

Experimental Insight Into the Fair Process Effect and Its Boundary Conditions

External Attributions May Moderate Reactions to Procedural Justice in Legal Contexts

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Abstract

The perception of being treated fairly during decision-making processes is an important topic in the research literature on law and society. Many studies have indeed found that perceived procedural justice affects people's reactions, for instance, by increasing their trust in legal authorities and lowering their intentions to protest against these authorities' decisions. Here, we reveal support for this fair process effect and point to some of its potential boundary conditions. In our experimental study, 239 participants imagined being the defendant during a single-judge criminal court hearing that used either a fair or an unfair procedure. Following the experience of a fair as opposed to an unfair procedure, participants showed more trust in judges and were less inclined to protest against the judicial ruling. Interestingly, the effect of the procedure manipulation on trust in judges was moderated by the extent to which participants attributed their case outcomes to external causes. We found a fair process effect among participants with relatively low external attribution ratings, while this effect attenuated and was not statistically significant among participants whose external attribution ratings were relatively high. These findings point to the possibility that attributional processes can moderate people's responses to procedural justice in legally relevant contexts.

Keywords: procedural justice, fair process effect, boundary conditions, external attributions, experiment.

1 Introduction

Criminal justice is frequently a subject of debate both in Dutch society and beyond. Part of such debates is the focus and concerns on the issue of sentencing and the question whether criminal sentences are sufficiently severe. Studies on perceived procedural justice suggest that, in addition to sentences, criminal procedures and

how people perceive these are important as well.¹ That is, people's perceptions that they are treated fairly by legal authorities during decision-making procedures tend to be associated with various legally relevant variables, including trust in authorities and intentions to protest against case outcomes.² Such effects of perceived procedural justice on people's reactions are referred to as the fair process effect.³

Because the fair process effect may have important implications for the legal domain (for instance, in terms of trust in judges and filing appeals),⁴ it is important to gain a better understanding of this effect. To that end, many researchers have focused on the question in which circumstances the fair process effect is likely to be more pronounced. For instance, Brockner and Wiesenfeld aggregated findings of forty-five previous studies and found that people tend to react more strongly to perceived procedural justice when they consider their outcomes unfavourable, such as when they lose an arbitration procedure or a court case.⁵ Other studies suggest that perceived procedural justice has stronger effects when people find themselves in situations of uncertainty (e.g. when they are not sure whether they can trust decision-making authorities)⁶ or when they feel inhibit-

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- 1 E.A. Lind and T.R. Tyler, *The Social Psychology of Procedural Justice* (1988); T.R. Tyler and E.A. Lind, 'A Relational Model of Authority in Groups', in M.P. Zanna (ed.), *Advances in Experimental Social Psychology* (1992) 115.
- 2 For example, H.A.M. Grootelaar and K. van den Bos, 'How Litigants in Dutch Courtrooms Come to Trust Judges: The Role of Perceived Procedural Justice, Outcome Favorability, and Other Socio-legal Moderators', 52 *Law and Society Review* 234 (2018); T.R. Tyler and Y.J. Huo, *Trust in the Law: Encouraging Public Cooperation with the Police and Courts* (2002); L.F.M. Ansems, K. van den Bos & E. Mak, 'The Importance of Perceived Procedural Justice Among Defendants With a Non-Western Background Involved in Dutch Criminal Cases', 12 *Frontiers in Psychology* 29 (2021).
- 3 R. Folger, D. Rosenfield, J. Grove & L. Corkran, 'Effects of "Voice" and Peer Opinions on Responses to Inequity', 37 *Journal of Personality and Social Psychology* 2253 (1979); K. van den Bos, 'Humans Making Sense of Alarming Conditions: Psychological Insight into the Fair Process Effect', in R.S. Cropanzano and M.L. Ambrose (eds.), *Oxford Handbook of Justice in Work Organizations* (2015) 403.
- 4 I.M. Boekema, *De Stap naar Hoger Beroep: Onderzoek naar Appelgedrag van Burgers in Bestuursrechtelijke Zaken* (2015); H.A.M. Grootelaar, *Interacting with Procedural Justice in Courts* (2018).
- 5 J. Brockner and B.M. Wiesenfeld, 'An Integrative Framework for Explaining Reactions to Decisions: Interactive Effects of Outcomes and Procedures', 120 *Psychological Bulletin* 189 (1996).
- 6 K. van den Bos, 'Uncertainty Management: The Influence of Uncertainty Salience on Reactions to Perceived Procedural Fairness', 80 *Journal of Personality and Social Psychology* 931 (2001).

ed (e.g. when they are not sure how to behave because other people may be evaluating them).⁷

The present study takes a different approach; that is, rather than focusing on situations in which the effects of perceived procedural justice are likely to be stronger, we examine when these effects may be attenuated or even reversed. In other words, we assess whether people's favourable reactions to perceived procedural justice may be weakened, possibly to the extent that the fair process effect is no longer statistically significant, or reversed, such that people respond more favourably to procedures they perceive as unfair over procedures they perceive as fair.

Previous studies in organisational, performance-oriented or laboratory settings have sometimes found evidence for such a moderation of the fair process effect.⁸ We take these earlier findings as our point of departure and examine whether they can be observed in a different context. Indeed, one may wonder whether these findings extend to legal settings, given the different types of authorities involved (i.e. judges rather than work supervisors) and given the suggestion that legal authorities are often seen as important representatives of how people are being evaluated by society.⁹ As we will explain later, feeling evaluated may play an important role in attenuating or reversing the fair process effect.

To assess whether the fair process effect may be attenuated or reversed in legal contexts, and building on our previous survey study on this topic,¹⁰ we conducted an experimental study in the Netherlands among 239 participants who were asked to imagine that they were the defendant during a criminal court hearing that used either a fair or an unfair procedure. We also involved potentially moderating variables that may make the fair process effect less likely to emerge.¹¹ By examining these possible boundary conditions, our study enhances current insights into the fair process effect, which improves our understanding of procedural justice in legally relevant settings.

1.1 Procedural Unfairness as an External Attribution Opportunity

One explanation for the potential attenuation or reversal of the fair process effect relates to people's need to feel good about themselves and to protect their self-esteem.¹² When people receive negative outcomes that they attribute to internal causes, this may threaten their self-esteem.¹³ To preserve their self-esteem, people may look for opportunities to attribute negative outcomes to external causes rather than their own behaviours or capabilities.¹⁴

Importantly, unfair procedures offer such external attribution opportunities, while fair procedures are likely to trigger internal attributions.¹⁵ After all, procedural unfairness allows people to put the blame for their negative outcomes on something other than themselves (i.e. on the perceived unfairness of the procedure), whereas procedural fairness may force people to attribute their negative outcomes to something about themselves.¹⁶ Hence, people may sometimes prefer unfair procedures because these allow them to maintain their self-esteem by making external attributions for negative outcomes.¹⁷ As a result, the fair process effect may sometimes be attenuated or even reversed.¹⁸

This line of reasoning is supported by a few empirical studies. For instance, Gilliland studied the interaction between procedures and outcomes in a laboratory experiment concerning employee selection. Participants who were selected showed a fair process effect, such that procedural justice led people to feel more capable to perform the job and thus report higher levels of self-efficacy. For rejected participants, however, procedural justice led to lower ratings of self-efficacy.¹⁹ Similarly, Schroth and Shah examined the interaction between procedures and outcomes in an experimental design that varied whether or not participants would have been hired based on their performance on a managerial assessment task. These authors also conducted a field study that assessed students' perceptions of procedural justice and outcome justice in the context of their mid-

7 L. Hulst, K. van den Bos, A.J. Akkermans & E.A. Lind, 'On the Psychology of Perceived Procedural Justice: Experimental Evidence that Behavioral Inhibition Strengthens Reactions to Voice and No-voice Procedures', 6 *Frontiers in Psychological and Behavioral Science* 1 (2017).

8 For overviews, see D.R. Bobocel and L. Gosse, 'Procedural Justice: A Historical Review and Critical Analysis', in R.S. Cropanzano and M.L. Ambrose (eds.), *The Oxford Handbook of Justice in the Workplace* (2015) 51; J. Brockner, B.M. Wiesenfeld & D.A. Diekmann, 'Towards a "Fairer" Conception of Process Fairness: Why, When and How More May Not Always Be Better Than Less', 3 *Academy of Management Annals* 183 (2009); S.D. Desai, H. Sondak & K.A. Diekmann, 'When Fairness Neither Satisfies Nor Motivates: The Role of Risk Aversion and Uncertainty Reduction in Attenuating and Reversing the Fair Process Effect', 116 *Organizational Behavior and Human Decision Processes* 32 (2011).

9 Tyler and Lind, above n. 1.

10 Ansems et al. (2021), above n. 2.

11 Brockner et al. (2009), above n. 8; K. van den Bos, J. Bruins, H.A.M. Wilke & E. Dronkert, 'Sometimes Unfair Procedures Have Nice Aspects: On the Psychology of the Fair Process Effect', 77 *Journal of Personality and Social Psychology* 324 (1999).

12 M.R. Leary and M.L. Terry, 'Self-evaluation and Self-esteem', in D. Carlston (ed.), *Oxford Handbook of Social Cognition* (2013) 534; C. Sedikides, L. Gaertner & Y. Toguchi, 'Pancultural Self-enhancement', 84 *Journal of Personality and Social Psychology* 60 (2003).

13 B. Weiner, 'An Attributional Theory of Achievement Motivation and Emotion', 92 *Psychological Review* 548 (1985).

14 R.L. Cohen, 'Perceiving Justice: An Attributional Perspective', in J. Greenberg and R.L. Cohen (eds.), *Equity and Justice in Social Behavior* (1982) 119.

15 J. Brockner, L. Heuer, N. Magner, R. Folger, E. Umphress, K. van den Bos, R. Vermunt, M. Magner & P. Siegel, 'High Procedural Fairness Heightens the Effect of Outcome Favorability on Self-evaluations: An Attributional Analysis', 91 *Organizational Behavior and Human Decision Processes* 51 (2003); K. Leung, S.K. Su & M.W. Morris, 'When Is Criticism Not Constructive? The Roles of Fairness Perceptions and Dispositional Attributions in Employee Acceptance of Critical Supervisory Feedback', 54 *Human Relations* 1155 (2001).

16 R. Cropanzano, Z.S. Byrne, D.R. Bobocel & D.E. Rupp, 'Moral Virtues, Fairness Heuristics, Social Entities, and Other Denizens of Organizational Justice', 58 *Journal of Vocational Behavior* 164 (2001).

17 Van den Bos et al. (1999), above n. 11.

18 Brockner et al. (2009), above n. 8.

19 S.W. Gilliland, 'Effects of Procedural and Distributive Justice on Reactions to a Selection System', 79 *Journal of Applied Psychology* 691 (1994).

term examinations. The findings of both studies suggested a positive impact of procedural justice on self-esteem when outcomes were positive and a negative impact of procedural justice on self-esteem when outcomes were negative.²⁰

Brockner et al., too, found an interaction between procedures and outcomes in laboratory settings as well as real-life work contexts. In addition, their research offered empirical evidence for the assumed role of attributional processes by showing that the interaction between outcome favourability and procedural justice was explained (mediated) by the interaction between outcome favourability and internal attributions (operationalised in this study as the extent to which participants attributed their performance on a managerial assessment exam to themselves).²¹

Some studies have examined when these interactions between procedures and outcomes are particularly likely to occur. For example, research by Brockner et al. suggests that procedural justice is more likely to be inversely related to people's self-evaluations after receiving negative outcomes when people are more prevention focused (meaning that they are focused on avoiding losses rather than achieving gains).²² In addition, Holmvall and Bobocel found that people responded more negatively to unfavourable outcomes following fair procedures when they were higher in independent (rather than interdependent) self-construal, meaning that they identified themselves in terms of their achievements rather than in terms of their relationships with others.²³ Importantly, Holmvall and Bobocel found this reversed fair process effect not only on self-esteem but also on measures of perceived outcome fairness and outcome satisfaction.²⁴ Three experiments by Van den Bos et al. also showed a reversed fair process effect on measures other than participants' self-esteem. Participants in these experiments were told that there were five hierarchical positions within a simulated organisation and that, based on their task performance, they would be appointed to one of these positions (resulting in favourable or unfavourable outcomes). Van den Bos et al. found that participants reported lower outcome judgments (Experiments 1 and 2) and stronger intentions to protest against their outcomes (Experiment 3) following accurate rather than inaccurate procedures when they felt strongly evaluated. The authors explain these effects by referring to attribution-seeking processes: when people

feel that they are strongly evaluated, they may search for opportunities to attribute negative outcomes to external causes in order to preserve their self-esteem. Because unfair procedures offer such external attribution opportunities, people may respond more positively to procedural unfairness.²⁵ Taken together, these and other studies show that, under certain conditions, the fair process effect may be moderated by people's external attributions.²⁶

1.2 The Current Research

The present study builds on these earlier findings and aims to extend them to a legally relevant context. Thus, we conducted an experimental study in the Netherlands among 239 participants with a non-Western ethnic-cultural background,²⁷ who read a scenario in which they were the defendant during a criminal court hearing before a single judge. We conducted our study among people with a non-Western ethnic-cultural background because some of them may feel negatively evaluated by Dutch society. After all, some members of society have a quite negative image of people with a non-Western background, which is also experienced as such by them.²⁸ Indeed, a 2020 study showed that people with Moroccan and Turkish backgrounds in particular feel discriminated relatively often, more so than people who otherwise do not belong to the dominant majority in the Netherlands.²⁹ As explained earlier, feeling negatively evaluated can play an important role in the attributional processes studied here.³⁰ Therefore, our study focused on participants with a non-Western background.³¹ In our experiment, we manipulated procedural justice by means of random allocation to conditions, such that one-half of the participants read about a procedure that was fair and the other half of the participants read about a procedure that was unfair. All participants received the same negative case outcome (i.e. a fine of €400).³² Among other things, we then assessed participants' perceptions of procedural justice, outcome judgments (i.e.

20 H.A. Schroth and P.P. Shah, 'Procedures: Do We Really Want to Know Them? An Examination of the Effects of Procedural Justice on Self-esteem', 85 *Journal of Applied Psychology* 462 (2000).

21 Brockner et al. (2003), above n. 15; see also J.D. Lilly and K. Wipawayangkool, 'When Fair Procedures Don't Work: A Self-Threat Model of Procedural Justice', 37 *Current Psychology* 680 (2018).

22 J. Brockner, D. de Cremer, A.Y. Fishman & S. Spiegel, 'When Does High Process Fairness Reduce Self-evaluations Following Unfavorable Outcomes? The Moderating Effect of Prevention Focus', 44 *Journal of Experimental Social Psychology* 187 (2008).

23 C.M. Holmvall and D.R. Bobocel, 'What Fair Procedures Say about Me: Self-construal and Reactions to Procedural Fairness', 105 *Organizational Behavior and Human Decision Processes* 147 (2008).

24 *Ibid.*

25 Van den Bos et al. (1999), above n. 11.

26 Brockner et al. (2009), above n. 8.

27 The term 'non-Western ethnic-cultural background' in this work refers to being born in a non-Western country, which according to Statistics Netherlands refers to countries in Africa, Latin-America and Asia (excluding Indonesia and Japan) or Turkey. We also use the term to refer to persons whose parents or other ancestors were born in a non-Western country. See www.cbs.nl/nl-nl/publicatie/2018/47/jaarrapport-integratie-2018 (last visited 20 July 2022).

28 W. Huijink and I. Andriessen, *Integratie in zicht? De integratie van migranten in Nederland op acht terreinen nader bekeken* (2016).

29 I. Andriessen, J. Hoegen Dijkhof, A. van der Torre, E. van den Berg, I. Pulles, J. Iedema & M. de Voogd-Hamelink, *Ervaren discriminatie in Nederland II* (2020).

30 Van den Bos et al. (1999), above n. 11.

31 When analysing our data, we found that participants' average external attribution ratings were at the middle of the 7-point external attributions scale ($M = 4.01$, $SD = 1.19$).

32 This fine is larger than the amount of €150 that is indicated by the relevant legal guidelines. We opted for a higher fine because this is more likely to be perceived as a negative case outcome by research participants, which makes the scenario more likely to trigger the external attribution processes that we are interested in. See www.rechtspraak.nl/voor-advocaten-en-juristen/reglementen-procedures-en-formulieren/strafrecht/paginas/orientatiepunten-voor-straftoemeting.aspx (last visited 20 July 2022).

how fair participants consider their case outcomes and how satisfied they are with these outcomes), external attribution ratings (i.e. the extent to which participants attribute their outcomes to external causes), intentions to protest against the judicial ruling, trust in judges, and the grades that they assigned to indicate their level of trust in judges.

Our study differs from previous research that found attenuated or reversed fair process effects in several ways. First, we use a different sample than the samples used in the laboratory experiments that make up a large part of the relevant procedural justice literature, which focus on WEIRD³³ (Western, Educated, Industrialised, Rich and Democratic) participants.³⁴ That is, participants in our study had a non-Western background and were generally less educated than college student samples. Second, our study explicitly involves external attribution ratings as a potentially moderating variable. Other studies examining the potential attenuation or reversal of the fair process effect often assume that attributional processes play a role but do not include attributions as a variable in their analyses.³⁵ Third, we examine the potential moderation (attenuation or reversal) of the fair process effect in a novel context, focusing on legal procedures rather than treatment in organisational or performance-oriented settings.³⁶

To test our ideas, we formulated three hypotheses. First, we assess whether we can observe the fair process effect that has been found in previous procedural justice studies.³⁷ Thus, Hypothesis 1 predicts that procedural justice, as manipulated in the scenario, has an effect on participants' trust in judges, the grade that participants assigned to indicate their level of trust in judges, and participants' protest intentions. More specifically, we expect that participants in the fair procedure condition have more trust in judges, assign a higher grade to indicate their level trust in judges and report lower protest intentions than participants in the unfair procedure condition.

Second, we assess the potential interaction between the procedure manipulation and external attribution ratings. Specifically, Hypothesis 2 predicts a fair process effect when people's external attribution ratings are relatively low, such that participants in the fair procedure

condition have more trust in judges, assign a higher grade to indicate their level of trust in judges and report lower protest intentions. Based on previous work,³⁸ Hypothesis 2 predicts that these effects of the procedure manipulation may be attenuated or even reversed when external attribution ratings are relatively high.

Third, we examine whether there is an interaction between the procedure manipulation and participants' outcome judgments. One of the reasons why we include outcome judgments in our study is that, as explained earlier, receiving negative outcomes may make people look for external attribution opportunities to protect their self-esteem.³⁹ Because unfair procedures offer such external attribution opportunities, people may prefer unfair procedures over fair procedures, such that the fair process effect may be attenuated or even reversed.⁴⁰ In addition, the fair process effect may be strengthened when outcomes are perceived as unfavourable, because unfavourable outcomes may prompt people to examine what caused these outcomes and, hence, pay more attention to procedural fairness. Brockner and Wiesenfeld propose that both types of reactions may be explained by the sense-making processes that unfavourable outcomes tend to trigger.⁴¹ Aggregating these insights, Hypothesis 3 examines whether the fair process effect is moderated by outcome judgments, such that participants' reactions to the procedure manipulation are strengthened, attenuated or reversed when they judge their outcomes negatively.

Taken together, we examine the following hypotheses: Hypothesis 1: Procedural justice affects participants' trust in judges, the grade that participants assigned to their trust in judges, and participants' protest intentions, such that participants in the fair procedure condition have more trust in judges, assigned a higher grade for their trust in judges and report lower protest intentions than participants in the unfair procedure condition (fair process effect).

Hypothesis 2: There is an interaction between procedural justice and external attribution ratings, such that there is a fair process effect when participants' external attribution ratings are relatively low and an attenuated or reversed fair process effect when external attribution ratings are relatively high.

Hypothesis 3: There is an interaction between procedural justice and outcome judgments, such that the fair process effect is strengthened, attenuated or reversed when participants judge their outcomes negatively.

1.3 Research Context

The scenarios we used in this study focused on a criminal court hearing before a single judge. In the Dutch legal context, single judges (instead of a three-judge panel) handle criminal cases in which the public prosecutor demands a maximum of one-year imprisonment. Single

33 J. Henrich, S.J. Heine & A. Norenzayan, 'The Weirdest People in the World?', 33 *Behavioral and Brain Sciences* 61 (2010).

34 For example, Gilliland, above n. 19; Holmvall and Bobocel, above n. 23; Van den Bos et al. (1999), above n. 11. We note that, because we used a different kind of sample, we were able to examine whether fair process effects found in other studies could also be observed among research participants with different backgrounds. Since demonstrating possible differences in reactions to perceived procedural justice among research participants with WEIRD and non-WEIRD backgrounds was not the focus of our research, we did not include both groups in our study.

35 For example, Brockner et al. (2008), above n. 22; Holmvall and Bobocel, above n. 23; Schroth and Shah, above n. 20. For an exception, see Brockner et al. (2003), above n. 15.

36 For example, Brockner et al. (2003), above n. 15; Schroth and Shah, above n. 20; Van den Bos et al. (1999), above n. 11.

37 For example, J. Thibaut and L. Walker, *Procedural Justice: A Psychological Analysis* (1975); Lind and Tyler, above n. 1; Van den Bos (2015), above n. 3.

38 For example, Brockner et al. (2009), above n. 8; Van den Bos et al. (1999), above n. 11.

39 Cohen, above n. 14.

40 Brockner et al. (2009), above n. 8; Van den Bos et al. (1999), above n. 11.

41 Brockner and Wiesenfeld, above n. 5.

judges can impose fines, community service or prison sentences, among other things, and these sentences can be conditional or unconditional. Cases typically handled by single judges include assault, theft, insult, threat, destruction, drug offenses and driving under the influence. Defendants can choose to be assisted by a criminal defence lawyer during the proceedings. Rather than viewing the court hearing as a clash of parties before a passive judge, as is the case in more adversarial systems, the Dutch legal system treats defendants as subject of the investigation and involves an active role for judges. In addition, Dutch court hearings involve only professional judges and, thus, do not have bifurcated proceedings in which juries determine defendants' guilt and judges decide on sentences. Court hearings before a single judge usually last around 30 minutes, and judgments are mostly delivered directly afterwards.⁴²

Our research participants were people with a non-Western ethnic-cultural background. The Netherlands is a multicultural society, the four largest groups with a non-Western ethnic-cultural background being people with a Turkish, Moroccan, Surinam or Antillean background.⁴³ Dutch citizens with a non-Western ethnic-cultural background tend to trust the judiciary as an institution to a similar extent as does the average Dutch citizen,⁴⁴ and trust in judges among the general population is relatively high compared to other Dutch institutions.⁴⁵ As explained earlier, some people with a non-Western background may feel negatively evaluated by Dutch society. This may trigger the attributional processes that we study in this work and that may attenuate or reverse reactions to procedural justice.

2 Method

2.1 Participants and Design

Our sample consisted of 239 persons with a non-Western ethnic-cultural background who were approached between 9 September 2019 and 10 October 2019 at two shopping centres in the city of Utrecht, the Netherlands to participate in our study. Of these participants, 130 (54.4% of the sample) were men and 109 (45.6% of the sample) were women. Participants were between 18 and 68 years, with a mean age of 31.46 years ($SD = 11.78$). Their highest completed levels of education ranged from no education at all ($N = 3$, 1.3%) via primary school ($N = 7$, 2.9%), secondary school ($N = 65$, 27.3%), secondary vocational education ($N = 84$, 35.3%) and higher professional education ($N = 55$, 23.1%) to university ($N = 22$, 9.2%). Two participants (0.8%) indicated that they had a different kind of highest completed level of education.

Participants also indicated whether they had a Moroccan ($N = 98$, 41.0%), Surinam ($N = 52$, 21.8%), Turkish ($N = 40$, 16.7%), Antillean ($N = 12$, 5.0%) background, or other ethnic-cultural background ($N = 43$, 18.0%). These other ethnic-cultural backgrounds included Afghanistan ($N = 7$, 2.9%), Somalia ($N = 4$, 1.7%), Iraq ($N = 3$, 1.3%) and Iran ($N = 3$ participants, 1.3%).

As many as 89 participants (37.4%) had experienced an actual hearing at a criminal court. Because we did not want to make participants potentially feel stigmatised, we did not ask them whether they were defendants during these court hearings. Therefore, this number may include participants who experienced court hearings as defendants, as victims, as part of the audience or in their professional capacities.

In the experiment, participants read a scenario in which they were the defendant during a criminal court hearing that progressed in either a fair or an unfair way. Participants were randomly assigned to one of these two conditions. The text of the scenarios was based on findings of our previous qualitative interview study in which we interviewed 100 defendants in criminal cases to examine what makes them feel treated fairly during their court hearings.⁴⁶ After reading the scenario, participants were asked to indicate their perceptions of procedural justice during the court hearing, their judgments of the outcome they received in the scenario (which was held constant across conditions), the extent to which they made external attributions with regard to what happened in the scenario, the extent to which they wanted to protest against their outcomes, their levels of trust in Dutch judges, and the grade that they assigned to indicate the extent of their trust in Dutch judges.

Our research assistant approached 873 persons to participate in the study, 253 of whom agreed to do so. This resulted in a response rate of 29.0%. Filtering out questionnaires of persons who turned out to have a Western ethnic-cultural background, did not indicate their ethnic-cultural background, turned out to be younger than 18 years or skipped answering a large number of questions eventually left us with 239 questionnaires to be used for our analyses. With this number of participants, we were able to test our hypotheses with sufficient statistical power. After all, an a priori G*Power analysis indicated that, to achieve statistical power of 0.80 to detect the two-way interaction between external attribution ratings and the procedure manipulation, with $\alpha = 0.05$ and a relatively small effect size ($f^2 = 0.04$), we needed at least 191 participants.⁴⁷

42 L.F.M. Ansems, K. van den Bos & E. Mak, 'Speaking of Justice: A Qualitative Interview Study on Perceived Procedural Justice Among Defendants in Dutch Criminal Cases', 54 *Law and Society Review* 643 (2020).

43 Andriessen et al., above n. 29.

44 J. Van der Schaaf, *Nieuwe Nederlanders en Vertrouwen in de Rechter* (2018).

45 J. den Ridder, E. Miltenburg, S. Kunst, L. van 't Hul & A. van den Broek, *Burgersperspectieven bericht 1* 2022 (2022).

46 Ansems et al. (2020), above n. 42.

47 J. Cohen, P. Cohen, S.G. West & L.S. Aiken, *Applied Multiple Regression/Correlational Analysis for the Behavioral Sciences* (2013); F. Faul, E. Erdfelder, A.-G. Lang & A. Buchner, 'G*Power 3: A Flexible Statistical Power Analysis Program for the Social, Behavioral, and Biomedical Sciences', 39 *Behavior Research Methods* 175 (2007). In our analyses, we also tested whether there was a significant three-way interaction between outcome judgments, external attribution ratings and the procedure manipulation. These analyses were conducted for exploratory purposes only, however, and are not reported in the present article. After all, a G*power analysis showed that, to achieve sufficient statistical power of 0.80 to detect the three-way interaction, with $\alpha = 0.05$ and a relatively small effect size ($f^2 = 0.02$),

2.2 Experimental Procedure

Our study procedures were approved by the ethical board of the Faculty of Law, Economics, and Governance at Utrecht University. A research assistant approached potential participants at two shopping centres in the city of Utrecht, the Netherlands. Participants were approached both inside the shopping centres and directly outside. The two selection criteria that were used were whether people appeared to have a non-Western ethnic-cultural background and were aged 18 years or older (both criteria subsequently confirmed for each participant after they filled out the questionnaire).

When approaching potential participants, our research assistant explained that she was assisting with a study on what makes people feel treated fairly and justly and asked whether they would be willing to fill out a short questionnaire. When people agreed, she provided additional information about the study, indicating that participation consisted of reading a short story about a hypothetical court hearing and answering questions about that court hearing as well as some other topics. She also explained that only people with a non-Western ethnic-cultural background were eligible for participation in the study, indicating that we were very interested in their perceptions and experiences. In addition, participants were notified that their participation was on a voluntary basis and that their answers would be treated confidentially and anonymously. Throughout the entire study we ensured that we treated people with respect.

After agreeing to participate, participants were asked to carefully read the following scenario and imagine that they were part of it:

For some time now, you have been having a conflict with your neighbours. They make so much noise that it makes you lose sleep at night. Talking about this has not worked. A couple of months ago, you were unable to control yourself during an argument in which you severely offended your neighbours. Your neighbours filed a charge of insult against you at the police station.

Today, you have to appear before the criminal law division of the court in Utrecht. You enter the courtroom and take a seat. You are sitting opposite to a judge. Next to the judge are the public prosecutor and a court official who takes notes during the court hearing.

The judge checks your personal information. He informs you that you have the right to remain silent. The public prosecutor then tells you that you are charged with insult. The judge asks you to tell what happened.

Then the experimental manipulation was introduced. That is, for participants in the fair condition ($N = 118$, 49.4% of the sample), the scenario continued as follows:

You notice that the judge gives you *a lot of time* to tell your side of the story. The judge does not interrupt you. He *listens* attentively to what you are saying. As a result, your impression is that the judge had not already made up his mind about your case beforehand. The judge seems to be really trying to get a *good idea* of what happened exactly. For example, he asks a lot of questions. The conflict with your neighbours about the noise, and how this has lasted for several years, is discussed as well. The judge comes across as *friendly*.

Participants in the unfair condition ($N = 121$, 50.6% of the sample) read the following:

You notice that the judge gives you only *very little time* to tell your side of the story. The judge interrupts you a couple of times. He does *not* seem to listen attentively to what you are saying. As a result, your impression is that the judge had already made up his mind about your case beforehand. The judge does *not* seem to be really trying to get a good idea of what happened exactly. For example, he asks very few questions. The conflict with your neighbours about the noise, and how this has lasted for several years, is not discussed either. The judge comes across as *unfriendly*.

After reading this part, for both groups the scenario continued as follows:

Then, the public prosecutor is allowed to speak. She presents the evidence against you and demands that you pay a fine of €450. You are allowed to respond to this. You reply by saying that you think this is a way too harsh penalty for a charge of insult. In addition, it is hard for you to come up with this amount of money. The public prosecutor is then allowed to speak once more. She sticks to the fine she demanded. After you have received a final opportunity to say something, the judge puts forward his verdict.

Participants in the fair condition then read:

The judge explains that he is taking into account your side of the story. He understands that you were angry at your neighbours because of the noise that they were making. Nevertheless, he deems a sentence warranted.

Participants in the unfair condition read the following:

The judge shortly explains that he deems a sentence warranted.

For all participants, the scenario ended in the same way:

The judge therefore sentences you to pay a *fine* of €400. You are disappointed about this verdict. You still think this sentence is too harsh. You had expected a less severe sentence. The judge explains that you can appeal this verdict. This ends your trial. You leave the courtroom.

at least 387 research participants were needed. Complete details and results are available with the first author on request.

After reading the scenario, participants answered questions regarding our main and background variables. Upon completing the questionnaire, they were thanked for their participation with a small token of appreciation and offered a summary of the research results that we would later send to them if they were interested. During data collection, our research assistant kept a logbook detailing relevant information, including participants' oral comments on the questionnaire.

2.3 Measures

In the following, we describe the measures we used for our independent variable (perceived procedural justice), moderating variables (outcome judgments and external attributions), dependent variables (protest intentions, trust in judges and grades assigned for trust in judges) and background variables. All measures were assessed on 7-point scales (1 = *completely disagree* to 7 = *completely agree*) unless indicated otherwise.

2.3.1 Independent Variable

The items we used to examine perceived procedural justice were partly based on work by Hulst et al. and Van den Bos et al.⁴⁸ We asked the participants to indicate to what extent they agreed with the following three statements: 'I think the procedure that has been followed during the court hearing is fair', 'I think the procedure that has been followed during the court hearing is just', and 'I think the procedure that has been followed during the court hearing is justified'. Together, these items formed a reliable perceived procedural justice scale ($\alpha = 0.92$), with higher scores reflecting higher levels of perceived procedural justice.

2.3.2 Moderating Variables

Building on research by Grootelaar and Van den Bos and research by Van den Bos et al.,⁴⁹ we measured participants' outcome judgments by asking them to indicate to what extent they agreed with the following three statements about the judge's ruling: 'I think this ruling is fair', 'I think this ruling is just', and 'I am satisfied with this ruling'. Answers to these questions were averaged to form a reliable outcome judgments scale ($\alpha = 0.92$), with higher scores indicating that participants judged their outcomes more positively.

We also assessed the extent to which participants made external attributions with items that were inspired by the research by Van den Bos et al.⁵⁰ We asked participants to indicate to what extent they agreed with the following six statements: 'I got this ruling because of myself' (reverse-coded), 'I got this ruling because of my own behaviour' (reverse-coded), 'I got this ruling because of something outside of myself', 'I got this ruling because of something other than my own behaviour', 'I got this ruling because of how the court hearing progressed', and 'I got this ruling because of how I was

treated during the court hearing'. Averaging participants' answers to these questions yielded a scale with sufficient reliability for our theory-testing purposes ($\alpha = 0.60$).⁵¹ Higher scores on this scale indicate higher external attribution ratings.⁵²

2.3.3 Dependent Variables

Following Stahl et al. and Van den Bos et al.,⁵³ we measured participants' protest intentions by asking them the following two questions: 'To what extent would you want to criticise the ruling?' and 'To what extent would you want to protest against the ruling?' (1 = *not at all* to 7 = *very much*). These items formed a reliable protest intentions scale ($\alpha = 0.87$), with higher scores reflecting stronger intentions to protest against the judge's ruling. Building on Grootelaar and Van den Bos,⁵⁴ who aimed to assess levels of trust as directly as possible, we solicited participants' trust in Dutch judges by asking them to indicate to what extent they agreed with the following three statements: 'I have faith in Dutch judges', 'I think Dutch judges are trustworthy', and 'I feel that Dutch judges cannot be trusted' (reverse-coded). Together, participants' answers to these questions formed a reliable trust in judges scale ($\alpha = 0.85$). Higher scores on this scale reflect higher levels of trust in Dutch judges. In addition, we asked participants to express their trust in Dutch judges with a report grade from 1 (*lowest*) to 10 (*highest*), in conformity with the grading system used at Dutch schools.

2.3.4 Background Variables

Finally, we examined several background variables to be able to provide a sample description, asking participants whether they had ever experienced an actual hearing at a criminal court, and asking them to indicate their highest completed level of education, gender, ethnic-cultural background or origins, and age. At the end of the questionnaire, there was room for participants to write down remarks or issues they considered important and that had not been assessed by means of our questions.⁵⁵

48 Hulst et al., above n. 7; Van den Bos et al. (1999), above n. 11.

49 Grootelaar and Van den Bos, above n. 2; Van den Bos et al. (1999), above n. 11.

50 Van den Bos et al. (1999), above n. 11.

51 F.M. Cramwinckel, E. van Dijk, D. Scheepers & K. van den Bos, 'The Threat of Moral Refusers for One's Self-concept and the Protective Function of Moral Cleansing', 49 *Journal of Experimental Social Psychology* 1049 (2013); J.C. Nunnally and I.H. Bernstein, *Psychometric Theory* (1994).

52 We report all measures in our study and thus note that we also included perceived everyday discrimination in our questionnaire to serve as a possible proxy for external attribution ratings. We did this because in one of our previous studies (Ansems et al. (2021), above n. 2) our measure of external attributions turned out to be insufficiently reliable. In the present study, however, the external attributions scale did reach sufficient reliability for this study's purposes, and perceived everyday discrimination and external attribution ratings were only marginally significantly correlated ($r = 0.12$, $p = 0.08$). Therefore, we included perceived everyday discrimination in our analyses for exploratory purposes only and do not report the results here. Complete details and results are available from the first author on request.

53 T. Stahl, R. Vermunt & N. Ellemers, 'Reactions to Outgroup Authorities' Decisions: The Role of Expected Bias, Procedural Fairness, and Outcome Favorability', 11 *Group Processes and Intergroup Relations* 281 (2008); Van den Bos et al. (1999), above n. 11.

54 Grootelaar and Van den Bos, above n. 2.

55 There were missing values for external attribution ratings (one missing value), protest intentions (1 missing value), trust in judges (3 missing values), grade for trust in judges (20 missing values), having experienced an

3 Results

This section first reports the results of our manipulation check and the main effects of the procedure manipulation on participants' trust in judges, the grade that they assigned to indicate the level of their trust in judges, and their protest intentions (Hypothesis 1). We then describe the results of the analyses testing whether there was an interaction between participants' external attribution ratings and the procedure manipulation (Hypothesis 2). Finally, we assess the interaction between the procedure manipulation and outcome judgments (Hypothesis 3).⁵⁶

3.1 Manipulation Check

To check if the manipulation that varied whether participants read the fair scenario or the unfair scenario affected perceived procedural justice among our participants, we performed a General Linear Model (GLM) analysis with the procedure manipulation as a dichotomous independent variable and perceived procedural justice as a dependent variable. Indeed, we found a statistically significant main effect of the procedure manipulation, $F(1, 231) = 60.88, p < 0.001, \eta^2 = 0.21$, with participants in the fair condition reporting higher levels of perceived procedural justice ($M = 4.28, SD = 2.03$) than participants in the unfair condition ($M = 2.45, SD = 1.52$).⁵⁷

3.2 Testing the Main Effects of the Procedure Manipulation

To assess whether our dependent variables were affected by the procedure manipulation, we performed three separate GLM analyses with the procedure manipulation as a dichotomous independent variable and trust in judges, the grade that participants assigned to indicate the level of their trust in judges, and protest intentions as dependent variables. These analyses revealed a significant effect of the procedure manipulation on trust in judges, $F(1, 228) = 6.22, p < 0.05, \eta^2 = 0.03$, with partic-

ipants in the fair condition reporting higher levels of trust in judges ($M = 4.91, SD = 1.40$) than participants in the unfair condition ($M = 4.42, SD = 1.60$). Participants in the fair condition also gave their trust in judges a higher grade ($M = 6.75, SD = 1.61$) than participants in the unfair condition ($M = 6.10, SD = 1.90$), $F(1, 211) = 7.10, p < 0.01, \eta^2 = 0.03$. Furthermore, participants in the fair condition showed significantly lower protest intentions ($M = 4.69, SD = 1.81$) than participants in the unfair condition ($M = 5.43, SD = 1.74$), $F(1, 230) = 10.23, p < 0.01, \eta^2 = 0.04$. These results support our first hypothesis, which predicted that participants in the fair condition would have more trust in judges, assign a higher grade to indicate the level of their trust in judges and report lower protest intentions than participants in the unfair condition.⁵⁸

3.3 Testing the Moderating Effect of External Attributions

We examined Hypothesis 2 by conducting GLM analyses with the procedure manipulation as a dichotomous independent variable and external attribution ratings as a continuous (quasi-interval) moderating variable. The external attributions variable was standardised before being entered into our analyses.

3.3.1 Trust in Judges

We performed a GLM analysis with the procedure manipulation and external attribution ratings as independent and moderating variables and trust in judges as a dependent variable. This analysis yielded a significant main effect of the procedure manipulation, $F(1, 225) = 5.91, p < 0.05, \eta^2 = 0.03$; no statistically significant main effect of external attribution ratings, $F(1, 225) = 0.16, p = .69, \eta^2 = 0.00$; and a significant interaction between external attribution ratings and the procedure manipulation, $F(1, 225) = 5.12, p < 0.05, \eta^2 = 0.02$. The main effect of the procedure manipulation indicated that participants in the fair condition reported more trust in judges ($M = 4.91, SD = 1.40$) than participants in the unfair condition ($M = 4.43, SD = 1.60$). The nonsignificant main effect of external attribution ratings indicated that external attribution ratings were not significantly associated with trust in judges.

We interpreted the interaction effect by assessing the simple effect of the procedure manipulation at different levels of participants' external attribution ratings. The effect of the procedure manipulation was statistically significant when external attribution ratings were relatively low (i.e. estimated at 1 *SD* below the mean), such that participants in the fair condition reported more trust in judges ($M = 5.05, SE = 0.17$) than participants in the unfair condition ($M = 4.08, SE = 0.24$), $F(1, 225) = 10.95, p < 0.01, \eta^2 = 0.05$. In contrast, when external attribution ratings were relatively high (i.e. estimated at 1 *SD* above the mean), the effect of the procedure ma-

actual court hearing (1 missing value), highest completed level of education (1 missing value), and age (3 missing values).

56 To detect outliers in our main analysis – that is, the main effect of the procedure manipulation on participants' trust in judges – we examined Cook's distance; see Cohen et al., above n. 47; D. Cook, 'Detection of Influential Observation in Linear Regression', 19 *Technometrics* 15 (1977). This revealed that six participants had Cook's distance scores more than 3 *SDs* above the mean. These participants were excluded from all analyses reported in the Results and Discussion sections of this article; see also Cramwinckel et al., above n. 51; K. van den Bos, J. Brockner, M. van den Oudenalder, S.V. Kamble & A. Nasabi, 'Delineating a Method to Study Cross-cultural Differences with Experimental Control: The Voice Effect and Countercultural Contexts Regarding Power Distance', 49 *Journal of Experimental Social Psychology* 624 (2013). When analyses including these six participants yielded different results, this is noted in footnotes.

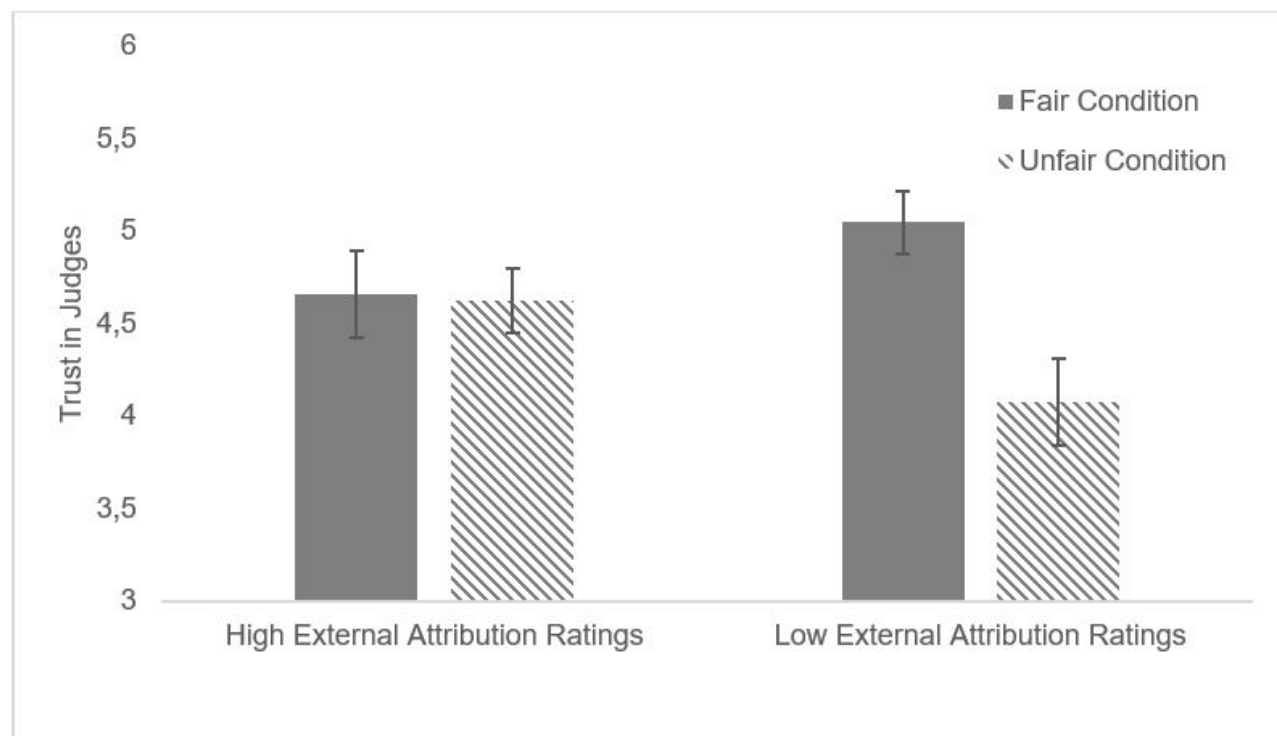
57 Please note that, strictly speaking, these conditions should be referred to as the 'more fair' and 'less fair' conditions. After all, the average score of participants in the fair condition ($M = 4.28, SD = 2.03$) is not far from the middle of the 7-point perceived procedural justice scale (i.e. score 4). Indeed, a one-sample *t* test showed that the average score of participants in the fair condition did not significantly deviate from 4, $t(111) = 1.44, p = .15, d = 0.14$. For reasons of simplicity, however, we refer to the experimental conditions as the 'fair' and 'unfair' conditions.

58 When we performed these analyses while including the six outliers, we did not find a significant effect of the procedure manipulation on trust in judges, $F(1, 234) = 1.99, p = 0.16, \eta^2 = 0.01$, or on the grade participants gave their trust in judges, $F(1, 217) = 2.23, p = 0.14, \eta^2 = 0.01$.

nipulation was no longer statistically significant, $F(1, 225) = 0.01$, $p = 0.91$, $\eta^2 = 0.00$, with participants in the fair condition reporting a similar level of trust in judges

($M = 4.66$, $SE = 0.23$) as participants in the unfair condition ($M = 4.63$, $SE = 0.17$). Figure 1 illustrates the interaction effect.

Figure 1 Trust in Judges, the Procedure Manipulation and External Attribution Ratings



These results indicate that we observed a fair process effect when external attribution ratings were relatively low: when participants reported relatively low external attribution ratings, they showed more trust in judges in the fair condition than in the unfair condition. This effect was not statistically significant when external attribution ratings were relatively high. That is, when participants reported relatively high external attribution ratings, they showed similar levels of trust in judges in the fair condition as they did in the unfair condition.

3.3.2 Grade for Trust in Judges

We also conducted a GLM analysis with the procedure manipulation and external attribution ratings as independent and moderating variables and the grade that participants assigned to indicate their level of trust in judges as a dependent variable. This yielded a marginally significant main effect of the procedure manipulation, $F(1, 208) = 3.44$, $p = 0.07$, $\eta^2 = 0.02$; a marginally significant main effect of external attribution ratings, $F(1, 208) = 2.77$, $p < 0.10$, $\eta^2 = 0.01$; and a nonsignificant interaction between external attribution ratings and the procedure manipulation, $F(1, 208) = 1.22$, $p = 0.27$, $\eta^2 = 0.01$. The marginally significant main effect of the procedure manipulation suggested that participants gave their trust in judges a somewhat higher grade when they were in the fair condition ($M = 6.75$, $SD = 1.61$) than when they were in the unfair condition ($M = 6.15$, $SD = 1.85$). The marginally significant main effect of external attribution ratings suggested that participants who reported higher external attribution ratings gave their

trust in judges a somewhat lower grade. The nonsignificant interaction effect indicated that the effect of the procedure manipulation on the grade participants assigned to indicate their level of trust in judges was not moderated by their external attribution ratings.

3.3.3 Protest Intentions

Furthermore, we performed a GLM analysis with the procedure manipulation and external attribution ratings as independent and moderating variables and protest intentions as a dependent variable. Again, we found a significant main effect of the procedure manipulation, $F(1, 228) = 4.78$, $p < 0.05$, $\eta^2 = 0.02$; a significant main effect of external attribution ratings, $F(1, 228) = 10.83$, $p < 0.01$, $\eta^2 = 0.05$; and no significant interaction between external attribution ratings and the procedure manipulation, $F(1, 228) = 0.18$, $p = 0.67$, $\eta^2 = 0.00$. The main effect of the procedure manipulation indicated that participants showed lower protest intentions in the fair condition ($M = 4.69$, $SD = 1.81$) than in the unfair condition ($M = 5.43$, $SD = 1.74$). The main effect of external attribution ratings indicated that participants showed more protest intentions when they reported higher external attribution ratings. The nonsignificant interaction effect showed that the effect of the procedure manipulation on participants' protest intentions was not moderated by their external attribution ratings.

3.3.4 Interim Conclusion

Together, these analyses show that we obtained partial support for our second hypothesis, which predicted that

the effect of the procedure manipulation on trust in judges, the grade participants assigned to indicate the level of their trust in judges, and protest intentions would be attenuated or even reversed when external attribution ratings were relatively high. That is, our analyses did not yield an interaction effect of external attribution ratings and the procedure manipulation on the grade participants assigned to indicate the level of their trust in judges and their protest intentions. We did find an interaction effect of external attribution ratings and the procedure manipulation on participants' trust in judges. Specifically, our analyses revealed that participants in the fair condition reported a significantly higher level of trust in judges than participants in the unfair condition in case of relatively low external attribution ratings, while this effect ceased to be significant when external attribution ratings were relatively high.⁵⁹

3.4 Testing the Moderating Effect of Outcome Judgments

We tested Hypothesis 3 by conducting GLM analyses with the procedure manipulation as a dichotomous independent variable and outcome judgments as a continuous (quasi-interval) moderating variable. Like the variable measuring external attributions, the outcome judgments variable was standardised before being entered into our analyses.

3.4.1 Trust in Judges

We performed a GLM analysis with the procedure manipulation and outcome judgments as independent and moderating variables and trust in judges as a dependent variable. We found a significant main effect of outcome judgments, $F(1, 226) = 7.08, p < 0.01, \eta^2 = 0.03$; a marginally significant main effect of the procedure manipulation, $F(1, 226) = 3.56, p = 0.06, \eta^2 = 0.02$; and no statistically significant interaction between outcome judgments and the procedure manipulation, $F(1, 226) = 0.27, p = 0.60, \eta^2 = 0.00$. The main effect of outcome judgments showed that participants who judged their outcomes more positively reported more trust in judges. The marginally significant effect of the procedure manipulation on trust in judges suggested that participants in the fair condition reported somewhat higher levels of trust in judges ($M = 4.91, SD = 1.40$) than participants in the unfair condition ($M = 4.42, SD = 1.60$). The nonsignificant interaction effect indicated that the effect of the procedure manipulation on trust in judges was not moderated by participants' outcome judgments.

3.4.2 Grade for Trust in Judges

We also conducted a GLM analysis with the procedure manipulation and outcome judgments as independent and moderating variables and the grade participants assigned to indicate their level of trust in judges as a dependent variable. This analysis yielded a significant main effect of outcome judgments, $F(1, 209) = 9.50, p < 0.01, \eta^2 = 0.04$; a significant main effect of the procedure manipulation, $F(1, 209) = 3.93, p < 0.05, \eta^2 = 0.02$; and no significant interaction effect, $F(1, 209) = 0.37, p = 0.54, \eta^2 = 0.00$. The main effect of outcome judgments showed that participants who judged their outcomes more positively gave their trust in judges a higher grade. Furthermore, the main effect of the procedure manipulation showed that in the fair condition participants assigned a higher grade for their trust in judges ($M = 6.75, SD = 1.61$) than they did in the unfair condition ($M = 6.10, SD = 1.90$). The nonsignificant interaction between the procedure manipulation and outcome judgments indicated that the effect of the procedure manipulation on the grade participants assigned to indicate the level of their trust in judges was not moderated by their outcome judgments.

3.4.3 Protest Intentions

Finally, we conducted a GLM analysis with the procedure manipulation and outcome judgments as independent and moderating variables and protest intentions as a dependent variable. This analysis revealed a significant main effect of outcome judgments, $F(1, 228) = 41.49, p < 0.001, \eta^2 = 0.15$; a significant main effect of the procedure manipulation, $F(1, 228) = 4.17, p < 0.05, \eta^2 = 0.02$; and no significant interaction between outcome judgments and the procedure manipulation, $F(1, 228) = 0.81, p = 0.37, \eta^2 = 0.00$. The main effect of outcome judgments indicated that participants who judged their outcomes more positively reported lower protest intentions. In addition, the main effect of the procedure manipulation showed that participants in the fair condition expressed lower protest intentions ($M = 4.69, SD = 1.81$) than participants in the unfair condition ($M = 5.43, SD = 1.74$). Again, the nonsignificant interaction effect showed that the effect of the procedure manipulation on participants' protest intentions was not moderated by their outcome judgments.

3.4.4 Interim Conclusion

These analyses show that we did not find the two-way interaction between the procedure manipulation and outcome judgments that we explored with our third hypothesis on any of our dependent variables. In other words, the effect of procedural justice on trust in judges, grade for trust in judges, and protest intentions was not moderated by participants' outcome judgments in our study. We come back to these results in the Discussion section to follow.⁶⁰

59 When we performed these analyses while including the six outliers, this yielded partly different results. That is, we did not find a significant main effect of the procedure manipulation on trust in judges, $F(1, 231) = 1.69, p = 0.20, \eta^2 = 0.01$. The effect of external attribution ratings on trust in judges was marginally significant in both the fair condition ($b = -0.27, \beta = -0.17, t[115] = -1.83, p = 0.07$) and the unfair condition ($b = 0.27, \beta = 0.16, t[116] = 1.73, p = 0.09$). In addition, the main effect of the procedure manipulation on the grade participants assigned to indicate their level of trust in judges ceased to be marginally significant, $F(1, 214) = 0.52, p = 0.47, \eta^2 = 0.00$. We found a marginally significant effect of the procedure manipulation on protest intentions, $F(1, 234) = 3.74, p = 0.05, \eta^2 = 0.01$.

60 When we performed these analyses while including the six outliers, we did not find a significant main effect of the procedure manipulation on trust in judges, $F(1, 232) = 0.69, p = 0.41, \eta^2 = 0.00$, or on the grade that participants assigned to indicate their level of trust in judges, $F(1, 215) =$

4 Discussion

In this study, we assessed participants' reactions to procedural justice. We focused not only on replicating the fair process effect but also on its potential attenuation, or even reversal, by involving moderating variables. Our results showed that we successfully manipulated procedural justice by asking participants to read a scenario in which they were the defendant in a criminal court hearing that progressed in either a fair or an unfair way. This procedure manipulation had statistically significant effects on participants' trust in judges, the grade they assigned to indicate the level of their trust in judges, and their protest intentions. That is, participants reported more trust in judges, assigned a higher grade to indicate their level of trust in judges and were less inclined to protest against the judicial ruling in the fair condition than in the unfair condition. The effect of the procedure manipulation on trust in judges was significantly moderated by participants' external attributions, such that we found a fair process effect among participants with relatively low external attribution ratings, while this effect was attenuated, in fact was not statistically significant, among participants whose external attribution ratings were relatively high. In what follows, we discuss the implications and limitations of our study and suggest directions for future research that may further enhance our insight into the fair process effect and its boundary conditions in legal contexts.

4.1 Implications

4.1.1 The Fair Process Effect

The main effects of the procedure manipulation found in this study are important because they suggest that people, when faced with the same negative outcome, report more trust in judges, assign a higher grade to indicate their level of trust in judges and are less inclined to protest against judicial rulings in case of fair procedures. Experimental designs such as the one used in our study, which vary procedural justice but keep the outcome constant (in this case, a fine of €400), can be a powerful way of uncovering such fair process effects. In addition, we found these effects among research participants who differ from the WEIRD participants that are the focus of many procedural justice studies, as we focused on citizens in the Netherlands with a non-Western ethnic-cultural background. In these ways, our findings support results obtained by previous studies in legal contexts that found associations between procedural justice and other important variables, sometimes among marginalised groups.⁶¹

0.79, $p = 0.38$, $\eta^2 = 0.00$. The main effect of the procedure manipulation on protest intentions was marginally significant, $F(1, 234) = 3.54$, $p = 0.06$, $\eta^2 = 0.02$.

61 For example, J.D. Casper, T.R. Tyler & B. Fisher, 'Procedural Justice in Felony Cases', 22 *Law & Society Review* 483 (1988); J.M. Landis and L. Goodstein, 'When Is Justice Fair? An Integrated Approach to the Outcome versus Procedure Debate', 11 *American Bar Foundation Research Journal* 675 (1986); Tyler and Huo, above n. 2.

These fair process effects are particularly relevant in the context of criminal court hearings, we think, as many defendants have a non-WEIRD background and receive a negative case outcome in the form of a conviction. Our findings can therefore be of interest to legal practice, including the judiciary. After all, people's protest intentions as examined in the present study are likely to be at least to some extent related to appeals against their case outcomes, which has implications for judges' workload.⁶² Trust in judges, too, is an issue that has the Dutch judiciary's ongoing attention⁶³ and has become even more relevant since the childcare benefits scandal.

The effects of procedural justice on important variables like protest intentions and trust in judges, of course, do not imply that judges and other authorities can or should use procedural justice in an instrumental or even manipulative way. For one, people may often detect insincere efforts by authorities to seem fair (also termed 'hollow justice'),⁶⁴ such that these efforts are likely to backfire.⁶⁵ Moreover, having people feel treated fairly during legal procedures has value in itself, apart from its impact on attitudes like protest intentions and trust.⁶⁶ We do think, however, that the fair process effects obtained in our study point to the societal relevance of our findings, beyond their scientific contributions.

4.1.2 Boundary Conditions

As mentioned earlier, we aimed to examine not only the replication of the fair process effect but also its potential boundary conditions. Hence, a second important finding of our study is that participants' external attribution ratings moderated the effect of the procedure manipulation on trust in judges in the way predicted by our second hypothesis. That is, we found an effect of the procedure manipulation on trust in judges among participants with relatively low external attribution ratings, while this effect ceased to be statistically significant when external attribution ratings were relatively high. In other words, our study suggests a boundary to the fair process effect in that the effect was attenuated and indeed not statistically significant among participants with relatively high external attribution ratings.

These findings fit with the line of reasoning presented at the beginning of this work. That is, people may sometimes want to attribute negative outcomes to external

62 In line with this, Boekema's study of administrative law cases showed a statistically significant relationship between perceived procedural justice and filing an appeal, although this relationship was not as strong as the relationship between appeals and people's perceptions of their outcomes (Boekema, above n. 4).

63 See, for instance, the inaugural address by the President of the Dutch Supreme Court, available at www.hogeraad.nl/over-ons/raad/toespraken-president/rede-dineke-groot-installatie-president-hoge-raad/ (last visited 20 July 2022).

64 For example, Lind and Tyler, above n. 1; Tyler and Lind, above n. 1; R.J. MacCoun, 'Voice, Control, and Belonging: The Double-edged Sword of Procedural Fairness', 1 *Annual Review of Law and Social Science* 171 (2005).

65 Lind and Tyler, above n. 1.

66 For a further discussion of these issues, see L.F.M. Ansems, *A Critical Test of Perceived Procedural Justice From the Perspective of Criminal Defendants* (2021) (Chapter 6).

causes in order to preserve their self-esteem.⁶⁷ Since unfair procedures offer such external attribution opportunities, people may respond more positively to procedural unfairness, yielding an attenuation, or even reversal, of the fair process effect.⁶⁸ Thus, our finding that the fair process effect was not statistically significant among participants with relatively high external attribution ratings may indicate that participants who wanted to attribute their outcomes to external causes responded less positively to the fair procedure condition, because the fair procedure did not offer them the external attribution opportunities they desired. In this way, people's desire to protect their self-esteem when faced with negative outcomes may account for the interaction between external attribution ratings and the procedure manipulation observed in the present study.

Our findings regarding the interaction between external attribution ratings and the procedure manipulation add to previous studies that examined potential boundary conditions of the fair process effect in at least two ways. First, previous studies often assumed that attributional processes may underlie the attenuation or reversal of the fair process effect rather than explicitly including attributions as a variable in their analyses.⁶⁹ Because our analyses involved participants' external attribution ratings as a potentially moderating variable, our study provides direct empirical support for this suggestion.

Second, our study extends previous findings regarding participants' attenuated preference for fair procedures to an important new context. That is, rather than examining the potential attenuation or reversal of the fair process effect in organisational, performance-oriented or laboratory contexts,⁷⁰ we assessed these issues in a legally relevant setting. After all, participants imagined being the defendant in a criminal court hearing during which they were treated fairly or unfairly. Our findings thus suggest that in legal settings, too, attributional processes may moderate people's reactions to fair procedures. In our study, this moderation entailed an attenuation (rather than a reversal) of the fair process effect to the extent that the effect was no longer statistically significant. Future studies using different methods and different research participants could examine whether, in legal contexts, the fair process effect may be reversed when external attribution ratings are high. Such studies could also reflect on the normative implications of a reversed fair process effect.⁷¹

67 Cohen, above n. 14.

68 For example, Brockner et al. (2009), above n. 8; Van den Bos et al. (1999), above n. 11.

69 For an exception, see Brockner et al. (2003), above n. 15.

70 For example, Brockner et al. (2003), above n. 15; Schroth and Shah, above n. 20; Van den Bos et al. (1999), above n. 11.

71 For example, if people sometimes respond more favourably to procedures that they perceive as unfair, it does not automatically follow that authorities should not aim to enhance perceptions of procedural fairness. Furthermore, as pointed out by one of the anonymous reviewers of this article, internal attributions prompted by fair procedures might lead to desirable change within a defendant. For further discussion of translating empirical findings from procedural justice research to the normative domain of law, see Ansems (2021), above n. 66 (Chapter 6).

One of the reasons the interaction effect we found in the present study is interesting, we think, is that intergroup dynamics may play a role in the context of court hearings in general and criminal court hearings in particular. That is, some defendants may be sensitive to the fact that, in various respects, for them the judge represents an outgroup.⁷² The present study may thus advance our thinking about people's attenuated preference for fair procedures in contexts that involve intergroup dynamics, which can shape people's reactions to procedural justice to an important extent.⁷³

Finally, we note that we did not find an interaction between the procedure manipulation and outcome judgments, as explored by our third hypothesis. This might be explained by the scenarios used in our study, which focused on criminal court hearings. After all, Grootelaar and Van den Bos found an interaction between outcome favourability and perceived procedural justice in Dutch motoring fine cases but not in single-judge criminal cases.⁷⁴ They write that whether this interaction can be observed may depend on the type of legal case examined. The nonsignificant interaction between outcome judgments and procedural justice supports their suggestion.

4.2 Limitations

The present study has some limitations that one should keep in mind when interpreting the results and designing future research that may follow from the study presented here. First, we note explicitly that the correlational aspects of some of our findings clearly limit what we learn from these findings and the confidence with which we can interpret our results. Most notably, in our experiment both participants' external attributions and their outcome judgments were affected by the procedural fairness manipulation.⁷⁵ These effects of our procedure manipulation on external attributions and outcome judgments are not unexpected, as they clearly fit with the large literature on the fair process effect.⁷⁶ Furthermore, in our interpretation of the results, we relied

72 M.J. Hornsey and S. Esposo, 'Resistance to Group Criticism and Recommendations for Change: Lessons from the Intergroup Sensitivity Effect', 3 *Social and Personality Psychology Compass* 275 (2009); M. Hornsey and A. Imani, 'Criticizing Groups from the Inside and the Outside: An Identity Perspective on the Intergroup Sensitivity Effect', 30 *Personality and Social Psychology Bulletin* 365 (2004).

73 H.J. Smith, T.R. Tyler, Y.J. Huo, D.J. Ortiz & E.A. Lind, 'The Self-relevant Implications of the Group-value Model: Group Membership, Self-worth, and Treatment Quality', 34 *Journal of Experimental Social Psychology* 470 (1998).

74 Grootelaar and Van den Bos, above n. 2.

75 More specifically, a GLM analysis with the procedure manipulation as an independent variable and external attribution ratings as a dependent variable showed that participants in the fair condition reported lower external attribution ratings ($M = 3.65$, $SD = 1.20$) than participants in the unfair condition ($M = 4.33$, $SD = 1.10$), $F(1, 230) = 20.20$, $p < 0.001$, $\eta^2 = 0.08$. Furthermore, a GLM analysis with the procedure manipulation as an independent variable and outcome judgments as a dependent variable showed that participants in the fair condition judged their outcomes more positively ($M = 2.89$, $SD = 1.81$) than participants in the unfair condition ($M = 2.17$, $SD = 1.53$), $F(1, 231) = 10.80$, $p < 0.01$, $\eta^2 = 0.05$.

76 Van den Bos (2015), above n. 3; K. van den Bos, 'What Is Responsible for the Fair Process Effect?', in J. Greenberg and J. Colquitt (eds.), *Handbook of Organizational Justice* (2005) 273; K. van den Bos, *The Fair Process Effect: Overcoming Distrust, Polarization, and Conspiracy Thinking* (in press).

on earlier research that used experimental manipulations of attributions⁷⁷ and outcome favourability.⁷⁸ This noted, we would applaud future research that manipulates procedure, external attributions and outcome judgments independently from each other, with full experimental control and with random assignment to conditions.⁷⁹ The current mix of experimentally manipulating procedure and measuring participants' attributions and their outcome judgments did not include experimental manipulations of attributions and outcome judgments, thus limiting the confidence with which we can interpret the findings as presented in our research study.

A second limitation of the present study is its use of scenarios, which provides less external validity than studies that ask people about their experiences and perceptions during actual court hearings with real stakes.⁸⁰ Indeed, the lack of real interaction with a judge may be why the relationships between procedural justice and trust in judges in our study are not as strong as those found in studies involving real-life court hearings.⁸¹ In line with this, Lind and Tyler point out that the fair process effect tends to be less powerful in study contexts that are less real.⁸² One could also argue, however, that real-life situations are more likely to trigger the attributional processes that may attenuate or reverse the fair process effect. This is in line with findings Brockner et al. obtained in organisational settings,⁸³ which suggest that reversed fair process effects can occur in real-life situations during which people are being evaluated. Future studies are needed to assess whether attributional processes may sometimes attenuate or reverse the fair process effect in actual court hearings.

Third, we manipulated procedural justice by varying whether participants read the fair scenario or the unfair scenario. These scenarios were based on findings of our previous qualitative study that examined what makes defendants in criminal cases feel treated fairly during their court hearings.⁸⁴ Future research may examine whether manipulations focusing on other aspects of procedures or focusing on a single procedural aspect yield attenuated or reversed fair process effects too.

Fourth, although the scale we used to measure participants' external attribution ratings showed sufficient reliability for theory-testing purposes,⁸⁵ one should take

care when applying these insights to important legal contexts. Follow-up research could examine how external attribution ratings can be assessed in a more reliable manner in the context of criminal court hearings. For example, one might consider measuring only external attribution ratings rather than also including reverse-coded items measuring internal attributions as in the present study, because both types of attributions do not necessarily rule out one another.⁸⁶

Fifth, we note that the interaction between the procedure manipulation and external attribution ratings was statistically significant only on participants' trust in judges. Hence, our findings regarding the attenuation of the fair process effect should be interpreted with caution. Follow-up research is needed to assess whether our results can be replicated and whether there is an interaction effect of procedural justice and external attributions on other variables as well.

4.3 Coda

The present study shows that procedural justice, as manipulated in a scenario involving a criminal court hearing, had significant effects on trust in judges and intentions to protest against judicial rulings. These effects were not attenuated or reversed depending on participants' outcome judgments. We did find an attenuation of the effect of procedural justice on trust in judges among participants with relatively high external attribution ratings to such extent that the effect was no longer statistically significant. This is an interesting finding, because it reveals a potential boundary condition of the fair process effect. Overall, however, our results support the importance of procedural justice. Thus, our study suggests that procedural fairness matters when people are responding to legally relevant stimulus materials. We hope that our experimental insight into the fair process effect and some of its potential boundary conditions will help to better understand people's reactions to criminal procedures.

77 Van den Bos et al. (1999), above n. 11.

78 Brockner and Wiesenfeld, above n. 5.

79 R.E. Kirk, *Experimental Design: Procedures for the Behavioral Sciences* (2013); K. van den Bos, *Empirical Legal Research: A Primer* (2020).

80 For example, Casper et al., above n. 61; L. Hulst, K. van den Bos, A.J. Akkermans & E.A. Lind, 'On Why Procedural Justice Matters in Court Hearings: Experimental Evidence that Disinhibition Weakens the Association between Procedural Justice and Evaluations of Judges', 13 *Utrecht Law Review* 114 (2017).

81 For example, Grootelaar and Van den Bos, above n. 2.

82 Lind and Tyler, above n. 1.

83 J. Brockner, 'Making Sense of Procedural Fairness: How High Procedural Fairness Can Reduce or Heighten the Influence of Outcome Favorability', 27 *The Academy of Management Review* 58 (2002); Brockner et al. (2003), above n. 15.

84 Ansems et al. (2020), above n. 42.

85 Nunnally and Bernstein, above n. 51.

86 For example, Brockner et al. (2003), above n. 15; B. Major, W.J. Quinton & S.K. McCoy, 'Antecedents and Consequences of Attributions to Discrimination: Theoretical and Empirical Advances', in M.P. Zanna (ed.), *Advances in Experimental Social Psychology* (2002) 251.