experimenter outgroup condition agreed more with the statement that the experimenter was from Erasmus University Rotterdam ( $M = 6.9$ ) than those in the experimenter ingroup condition ( $M = 1.5$ ).

We conducted a  $2 \times 2$  MANOVA on the two checks of other participant's categorization. Results showed only main effects of other participant's categorization at both the multivariate and univariate levels: multivariate  $F(2, 99) = 689.23, p < .001$ ; for the Leiden University item,  $F(1, 100) = 1259.47, p < .001$ ; for the Erasmus University Rotterdam item,  $F(1, 100) = 633.71, p < .001$ . Participants in the other participant ingroup condition agreed more with the statement that Other was from Leiden University ( $M = 6.7$ ) than participants in the other participant outgroup condition ( $M = 1.2$ ). Participants in the other participant outgroup condition agreed more with the statement that the other participant was from Erasmus University Rotterdam ( $M = 6.7$ ) than those in the other participant ingroup condition ( $M = 1.4$ ). It can be concluded that the independent variables were induced as intended.

#### Percentage and comparability findings

A  $2 \times 2$  analysis of variance (ANOVA) was performed on the percentages of lottery tickets that participants believed that they should get relative to the other participant and which they wrote down on the pieces of paper (excluding the data of two participants who accidentally forgot to write down a percentage). This ANOVA yielded no significant effects. One hundred (out of 104) participants indicated that they should get 50% of the tickets. The grand mean percentage was 50.0%.

The answers that participants gave to the questions that assessed whether participants thought of the other participant as a comparable person with respect to the tasks that were performed in this experiment were subjected to  $2 \times 2$  ANOVAs. These analyses did not yield significant results. Inspection of the means indicated that participants thought that Other had done equally his or her best in the work round ( $M = 4.0$ ), and was equally good in performing the experimental tasks ( $M = 3.9$ ).

#### Relational treatment evaluations

The means of participants' relational treatment evaluations are presented in Table 1. A  $2 \times 2$  ANOVA on participants' relational treatment evaluations yielded only a significant interaction effect,  $F(1, 100) = 5.81, p < .02$ . As was predicted by Hypothesis 1, but contrary to Hypothesis 1<sub>alt</sub>, a Duncan multiple range test ( $p < .05$ ; see Table 1 for results) showed more negative relational treatment evalua-

Table 1

Means of participant's relational treatment evaluations as a function of experimenter's categorization and other participant's categorization (Experiment 1)

Other participant's categorization	Experimenter's categorization	
	Ingroup	Outgroup
Ingroup	3.8 <sub>a</sub>	4.2 <sub>a</sub>
Outgroup	4.0 <sub>a</sub>	3.0 <sub>b</sub>

Note. Higher values indicate more positive relational treatment evaluations. Means with no subscript in common differ significantly as indicated by Duncan's multiple range test ( $p < .05$ ).

tions in the experimenter outgroup and other participant outgroup condition than in the other three conditions.

#### Discussion

The results corroborated our hypothesis and not the alternative prediction. In the situation where both the experimenter and the other participant were outgroup members, relational treatment evaluations were significantly lower than in the other situations. These findings support the notion that in a situation where people are subjected to a negative procedure and both the authority and another salient individual are outgroup members, people more easily conclude that their relational treatment was low. As a consequence, people display relatively more negative evaluations of relational treatment.

Experiment 1 is important for the current purposes because it demonstrates that following a negative procedure (the participant received a no-voice procedure and was informed that the other participant receive a voice procedure) aspects of the intergroup context may promote the inference that relational treatment was low. However, to fully explore the general hypothesis that perceptions of a biased authority may moderate reactions to negative procedures, we have to extend Experiment 1 with a second experiment. In Experiment 1 participants were provided with indirect cues that the experimenter might be inconsistent between persons (i.e., because of differences in group memberships). As we interpret the findings of Experiment 1 alone, our conclusion hinges on the assumption that inconsistency between persons was the underlying construct that has caused the effects. In the second experiment we report here, we directly manipulated whether or not the experimenter was inconsistent between persons, and investigated whether we could obtain results that are consistent with the findings of Experiment 1 in an interpersonal setting.

#### Experiment 2

In Experiment 2, we first manipulated the attentiveness of the authority toward the participants themselves: the authority behaved in a way that showed either a positive versus a negative attitude toward the participant. After this, we manipulated whether the authority showed biased attitudes by providing participants with information that the authority

was or was not consistent between persons (Leventhal, 1980). An authority who had unbiased attitudes (i.e., was consistent between persons) showed a similar attitude towards another participant compared with the attentiveness towards participants themselves. An authority who had biased attitudes (i.e., was inconsistent between persons) showed a different attitude towards another participant compared with the attitude shown towards participants themselves. More specifically, we introduced an authority that had a relatively more positive attitude towards another individual (cf. Lind & Lissak, 1985) and an authority that had a relatively more positive attitude towards the participant him/herself. We will label the authority with a relatively more negative attitude towards the participant as negatively biased, and the authority with a relatively more positive attitude towards the participant as positively biased. This distinction is important, because based on our line of reasoning we would expect that when the authority is negatively biased people will react more negatively following negative procedures (e.g., no-voice procedures), but not when the authority is positively biased. After all, only information that the authority is negatively biased (and not information that the authority is positively biased) may provide people with insights why they were treated negatively by that same authority.

To further extend Experiment 1, in Experiment 2 we manipulated (rather than held constant) the most widely accepted operationalization of decision-making procedure: We varied whether participants were granted or denied an opportunity to voice their opinion (Folger, 1977). This allowed us to establish whether negative bias information leads to more negative reactions *only* if followed by negative (and not positive) procedures, as hypothesized in the introduction. Thus, we expected to find results that mirrored the findings of Experiment 1 among participants who were denied the opportunity to voice their opinion, and not among participants who were granted the opportunity to voice their opinion.

In correspondence with Experiment 1, we again measured relational treatment evaluations in Experiment 2. To further extend Experiment 1, however, in Experiment 2 we also measured judgments that are most often assessed in procedural justice research: participants' procedural justice judgments (Lind & Tyler, 1988). These judgments measure directly participants' perceptions of the fairness of the procedure and are correlated with other important reactions to procedures, such as relational treatment evaluations (Huo et al., 1996). We hypothesized that after a no-voice procedure both procedural justice ratings and relational treatment evaluations would be lower if the experimenter was perceived as negatively inconsistent than if the experimenter was perceived as positively inconsistent or consistent (Hypothesis 2).

## Method

### Participants and design

We tested our hypothesis in a 2 (attentiveness: positive vs. negative)  $\times$  2 (consistency between persons: consistent

vs. inconsistent)  $\times$  2 (procedure: voice vs. no voice) factorial design. One hundred fifty-seven students at Leiden University (34 men, 127 women), between 17 and 38 years of age, voluntarily participated in the experiment. The experiment was preceded by another, unrelated experiment. All participants received 15 Dutch guilders for their participation in the two experiments.

### Procedure

All participants were led individually to the same cubicles that were used in Experiment 1. Again, the experiment was introduced as a study investigating how people perform tasks. Participants were told that in a similar cubicle another person was participating in the experiment; this person was referred to as "Other" for the rest of the experiment. Participants were told that, by means of the computer network, they would receive messages from the experimenter on their computer screen throughout the experiment (like in Experiment 1, all stimulus information was preprogrammed; a procedure to which none of the participants objected upon debriefing).

The experimental procedure was then explained to the participants. This procedure was the same as in Experiment 1. After the explanation of the lottery, we induced the attentiveness manipulation. In the positive attentiveness condition, participants were informed that the experimenter would attach importance to what they themselves may need during the course of the experiment. In the negative attentiveness condition, participants were informed that the experimenter would not attach importance to what they themselves may need during the course of the experiment.

After this, we manipulated consistency between persons. Participants in the consistent conditions were informed that, relative to what the participant may need, the experimenter would pay similar attention to what Other may need during the course of the experiment. Participants in the inconsistent conditions were told that, relative to what the participant may need, the experimenter would pay opposite attention to what Other may need during the course of the experiment.<sup>1</sup> These attentiveness and consistency manipulations were thus designed to create perceptions of a positively or negatively biased vs. unbiased experimenter.

After the manipulations of attentiveness and consistency between persons, participants proceeded with the tasks. These tasks were the same as in Experiment 1. Following the work round, we administered the procedure manipulation to the participants. In the voice condition, the experimenter allegedly asked participants by means of the

<sup>1</sup> To obtain a clean and direct operationalization of authority's biased attitudes, we made sure not to provide participants with explicit reasons why the experimenter's attentiveness would be positive or negative and why the experimenter would be consistent or inconsistent between persons. After all, providing explanations would confound the manipulations of attentiveness, consistency between persons, and procedure with justifications, which is another operationalization of procedural justice (Folger & Martin, 1986; Folger, Rosenfield, & Robinson, 1983).

computer network to type in the percentage of lottery tickets they should receive relative to Other. In the no-voice condition, participants were informed that they were not allowed to type in the percentage of lottery tickets they should receive relative to Other. As such, we induced a positive versus a negative decision-making procedure.

Following the manipulation of procedure, all participants were informed that they had received three lottery tickets, and did not receive information how many lottery tickets the other participant would receive (cf. Van den Bos et al., 1998). After this, the dependent variables and the manipulation checks were measured. To measure procedural justice judgments, participants responded to the following three items: “How fair do you find the procedure used to divide the lottery tickets between you and Other?” (1 = *very unfair*, 7 = *very fair*), “How just do you find the procedure used to divide the lottery tickets between you and Other?” (1 = *very unjust*, 7 = *very just*), and “How appropriate do you find the procedure used to divide the lottery tickets between you and Other?” (1 = *very inappropriate*, 7 = *very appropriate*). These three procedure items were averaged to form a reliable procedural justice scale ( $\alpha = .96$ ). Furthermore, to measure relational treatment evaluations we asked if participants felt that the experimenter was proud of them (1 = *definitively not*, 7 = *definitively*) and if they felt that the experimenter regarded them as a fully-fledged group member (1 = *definitively not*, 7 = *definitively*). These items were strongly correlated ( $r = .59$ ,  $p < .001$ ), and we averaged them into a reliable index of participants’ relational treatment evaluations ( $\alpha = .74$ ). In correspondence with previous research (Huo et al., 1996), procedural justice judgments and relational treatment evaluations were positively correlated ( $r = .23$ ,  $p < .01$ ).

To assess the induction of the attentiveness manipulation, participants answered the item: “To what extent did the experimenter attach importance to your needs?” (1 = *not at all*, 7 = *very much*). To check whether or not the manipulation of consistency between persons was successful in operationalizing the extent to which participants perceived the experimenter as having biased attitudes, we posed the questions “Do you think that the experimenter is partial?” (1 = *not at all*, 7 = *very much*), “Do you think that the experimenter is objective?” (1 = *not at all*, 7 = *very much*; recoded), and “How sincere was the experimenter in what he told you?” (1 = *not at all*, 7 = *very much*; recoded). The three items were averaged to form a reliable bias scale ( $\alpha = .72$ ). We checked the procedure manipulation with the items “Did the experimenter allow you an opportunity to voice your opinion about the percentage of lottery tickets you should receive relative to Other?” (1 = *no*, 7 = *yes*) and “To what extent did the experimenter allow you an opportunity to voice your opinion concerning the number of lottery tickets that were divided between you and Other?” (1 = *not at all*, 7 = *very much*). We averaged these items to form a single procedure scale ( $r = .91$ ,  $p < .001$ ). After the experiment all participants were fully debriefed, thanked and paid for their participation.

## Results

### Manipulation checks

A  $2 \times 2 \times 2$  ANOVA on the attentiveness check yielded a significant main effect of attentiveness,  $F(1, 149) = 253.69$ ,  $p < .001$ . Participants in the positive attentiveness condition perceived that the experimenter attached more importance to their needs ( $M = 5.9$ ) than participants in the negative attentiveness condition ( $M = 2.0$ ). We also found a significant main effect of procedure in this analysis,  $F(1, 149) = 5.57$ ,  $p < .05$ . Participants who received the opportunity of voicing their opinion perceived the experimenter as attaching slightly more importance to their needs ( $M = 4.2$ ) than participants who did not receive the opportunity of voicing their opinion ( $M = 3.6$ ), an effect that was very small ( $\eta^2 = .036$ ). The main effect of consistency between persons and all of the interaction effects were nonsignificant, indicating that the effect of procedure was equally strong in both attentiveness conditions. These results suggested that attentiveness was successfully manipulated.

A  $2 \times 2 \times 2$  ANOVA on the bias scale yielded only a significant main effect of consistency between persons,  $F(1, 149) = 118.98$ ,  $p < .001$ . Participants in the inconsistent conditions rated the experimenter as more biased ( $M = 5.1$ ) than participants in the consistent conditions ( $M = 2.7$ ). This indicates that consistency between persons was a successful operationalization of the extent to which the experimenter was perceived as biased.

A  $2 \times 2 \times 2$  ANOVA on the procedure scale yielded only a significant main effect of procedure,  $F(1, 149) = 735.10$ ,  $p < .001$ . Participants in the voice condition perceived more opportunities of voicing their opinion ( $M = 6.2$ ) than participants in the no-voice condition ( $M = 1.2$ ). From these analyses, it can be concluded that the participants perceived the experimental manipulations as intended. Furthermore, we note that the effects of the manipulation of voice versus no-voice procedures were very strong and may therefore have caused an unintentional effect on the check of the attentiveness manipulation. It is important to note here, however, that this effect was independent of the other manipulations.

### Dependent variables

The cell means of participants’ procedural justice judgments and relational treatment evaluations are described in Table 2. A  $2 \times 2 \times 2$  MANOVA on procedural justice judgments and relational treatment evaluations indicated a significant multivariate main effect of the manipulation of voice versus no-voice procedures,  $F(2, 148) = 104.73$ ,  $p < .001$ . The univariate procedure main effect was significant for participants’ procedural justice judgments,  $F(1, 149) = 208.50$ ,  $p < .001$ , but not for their relational treatment evaluations,  $F(1, 149) = 1.50$ ,  $p > .22$ . The findings on procedural justice judgments revealed that, as expected, participants rated voice procedures as fairer ( $M = 5.6$ ) than no-voice procedures ( $M = 2.4$ ). More important was that the predicted three-way interaction between attentiveness, consistency between

Table 2

Mean procedural fairness judgments and relational treatment evaluations as a function of attentiveness, consistency between persons, and procedure (Experiment 2)

Dependent variable	Attentiveness			
	Positive		Negative	
	Inconsistent	Consistent	Inconsistent	Consistent
Procedural justice judgments				
Voice procedure	5.6 <sub>a</sub>	5.7 <sub>a</sub>	5.9 <sub>a</sub>	5.0 <sub>a</sub>
No-voice procedure	2.9 <sub>b</sub>	2.6 <sub>b</sub>	1.5 <sub>c</sub>	2.7 <sub>b</sub>
Relational treatment evaluations				
Voice procedure	4.8 <sub>a</sub>	4.8 <sub>a</sub>	4.4 <sub>a</sub>	4.1 <sub>a,b</sub>
No-voice procedure	4.3 <sub>a</sub>	4.4 <sub>a</sub>	3.3 <sub>b</sub>	4.9 <sub>a</sub>

Note. Higher values indicate higher ratings on the dependent variable in question. Means with no subscript in common differ significantly as indicated by Duncan's multiple range test ( $p < .05$ ).

persons, and procedure was found on both the multivariate and univariate levels, multivariate,  $F(2, 148) = 5.33, p < .01$ ; for procedural justice judgments,  $F(1, 149) = 8.30, p < .01$ ; for relational treatment evaluations,  $F(1, 149) = 4.32, p < .04$ .

To explore this three-way interaction effect, we conducted three follow-up analyses. As a first follow-up analysis, we tested whether or not the effects of the procedure manipulation would be stronger in the negative inconsistent condition than in the other three conditions of attentiveness and consistency between persons. To this end, we performed an interaction contrast analysis in which we tested whether the effect of the manipulation of voice versus no-voice procedures was significantly stronger when the experimenter was perceived as negatively inconsistent compared to when the experimenter was positively inconsistent or consistent. As expected, we found a significant contrast interaction effect, multivariate  $F(2, 152) = 6.18, p < .01$ ; for procedural justice judgments,  $F(1, 153) = 10.60, p < .01$ ; for relational treatment evaluations,  $F(1, 153) = 3.96, p < .05$ . As can be seen in Table 2, compared to the other conditions of Experiment 2, participants responded more strongly to voice versus no-voice procedures when the experimenter acted negatively inconsistent between participants.

As a second follow-up analysis, we tested the prediction that only negative bias would influence participant's reactions to procedures. We therefore investigated whether consistency between persons and procedure only interacted when the experimenter's attentiveness towards the participant was negative, and not when attentiveness was positive. The analyses indicated a significant interaction between procedure and consistency between persons within the negative attentiveness condition, multivariate,  $F(2, 148) = 7.71, p < .01$ ; for procedural justice judgments,  $F(1, 149) = 10.26, p < .01$ ; for relational treatment evaluations,  $F(1, 149) = 8.18, p < .01$ . The procedure  $\times$  consistency interaction was not significant within the positive attentiveness condition, multivariate and univariate,  $F_s < 1$ . These findings indicate that, as predicted, only negative bias, and not positive bias, influenced participants' reactions to the manipulation of voice versus no-voice procedures.

As a third follow-up analysis, we investigated the prediction that negative bias would only influenced participants'

reactions to negative, and not to positive procedures. To this end, we tested the attentiveness  $\times$  consistency between person interactions within both procedure conditions. This interaction was significant within the no-voice condition, multivariate  $F(2, 148) = 4.35, p < .02$ ; for procedural justice judgments,  $F(1, 149) = 5.61, p < .02$ ; for relational treatment evaluations,  $F(1, 149) = 4.82, p < .04$ . In further accordance with our predictions, this interaction was nonsignificant within the voice condition, multivariate  $F(2, 148) = 1.26, p > .30$ ; for procedural justice judgments,  $F(1, 149) = 2.40, p > .12$ ; for relational treatment evaluations,  $F < 1$ . As shown by a Duncan multiple range test ( $p < .05$ ; see Table 2), in the voice condition the means of procedural justice judgments and relational treatment evaluations did not differ as function of the attentiveness and consistency manipulation. In the no-voice condition, however, participants judged procedures to be less fair and relational treatment to be lower in the negative inconsistent condition than in the other attentiveness and consistency conditions. This revealed corroborative evidence for the pattern of means we had predicted.

### Discussion

The results of Experiment 2 clearly corroborated our hypothesis. People's procedural justice judgments and relational treatment evaluations were most strongly affected by no-voice procedures in situations where the authority was inconsistent and showed negative attentiveness to the person making the judgment. These findings extend Experiment 1 in two important ways. First, whereas in Experiment 1 social cues indirectly suggested that an authority may be biased decreased relational treatment evaluations following a negative procedure, in Experiment 2 direct interpersonal information that an authority is inconsistent between persons decreased participants' reactions following a negative procedure. Second, and in further correspondence with predictions, only reactions to no-voice procedures, and not reactions to voice procedures, differed significantly as a function of attentiveness and consistency. These latter results support the argument that if an authority has a biased attitude in favor of another individual, indi-

viduals tend to express more negative reactions only following negative procedures, and not following positive procedures.

The results of Experiment 2 suggest a self-serving component in the evaluation of procedures. That is, we found a main effect of attentiveness on procedural justice judgments, indicating higher perceptions of procedural justice when attentiveness was positive rather than negative. Attentiveness contains information about the experimenter's attitudes towards the participants themselves. However, we did not find a main effect of consistency between persons on procedural judgments. Consistency between persons contains information about the experimenter's attitudes towards the other participant relative to the participant him/herself. In other words, participants were affected by the authority's attitudes towards themselves but were not affected by the authority's attitudes towards the other participant. Our findings therefore suggest that an individual may perceive procedures from an inconsistent authority as relatively fair, as long as the inconsistency is beneficial to the individual. Apparently, individuals are to some extent self-oriented in their reactions to the procedures pursued by authorities (cf. Lind, Kray, & Thompson, 1998; Van den Bos & Lind, 2001).

## General discussion

The two experiments presented here indicate that people's responses to negative procedures are influenced by information that an authority might be negatively biased. In Experiment 1, this negative bias information was provided in an intergroup context (cf. Opatow, 1990). In Experiment 2, negative bias information was provided more directly in an interpersonal context, extending on the manipulation of Lind and Lissak (1985). Both experiments converged on the finding that people responded more negatively to negative procedures when social information suggested that the experimenter might be negatively biased. This convergence supports the assumption that authority's inconsistency bias is the underlying construct of importance in both the studies presented here. Taken together, the findings of both experiments suggest that social cues suggesting that an authority may be inconsistent between persons can provide insights into the implications of a negative procedure, thereby reinforcing people's inferences that negative procedures have been unfair and that relational treatment has been low.

The current research provides several extensions of previous research on the relation between authority's biased attitudes and procedural injustice (De Cremer, 2004; Lind & Lissak, 1985; Tyler, 1989, 1994). A first contribution of the current paper is that it extends the work of Lind and Lissak (1985), who investigated the relation between negative bias and outcome favorability. Building on Lind and Lissak's research, the current research has explored the relation between negative bias and procedural valence. This is a meaningful contribution, because the effects of

outcomes versus procedures differ substantially in the justice judgment process (Lind & Tyler, 1988; Thibaut & Walker, 1975). Whereas outcome favorability is in itself not necessarily related to the perceived fairness of decision-making procedures, the negative procedure in Experiment 1 and the no-voice procedure in Experiment 2 have frequently been labeled as "unfair" in social justice literature (e.g., Lind & Tyler, 1988; Tyler & Lind, 1992). In the present article we have frequently referred explicitly to "negative" procedures instead of "unfair" procedures, because it may not be entirely clear how to react to these procedures for people who are subjected to them (cf. Cropanzano & Greenberg, 1997; Van den Bos et al., 1998). Although people tend to evaluate negative procedures considerably less fair than positive procedures, people may sometimes question why an authority provided one with a negative procedure and what the implications are of the procedure. It therefore would seem more accurate to view negative procedures and unfair procedures as different concepts.

A second contribution is the notion that authorities can be biased in various ways, and that these various forms of bias may well have different implications for the psychology of procedural injustice. Whereas De Cremer (2004) has shown that information that an authority is self-interested leads to more negative evaluations of both positive and negative procedures, the current research has revealed that cues suggesting inconsistency between persons diminishes evaluations of negative (but not positive) procedures. This was particularly evident in Experiment 2, in which participants' procedural fairness ratings and relational treatment evaluations in the voice condition were unaffected by information that the authority was negatively biased. The current research therefore suggests that it is necessary to distinguish between various forms of authority bias in the psychology of justice, because self-interest bias (De Cremer, 2004) seems to exert different effects on justice judgments than the inconsistency bias that was under investigation here.

As a third contribution, the second experiment reported here has provided indications for a partly egocentric nature of justice judgments by introducing the concept of a positively biased authority (i.e., an authority that favors the target recipient at the expense of an unknown other). This operationalization produced results that lead to the conclusion that when people are themselves directly affected, their reactions to a biased authority are in part self-serving, given that inconsistency bias only influenced perceptions of procedural justice if the authority was negatively (but not positively) biased. This latter conclusion is consistent with previous research findings. For example, Lind et al. (1998) have found that people experience a mild personal injustice as less fair than the report of a more severe injustice experienced by someone else. The findings of the current research, in combination with those obtained by Lind et al. (1998), clearly suggest a self-serving component in people's evaluations of the fairness of decision-making procedures.

Although the operationalizations of authority's biased attitudes in the present research were inspired by

Leventhal's (1980) consistency-between-persons principle, it should be noted here that our operationalizations differed in one respect from Leventhal's conceptualization. Leventhal's work focused on the extent to which an authority is (in)consistent in the allocation process, leading directly to judgments of procedural injustice. In our research, however, we investigated information that suggested that the authority had a general preference for one litigant over the other, raising the suspicion that an authority could possibly be inconsistent in the allocation process. It is not surprising, therefore, that in Experiment 2 we did not find a main effect of consistency between persons on procedural justice judgments. This should not be regarded as evidence that our inconsistency manipulation failed. After all, our manipulation-check findings show that participants rated the experimenter as more biased in the inconsistent conditions than in the consistent conditions. Furthermore, we found the expected effects of our inconsistency manipulation on the dependent variables.

On a broader conceptual level, our line of reasoning shows some resemblance to social psychological theorizing on attributional ambiguity (e.g., Crocker & Major, 1989). In the attributional ambiguity domain, scholars have argued that members of stigmatized groups sometimes use situational cues to determine whether negative feedback may be attributable to discrimination (cf. Dion & Earn, 1975). Thus, both the attributional ambiguity domain and the current research make predictions about the extent to which people define negative treatment as unfair. It is important to note, however, that despite these similarities, the current research has a number of distinct features as compared to theorizing on attributional ambiguity. First, the attributional ambiguity framework has focused on the functionality of discriminatory attributions to protect global self-esteem, whereas our argument refers to people's relational treatment evaluations and procedural justice judgments following negative procedures. Second, the attributional ambiguity domain explicitly refers to perceptions of discrimination, whereas our study refers to people's negative reactions following no-voice procedures. No-voice procedures constitute a clearly different conceptualization of social injustice than discrimination. Third, the attributional ambiguity framework is aimed at understanding reactions of stigmatized individuals, whereas in our research this is not necessarily so. Nevertheless, the apparent consistencies between the attributional ambiguity framework and our research does support the argument that people sometimes use social information such as authority's biased attitudes to help them gauge how negative their reactions to procedures should be.

The present research has yielded results that were in line with our hypotheses in both a somewhat natural and a more direct context. That is, the conception of authority's biased attitudes in Experiment 1 can be thought of as to some extent a more naturally occurring form of bias, given that we used existing group memberships to provide participants with information about authority's biased attitudes.

However, Experiment 2 suggests that this more natural context is not necessary to demonstrate the effects of authority's biased attitudes on the interpretation of subsequent procedure information. When we isolated the constructs of interest and thus directly induced in Experiment 2 whether the experimenter had a biased attitude in favor of one of the participants, similar effects were found as in Experiment 1. This suggests that authority's biased attitudes indeed constituted the underlying psychological mechanism responsible for the effects reported in Experiment 1, and that converging evidence across more natural and more direct settings increases faith in the generalizability of the findings of both experiments. More research is needed, of course, to study the implications of the current studies. For example, a future mediation study may provide more direct evidence that the intergroup context of Experiment 1 may sometimes lead people to perceive the authority as biased. As research accumulates concerning moderators of procedural justice effects, as it has in this study and other studies, we begin to understand a great deal about why these effects occur at all and why they are so potent when they do occur. This knowledge in turn promises to advance our understanding of fundamental issues in the social psychology of justice and of the role of justice-related phenomena in basic social relations.

In Experiment 1 we contrasted our ideas with the idea that people may be more affected by negative procedures if provided by an ingroup authority than by an outgroup authority because of social identity motives. Contrary to the relational model's social identity prediction (Tyler & Lind, 1992), participants were affected more by negative procedures in a situation where the experimenter was an outgroup member than in situations where the experimenter was an ingroup member. Although there may well be situations in which people are more affected by procedures if provided by an ingroup authority (Smith et al., 1998), our results suggest that the relation between the authority's group membership and reactions to negative procedures is not as straightforward as has been assumed in the research literature thus far. That is, there may also be situations in which people are affected even more strongly by procedures they receive from an outgroup authority. Interestingly, a recent study has found some corroborative evidence for this proposition Ståhl et al. (2004). This idea has, according to our knowledge, not been recognized before, but is important for our understanding of how people respond to negative procedures in an intergroup context, and hence deserves attention in future research.

To return to the concepts that motivated the research presented here, our studies have made explicit that social cues that suggest inconsistency between persons moderate people's reactions to negative decision-making procedures. Specifically, information that an authority may have biased attitudes in favor of another individual helps individuals to assess how to react to a negative procedure and hence causes lower relational treatment evaluations and procedural justice judgments following negative procedure

information. Therefore, authority's biased attitudes play an important moderating role in people's reactions to negative decision-making procedures.

## References

- Baumeister, R. F., Bratlavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323–370.
- Brockner, J., & Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin*, 120, 189–208.
- Cohen, R. L. (1982). Perceiving justice: An attributional perspective. In J. Greenberg & R. L. Cohen (Eds.), *Equity and justice in social behavior* (pp. 119–160). New York: Academic Press.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608–630.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58, 164–209.
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 317–372). New York: Wiley.
- Cropanzano, R., & Folger, R. (1991). Procedural justice and worker motivation. In R. M. Steers & L. W. Porter (Eds.), *Motivation and work behavior* (Vol. 5, pp. 131–143). New York: McGraw-Hill.
- De Cremer, D. (2004). The influence of accuracy as a function of leader's bias: The role of trustworthiness in the psychology of procedural justice. *Personality and Social Psychology Bulletin*, 30, 293–304.
- Dion, K. L., & Earn, B. M. (1975). The phenomenology of being a target of prejudice. *Journal of Personality and Social Psychology*, 32, 944–955.
- Folger, R. (1977). Distributive and procedural justice: Combined impact of "voice" and improvement on experienced inequity. *Journal of Personality and Social Psychology*, 35, 108–119.
- Folger, R. (1984). Emerging issues in the social psychology of justice. In R. Folger (Ed.), *The sense of injustice: Social psychological perspectives* (pp. 3–24). New York: Plenum.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage.
- Folger, R., & Martin, C. (1986). Relative deprivation and referent cognitions: Distributive and procedural justice effects. *Journal of Experimental Social Psychology*, 22, 531–546.
- Folger, R., Rosenfield, D., Grove, J., & Corkran, L. (1979). Effects of "voice" and peer opinions on responses to inequity. *Journal of Personality and Social Psychology*, 37, 2253–2261.
- Folger, R., Rosenfield, D., & Robinson, T. (1983). Relative deprivation and procedural justifications. *Journal of Personality and Social Psychology*, 45, 268–273.
- Huo, Y. J., Smith, H. J., Tyler, T. R., & Lind, E. A. (1996). Superordinate identification, subgroup identification, and justice concerns: Is separatism the problem; is assimilation the answer. *Psychological Science*, 7, 40–45.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47, 263–291.
- Kanouse, D. E., & Hanson, L. R., Jr. (1972). Negativity in evaluations. In E. E. Jones (Ed.), *Attribution: Perceiving the causes of behavior* (pp. 27–46). New York: General Learning Press.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances on theory and research* (pp. 27–54). New York: Plenum.
- Lind, E. A., Kanfer, R., & Earley, P. C. (1990). Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. *Journal of Personality and Social Psychology*, 59, 952–959.
- Lind, E. A., Kray, L., & Thompson, L. (1998). The social construction of injustice: Fairness judgments in response to own and others' unfair treatment by authorities. *Organizational Behavior and Human Decision Processes*, 75, 1–22.
- Lind, E. A., & Lissak, R. (1985). Apparent impropriety and procedural fairness judgments. *Journal of Experimental Social Psychology*, 21, 19–29.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Lind, E. A., Tyler, T. R., & Huo, Y. (1997). Procedural context and culture: Variation in the antecedents of procedural justice judgments. *Journal of Personality and Social Psychology*, 73, 767–780.
- Lord, R. G., & Brown, D. J. (2003). *Leadership processes and follower self-identity*. Mahwah, NJ: LEA.
- Miller, D. T., & Ratner, R. K. (1996). The power of the myth of self-interest. Current societal issues in justice. In L. In Montada & M. J. Lerner (Eds.), (pp. 25–48). New York: Plenum.
- Miller, D. T., & Ratner, R. K. (1998). The disparity between actual and assumed power of self-interest. *Journal of Personality and Social Psychology*, 74, 53–62.
- Opatow, S. (1990). Deterring moral exclusion. *Journal of Social Issues*, 46, 173–182.
- Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, 105, 131–142.
- Smith, H. J., & Tyler, T. R. (1997). Choosing the right pond: The impact of group membership on self-esteem and group-oriented behavior. *Journal of Experimental Social Psychology*, 33, 146–170.
- Smith, H. J., Tyler, T. R., Huo, Y. J., Ortiz, D. J., & Lind, E. A. (1998). The self-relevant implications of the group-value model: Group membership, self-worth, and treatment quality. *Journal of Experimental Social Psychology*, 34, 470–493.
- Stahl, T., Van Prooijen, J.-W., & Vermunt, R. (2004). On the psychology of procedural justice: Reactions to procedures of ingroup vs. outgroup authorities. *European Journal of Social Psychology*, 34, 173–189.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Tyler, T. R. (1987). Conditions leading to value expressive effects in judgments of procedural justice: A test of four models. *Journal of Personality and Social Psychology*, 52, 333–344.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of Personality and Social Psychology*, 57, 830–838.
- Tyler, T. R. (1994). Psychological models of the justice motive: Antecedents of distributive and procedural justice. *Journal of Personality and Social Psychology*, 5, 850–863.
- Tyler, T. R., & Blader, S. L. (2004). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7, 349–361.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 115–292). San Diego CA: Academic Press.
- Van den Bos, K. (1999). What are we talking about when we talk about no-voice procedures? On the psychology of the fair outcome effect. *Journal of Experimental Social Psychology*, 35, 560–577.
- Van den Bos, K., & Lind, E. A. (2001). The psychology of own versus others' treatment: Self-oriented and other-oriented effects on perceptions of procedural justice. *Personality and Social Psychology Bulletin*, 27, 1324–1333.
- Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. In M. P. Zanna (Ed.), *Advances in experimental social psychology*. San Diego, CA: Academic Press.
- Van den Bos, K., & Van Prooijen, J.-W. (2001). Referent cognitions theory: The psychology of voice depends on closeness of reference points. *Journal of Personality and Social Psychology*, 81, 616–626.
- Van den Bos, K., Vermunt, R., & Wilke, H. A. M. (1997). 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, 95–104.
- Van den Bos, K., Wilke, H. A. M., & Lind, E. A. (1998). When do we need procedural fairness. The role of trust in authority. *Journal of Personality and Social Psychology*, 75, 1449–1458.

- Van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. In R. M. Kramer & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 25, pp. 243–285). Amsterdam: Elsevier.
- Van Prooijen, J.-W., Van den Bos, K., & Wilke, H. A. M. (2002). Procedural justice and status: Status salience as antecedent of procedural fairness effects. *Journal of Personality and Social Psychology*, 83, 1353–1361.
- Van Prooijen, J.-W., Van den Bos, K., & Wilke, H. A. M. (2004a). The role of standing in the psychology of procedural justice: Towards theoretical integration. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 15, pp. 33–58). East Sussex, UK: Psychology Press.
- Van Prooijen, J.-W., Van den Bos, K., & Wilke, H. A. M. (2004b). Group belongingness and procedural justice: Social inclusion and exclusion by peers affects the psychology of voice. *Journal of Personality and Social Psychology*, 87, 66–79.
- Van Prooijen, J.-W., Van den Bos, K., & Wilke, H. A. M. (2005). Procedural justice and intragroup status: Knowing where we stand in a group enhances reactions to procedural justice. *Journal of Experimental Social Psychology*, 41, 664–676.