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Procedural justice and intragroup status: Knowing where we stand in a group enhances reactions to procedures ☆

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Abstract

The current research investigates the role of relative intragroup status as a moderator of people's reactions to procedural justice. Based on a review of the procedural justice literature, the authors argue that information about intragroup status influences people's reactions to variations in procedural justice. In correspondence with predictions, two experiments show that reactions of people who have been informed about their intragroup status position (either low, average, or high) are influenced more strongly by voice as opposed to no-voice procedures than people who are not informed about their intragroup status. It is concluded that knowing where we stand in a group enhances reactions to procedural justice.

Social justice is an essential element of human life: acts that people consider to be fair or unfair influence their perceptions, attitudes, affective reactions, and behaviors (e.g., Folger, 1984). Considerable social psychological research efforts have therefore been concentrated on the psychology of social justice. One justice concern that people have refers to outcome divisions: people want outcome distributions to be fair. The issue of whether outcomes are fair or unfair is generally referred to as distributive justice (Adams, 1965). Distinct from these distributive justice concerns is the perceived fairness of decision-making processes: people want the processes that lead to decisions (such as decisions about outcome distributions) to be fair. The perceived fairness of decision-making processes is referred to as procedural justice (for overviews, see Brockner & Wiesenfeld, 1996; Cropanzano, Byrne, Bobocel, & Rupp, 1997; Folger & Cropanzano, 1998; Lind & Tyler, 1988; Tyler & Blader, 2000; Tyler & Smith, 1998; Van den Bos & Lind, 2002; Van Prooijen, Van den Bos, & Wilke, 2004b). The distinction between distributive and procedural justice is important, because the classic work of Thibaut and Walker (1975) suggests that people's justice concerns indeed involve questions about both the fairness of outcomes and the fairness of procedures.

Justice is a social phenomenon, because experiences of (in)justice are products of people's interactions with others in social settings (Lind & Tyler, 1988). More generally, it has been argued that social relationships are interconnected with people's experiences of (in)justice (Folger & Cropanzano, 1998; Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler & Blader, 2000; Van den Bos & Lind, 2002). An example of a specific social factor that is related to both distributive and procedural justice is intragroup status (Tyler & Lind, 1992). Distributive justice researchers have argued that intragroup status differences can influence perceptions of entitlement: people who have high intragroup status may perceive themselves to be more entitled to certain outcomes than

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people who have low intragroup status (e.g., Feather, 1994). As a consequence, differences in outcomes (e.g., salaries) between group members holding different status positions (e.g., assistant vs. full professors) are not necessarily perceived to be unfair. In this way, intragroup status can influence distributive justice judgments (Feather, 1994).

Several authors have stated that intragroup status is related to the psychology of procedural justice as well (Cropanzano, Rupp, Mohler, & Schminke, 2001; Folger & Cropanzano, 1998; Lind, 2001; Lind & Tyler, 1988; Tyler & Lind, 1992; Van Prooijen, Van den Bos, & Wilke, 2002). Furthermore, empirical surveys have repeatedly shown significant correlations between perceptions of intragroup status and perceptions of procedural justice (e.g., Tyler, 1989, 1994; Tyler & Blader, 2002; Tyler, Degoey, & Smith, 1996). However, several authors have noted that the relation between procedural justice and status is conceptually different from the relation between distributive justice and status. That is, whereas high intragroup status may lead people to feel entitled to desirable outcomes, it has been argued that people at all levels of a status hierarchy feel entitled to fair decision-making procedures (Lind, 2001; Tyler, Boeckmann, Smith, & Huo, 1997, p. 119). In the following we argue that there are important missing links in scientific knowledge on the relationship between intragroup status and procedural justice. The current research is therefore designed to further explore the relation between intragroup status and procedural justice. Below we review the role of intragroup status in the psychology of procedural justice, and introduce what the current research adds to existing knowledge on this topic.

Procedural justice and intragroup status

An illustration of a typical procedural justice phenomenon is the finding that people evaluate procedures that allow them an opportunity to voice their opinions in a decision-making process to be more fair than procedures that do not allow them such an opportunity (Folger, 1977). These procedural fairness perceptions can subsequently influence a wide range of human reactions, such as positive and negative affect, the willingness to accept decisions, protest intentions, evaluations of people's relations with authorities, and task performance (Folger, Rosenfield, Grove, & Corkran, 1979; cf. Greenberg & Folger, 1983; Lind & Tyler, 1988; Van den Bos, Wilke, Lind, & Vermunt, 1998). It has been noted that these voice effects are among the most frequently replicated effects in social psychology (e.g., Brockner et al., 1998; Lind, Kanfer, & Earley, 1990; Van den Bos, 1999; Van den Bos & Van Prooijen, 2001).

A specific social factor that has been related to the effects of voice as opposed to no-voice procedures is intragroup status, that is, people's position in a group compared to other members[1] (Cropanzano et al., 2001; Folger & Cropanzano, 1998; Lind, 2001; Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler & Blader, 2002; Van Prooijen et al., 2002). The relation between intragroup status and procedural justice is highlighted in the relational model of authority, a group-dynamic procedural justice theory (Tyler & Lind, 1992; cf. Lind & Tyler, 1988). Following social identity theory (Tajfel & Turner, 1979), the relational model has made explicit that people attach importance to being respected members of the social groups they belong to. As a consequence, people search for information about the extent to which they are valued and respected by their fellow group members. Because people tend to regard group authorities as representative for their group (Tyler & Lind, 1992), fair procedures (such as voice procedures) by group authorities communicate that people are respected and valued members of the social group they belong to (Tyler et al., 1996).

The relational model has stated (among other things) that information about intragroup status influences people's reactions to procedures. More specifically, the relational model has assumed that people want to know where they stand in the group (Tyler, 1989, 1994). In other words, people want to know whether they have high or low intragroup status. People derive such information, the relational model proposes, from the way authorities treat them: if authorities treat people respectfully, people conclude that they have high intragroup status. If authorities treat people rudely, people conclude that they have low intragroup status. Information about intragroup status subsequently shapes people's experiences of and reactions to procedural fairness (Tyler, 1989, 1994; Tyler et al., 1996; Tyler & Blader, 2002). The relational model thereby assumes two causal relations between intragroup status and procedural justice: procedures influence the emergence of status differentials, and status differentials influence people's perceptions of procedural treatment. We note here that the assumed causal

[1] It is important to note here that procedural justice researchers have not defined intragroup status consistently (see Cropanzano et al., 2001; Lind, 2001; Tyler & Blader, 2002; Van Prooijen et al., 2002). Definitions of intragroup status can broadly be categorized into two classes. First, it has been conceived of as relative standing compared to other group members because of external characteristics, such as performances ("comparative status"; Tyler, 1994; Tyler & Blader, 2002). Second, intragroup status can be based on internal characteristics, such as values and norms ("autonomous status"; Lind, 2001; Tyler & Blader, 2002). This latter form is related to perceptions of inclusion in a group (Lind, 2001). In a different paper (Van Prooijen, Van den Bos, & Wilke, 2004a) we have focused on level of inclusion in a group, which corresponds to autonomous status. In the current paper, we study comparative intragroup status (cf. Tyler, 1994).

effects of status on procedural justice are most central in the relational model. This is evidenced by the fact that the relational model seeks to explain procedural justice judgments, and perceptions of status are assumed to shape such judgments.

In two recent experiments we have investigated the effects of status on people's reactions to procedures (Van Prooijen et al., 2002). In those experiments we proposed an implicit mental relation between status and fairness. Based on the relational model (Tyler & Lind, 1992; cf. Lind & Tyler, 1988) and the research that followed from it (Tyler, 1989, 1994; Tyler & Blader, 2002), we argued that the general concept status is cognitively associated with fairness. More specifically, status is related to the regard and approval that people receive from others (Tyler et al., 1996), and therefore it stands to reason that cognitively activating the general concept status may lead to an increased concern for such regard and approval. Furthermore, people tend to use procedural fairness information to make inferences about the extent to which they are held in regard by others in interpersonal encounters (Tyler & Lind, 1992; cf. Lind & Tyler, 1988). From this line of reasoning we inferred that cognitively activating the general concept status would enhance people's reactions to procedures. In correspondence with this, the data of two experiments showed that asking participants two open-ended questions about the general concept status–hence making status a salient issue to participants–enhanced reactions to procedural justice manipulations compared to a control condition in which status was not made salient (Van Prooijen et al., 2002). These data suggested a status salience explanation for the relation between status and procedural justice and, additionally, provided preliminary evidence for the causal order of status shaping people's reactions to procedures.

The current research

In the current article, we present two experiments in which we provided participants with intragroup status information on three possible levels (high vs. average vs. low), and we included a control condition in which participants' intragroup status was unknown. Furthermore, we manipulated whether or not participants received an opportunity to voice their opinions in a decision-making process (Folger, 1977). With these experiments we would like to contribute in two ways to current knowledge on the relation between intragroup status and procedural justice. As a first contribution, we aim to extend the status salience findings of Van Prooijen et al. (2002): What do the status salience findings imply for situations with intragroup status differences? In the previous status salience experiments we did not explore the effects of intragroup status positions on people's reactions to procedures. However, the relational model argues that intragroup status (and not status salience) determines people's reactions to variations in procedural justice (Lind & Tyler, 1988; Tyler & Blader, 2000; Tyler & Lind, 1992). As a consequence, conceptually it makes good sense to investigate the effects of intragroup status differences on reactions to procedures. Moreover, most status issues in real-life situations can best be characterized in terms of relative intragroup status differences (e.g., being either an assistant professor or a full professor in the same psychology department). Studying the effects of intragroup status differences on reactions to procedures would therefore be worthwhile to further scientists' understanding of procedural justice phenomena in real-life social settings.

To investigate whether status salience causes a relation between intragroup status and procedural justice, we hypothesize a central role for the *availability* of status information. People do not always know their intragroup status position (e.g., in task groups people do not always know how well others perform, and even if they do performances are not always comparable due to different individual task characteristics). In the current paper, we argue that the availability of status information has consequences for people's reactions to procedures. More specifically, in situations where people are unaware of their intragroup status, status is likely to be less salient than when people did receive direct information about their intragroup status. For example, information that someone is the best, average, or worst performing group member emphasizes the individual's relative status position in the group. It is therefore reasonable to assume that status is more salient in situations where status information is available compared to situations where status information is unavailable. Building on the finding that status salience amplifies reactions to procedures (Van Prooijen et al., 2002), it can therefore be expected that the mere presence of intragroup status information leads to stronger reactions to procedures compared to situations where status information is absent. We therefore predicted that following status information (i.e., information that one has either high, average, or low intragroup status) participants would respond more strongly to voice as opposed to no-voice procedures than participants in a control condition in which no status information is provided (Hypothesis 1).

An interesting feature of this hypothesis is that it can be contrasted with different insights derived from other procedural justice theories. More specifically, social-cognitive procedural justice theories such as fairness heuristic theory (e.g., Lind, Kulik, Ambrose, & De Vera Park, 1993; Van den Bos, Lind, & Wilke, 2001; Van den Bos, Wilke, & Lind, 1998) and the uncertainty management model (Van den Bos, 2001; Van den Bos & Lind, 2002) would lead to different predictions regarding the relation between status and procedural justice. One of the

propositions of these theoretical frameworks is the fairness substitutability effect (Van den Bos & Lind, 2002): under conditions of information uncertainty, people start using other information—as heuristic substitutes—to assess what is fair. Based on this, it has been argued that people's fairness judgments are strongly affected by procedures in conditions of information uncertainty (Van den Bos & Lind, 2002). An illustration of the fairness substitutability effect can be found in Van den Bos et al. (1998). These authors showed that people's distributive justice judgments are more strongly affected by procedures if they do not know whether or not an authority can be trusted as compared with situations where they do know that an authority can or cannot be trusted. When we apply this reasoning to the current research, participants experience most information uncertainty in the condition where they are not informed about their status position. As such, it can alternatively expected here that the availability of status information leads to weaker (instead of stronger) reactions to voice as opposed to no-voice procedures compared to situations where status information is absent (Hypothesis 1_{alt}).

Besides investigating the effects of the availability of status information as such, a second extension of the literature is that we examine the moderating effects of status differences on reactions to procedures. Based on the current knowledge, it is as yet unclear whether people's reactions to procedures are moderated by specific intragroup status positions. This is problematic, because the literature suggests at least two different predictions regarding whether high versus average versus low status members respond differently to procedures. First, if status salience is the primary explanation of the relation between intragroup status and procedural justice, differences between specific status positions in reactions to voice as opposed to no-voice procedures are not necessarily to be expected (Hypothesis 2). That is, information that someone is the best, average, or the worst performing group member emphasizes one's position in the group, makes status a salient issue to the person, and thus amplifies people's reactions to procedures (cf. Van Prooijen et al., 2002).

However, based on the relational model it can alternatively be expected that people respond differently to procedures as function of specific status positions. After all, the relational model has posited that voice procedures communicate that people are well-respected members of social groups (Lind & Tyler, 1988; Tyler & Lind, 1992). Members who have low intragroup status may therefore be more concerned about the fairness of procedures than members with high intragroup status, because low status members are less secure of the extent to which they are respected by their fellow group members than high status members (see also De Cremer, 2002). Thus, it can be hypothesized that voice as opposed to no-voice procedures exert stronger effects on people who are low in status than on people who are high in status (Hypothesis 2_{alt}).

In both experiments, we tested the hypotheses on one of the most typical dependent variables in procedural justice research: we assessed participants' procedure judgments (Lind & Tyler, 1988). Specifically, we asked participants how fair they thought the procedure was, how just they thought the procedure was, how appropriate they thought the procedure was, and how satisfied they were with the procedure (cf. Van den Bos & Lind, 2001).

Experiment 1

Method

Participants and design

We tested the above-mentioned hypotheses in a 4 (intragroup status: high vs. average vs. low vs. unknown) × 2 (procedure: voice vs. no voice) factorial design. A total of 111 students at the Free University Amsterdam (45 men, 66 women), varying in age from 17 to 29 years, voluntarily participated in the experiment. Participants were assigned randomly to conditions. The experiment was preceded by two other, unrelated experiments. The experiments lasted a total of 75 min and participants were paid 17.50 Dutch guilders (about US $7.50 at the time this study was conducted) for participation.

Procedure

On arrival at the laboratory, participants were led to one of 15 separate cubicles. In the cubicles, participants found computer equipment that was used to present the stimulus information and to collect the data. The intragroup status manipulation was introduced by asking participants to imagine the following situation:

You are an employee at a specific department of a factory. Because of your work performance you are *the highest* / *on average* / *the lowest* in status at your department.

The sentence that carried the intragroup status information was omitted in the no-information condition. After this, participants read the procedure manipulation:

The management of the factory has decided to give the employees of your department a once-only financial bonus. The management has decided to give you *voice* / *no voice* about the size of the bonus you think you should receive.

Participants then answered the questions pertaining to the dependent variables. The following four procedure judgments were assessed: "How fair was the procedure used to divide the bonus?" (1 = *very unfair*, 7 = *very fair*), "How just was the procedure used to divide the bonus?" (1 = *very unjust*, 7 = *very just*), "How

appropriate was the procedure used to divide the bonus?" (1 = *very inappropriate*, 7 = *very appropriate*), and "How satisfied are you with the procedure used to divide the bonus?" (1 = *very unsatisfied*, 7 = *very satisfied*). These four items were strongly correlated ($rs > .76$, $ps < .001$). Furthermore, a confirmatory factor analysis showed an excellent fit of a one-factor model, $\chi^2(2) = 3.13$, ns; NFI = .99; NNFI = .99; CFI = 1.00. We therefore averaged these four items into a reliable procedure judgments scale ($\alpha = .95$).

Results

The cell means and standard deviations are presented in Table 1. A 4×2 univariate analysis of variance (ANOVA) showed a significant main effect of procedure, $F(1,103) = 234.62$, $p < .001$. This main effect was qualified by the predicted interaction, $F(3,103) = 3.80$, $p < .02$.

To test whether the effect of procedure was significantly stronger among participants who were informed about their intragroup status than among those who were not informed about their intragroup status, we conducted an interaction contrast analysis in which we contrasted the effect of procedure in the intragroup status known conditions (i.e., the high, average, and low status conditions) versus the effect of procedure in the intragroup status unknown condition. This analysis yielded a significant interaction contrast, $F(1,107) = 8.79$, $p < .01$. Furthermore, we tested whether the procedure manipulation exerted different effects in the three status-known conditions by means of a 2 (procedure: voice vs. no-voice) × 3 (status: high vs. average vs. low) ANOVA. The interaction was nonsignificant, $F(2,78) = 1.36$, $p > .26$, indicating that the different levels of known status yielded similar procedure effects: participants in the high, average, and low status conditions did not differ in their reactions to the procedure manipulation. Subsequent analyses revealed that the procedure simple main effect was much stronger in the status known conditions, $F(1,107) = 221.81$, $p < .001$, $\eta^2 = .68$, than in the status unknown condition, $F(1,107) = 25.80$, $p < .001$, $\eta^2 = .19$. In correspondence with Hypothesis 1, these results showed that procedure judgments were influenced more strongly by the procedure manipulation among participants who had been informed about their intragroup status than among participants who had not been informed about their intragroup status. Furthermore, the finding that the procedure manipulation exerted the same effects in the status known conditions supported Hypothesis 2.

As an aside, the means reported in Table 1 suggest that particularly participants who had received a no-voice procedure were influenced by the intragroup status manipulation. In correspondence with this, simple main effect analyses showed that the intragroup status effect was nonsignificant within the voice condition, $F(3,103) = 1.22$, ns, but was significant within the no-voice condition, $F(3,103) = 4.03$, $p < .01$. To further explore these effects, we contrasted within each procedure condition the reactions of participants who had versus had not information about intragroup status. Results showed that status information did not significantly influence procedure judgments of participants following a voice procedure, $F(1,103) = 1.22$, ns, but status information did influence procedure judgments following a no-voice procedure, $F(1,103) = 11.50$, $p < .002$. Thus, being informed about intragroup status predominantly enhanced participants' reactions to no-voice procedures. We revisit this issue in General discussion.

Table 1
Means and standard deviations of participants' procedure judgments as a function of intragroup status and procedure (Experiment 1)

Procedure	Intragroup status							
	High		Average		Low		Unknown	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Voice	5.64	0.88	5.80	0.89	6.25	0.77	5.54	1.13
No voice	2.59	0.93	2.48	1.46	2.29	1.26	3.48	1.02

Note. Higher means indicate more positive procedure judgments.

Discussion

Results of Experiment 1 provide corroborative evidence for Hypothesis 1: people who have information about their intragroup status are more strongly affected in their procedure judgments by variations in voice procedures than people who do not have information about their intragroup status position. These results therefore suggest that information about status enhances people's reactions to procedures. This finding is in correspondence with the relational model (Tyler & Lind, 1992; cf. Lind & Tyler, 1988) and suggests that the relation between procedural justice and status differentials in an intragroup setting may be explained because the mere presence of status information amplifies reactions to procedures (cf. Van Prooijen et al., 2002).

Following Hypothesis 2, in the current experiment we did not find significant differences between individuals who knew their intragroup status (i.e., the high vs. average vs. low conditions) in their reactions to voice as opposed to no-voice procedures. This may imply that the primary explanation for the relation between status and procedural justice is salience of status, and not different consequences of various intragroup status positions on reactions to procedures. Before drawing strong conclusions, however, it is important to replicate the findings of Experiment 1 in a second experiment. After all, in Experiment 1 participants imagined themselves to be in a fictitious situation. Based on Experiment 1, we cannot be sure how people would react in a situation in which they really experience status differences and voice or no-voice

procedures. To establish the robustness of our findings, we tested our hypotheses again in an experiment in which participants directly experienced intragroup status differences and voice or no-voice procedures.

Experiment 2

In Experiment 2, we used a laboratory group situation (cf. Brewer, 1979) in which participants directly experienced variations in intragroup status and opportunities to voice their opinions. Replication of our results in such an experiential setting would increase our confidence that the findings of Experiment 1 are not artifacts of the scenario methodology, but rather are indicative for the effects of intragroup status on reactions to voice procedures, as we have hypothesized in our general introduction. Dependent measures were the same procedure judgments as in Experiment 1.

An additional aim of the second experiment was to rule out alternative interpretations of our results. We did this in two ways. First, in Experiment 2 we measured a number of constructs that could possibly be associated with the relation between status and procedural justice: procedural entitlement (i.e., the extent to which people perceive themselves as entitled to fair decision-making procedures), belongingness, and expectations of unequal treatment. By measuring these constructs, in Experiment 2 we were able to investigate whether or not the described effects are attributable to other processes than the status salience explanation argued for in the introduction.

Second, we also tried to rule out the alternative explanation that status information may have increased participants' distributive justice concerns. After all, it has been argued before that status differentials may affect what outcomes are perceived as fair: people with high status positions may perceive themselves as more entitled to positive outcomes than people with low status positions (Feather, 1994). Furthermore, procedures may influence participants' perceptions of outcome control (Thibaut & Walker, 1975): voice procedures may raise the impression that recipients can influence their own outcomes, whereas no-voice procedures may lead people to conclude that they cannot influence their own outcomes. It could therefore be argued that participants' intragroup status position gave them a clearer picture of what outcomes they are entitled to (cf. Feather, 1994), and may thus have increased the need for voice procedures in order to obtain those outcomes. In the second experiment, we have tried to rule out this possibility by allowing participants voice as opposed to no-voice about outcome distributions at the *inter*group level whereas manipulating status (high vs. average vs. low vs. unknown) at the *intra*group level. More specifically, participants could versus could not voice an opinion about how resources should be distributed between their group and other groups, without referring to how these outcomes would be divided between themselves and other group members. We assumed that intragroup status differentials would not influence people's perceptions of how resources should be distributed between their own group and different groups, and we checked this by analyzing the opinions that participants in the voice conditions expressed.

Method

Participants and design

We tested our hypotheses in a 4 (intragroup status: high vs. average vs. low vs. unknown) × 2 (procedure: voice vs. no-voice) factorial design. A total of 171 students at the Free University Amsterdam (41 men and 130 women, varying in age from 17 to 35 years) voluntarily participated in the experiment. The experiment was preceded by another, unrelated experiment. The experiments lasted a total of 1 h and participants received 12.50 Dutch guilders for participation in the experiments.

Procedure

Participants were welcomed in the same laboratory and were seated behind the same computer equipment as in Experiment 1. Participants were told that they would participate in a study on how people perform tasks in groups, and that therefore they would work on tasks together with the other participants that were at that moment present in the laboratory. Each participant would work on individual tasks. The performance of each participant would be used to compute one single group performance score. As such, the participants present in the laboratory formed a team. This team was referred to as "The Blue Team" (cf. Van Leeuwen, Van Knippenberg, & Ellemers, 2003; Van Prooijen et al., 2004a). After this, participants were presented with a blue team logo on the computer screen. Participants were informed that there were currently eight participants in the laboratory and that The Blue Team would therefore consist of eight members (in reality, all stimulus information was preprogrammed; a procedure none of the participants objected to upon debriefing).

Participants were then informed that several teams had previously participated in the experiment. Three of these teams also had eight members. Thus, the current team (the Blue Team) was the fourth team consisting of eight members that participated in the experiment. Furthermore, participants were informed that after all teams were run, a lottery with a prize of 100 Dutch guilders would be held among all participating teams. A number of lottery tickets would be allocated to The Blue Team. Additionally, participants were told that all computers were connected to each other by means of a computer

network and that the experimenter would send messages to the members of The Blue Team during the experiment. To ensure comprehension of this experimental procedure, we then posed six dichotomous practice questions referring to the procedure. Participants received feedback if they gave an incorrect answer to a question.

After this, the tasks that the participants and their team members would conduct were explained. Participants worked on the tasks in two rounds: a practice round of 2 min and a work round of 10 min. A figure that consisted of 36 squares was presented on the upper right side of the computer screen. Each square showed one of eight distinct patterns. One of the eight patterns was presented on the upper left side of the screen, and participants had to count the number of squares with this pattern in the figure on the right side of the screen. After the participants had indicated the correct number, another figure was presented. In both the practice and the work round, the number of tasks completed (i.e., the number of figures that participants had counted in that round) and the time remaining were both shown at the bottom of the screen. At the end of the work round, participants were informed that the group performance of The Blue Team was similar to the group performances of the three previous teams that had also consisted of eight members.

We then induced the status manipulation. Participants in the high status condition were informed that with their individual task performance they had contributed *the most* to the team performance and that they were therefore the *highest* in status within The Blue Team. Participants in the average status condition were informed that with their individual task performance they had contributed *on average* to the team performance and that they were therefore *on average* in status within The Blue Team. Participants in the low status condition were informed that with their individual task performance they had contributed *the least* to the team performance and that they were therefore the *lowest* in status within The Blue Team. In the no-information condition, participants did not receive such information concerning their individual contribution to the team performance and their corresponding status position.

After this, we administered the procedure manipulation to the participants. In the voice condition, the experimenter ostensibly asked participants by means of the computer network to give their opinion about the percentage of lottery tickets that they thought should be allocated to The Blue Team. These participants were subsequently asked to type in the percentage of the lottery tickets that would be divided among the four teams they thought should be allocated to The Blue Team (this percentage is subsequently referred to as participants' "voiced opinions"). In the no-voice condition, the experimenter ostensibly informed participants by means of the computer network that they would *not* be asked to give their opinion about the percentage of lottery tickets that they thought should be allocated to The Blue Team. These participants were subsequently *not* asked to type in the percentage of the lottery tickets that would be divided among the four teams they thought should be allocated to The Blue Team.

Dependent measures

The participants then answered the questions pertaining to the dependent measures and the manipulation checks. We solicited participants' procedure judgments the same as in Experiment 1 by asking four similar questions about the procedure used to divide the lottery tickets. As in Experiment 1, these four items were strongly correlated ($rs > .74$, $ps < .001$). Furthermore, a confirmatory factor analysis showed an excellent fit of a one-factor model, $\chi^2(2) = 1.94$, ns.; NFI = 1.00; NNFI = 1.00; CFI = 1.00. In correspondence with Experiment 1, we therefore decided to combine these items into one general and reliable measure of procedure judgments ($\alpha = .94$).

To get a better sense of the effects of the status manipulation, and to rule out alternative explanations, we also assessed a number of additional measures. First, we measured participants' sense of procedural entitlement. More specifically, participants were asked to what extent they agreed to the following two questions (1 = *not at all*, 7 = *very much*): "Because of my performance on the tasks, I think that I am entitled to correct treatment during the course of the experiment" and "Because of my performance on the tasks, I believe that I deserve correct treatment during the course of the experiment." These two items were averaged into a reliable entitlement scale ($\alpha = .95$). Furthermore, we assessed participants' sense of belongingness in the group and their identification with the group. To assess belongingness, we used a modified version of the inclusion of other in the self-scale (Aron, Aron, & Smollan, 1992). That is, participants were graphically presented with seven figures, each containing two Venn diagrams. One Venn diagram represented the self and the other represented The Blue Team. The figures varied regarding the amount of overlap between the two Venn diagrams, and participants had to choose what figure best described their relation to The Blue Team (for details, see Aron et al., 1992). To assess identification, we asked to what extent participants agreed to the following three statements (1 = *strongly disagree*, 7 = *strongly agree*): "I identify with The Blue Team," "I feel connected with The Blue Team," and "I feel committed to The Blue Team." These three items were averaged into a reliable identification scale ($\alpha = .92$). Finally, we asked participants how they believed that other participants were treated with the following question: "Do you believe that other participants were able to voice their opinions?" (1 = *certainly not*, 7 = *certainly*).

To check the status manipulation, we asked participants to what extent they agreed with the following six statements (1 = *strongly disagree*, 7 = *strongly agree*): "With my individual performance on the tasks I had contributed the most to the performance of The Blue Team," "With my individual performance on the tasks I had contributed the least to the performance of The Blue Team" (recoded), "Because of my individual performance on the tasks I was the highest in status within The Blue Team," "Because of my individual performance on the tasks I was the lowest in status within The Blue Team" (recoded), "Because of my individual performance on the tasks I have been important for The Blue Team," and "Because of my individual performance on the tasks I have been unimportant for The Blue Team" (recoded). These six items were averaged into a reliable status check scale ($\alpha = .77$). To check the status-unknown condition we asked all participants to what extent they agreed to the following three statements (1 = *strongly disagree*, 7 = *strongly agree*): "I do not know to what extent my individual performance on the tasks had contributed to the performance of The Blue Team," "I do not know what status I have within The Blue Team," and "I do not know to what extent I have been important for The Blue Team." These three items were averaged into a reliable status-unknown check scale ($\alpha = .87$).

Finally, we checked the procedure manipulation with the following two items (1 = *not at all*, 7 = *very much*): "Did you receive an opportunity to voice your opinion about the allocation of the lottery tickets to The Blue Team?" and "To what extent did the experimenter allow you an opportunity to voice your opinion about the allocation of the lottery tickets to The Blue Team?" These two items were strongly correlated ($r = .92$, $p < .001$) and we averaged them into a reliable procedure check scale ($\alpha = .96$). After this, participants were fully debriefed, thanked, and paid for their participation.

Results

Manipulation checks

The experimental manipulations were checked by means of 4×2 ANOVAs. On the status check scale we found a significant main effect of status only, $F(3,163) = 45.81$, $p < .001$. A LSD test ($p < .05$) with status as independent variable showed that participants in the low status condition ($M = 3.11$, $SD = 1.23$) perceived themselves to have significantly lower intragroup status than participants in the average status condition ($M = 4.44$, $SD = 0.54$), who in turn perceived themselves to have a significantly lower intragroup status than participants in the high status condition ($M = 5.40$, $SD = 1.09$; all $ps < .001$). Participants in the status-unknown condition scored close to the mean of this scale ($M = 4.41$, $SD = 0.54$) and differed significantly from the low and the high status conditions ($ps < .001$). Furthermore, it can be noted here that the mean in the average condition was significantly higher than the scale midpoint of 4, $F(1,167) = 9.32$, $p < .01$. Thus, participants in the average status condition rated their intragroup status as moderately positive in our experiment (although they were less positive than participants in the high status condition, as evidenced by the LSD tests described earlier). The only condition in which participants were negative about their status position was the low status condition, in which the mean was well below the scale midpoint of 4, $F(1,167) = 40.50$, $p < .001$. These results show that participants perceived the status manipulation as intended.

On the status unknown check scale we found a significant main effect of status only, $F(3,163) = 17.03$, $p < .001$. A LSD test ($p < .05$) with status as the independent variable showed that participants in the status unknown condition agreed significantly more with the statements that they did not know their intragroup status ($M = 6.23$, $SD = 1.14$) than participants in the low, average, and high status conditions ($M = 3.93$, $SD = 1.14$; $M = 4.33$, $SD = 1.86$; $M = 4.01$, $SD = 1.92$; respectively; $ps < .001$). There were no significant differences between any of the low, average, and high status conditions on this measure. These findings indicate that the distinction between status known versus status unknown was induced as intended.

On the procedure check scale we found a significant main effect of procedure only, $F(1,163) = 1794.14$, $p < .001$. Participants in the voice condition indicated that they had received more opportunities to voice their opinions about the allocation of the lottery tickets to The Blue Team ($M = 6.37$, $SD = 0.73$) than participants in the no-voice condition ($M = 1.26$, $SD = 0.83$). From these analyses, we can conclude that the participants had perceived the experimental manipulations as intended.

Voiced opinions

We then analyzed the opinions that participants expressed when they received a voice procedure. An ANOVA in the voice condition showed that the status manipulation did not affect participants' voiced opinions about how lottery tickets should be distributed between the teams, $F(3,82) = 1.04$, $p > .37$ (overall $M = 28.07$, $SD = 14.47$). Thus, participants in the high, average, low, and unknown conditions did not differ in their opinions about how lottery tickets should be divided between the teams. This demonstrates that participants' intragroup status position did not influence their opinions about the percentage of lottery tickets that The Blue Team should receive, as was intended with this manipulation.

Procedural entitlement

A 2×4 ANOVA on the procedural entitlement scale showed no significant results (all $ps > .28$; overall $M = 5.15$, $SD = 1.53$). Thus, participants in the various status positions did not differ significantly in the extent to which they felt entitled to fair procedures. This finding

is in correspondence with arguments by Lind (2001) and Tyler et al. (1997; p. 119), who posited that, whereas status may lead people to feel entitled to certain outcomes (Feather, 1994), status does not influence the extent to which people feel entitled to fair procedures. These analyses showed that the current results cannot be explained by differences in perceived procedural entitlement as function of the status manipulation.

Group belongingness and identification

A 2 × 4 MANOVA on the belongingness and identification scales showed no significant effects on both the multivariate and univariate levels (multivariate $ps > .28$; univariate $ps > .30$; belongingness overall $M = 4.35$, $SD = 1.48$; identification overall $M = 3.73$, $SD = 1.63$). Thus, the status manipulation did not influence participants' perceived belongingness or their identification with the group. These results are consistent with previous research findings by Ellemers, Van Knippenberg, De Vries, and Wilke (1988), who showed that intragroup status does not influence identification if group boundaries are impermeable (i.e., no intergroup mobility is possible or made salient, as was the case in the current experiments). These results showed that belongingness and identification cannot explain the data that are presented in this experiment.

Treatment of other participants

An ANOVA on the question whether or not participants believed that other participants were able to voice their opinions, we found a main effect of procedure, $F(1,163) = 114.53$, $p < .001$. Participants in the voice condition believed more strongly that others were allowed an opportunity to voice their opinions ($M = 6.28$, $SD = 1.30$) than participants in the no-voice condition ($M = 3.54$, $SD = 1.95$). Importantly, the main effect of status and the interaction were nonsignificant ($ps > .37$). Thus, the status manipulation did not influence participants' expectations of (un)equal treatment.

Procedure judgments

The cell means and standard deviations are presented in Table 2. An ANOVA on the procedure judgments scale showed significant main effects of procedure, $F(1,163) = 187.96$, $p < .001$, and intragroup status, $F(3,163) = 2.81$, $p < .05$. These main effects were qualified by the predicted interaction between intragroup status and procedure, $F(3,163) = 2.97$, $p < .04$.

Table 2
Means and standard deviations of participants' procedure judgments as a function of intragroup status and procedure (Experiment 2)

Procedure	Intragroup status							
	High		Average		Low		Unknown	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Voice	5.26	1.06	5.91	0.89	5.43	1.19	5.17	1.58
No voice	2.44	1.30	2.97	1.08	2.06	1.29	3.40	1.71

Note. Higher means indicate more positive procedure judgments.

To test whether the effect of procedure was significantly stronger when participants had information about their intragroup status than when participants did not have information about their intragroup status, we conducted an interaction contrast analysis in which we tested the effect of procedure in the status unknown condition versus the status known conditions (i.e., the low, average, and high status conditions). This analysis showed a significant interaction contrast, $F(1,167) = 7.82$, $p < .01$. Furthermore, we tested whether the procedure manipulation had different effects in the status-known conditions by means of a 2 (procedure: voice vs. no-voice) × 3 (intragroup status: high vs. average vs. low) ANOVA. The interaction was nonsignificant, $F < 1$, demonstrating that procedure effects were similar in the status known conditions: Participants in the high, average, and low status conditions did not differ in their reactions to the procedure manipulation. Subsequent analyses showed that the procedure simple main effect was stronger in the status known conditions, $F(1,167) = 170.17$, $p < .001$, $\eta^2 = .51$, than in the status unknown condition, $F(1,167) = 20.81$, $p < .001$, $\eta^2 = .11$. In support of Hypothesis 1, participants who had information about their intragroup status responded more strongly to voice as opposed to no-voice procedures than participants who did not have information about their intragroup status. Furthermore, the finding that the status known conditions produced the same procedure effects supported Hypothesis 2. These results correspond to the findings that were obtained in Experiment 1.

It can further be noted here that, in further correspondence with Experiment 1, simple main effect analyses showed that the intragroup status manipulation did not affect procedure judgments of participants in the voice condition, $F < 1$, and did influence procedure judgments of participants in the no-voice condition, $F(3,163) = 4.79$, $p < .01$. To further explore these effects we contrasted within each procedure condition the procedure judgments of participants who had versus had no information about their intragroup status. Results showed that the absence versus presence of intragroup status information did not affect participants' procedure judgments following voice procedures, $F < 1$, but did influence procedure judgments following no-voice procedures, $F(1,163) = 7.20$, $p < .01$. As in Experiment 1, intragroup status information particularly enhanced participants' reactions to no-voice procedures. We elaborate on this in General discussion.

General discussion

In correspondence with Hypothesis 1, the results of two experiments indicated that information about

intragroup status enhances people's reactions to voice as opposed to no-voice procedures. In the high, average, and low intragroup status conditions, we consistently found stronger effects of variations in voice procedures on participants' procedure judgments than in the control condition, where participants had no information about their intragroup status position. The two reported experiments therefore suggested that people's reactions to procedures are moderated by the absence versus presence of intragroup status information. The moderating effect of the absence versus presence of status information is consistent with the findings reported in Van Prooijen et al. (2002) in which it was shown that salience of the general concept status was sufficient to enhance reactions to procedural justice. Taken together, the current findings and the Van Prooijen et al. (2002) data suggest that informing people about their specific intragroup status position makes the general concept status salient, regardless of whether intragroup status is low, average, or high. The finding that the effects of voice as opposed to no-voice procedures were enhanced in the high, the average, and the low status conditions may therefore imply that salience of the concept status constitutes a primary explanation for relations between status and procedural justice in intragroup settings.

The current data did not provide evidence for a difference in reactions to procedures between high versus low status individuals, as was predicted in Hypothesis 2_{alt}. Moreover, in correspondence with research by Ellemers et al. (1988), in Experiment 2 we found no effects of the status manipulation on belongingness and identification. This contradicts the alternative proposition that low status members needed to be reassured of their belongingness to the group, the proposition that led to Hypothesis 2_{alt}. The current findings are in correspondence with Hypothesis 2, and the fact that we did find the predicted moderating effect of the absence versus presence of status information suggests that, at least in the current research, status salience is a more potent explanation of the relation between intragroup status and procedural justice than possible differences in level of status positions.

Nevertheless, we note here that scientists should not be too ready in concluding that differences between status positions on reactions to procedures can never be found. For example, it could be that status differences based on issues that are more centrally located in the self-concept than was the case in the current studies do lead to differences in reactions to procedures. Furthermore, it is noteworthy that in the present experiments nobody could be excluded from the group (i.e., exclusion was impossible in Experiment 2, and the possibility of exclusion was not made salient in Experiment 1). As such, it could be the case that there was no need for low status individuals to feel insecure of their belongingness in the group, given that they did not expect to be cast out of the group. In correspondence with this line of reasoning, Ellemers et al. (1988) found no effects of intragroup status on identification if intergroup mobility was impossible, but they did find effects of intragroup status on identification if intergroup mobility was possible. By derivation, it can thus be predicted that the difference between high and low status members in procedural influence does materialize in situations where low status members can be degraded to lower status groups, or where high status members can be promoted to higher status groups. These issues are interesting directions for future research to pursue.

The current studies did not find evidence for Hypothesis 1_{alt}, which stated that the effects of procedures would be weaker when status information was available than when status information was unavailable. This hypothesis was based on fairness heuristic theory's proposition of the fairness substitutability effect (e.g., Van den Bos et al., 1998; Van den Bos & Lind, 2002). A possible explanation for the fact that we could not find evidence for a substitutability effect in the relation between status and procedural justice is the group-dynamic context in which the hypotheses were tested. In previous fairness heuristic and uncertainty management experiments, participants were typically not placed in social groups, as we did in the current experiments. Furthermore, it has been found before that fairness heuristic theory's and uncertainty management model's predictions could not be corroborated in group paradigms (see Van den Bos & Lind, 2001; Van Prooijen et al., 2004a). It could therefore be the case that the processes advanced by fairness heuristic theory and the uncertainty management model are less generalizable to group-dynamic contexts than has been recognized before. Nevertheless, the current research should not be conceived of as a refutation of fairness heuristic theory and the uncertainty management model. There are more studies that support fairness heuristic and uncertainty management predictions (e.g., Van den Bos, 2001; Van den Bos & Miedema, 2000; Van den Bos, Poortvliet, Maas, Miedema, & Van den Ham, 2005; Van den Bos, Lind, Vermunt, & Wilke, 1997; Van den Bos, Vermunt, & Wilke, 1997; Van den Bos et al., 1998; for an overview, see Van den Bos & Lind, 2002) than studies that do not support fairness heuristic and uncertainty management predictions (cf. the current paper; Van den Bos & Lind, 2001; Van Prooijen et al., 2004a). Future research would do well to explore conditions under which the processes advanced by fairness heuristic theory and the uncertainty management model do or do not operate.

We operationalized no-voice procedures by explicitly denying participants the opportunity to voice their opinions. It was important to do so, because it has been found before that explicit denial of voice is more successful in inducing experiences of procedural unfairness as compared with more implicit no-voice procedures (i.e.,

not mentioning the possibility of having voice; see Van den Bos, 1999, 2003). In the current experiments, the explicit denial of voice had implications for participants' reactions to the status manipulation: inspection of the data presented here reveals that predominantly participants who were denied voice (and not those who received voice) were affected by the intragroup status manipulation. That is, in both experiments information about status significantly affected the reactions of participants who had received a no-voice procedure compared with the control condition. This corresponds to previous statements in the literature that negative procedures might exert stronger negative effects on people's reactions than that positive procedures exert positive effects, and that people seem to be affected more by procedural *in*justice than by procedural justice (e.g., Folger, 1984; Folger & Cropanzano, 1998; Van den Bos & Van Prooijen, 2001; see also Brockner & Wiesenfeld, 1996; Van den Bos et al., 1997; cf. Skowronski & Carlston, 1989). These findings have led some authors to conclude that it may be more accurate to talk about a no-voice effect as opposed to a voice effect (Van den Bos & Van Prooijen, 2001). The present findings have shown similar results: stronger reactions to status information when participants were denied a voice opportunity than when they received such an opportunity. This suggests that intragroup status predominantly influences people's reactions to unfair procedures.

Manipulation checks in Experiment 2 showed that relative task performance was a successful operationalization of intragroup status (Tyler & Blader, 2002; cf. Van Prooijen et al., 2004b). Nevertheless, it is possible that manipulating task performance might also influence other variables, such as self-efficacy and mood. It is important to note here that, in light of previous research findings, it is unlikely that these variables explain the current results. First, previous research has shown that people who are highly capable of providing meaningful input in a decision-making process (which is closely associated with the self-efficacy construct) respond more strongly to voice as opposed to no-voice procedures than people who are low capable of providing meaningful input (Brockner et al., 1998). This does not correspond with the current findings, where high status individuals responded equally strong to procedures as low status individuals. Second, previous research has shown that mood only influences procedural fairness judgments if people do not have information about procedures (Van den Bos, 2003). However, in the current experiment all participants had information about the procedure they received (i.e., participants received either a voice or a no-voice procedure). Moreover, Van Prooijen et al. (2002) had assessed a mood measure, and this measure could not explain the relation between status and procedural justice. Taken together, the most plausible explanation of the current results is that the availability of status information makes the concept status salient, as argued in this article (cf. Van Prooijen et al., 2002).

As noted in the introduction, distributive justice research has related intragroup status to perceptions of entitlement (Feather, 1994): people with high intragroup status often are entitled to higher outcomes than people with low intragroup status. As a consequence, different outcome distributions may be fair depending on people's status positions. It is important to note that these arguments refer to distributive justice, not to procedural justice. It is less likely that social status affects the extent to which people perceive themselves to be entitled to fair procedures. As emphasized by Lind (2001), people at all levels of group hierarchies value fair procedures as such procedures affirm that people are respected and valued by the social groups they belong to (see also Tyler et al., 1997, p. 119). In other words, fair procedures convey relational benefits that are important to members at all levels of group hierarchies (see also Huo, 2002). Furthermore, we did not find that the effects of voice as opposed to no-voice procedures were strongest in the high status condition, which would be expected if high status individuals perceived themselves as most entitled to fair procedures. In addition, in Experiment 2 we measured the extent to which participants felt entitled to fair procedures, and this measure was unaffected by the status manipulation. These considerations suggest that the current findings cannot be explained by perceptions of entitlement.

To return to the concepts that motivated the current contribution, it can be concluded that the present studies have shown new insights in the psychology of intragroup status and procedural justice. Information about people's intragroup status position enhances their reactions to voice as opposed to no-voice procedures. This suggests that status salience may help to explain the relation between status and procedural justice in an intragroup context. Knowing where we stand in a group, to the extent that it makes one's intragroup status salient, thus enhances reactions to procedural justice.

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