



# How Litigants in Dutch Courtrooms Come to Trust Judges: The Role of Perceived Procedural Justice, Outcome Favorability, and Other Sociolegal Moderators

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This paper examines the hypothesis that litigants' perceived procedural justice is positively associated with their trust in judges. We argue that although this association might seem quite robust, it can vary across contexts. In particular, we suggest that the nature and magnitude of the association between procedural justice and trust in judges depends on outcome concerns, and other sociolegal moderators such as outcome importance and prior court experience. We tested our predictions in three different types of law cases among 483 litigants at court hearings of the district court of the Mid-Netherlands. As predicted, our results indicate that perceived procedural justice was positively associated with trust in judges when outcomes were relatively favorable, and that this association was even stronger when outcomes were relatively unfavorable. The courtroom context studied here enabled us to explore how other sociolegal variables moderated these relationships.

udicial dispute resolution is an aspect of our legal system that matters a great deal to citizens involved in disputes. Judges are important representatives of societal institutions that need citizens' trust to operate effectively (Tyler 2006). They are, therefore, justifiably concerned with the public's confidence in their functioning. In the current paper, we examine how people come to trust judges and provide support for the idea that trust in judges is elicited by litigants' experience of procedural justice.

We studied the procedural justice-trust relationship among real litigants involved in actual cases at real court hearings. These litigants had real outcomes at stake such as traffic fines, and imprisonments, and were understandably preoccupied with issues such as whether they would receive social benefits the next month or whether they would be sentenced by the criminal law judge. We

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will argue that these outcome concerns can influence the role perceived procedural justice plays when litigants form their judgments of trust in judges. More specifically, we believe that whether people benefit from the judge's decision (i.e., outcome favorability) and what people have at stake (i.e., outcome importance) moderate the proposed relationship between perceived procedural justice and trust in judges.

We conducted our study in the Netherlands, a country that is relatively understudied in the international research literature on law and society. After all, many or most studies on perceived procedural justice and trust in law have been done in the United States. By studying Dutch court hearings, our study adds to the debated cross-cultural generality of procedural justice findings (Brockner et al. 2001; Kidder & Muller 1991; Lind et al. 1997). Van den Bos et al. (2010), for example, found meaningful crosscultural differences in reactions to perceived procedural justice between participants from the United States and the Netherlands, revealing that being better off than others is a norm that tends to be more salient in the United States than in the Netherlands (see also Hofstede 1998). Social comparisons, such as being better off than others, play an important role in how people respond to their outcomes (Adams 1965; Van den Bos et al. 2006), which raises the question of whether outcome favorability will moderate the association between perceived procedural justice and trust in judges, as has been suggested on the basis of studies done in organizational and other contexts (for overviews, see Brockner 2010; Brockner & Wiesenfeld 1996).

In three different types of law cases among 483 litigants at court hearings of the district court of the Mid-Netherlands, we aim to better understand how and when procedural justice and outcome concerns matter both separately and in an interactive sense. We extend the current knowledge in three ways. First, we provide support for the existence of a positive relationship between procedural justice and trust in judges in a real-life courtroom context in the Netherlands. Second, we demonstrate how important sociolegal variables, in particular outcome-related variables such as outcome favorability and outcome importance, might moderate this relationship. Third, in addition to providing empirical insight about the relationships between procedural justice, trust in judges, and outcome concerns, we aim to conceptually clarify how to measure these concepts in real-life courtroom settings.

# **Trust in Judges**

Trust in legal authorities such as the police and the courts is important, in part because it results in public cooperation with these authorities and builds institutional legitimacy and compliance with the law (Tyler & Huo 2002; Tyler & Jackson 2014). Legal authorities are justifiably concerned with the public's confidence in their functioning and compliance with their decisions. In the United States, for example, the National Center for State Courts (NCSC) frequently carries out nationwide surveys to measure public confidence and trust in the courts (NCSC 2005, 2015). The European Social Survey (ESS) reveals the variation in trust in justice and legitimacy of justice institutions across Europe (see Jackson et al. 2011). The Dutch judiciary, too, is paying more attention to people's trust in judges, due to the turbulent times of waning legitimate power, reflected by an increasing number of requests for a judge to be removed, the public's growing attention for judicial errors, negative publicity in the media, and the growth of so-called political processes (Bokhorst & Witteveen 2013).

Our understanding of trust in legal institutions is currently mixed. In some studies, the public has a moderate amount of trust in judges, which appeases us with the message that courts are still the most trusted branch of government, even though certain members of society currently tend to express less confidence in them (NCSC 2015). In other studies, the public in several countries has been slowly losing confidence in the justice system, which suggests that the justice system is not often among the most trusted institutions in a country (Van de Walle & Raine 2008). In yet other studies, the public's trust in judges seems to fluctuate in more or less the same way as the public's confidence in other societal institutions does, tending to decrease when confidence in those institutions is shrinking (Arends & Schmeets 2015). Thus, the same negative and positive images of the judiciary recur with varying degrees of forcefulness in the different studies (Rottman & Tomkins 1999). Furthermore, some studies measure "trust" in a rather general way and do not say much about what it exactly means for individuals to trust judges with whom they are confronted in court (Griffiths 2011). In short, trust in judges is not fully understood. Our study will add to our understanding of how litigants come to trust judges by measuring it as precisely as possible directly after litigants have entered the courtroom with items that we believe are valid and meaningful to the litigants and hence have appropriate levels of face validity (Brewer 2000).

# **Perceived Procedural Justice**

People react more positively toward decision-making authorities when they perceive a decision-making process as fairer. Procedural fairness has been found to be related to various human reactions such as voluntarily acceptance of authorities' decisions and commitment to groups, organizations, and society (Tyler et al. 1997). In legal contexts, procedural justice judgments are strongly associated with acceptance of court-ordered arbitration awards (Lind, et al. 1993), obedience to laws (Tyler 2006), and outcome satisfaction (Casper et al. 1988). It is therefore likely that treating citizens fairly positively affects their evaluations of and the amount of trust they place in legal authorities. Therefore, Hypothesis 1 predicts that perceived procedural justice will be positively associated with trust in judges in our study among litigants in Dutch courtrooms.

#### **Outcome Concerns**

Although procedural justice is valued by citizens who interact with authorities, citizen-authority interactions involve more than procedures only. Thus, we aim to both provide support for Hypothesis 1 and to qualify the hypothesis in various ways.

One way in which we want to qualify Hypothesis 1 is by noting that outcomes matter too. We, therefore, want to link how litigants evaluate legal authorities to outcome concerns as well. Theory and research have long focused on instrumental issues, such as the effects on individuals of the outcomes associated with their relationships or encounters. Outcomes may influence attitudes toward leaders (Michener & Lawler 1975) and trust in government (Katz et al. 1975). Moreover, in discussions about public trust in the courts, discontent with the courts is linked to instrumental concerns about the outcomes delivered by the court (Tyler 2001).

As Casper et al. (1988: 485) stated: "One does not have to be much of an economist to believe that whether litigants win or lose their cases powerfully affects their sense that their interests and concerns have been dealt with appropriately." Not only economists, but also legal scholars tend to adhere to the view that outcomes drive legal behavior, legal judgments, and evaluations of the legal system (MacCoun 2005). It does seem plausible that litigants whose liberty, money, or driving license is truly at stake might be primarily concerned with their own self-interest and therefore the outcome of the case (Casper et al. 1988).

In our study, we focus on the combined effects of both litigants' perceived procedural justice and their outcome concerns and examine how the effects of the one depend on the effects of the other. Therefore, we will examine how three outcome variables can moderate the relationship between procedural justice and trust in judges.

## **Outcome Favorability**

We believe that the favorability of the outcomes that litigants receive from the court matters for the relationship between procedural justice and trust in judges. Not only being fairly treated by judges, but also perceiving the final decision taken by these judges as favorable determines how litigants evaluate their day in court. The more litigants benefit from a court decision, the more positively they will feel about the judge who handled their case, and the less impact procedural justice concerns will have on their evaluation of the judge.

The effects of both outcomes and procedures are often considered in the same study. In some studies, perceived procedural justice and outcome favorability independently affect attitudes toward received outcomes, judges, and courts (Casper et al. 1988; Thibaut & Walker 1975; Tyler 1984) whereas in other studies, perceived procedural justice seems to be a more important determinant of evaluations of institutions than outcomes (Benesh & Howell 2001; Tyler 2006).

We propose that the effects of procedural justice and outcome favorability are not merely additive, but that they interact with each other, in that the impact of perceived procedural justice depends on how favorably people perceive their outcome. Or, to phrase this process × outcome interaction effect differently (Brockner & Wiesenfeld 1996), perceived procedural justice can attenuate the negative impact of unfavorable decisions often made by judges in courtrooms. Therefore, Hypothesis 2 proposes that outcome favorability will moderate the relationship between procedural justice and trust in judges, such that procedural justice will be positively associated with trust in judges when outcomes are relatively favorable, and that this association will be even stronger when outcomes are relatively unfavorable.

# **Outcome Importance**

What people have at stake when they enter the courtroom may influence how perceived procedural justice impacts their trust in judges as well. Procedural concerns seem to be less potent factors psychologically when serious outcomes like imprisonments are at stake than when less serious outcomes are at stake (Lind & Tyler 1988). However, procedures are still important when outcomes are serious, such as in felony cases (Casper et al. 1988), divorce cases (Benesh & Howell 2001), and domestic violence cases (Paternoster et al. 1997).

It is conceivable that outcome importance influences the meaning of procedural justice (Tyler 1988). When people have a lot at stake, they may care even more about the way they are treated by the legal institutions that ultimately judge their case. Thus, Hypothesis 3 proposes that outcome importance moderates the positive relationship between procedural justice and trust, such that this relationship will be more pronounced when outcomes are relatively important to litigants.

We believe that outcome importance may also moderate the interactive relationship between procedural justice and outcome favorability. After all, in response to events that are unexpected or negative (Fiske & Taylor 1991), people are likely to interpret what is going on and seek information that helps them to interpret the situation. In those situations, external cues that address their informational needs are particularly influential (Brockner & Wiesenfeld 1996). Thus, when outcomes are unfavorable, procedural justice may have high informational value. This informational value may be even stronger when unfavorable outcomes are perceived to be important for the litigants. In other words, the more there is at stake, the more likely people are to figure out what is going on and seek information during their courtroom hearing. In those circumstances, information about how fair litigants are treated by the judge can greatly impact their trust judgments.

Thus, Hypothesis 4 predicts that perceived outcome importance moderates the interactive relationship between procedural justice and outcome favorability on trust in judges: When litigants have relatively much at stake, the interaction effect between procedural justice and outcome favorability will be more pronounced.

#### **Outcome Information**

People may evaluate procedures in light of the outcomes they produce: knowing the outcome may influence the way people judge the fairness of the procedure. For example, defendants with more certainty about their outcome tend to be more likely to view their treatment as fair than those who have experienced less certainty (Landls & Goodstein 1986). Prior knowledge about the outcome may not necessarily change the meaning people attribute to the way they were treated, but it may change the weight people place on their procedural justice judgments when evaluating the decision makers (Tyler 1996). When people know that the outcome of a procedure is favorable before they evaluate that procedure, their judgments about procedural fairness have less impact on their support for the decision maker. Indeed, the

order in which information about procedures and outcomes is received matters, and concerns about procedural justice may be more important when people are informed about the procedure first, and about the outcome later (Van den Bos et al. 1997).

Hypothesis 5 proposes that outcome information moderates how much perceived procedural justice influences trust in judges, such that litigants rely more heavily on procedural justice as a basis for forming trust judgments when information about the outcome is not yet available.

## **How Litigants Enter the Courtroom**

We expect the way in which litigants enter the courtroom to play an important role in how they perceive the fairness of their treatment during their court hearing as well. After all, having your day in court is a serious and often stressful event (Casper 1978), which can lead to litigants being nervous and tense. Litigants usually perceive their day in court as an important and emotional day. Furthermore, litigants need to go through the metal detectors, look for the right courtroom in the maze of hallways and stairs, and then start waiting for their court hearing to begin, which makes coming to court often perceived as unpleasant and complicated.

As a consequence, the state of mind in which litigants find themselves at the time the court hearing starts might influence the way litigants perceive what happens within the courtroom. This is obviously difficult to examine unambiguously, and there are countless criteria that qualify for litigants' state of mind during their day in court. We decided to work with two variables which we considered to be appropriate indicators for how litigants enter the courtroom.

In particular, we argue that having your day in court can be an emotional event for litigants. Not knowing what to expect, whether you will be asked questions, and what the judge will decide may evoke feelings of uncertainty. We believe that how litigants emotionally respond to uncertainty plays an important role in our court-room study. We know that uncertainty enhances concerns for fairness, and especially procedural fairness (Van den Bos & Lind 2002). Thus, uncertainty, and especially people's affective or emotional responses to experiences of personal uncertainty (Van den Bos 2007), may heighten the influence of litigants' experiences, such as how they experience procedural justice. We also know that the fair process effect is more pronounced when uncertainty is relatively high (Van den Bos & Lind 2002). Thus, the more uncertain people are, the more procedural justice perceptions will be

enhanced. Hypothesis 6 predicts that litigants' emotional responses to uncertainty moderates the positive relationship between procedural justice and trust, such that this relationship will be more pronounced when litigants respond relatively emotionally to uncertainty.

We further argue that having earlier courtroom experiences may moderate the effects proposed here. We think that having your day in court may be perceived differently when you have been to the court several times before. Having seen the court building before, knowing what to expect from court hearings and judges, and knowing what is expected from you might influence how much impact their perceptions of procedural justice have for litigants' judgments of trust. Court experience may be a locus of comparison for litigants (Casper et al. 1988), such that they will compare the court hearing with the previous time they came to court. Litigants who do not have prior court experience may be more like a blank page, interpreting what happens without any references or expectations. Indeed, the consistency over time rule prescribes that people want the same procedural rules to be applied at different times (Leventhal 1980). These reflections aside, at the start of our project we were not sure what to expect of the possible role of earlier court experiences and whether this would moderate the relationship between procedural justice and trust in judges. We thus assessed the possible moderating role of litigants' prior court experience in an explorative way.

#### The Current Research

Taken together, we examine in this paper how procedural justice is associated with trust in judges, and how this relationship is influenced by outcome concerns and by how litigants enter the courtroom. Thus, our study aims to shed light on the empirical relationships between procedural justice and trust in judges (Hypothesis 1), the interaction effect between procedural justice and outcome favorability on trust in judges (Hypothesis 2), and the moderating effects of outcome importance, outcome information, emotional uncertainty, and prior court experience on these relationships (Hypotheses 3–6). In addition, our research intends to clarify the question of how to measure procedural justice, outcome favorability, and trust in judges.

Our study has been conducted in the context of real litigants with real problems in real courts. Many procedural justice studies have been conducted using laboratory simulations, typically with undergraduate students as participants. Adult litigants involved in real law cases may have different values, different expectations

about the procedures and outcomes, and different attitudes towards our legal system than participants in the lab (Casper et al. 1988). Other procedural justice studies have been conducted in organizational settings where other concerns might be at stake than in the legal contexts we studied here (Brockner 2010). It is thus important to examine the role of procedures and outcomes in how people come to trust judges in the context of Dutch courtrooms in order to assess whether these variables hold up as well as in laboratory or organizational studies, conducted mainly in the United States.

In order to examine whether the five sociolegal variables, we distinguished will moderate our first hypothesis that procedural justice is positively related to trust in judges, we used the opportunities the courtroom context of our research offered us and conducted our study by distinguishing between differing types of law cases. Each type of law case can differ with regard to the type of litigant involved (i.e. educational level, income level, and social class), whether these litigants have legal assistance and prior court experience, and what is at stake for these litigants. Furthermore, each type of law case has its own setting and atmosphere (Green et al. 2010). Because we do not know what to expect with regard to the influence of these courtroom differences on our proposed relationships, we refrain from developing specific hypotheses on how and in which ways the type of law case may moderate the proposed relationships, and we will explore in our analyses what possible moderating effects of type of law case can be reliably observed in the data we report here.

Within this real-life courtroom context of our study, we argue that perceived procedural justice is positively related to trust in judges. Procedural justice in courtroom settings is often measured by using items adapted from existing procedural justice scales (e.g., Peterson-Badali et al. 2007) or by using a combination of the criteria mentioned before (Cheng 2017). Although we can conclude that the results of studies that have explored the criteria of procedural justice converge considerably, there is still not one widely accepted scale of procedural justice in courtrooms or other legal contexts.

Supported by Lind and Tyler (1988), who tried to spur researchers to undertake careful measurement of procedural justice perceptions, we put forward a scale of procedural justice that could be used in a meaningful way in the court cases studied in our project and that we hope can serve as an impetus for the future investigation of procedural justice in court settings. We measured perceived procedural justice both in terms of "fairness" and "justice" (Lind et al. 1993), and by using several criteria we consider suitable in courtroom settings.

We further argue that outcome concerns should be taken into consideration when examining the association between procedural justice and trust. How should we measure these concerns? Outcome perceptions typically take one of two forms: some studies examined the effects of "outcome fairness" (Lind et al. 1990; McEwen & Maiman 1984), whereas a larger number of studies looked at the effects of "outcome favorability" (Lind & Lissak 1985; Lind et al. 1993).

Brockner and Wiesenfeld (1996) used the term outcome favorability to describe a construct that captures both outcome fairness (i.e., the extent to which people perceive the outcome as fair) and outcome valence (i.e., the extent to which people believe they materially benefit from the decision). According to these authors, outcome fairness and outcome valence are two conceptually separate constructs which are not identical, but do overlap considerably. Brockner and Wiesenfeld argued convincingly that it is desirable to focus on the convergence rather than on the divergence between the two concepts.

In the current study, we will follow this line of reasoning and work with a concept of outcome favorability which entails both outcome valence and outcome fairness. Additionally, we will test whether splitting this variable into two different constructs (outcome fairness versus outcome valence) affects the results.

#### Method

## Respondents

Our sample of 483 litigants consisted of 335 men (69.4 percent) and 148 women (30.6 percent). Respondents' ages varied between 18 and 82 years with an average of 44.39 years (s.d. = 14.55). Respondents' highest education attained varied between primary school (15 respondents, 3.1 percent of the sample), secondary school (116 respondents, 24 percent of the sample), senior secondary vocational school (87 respondents, 18 percent of the sample), higher professional education (118 respondents, 24.4 percent of the sample), and university (72 respondents, 14.9 percent of the sample). Seventy-five respondents (15.5 percent of the sample) did not state their educational level. The average net income per month of the 387 respondents who filled out their income level was between one and one and a half times the modal wage in the Netherlands.

#### **Research Procedure**

Litigants who were scheduled to appear at a court hearing in a particular courtroom at a particular time between August 11 and December 22, 2015 were approached by the first author of this paper while they were waiting in the hallway of the court building for their court hearing to begin. Litigants were asked to participate in a study about their evaluations of their courtroom experience and were informed that their identities would remain anonymous, data would be reported in aggregate only, the study was being conducted independently from the court, and only researchers at the university responsible for conducting the study would have access to the data. All in all, of the 827 litigants approached, 483 agreed to participate, resulting in a 58.4 percent response rate.

The pre-hearing questionnaire was filled out prior to the court hearing and asked respondents their state of mind, what they had at stake, and how they coped with emotional uncertainty. The post-hearing questionnaire was filled out when respondents left the courtroom after they had appeared before the judge and measured respondents perceived procedural justice, outcome favorability, and trust in judges. Respondents were also asked for demographical information, including age, gender, income, and educational level.

After filling out the questionnaires, respondents were informed that they could give their email address if they wanted to be informed of the results of our study. One month after we completed the final analyses, we debriefed these respondents by sending them an email summarizing our results. We gained permission to conduct the study by both the district court of the Mid-Netherlands and the Dutch Council for the Judiciary.

Respondents were involved in three types of cases. In cases concerning motoring fines (N = 163), respondents had been imposed administrative fines with the amount of money

<sup>&</sup>lt;sup>1</sup> We report all measures in our study, so we note that we used 20 items in the post-hearing questionnaire measuring other reactions, such as litigants' willingness to accept the court's decision, litigants' trust in the Dutch judiciary, and the perceived social distance to judges. These items were measured after the variables reported here, were included for exploratory purposes, and did not affect the effects reported here. We asked respondents whether they wanted to give their phone number, so that we could call them after some time in order to ask how they felt about the law cases. Those respondents who did give their phone number on a voluntary basis were called two weeks after they received the judge's decision (N = 199). During that telephone interview, respondents were interviewed on the same variables as measured with the post-hearing questionnaire. This telephone questionnaire was included for exploratory purposes and did not affect the effects reported. All questionnaires were conducted in Dutch and the stimulus materials are available on request.

depending on the seriousness of the traffic offence, ranging from €23 (approximately 26 USD) for illegal parking to €400 (approximately 445 USD) for not possessing an insurance certificate. Litigants appealed these administrative fines and gave an oral explanation of their appeal during the court hearing in the presence of a public prosecutor. In these cases, it is often a citizen's word against a policeman's, and the policeman's word outweighs the citizen's when the subdistrict court judge has to take a decision. Litigants in these cases rarely have legal assistance, and most of them defend themselves.

In criminal cases before the single judge (N = 148), respondents were suspected of misdemeanors, such as theft, threats, or fraud. Single judges cannot impose more severe sentences than fines, community punishments, and imprisonments which last no longer than six months. During the court hearing, respondents either defended themselves against the charges of the public prosecutor, or were defended by their criminal defense lawyer.

In administrative law cases (N = 172), respondents applied for judicial review of decisions made by administrative authorities. These cases concerned predominantly social security issues such as social benefits, social support and tax surcharges. The court hearing is often used by the judge to ask questions to both the representative of the administrative authority and the respondent, whether or not represented by a lawyer. The administrative law judge can declare appeals well-founded, unfounded, or inadmissible. Administrative law judges usually decide cases in a written judgment six weeks after the court hearing has taken place.

Therefore, not all 483 respondents completed all items in our questionnaire. At the time of filling out the post-hearing questionnaire, 186 respondents—predominantly in administrative law cases—had not been informed of the outcome of their case yet. Nevertheless, the majority of the respondents (N = 297) had been informed of the outcome of their case. Due to missing values within this subsample, analyses including outcome favorability were performed with 241 respondents.<sup>2</sup> The full sample of 483 respondents was used for analyses that did not include outcome favorability.

 $<sup>^2</sup>$  So, in fact, these 241 respondents completed all items on both procedural justice, outcome favorability and trust in judges. A post-hoc G\*power analysis (Faul et al. 2007) indicated that with  $\alpha=0.05$ , and a medium average effect size (f=.24, Cohen 1992), the sample of this study has an average statistical power of .93 to detect the predicted main effects of procedural justice, outcome favorability, and the interaction effect between the two, which was deemed sufficient for the current purposes.

#### **Main Variables**

## Trust in Judges

Trust is often used as an umbrella term measuring different concepts. In their study on confidence in both state and local courts, for example, Benesh and Howell (2001) measured confidence by only asking respondents for their approval of how the courts were doing their jobs. They did not use terms like "trust" or "confidence" in any of the items they asked respondents to fill out. The same situation occurred in Sprott and Green's (2010) study on trust and confidence in the courts. Instead of measuring trust and confidence, they measured legitimacy, using items on people's obedience to the law, the fair treatment of honest court employees and people's support for decisions made by the court. Indeed, a close reading of the specific items used in previous research on trust in legal authorities suggests that sometimes procedural justice items are used to measure trust (Sunshine & Tyler 2003). For example, Tyler and Huo (2002) assessed people's motive-based trust in authorities by asking respondents, among other things, the extent to which they agreed that the authority considered their views and tried to take their needs into account. These items resemble procedural justice enhancing factors, such as voice and due consideration to a great extent, although they are seen and treated as measures of trust in research. We seek to address this issue by assessing trust in judges as directly and precisely as possible, by using words like "trust," "reliability," or "confidence" in the items we used. We assessed litigants' trust in judges as directly and precisely as possible by asking them to indicate their level of agreement with the following six statements: "I have confidence in this judge," "This judge is someone I trust," "I find this judge reliable," "I do not trust this judge," "I am confident that the judge has taken the right decision," and "I have the feeling that I cannot trust this judge." If necessary, items were reverse scored. Higher scores on the scale reflect a higher degree of trust in judges. The items demonstrated strong internal consistency ( $\alpha = .92$ ). An Exploratory Factor Analysis (EFA) using Maximum Likelihood (ML) extraction and orthogonal rotation was conducted to assess the degree to which the items loaded together. The results of this analysis showed that the six items loaded on a single component ( $\lambda = 4.40$ ; loadings > .60). Therefore, the items were averaged to yield a trust in judges scale.

# Procedural Justice

Our measure of perceived procedural justice is based on earlier literature (Lind & Tyler 1988; Van den Bos et al. 2014)

and asked respondents to indicate to what extent they agreed with the following 11 statements: "I was treated in a fair manner," "I was treated in a polite manner," "The judge was impartial," "I was able to voice my opinions," "My opinion was seriously listened to," "I was treated in a just manner," "I was treated with respect," "The judge has carefully studied my case," "The judge who handled my case was competent," "I believe the judge has treated me in the same way as others," and "The judge who handled my case was professional." All responses in our study were measured using 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). Cronbach's alpha showed the procedural justice items had strong internal consistency  $(\alpha = .94)$ . EFA revealed that the items loaded on 1 factor  $(\lambda = 6.97; loadings > .70)$ . Accordingly, the items were averaged to construct a procedural justice scale with higher scores indicating more positive evaluations of procedural justice.

Because we aimed to address the conceptual issue of what exactly constitutes trust and what constitutes procedural justice, we used confirmatory factor analysis (CFA) to test if two latent variables would account for the items used to measure both concepts. Two models were investigated: a single-factor model that treated all procedural justice and trust items as indicators of a single latent variable ( $\chi^2$  (117, N = 395) = 891.85,p < .00001; CFI = 0.96; SRMR = 0.070;RMSEA = 0.13) and a two-factor model that distinguished procedural justice from trust. The two-factor model had a better fit than the one-factor model ( $\Delta \chi^2$  (1) = 510.4, p < .0001). It should be noted that in both the single-factor and the twofactor model we allowed covariation between the errors of two items for procedural justice, and covariation between the errors of two items for trust, to improve the model fit. The final measurement model fit the data well ( $\gamma^2$  (116, N = 395) = 381.45, p < .00001; CFI = 0.98; SRMR = 0.05;RMSEA = 0.08). In this model, the correlation between both latent variables was  $\rho = .79$ , p < .001.

# **Sociolegal Variables**

## **Outcome Favorability**

In line with Brockner and Wiesenfeld (1996), we measured perceived outcome favorability by asking respondents to indicate to what extent they agreed with the following statements: "I find this a favorable decision," "The outcome in the case is positive to me," "I agree with the judge's decision," "I find this outcome fair," "I have the feeling I won this case," "This outcome makes me happy," and "I find this outcome just." Because the

Cronbach's alpha was high ( $\alpha$  = .97) and EFA revealed that the items loaded on one factor ( $\lambda$  = 6.01; loadings > .85), the items were averaged to form an outcome favorability scale with higher scores indicating more favorable outcomes.<sup>3</sup>

## Outcome Importance

To assess what litigants had at stake before entering the court room, we constructed a 4-item scale with items inspired by Brockner (2010) consisting of the following statements: "The outcome in the case is very important to me," "There is a lot at stake in this case for me," "My financial well-being depends on the outcome in this case," and "The outcome is important for me in order to move on with my life." Because the Cronbach's alpha was high ( $\alpha$  = .87), and EFA revealed that the items loaded on one factor ( $\lambda$  = 2.89; loadings > .70), items were averaged to yield an outcome importance scale with higher scores indicating more at stake for the litigant.

## **Outcome Information**

We dummy coded whether respondents had outcome information at the time they filled out the questionnaire directly after the court hearing took place.

## Emotional Response to Uncertainty

To assess how litigants emotionally responded to uncertainty (Van den Bos & Lind 2009), we used the Emotional Responses to Uncertainty scale developed by Greco and Roger (2001). We chose those 10 of the 15 items that we considered most relevant for the current purposes. Specifically, respondents were asked to indicate their level of agreement with the following statements: "I get worried when a situation is uncertain," "Uncertainty frightens me," "When uncertain about what to do next, I tend to feel lost," "When I can't clearly discern situations, I get apprehensive," "Facing uncertainty is a nerve wracking experience," "I get really anxious if I don't know what someone thinks of me," "When I'm not certain about someone's intentions toward me, I often become upset or angry," "When the future is uncertain, I generally expect the worst to happen," "When a situation is unclear, it

<sup>&</sup>lt;sup>3</sup> We re-tested all analyses reported by using both outcome valence and outcome fairness separately. These analyses did not show different results than the ones presented in our results section. We interpret this as support of Brockner and Wiesenfeld's (1996) line of reasoning that the concept of outcome favorability entails both outcome valence and outcome fairness and can be used as such.

makes me feel angry," and "I tend to give up easily when I don't clearly understand a situation." EFA revealed an acceptable loading on one factor ( $\lambda = 5.53$ ; loadings > .45). We averaged the items into an emotional uncertainty scale. The items demonstrated strong internal consistency ( $\alpha = .91$ ).

### **Prior Court Experience**

We assessed whether litigants had prior court experience by asking them to respond to the following statement with "yes" or "no": "This is the first time in my life that I have come to court with a law case."

We also assessed several background variables. Respondents were asked to indicate their gender, age, education, income, and whether they had legal assistance.

#### Results

## **Descriptive Statistics and Correlations**

Bivariate correlations and descriptive statistics including means and s.d. for our main variables, sociolegal variables, and background variables are presented in Table 1.

## **Background Variables**

Table 1 shows that there was no statistically significant association between gender, income, educational level, legal assistance, and our main variables procedural justice and trust in judges. Therefore, none of these background variables were included in the analyses. We did find a statistically significant relationship between age and trust in judges, indicating that older respondents were more likely than younger respondents to trust the judge who handled their case ( $\beta = .11$ , t = 2.13, p < .05), and between age and procedural justice, indicating that older respondents were more likely than younger respondents to perceive higher levels of procedural justice ( $\beta = .10$ , t = 2.00, p < .05). Because adding age as a variable to the analyses did not influence the main effects and interaction effects reported here and did not alter the interpretation of these effects, we decided to leave this variable out of the analyses and the following presentation of our findings.

## **Testing Our Hypotheses**

We used multiple regression analyses for analyses that involved solely continuous variables. Following Cohen et al.

Table 1. Means, Standard Deviations, and Correlations for the Main Variables and Sociolegal Variables

Variable	M	s.d.	1	61	33	4	75	9	7	œ	6	10	11	12
1. Trust in judges	5.31	1.31	1											
2. Procedural justice	5.57	1.13	.76**	I										
3. Outcome favorability	4.16	1.97	.62**	.56**	1									
4. Outcome importance	4.58	1.73	.01	60.	Π.	I								
<ol><li>Outcome information</li></ol>	I	I	00.	.10	.04	.25**	I							
(0 = no, 1 = yes)														
6. Emotional uncertainty	3.47	1.30	07	00.	.05	.47**	*!!	1						
7. Court experience	I	I	12*	11*	05	80.	.01	01	I					
$(0 = no, \hat{1} = \gamma es)$														
8. Educational level	2.41	1.27	.02	00.	08	28**	90.	28**	90	1				
9. Age	44.39	14.55	.11*	.10*	90	10	.17**	04	.10*	60.	I			
10. Income	6.30	2.52	90.	.05	03	38**	02	34**	.04	.36**	.22**	I		
11. Gender	I	I	.07	60.	02	.18**	.13**	.18**	20**	.03	04	22**	I	
(0 = female, 1 = male)														
12. Legal assistance	I	I	07	02	90.	.42**	.22**	.26**	80.	18**	22**	28**	80.	I
(0 = no, 1 = yes)														

Note: \* b < .05; \*\* b < .01.

Variable	b	SE B	β	VIF
Step 1			·	
Procedural justice	.82	.045	.77***	1.00
Step 2				
Procedural justice	.68	.051	.63***	1.46
Outcome favorability	.16	.033	.24***	1.46
Step 3				
Procedural justice	.63	.054	.58***	1.66
Outcome favorability	.18	.032	.26***	1.48
Procedural justice X Outcome favorability interaction	06	.023	11**	1.15

**Table 2.** Summary of Stepwise Regression Analysis for Variables Predicting Trust in Judges

Notes:  $R^2_{\text{adj}} = .59$  for Step 1;  $R^2_{\text{adj}} = .62$  for Step 2;  $R^2_{\text{adj}} = .63$  for Step 3. \*\* p < .01; \*\*\* p < .001.

(2003), all predicting variables were centered before being entered into the regression analyses containing interactions. We used General Linear Model (GLM) analyses when analyzing the effects of both categorical and continuous independent variables (see, e.g., Tatsuoka 1988).

## **Procedural Justice**

To test Hypothesis 1, we regressed trust in judges on procedural justice. The regression analysis revealed a strong statistically significant relationship between perceived procedural justice and trust in judges (b = .85,  $\beta = .76$ , t (393) = 22.88, p < .001). In other words, those who perceived higher levels of procedural justice also stated that they had higher levels of trust in the judge who handled their case. This finding supports our first hypothesis that litigants' perceptions of procedural justice are positively associated with their trust judges.

# **Outcome Favorability**

To test Hypothesis 2, we performed a multiple regression analysis in which our main and interaction variables were entered stepwise. Table 2 shows the results of this analysis.

When considered together, procedural justice and outcome favorability predicted 62.6 percent of the variation in trust in judges ( $R^2 = .63$  for Step 2 in Table 2). The main effects in Step 2 showed that procedural justice predicted 39.8 percent of the variance of trust in judges ( $\beta = .63$ , t = 13.17, p < .001) while outcome favorability predicted 5.8 percent of the variance of trust in judges ( $\beta = .24$ , t = 5.02, p < .001). So, in fact, these results suggest that outcomes do matter in our study, but that procedural justice matters more.

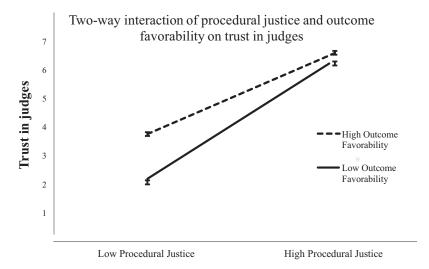


Figure 1. Litigants' trust in judges as a function of litigants' perceptions of procedural justice being relatively low (-1 s.d.) and relatively high (+1 s.d.) and their perceptions of the outcome being relatively unfavorable (-1 s.d.) and relatively favorable (+1 s.d.). Scores are on 7-point scales with higher values indicating higher levels of trust in judges. Error bars represent standard errors of the mean.

Table 2 also shows a statistically significant interaction effect of procedural justice and outcome favorability on trust in judges  $(b = -.06, \beta = -.11, t (237) = -2.71, p < .001)$ . This effect is illustrated in Figure 1.

Testing for relevant simple slopes (Cohen et al. 2003) showed that procedural justice was significantly related to trust in judges  $(b = .51, \beta = .44, t (237) = 6.17, p < .001)$  when outcomes were relatively favorable, that is, when respondents' scores were estimated to be 1 s.d. above the mean of outcome favorability (+1 s.d.). This association was even stronger (b = .75,  $\beta = .65$ , t = .65(237) = 9.02, p < .01) when outcomes were relatively unfavorable, that is, when respondents' scores were estimated to be 1 s.d. below the mean of outcome favorability (-1 s.d.). In other words, the positive relationship between outcome favorability and trust in judges was more pronounced when respondents perceived relatively low levels of procedural justice (-1 s.d., b = .24,  $\beta = .38$ , t(237) = 5.44, p < .001) than when they perceived relatively high levels of procedural justice (+1 s.d., b = .11,  $\beta = .17$ , t(237) = 2.25, p < .05). These findings are consistent with our second hypothesis and indicate that perceived outcome favorability moderated the positive relationship between perceived procedural justice and trust in judges in ways that were predicted by our line of reasoning.

## **Outcome Importance**

To test Hypothesis 3, we added the outcome importance scale and all interactions to the regression analysis. This revealed, in addition to the main effects of procedural justice and outcome favorability on trust in judges, a main effect of outcome importance on trust in judges (b = -.10,  $\beta = -.12$ , t (215)= -2.62, p < .01), a statistically significant two-way interaction between procedural justice and outcome importance (b = .11,  $\beta = .17$ , t (215) = 3.33, p < .01), and a statistically significant three-way interaction between procedural justice, outcome favorability, and outcome importance (b = .04,  $\beta = .14$ , t (215) = 2.80, p < .01). The main effect of outcome importance suggested that trust ratings were lower when outcomes were relatively more important.

Simple slope analyses probing the two-way interaction between procedural justice and outcome importance showed that for respondents for whom there was relatively much at stake (+1 s.d.), perceived procedural justice was associated with trust in judges (b = .36,  $\beta = .31$ , t (215) = 5.10, p < .001). For respondents who had relatively less at stake (-1 s.d.), the slope was not statistically significant, indicating that for those respondents there was no statistically significant association between procedural justice and trust in judges (b = -.02,  $\beta = -.02$ , t (215) = -.29, p = .77). These findings support our third hypothesis that the relationship between procedural justice and trust in judges is more pronounced when outcomes are relatively important to litigants.

To interpret the three-way interaction, we calculated the simple two-way interactions between procedural justice and outcome favorability at high and low levels of outcome importance. These calculations revealed that the two-way interaction between procedural justice and outcome favorability was only significant when the respondents' score was estimated to be 1 s.d. below the mean of outcome importance (-1 s.d., b = -.11,  $\beta = -.20$ , t (215) = -3.96, p < .001), and not statistically significant when the scores were estimated to be 1 s.d. above the mean of outcome importance (+1 s.d., b = .03,  $\beta = .05$ , t (215) = .62, p = .54).

Simple slope analyses were used to interpret these simple interactions between procedural justice and outcome favorability. These simple slopes are illustrated in Figure 2. When outcome importance was low (-1 s.d., Figure 2A), procedural justice was positively associated with trust in judges (b = .65,  $\beta = .57$ , t (215) = 6.03, p < .001) when outcomes were relatively favorable (+1 s.d.), and this association was even stronger (b = 1.09,  $\beta = .95$ , t (215) = 9.92, p < .001) when outcomes were relatively unfavorable (-1 s.d.). When outcome importance was high (+1 s.d., Figure 2B), the positive relationship between procedural

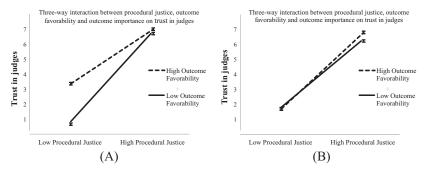


Figure 2. (A) Litigants' trust in judges as a function of litigants' perceptions of procedural justice being relatively low (-1 s.d.) and relatively high (+1 s.d.) and their perceptions of the outcome being relatively unfavorable (-1 s.d.) and relatively favorable (+1 s.d.) when outcome importance is relatively low (-1 s.d.). Scores are on 7-point scales with higher values indicating higher levels of trust in judges. Error bars represent standard errors of the mean. (B) Litigants' trust in judges as a function of litigants' perceptions of procedural justice being relatively low (-1 s.d.) and relatively high (+1 s.d.) and their perceptions of the outcome being relatively unfavorable (-1 s.d.) and relatively favorable (+1 s.d.) when outcome importance is relatively high (+1 s.d.). Scores are on 7-point scales with higher values indicating higher levels of trust in judges. Error bars represent stand errors of the mean.

justice and trust in judges was strongly pronounced both when outcomes were relatively favorable (+1 s.d., b = .92,  $\beta$  = .87, t (215) = 8.18, p < .001) and relatively unfavorable (-1 s.d., b = .82,  $\beta$  = .71, t (215) = 10.51, p < .001). These findings do not support our fourth hypothesis because they do not indicate that the interaction effect between procedural justice and outcome favorability was more pronounced when litigants had relatively more at stake.

#### **Outcome Information**

To test Hypothesis 5, we added trust in judges as a dependent variable, outcome information as a categorical independent variable, procedural justice as a continuous independent variable, and the interactions between the independent variables to the GLM analysis. This analysis revealed a statistically significant main effect of outcome information on trust in judges, F(1, 391) = 5.60, p < .05,  $\eta_p^2 = .01$ , in addition to the main effect of procedural justice. Because the interaction effect between outcome information and procedural justice was not significant, we found no support for our fifth hypothesis that outcome information would moderate the positive relationship between procedural justice and trust in judges. Indeed, when we looked at the regression analyses of procedural justice on trust in judges for

both litigants with outcome information (b = .85,  $\beta = .77$ , t (242) = 18.92, p < .001) and without outcome information (b = .91,  $\beta = .73$ , t (151) = 12.96, p < .001), we saw only a minor difference in weight, which was not statistically significant.

## **Emotional Responses to Uncertainty**

To test Hypothesis 6, we put the Emotional Responses to Uncertainty scale, the procedural justice scale, and all interactions in a regression analysis. This analysis revealed only a significant main effect of procedural justice on trust in judges. Because the interaction effect between emotional responses to uncertainty and procedural justice was only marginally significant (b = .06,  $\beta = .06$ , t (346) = 1.90, p = .06), we found no support for our sixth hypothesis that how litigants emotionally respond to uncertainty would moderate the positive relationship between procedural justice and trust in judges.

## **Prior Court Experience**

To examine the possible role of prior court experience, we used a GLM analysis in which we added trust in judges as a dependent variable, prior court experience as a categorical independent variable, procedural justice as a continuous independent variable, and the interactions between the independent variables. This analysis revealed a statistically significant main effect of prior court experience on trust in judges: F(1, 379) = 5.00, p < .05,  $\eta_p^2 = .01$ , in addition to the main effect of procedural justice. We also found a statistically significant interaction effect between prior court experience and procedural justice: F(1, 379) = 14.75, p < .001,  $\eta_p^2 = .04$ .

Simple slope analyses probing the two-way interaction between procedural justice and prior court experience showed that for respondents without prior court experience, perceived procedural justice was associated with trust in judges (b = .65,  $\beta = .60$ , t (150) = 9.13, p < .001). For respondents with prior court experience, this relationship was even more pronounced (b = .96,  $\beta = .83$ , t (228) = 22.18, p < .001). These findings indicate that the positive relationship between procedural justice and trust in judges was more pronounced when litigants had been to the court before. We will elaborate on this finding in the Discussion.

# **Type of Law Case**

Respondents appeared in three types of cases. Although we refrained from making specific hypotheses on the role of the type of law case in our study, we explored what possible

moderating effects of the type of law case could be observed reliably in our data. As a result, we conducted several GLM analyses in which we added type of law case as a categorical variable to our continuous independent variables, other categorical variables, and all interactions.

First of all, the type of law case did not moderate Hypothesis 1. We found a strong statistically significant positive relationship between procedural justice and trust in judges in both motoring fine cases (b=.82,  $\beta=.77$ , t (137) = 13.90, p<.001), criminal law cases (b=.85,  $\beta=.76$ , t (106) = 12.18, p<.001), and administrative law cases (b=.97,  $\beta=.75$ , t (146) = 13.52, p<.001).

Second, the type of law case did moderate Hypothesis 2 and moderated the interactive relationship between procedural justice and outcome favorability on trust in judges. We found a statistically significant three-way interaction effect between procedural justice, outcome favorability, and type of law case on trust in judges, F(2, 229) = 8.07, p < .001,  $\eta_p^{-2} = .07$ . Regression analyses for each type of case separately revealed a statistically significant interaction effect between procedural justice and outcome favorability in cases concerning motoring fines only (b = -.14,  $\beta = -.27$ , t = -4.80, p < .001). Simple slope analyses probing this effect showed that the simple interaction effect between procedural justice and outcome favorability in cases concerning motoring fines took the same form as the interaction effect illustrated in Figure 1. Procedural justice was positively related to trust in judges when outcomes were relatively favorable (+1 s.d., b = .20,  $\beta = .17$ , t (107) = 2.00, p < .05), and this association was much stronger when outcomes were relatively unfavorable (-1 s.d., b =.80,  $\beta = .70$ , t(107) = 7.78, p < .001).

The number of respondents involved in administrative law cases who received their outcome directly at the court hearing was too low to reliably calculate the effects, both when respondents were interviewed right after their court hearing,<sup>4</sup> and two weeks after they received the outcome in their case.<sup>5</sup> The procedural justice by outcome favorability interaction effect was not statistically significant for criminal law cases (b = .05,  $\beta = .09$ , t = 1.32, p = .19). Thus, the type of law case in which respondents were involved moderated the interactive relationship between outcome favorability and procedural justice, revealing only a statistically significant interaction effect in motoring fine cases.

 $<sup>^4\,</sup>$  The 29 respondents that we had then yielded an average power of .35 in G\*Power analyses (Faul et al. 2007).

 $<sup>^5\,</sup>$  The G\*Power analysis (Faul et al. 2007) revealed an average power of .60 with the 51 respondents that we had then.

The GLM analyses further revealed that the moderating effect of outcome importance on the procedural justice x outcome favorability interaction as proposed with Hypothesis 4 was no longer significant when we controlled for type of law case. In the Discussion, we will return to this observation. The GLM analyses did not reveal other moderating effects of the type of law case on any of our other hypotheses.

#### Discussion

Our research contributes to the study of procedural justice and trust in judges in several ways. First, we provide evidence for the presence of a positive relationship between procedural justice and trust in judges in a real-life courtroom context. Second, we demonstrate how outcome favorability, outcome importance, and prior court experience can moderate this relationship. Third, in addition to providing empirical insight about the relationships between procedural justice, outcome concerns, and trust in judges, we conceptually clarify how to measure these concepts in real-life courtroom settings. Taken together, these findings provide insights into how litigants come to trust judges after their courtroom hearings.

# The Procedural Justice × Outcome Favorability Interaction in Courtroom Settings

We found a statistically significant interaction between procedural justice and outcome favorability on trust in judges across the three different types of cases studied here, indicating that procedural justice is positively associated with trust in judges when outcomes are relatively favorable, and that this association is even stronger when outcomes are relatively unfavorable. Although these findings suggest that Brockner and Wiesenfeld's (1996) procedural justice- × outcome favorability interaction effect exists in real-life courtroom contexts, we note that the interaction effect explained only 1 percent of the variance in trust in judges, while the main effects of procedural justice and outcome favorability explained 62.6 percent of the variance in trust in judges (see Table 2). Thus, the interaction effect is important in the legal domain, but is certainly not the only or even the most important driver of citizens' trust in judges.

The interactive relationship between procedural justice and outcome favorability is important because it may provide insight into the mechanisms through which each of these variables affect people's beliefs and behaviors. What does the fact that procedural

justice matters more when outcomes are less favorable tell us about why procedural justice matters in the first place?

Although different psychological processes may account for the interaction effect, Brockner and Wiesenfeld (1996) speculated that all reflect people trying to make sense of what is going on in their environments (see also Van den Bos 2015). Furthermore, we assume such "sense-making processes" are elicited by the negativity or unexpectedness of unfavorable events and/or unfairness. Unfavorable outcomes, for example, may lead people to scrutinize the procedures that gave rise to those outcomes, thereby increasing the impact of procedural justice on their reactions (Brockner & Wiesenfeld 1996). In other words, when people try to make sense of what is going on, such as in the courtroom hearing in which they find themselves, external cues that address their informational needs are particularly influential. When procedures are unfair, outcome favorability may have high informational value, and when outcomes are unfavorable, procedural justice information is important. This sense-making analysis of the interaction effect may be particularly important in courtroom settings in which judges often provide litigants with undesired and unfavorable outcomes, such as finding suspects guilty and declaring appeals unfounded. Thus, trying to make sense of what is going in court hearings in which decisions are made about your case can be assumed to be a pivotal psychological process among many litigants. Of course, this is not to suggest that sense-making is the only basis through which procedural justice exerts influence. Therefore, we encourage future researchers to look for theoretical support for sense-making moderators within real-life contexts.

Furthermore, the courtroom context of our study enabled us to examine on an exploratory basis whether the interaction effect did indeed vary across contexts. If we look at each type of case separately, the procedural justice × outcome favorability interaction effect was only statistically significant in motoring fine cases. The procedural justice-outcome favorability interaction effect was not statistically significant in criminal law cases, and too few respondents filled out the questionnaire to reliably analyze administrative law cases.

We are unable to state with certainty why the interaction effect was absent in criminal law cases. An explanation could be that the punitive character of criminal law cases makes litigants in these kinds of cases feel strongly evaluated. Being evaluated by important others such as a judge is an event that may make litigants feel uncertain about themselves and try to make sense of what is happening (Van den Bos & Lind 2002). In these circumstances, information about whether they are treated fairly or

unfairly by judges, who are important representatives of society, can be of great value to litigants. As a result, outcome favorability may matter less when litigants make inferences about a judge's trustworthiness, which may explain why the relationship between procedural justice and trust in judges was strongly pronounced in criminal law cases.

Thus, although we provide evidence for the procedural justice x outcome favorability effect in the legal domain, our results suggest that the effect may depend on the type of law case litigants are involved in. We recommend that this issue be further explored in future studies that examine in detail the robustness of the interaction effect in other courtroom contexts.

## The Role of Sociolegal Moderators

In addition to the moderating influence of outcome favorability on the relationship between procedural justice and trust in judges, we found both outcome importance and prior court experience to moderate this relationship as well. These findings suggest that procedural justice matters more when litigants have more at stake and when they have prior court experience.

Contrary to our expectations, outcome information did not moderate the positive relationship between procedural justice and trust in judges. This suggests that prior knowledge about the outcome did not change the weight our litigants placed on their procedural justice perceptions when forming judgments about trust. Our results showed that if litigants knew that the outcome of a procedure was favorable before they evaluated that procedure, their judgments about procedural fairness had only slightly less impact on their trust in judges than when litigants did not know the favorability of the outcome. This difference was not significant.

We expected uncertainty, and especially litigants' emotional response to uncertainty to heighten the influence of perceived procedural justice. The interaction effect between our measure of emotional uncertainty and perceived procedural justice was marginally significant only (p = .06), indicating that the association between procedural justice and trust in judges was somewhat stronger when emotional uncertainty was relatively high as opposed to relatively low. The "marginally significant" quality of this relationship indicates that this relationship should be treated with caution until further research shows more robust evidence for this pattern. Future research may want to check whether Greco and Roger's (2001) Emotional Response to Uncertainty Scale that we used in this study is an appropriate measure of litigants' uncertainty at the moment they enter the courtroom. In fact,

this scale measures how people respond in general to uncertain situations, which may have accounted for the marginally significant moderating effect of uncertainty. For example, according to De Cremer et al. (2010), the interactive relationship between procedural justice and outcome favorability was more pronounced when people's uncertainty about their standing as organizational members was high, but they used different operationalizations of uncertainty about their standing. Thus, we encourage future researchers to examine how the interaction effect between procedural justice and outcome favorability might be moderated by how uncertain litigants feel by using a better operationalization of uncertainty within a courtroom context.

We also note here that exploring the possible role of prior court experience indicated that how the litigants of the present sample entered the courtroom influenced their reactions. That is, we found that the procedural justice-trust relationship was more pronounced when our litigants had prior court experience. We speculate that this finding makes sense in light of Leventhal's (1980) consistency over time rule, which suggests that litigants refer to their prior court experiences when assessing the way they are treated by the judge. In other words, having prior court experiences may create a basis on which to evaluate the current encounter of procedural fairness and the associated trust judgments.

The current findings regarding prior court experience become more important when they are contrasted with views that are more closely linked to how litigants evaluate legal authorities, especially under conditions of uncertainty in procedural justice. The absence of prior court experience may instigate higher levels of uncertainty among the litigants involved. If this assumption is warranted then one would expect a stronger relationship between procedural justice and trust in judges when there is no prior court experience (see, e.g., Van den Bos & Lind 2002). On the other hand, going to court for the first time may create too many uncertainties for litigants to be able to meaningfully interpret what is going on. Future research is clearly warranted to sort these and other possible implications that may follow from the findings presented here.

## The Use of Different Types of Law Cases

This study's design, and more specifically our focus on the moderating effects of sociolegal variables that we wanted to differentiate, prompted us to use three different types of law cases. We had no concrete expectations of what the differences between these law cases would be in our data, or what type of law case

would be an indicator of. That said, we do have some indication that the type of law case might help explain some of our unanticipated findings.

For example, we observed an outcome importance x procedural justice × outcome favorability interaction effect, indicating that the procedural justice x outcome favorability interaction was statistically significant when litigants perceived their outcomes as relatively unimportant. The procedural justice × outcome favorability interaction was not statistically significant when outcomes were judged as relatively important.

One possible explanation for this unexpected finding could be that the moderating influence of our outcome importance variable was due to the type of law case. In many of our analyses, controlling for type of law case did not yield different results. However, when we examined both three-way interactions between type of case  $\times$  procedural justice  $\times$  outcome favorability and outcome importance  $\times$  procedural justice  $\times$  outcome favorability simultaneously we found that the former effect was statistically significant (p < .001) whereas the latter effect was not (p > .22).

The fact that outcome importance and type of law case are indeed related (r = .59, p < .001), still leaves unanswered the question of why the interaction between procedural justice and outcome favorability was more likely to be significant when outcomes were seen as less important. One possibility is that outcome information is less complex to interpret when the stakes are low and when outcomes are relatively unimportant for litigants. After all, it may be easier for litigants to interpret the traffic fine that they will need to pay or not in motoring fine cases, than to interpret the verdict in criminal cases which may involve more complex information about fines, community service, imprisonment, or a combination of these measures. Indeed, posthoc probing of the outcome importance scores shows that litigants in criminal law cases thought the outcome in their case was more important (M = 4.91, s.d. = 1.51) than litigants involved in motoring fine cases (M = 3.19, s.d. = 1.36), F(1, 446) = 92.13,p < .001,  $\eta_p^2 = .17$ .

We further assume that information that is harder to interpret is less likely to interact with other variables present in the situation, such as perceived procedural fairness, and that procedural justice information may be easier for litigants to interpret than outcome information (Van den Bos & Lind 2002). Thus, because litigants in high stakes cases are dealing with outcomes which are difficult to interpret, they rely on procedural justice information when making inferences about the judge's trustworthiness. Outcome favorability may not have a moderating effect on the positive relationship between procedural justice and

trust in judges in those cases. More research is needed to examine these assumptions in detail.

This all suggests that type of law case may play a crucial role in how litigants respond to issues of procedural justice, outcome favorability, and the sociolegal moderators we distinguished. If this suggestion has merit then it implies that future research should focus on differences between different law cases and the psychological processes and concepts associated with these differences. Types of law cases do not only differ with regard to the type of litigants involved and the setting and atmosphere during the court hearing, but also with regard to, for example, the opposing parties involved (e.g. a governmental institution or a family member). We expect such differences to have psychological consequences, which are worth examining in future studies.

#### Limitations

In the current paper, we provide support for the idea that trust in judges is determined by someone's experience of procedural justice. The relationship between procedural justice and trust in legal authorities seems to depend more on context than is often realized in the research literature. For example, studies on procedural justice and trust in legal authorities present different models with contrasting relationships between the two such that some studies treated trust as an antecedent of procedural justice (Lind et al. 1993; Tyler & Blader 2000; Tyler & Lind 1992; Van de Walle 2009), while other studies viewed trust as the result of procedural justice (Jackson & Bradford 2010; Tyler & Huo 2002), and a third class of studies proposed that procedural justice and trust cannot really be distinguished from each other. Johnson et al. (2014), for example, found that procedural justice and institutional trust overlapped heavily and collapsed these variables into one variable that they term "trust and procedural justice."

Although we found a strong statistically significant relationship between perceived procedural justice and trust in judges across our three types of law cases, we acknowledge that these data are correlational, and any inferred causality must be regarded as tentative at best. This said, we nevertheless argue that the findings reported above remarkably converge with previous experiments on the fair process effect in which one can be considerably more confident about the direction of causality (for overviews, see, e.g., Lind & Tyler 1988; Van den Bos 2005).

Future research, for instance in different legal systems and that includes other measures that may reveal more in-depth insight into the issues revealed here or research that uses field experiments (when possible) in other courtroom contexts is needed to test the reasoning underlying this study. We hope that the line of reasoning proposed here and the measures we developed to test this line of reasoning may be useful there.

In essence, this is a procedural justice paper, in which we were primarily interested in the relationship between perceived procedural justice and trust in judges, and how outcome concerns and how litigants entered the courtroom influenced this relationship. We refrained from testing associations between outcome favorability and sociolegal moderators or other complex associations, such as four-way interactions between our main variables and our sociolegal variables. Those analyses would not have been reliable given our sample size.

Although 129 respondents involved in motoring fine cases and 139 respondents involved in criminal law cases had heard the outcome before they filled out the post-hearing questionnaire, we acknowledge that our study involves 143 respondents involved in administrative law cases who had not. Yet we can benefit from this circumstance by comparing the procedural justice and trust judgments of these litigants in administrative law cases at two moments: before they received their outcome and after they received their outcome. Preliminary comparisons between our two measuring moments showed that perceived procedural justice decreased significantly after litigants in administrative law cases heard the outcome in their case, F(1, 71) = 11.25, p < .01,  $\eta_p^2 = .14$ , indicating that the level of procedural justice was higher (M = 5.81, s.d. = .84) before litigants had heard the outcome than after (M = 5.45, s.d. = .91).

# **Policy Implications**

Understanding under what conditions procedural justice matters to litigants is useful not only for theory building. Judges, who encounter litigants in all kinds of law cases daily, can benefit from these results too. Judges who handle minor cases have been found to believe that litigants do not pay attention to procedures as long as the outcomes in their cases are positive (Tyler 1984). Our findings showed the contrary. Litigants did care about procedural justice when outcomes were favorable, and they cared even more about procedural justice when outcomes were unfavorable. Furthermore, the fact that we did not find outcome information to moderate the relationship between procedural justice and trust in judges suggests that knowing the outcome does not necessarily influence the weight people put on the fairness of the procedure. Being treated fairly by the judge continued to be important for those litigants who already knew their outcome.

It is important to know when perceived procedural justice is strongly associated with trust in judges and under which conditions high procedural justice can attenuate the negative impact of unfavorable decisions often made by judges in courtrooms. This compensatory effect of procedural justice entails that procedural justice can counteract or cushion the negative effect of unfavorable outcomes (Kwong & Leung 2002). In other words, authorities such as judges, who often have to disappoint litigants with undesirable and unfavorable outcomes, should ensure that procedural justice is maintained in order to reduce negative reactions to these outcomes.

#### **Conclusions**

By using the district court of the Mid-Netherlands as our research location, we expanded the study of trust in judges internationally, and we extended the literature on procedural justice, outcome favorability, and their interaction. One of the most notable implications of the findings thus reported is that they offer further empirical evidence for the importance of perceived procedural justice in real-life courtroom settings. We found that litigants who perceive the judge's treatment as fair are more likely to trust judges. This finding is robust across all three types of law cases studied here. This is an important finding, in part because trust builds the legitimacy of legal authorities in our society and is associated with law-abiding behavior. We also found that the positive relationship between procedural justice and trust in judges was more pronounced when outcomes were unfavorable, when litigants had a lot at stake, and when litigants had prior court experience.

Our findings show the importance of doing law and society research among actual litigants in different law cases. In short, the findings presented here have revealed evidence for the moderating role of outcome concerns, the association between procedural justice, and trust in judges. The limitations of the current research notwithstanding, we think it is safe to conclude that this paper helps us to better understand how litigants in Dutch courtrooms come to trust judges.

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