



# UNIVERSITY OF TWENTE.

Faculty of Behavioural, Management and  
Social sciences

## Stop Forms and Perceptions of Procedural and Interactional Justice

The Effect of Stop Forms and Explaining on Perceptions  
of Justice during Proactive Stops by the Dutch Police:  
A Civilian Perspective

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### Abstract

For years, part of Dutch civilians have experienced racism and unfair treatment by the police, which have impaired the police-civilian relationship. Various interventions were implemented to decrease ethnic profiling, however, many interventions lack academic support for their effectiveness and little studies focused on the perception of civilians. Specifically perceptions of procedural and interactional justice are expected to positively affect the experience of civilians and the legitimate position of the police. Hence, this study examined the effect of providing an explanation and the use of a stop form during proactive stops by the police, on perceptions of procedural and interactional justice.

Additionally, participants' interpretation of noting down ethnicity on stop forms was explored.

Participants ( $N = 118$ ) experienced a proactive stop in VR, with or without a Stop Form and with or without an Explanation (IVs). The results indicate that mainly providing an explanation increases perceptions of both procedural and interactional justice ( $f = 0.95$ ;  $f = 1.09$ ). Contrary to the expectations, stop forms appear not to affect perceptions of procedural justice, and to slightly impair the effect of explaining on perceptions of interactional justice ( $f = 0.10$ ). This study is a first indication for the possible important role of providing explanations and engaging in dialogue with civilians, to improve perceptions of justice during proactive stops by the police. Several suggestions are made for future studies to proceed this inquiry on how to improve police-civilian interactions during proactive stops. Additionally, the interpretations of noting down ethnicity on stop forms greatly varied. This indicates that this act of noting down ethnicity would require sufficient explaining to civilians, if it were to be implemented into practice.

Word count: 273

*Keywords: stop forms, procedural justice, interactional justice, justice, police, ethnic profiling, racial profiling, proactive stops, stop and check, virtual reality*

### Samenvatting

Een deel van de Nederlanders heeft jarenlang racisme en oneerlijke behandeling door de politie ervaren, wat de politie-burgerrelatie heeft beschadigd. Er zijn verschillende interventies ingevoerd om etnisch profileren te verminderen, echter missen veel interventies academische ondersteuning voor hun effectiviteit en zijn weinig studies gericht op de ervaringen en waarneming van burgers. Met name waarnemingen van procedurele en interactionele rechtvaardigheid kunnen naar verwachting een positieve invloed hebben op de ervaringen van burgers en de legitieme positie van de politie. In dit onderzoek is daarom gekeken naar het effect van het geven van uitleg en het gebruik van een staandhoudingsformulier voor proactieve staandhoudingen door de politie, op waarnemingen van procedurele en interactionele rechtvaardigheid. Bovendien werd de interpretatie van de deelnemers van het noteren van etniciteit op stopformulieren onderzocht. Deelnemers ( $N = 118$ ) beleefden een

proactieve stop in VR, met of zonder Stopformulier en met of zonder Uitleg (IV's). De resultaten geven aan dat vooral het geven van een uitleg de waarneming van zowel procedurele als interactionele rechtvaardigheid sterk vergroot ( $f = 0.95$ ;  $f = 1.09$ ). In tegenstelling tot de verwachtingen blijken stopformulieren de waarneming van procedurele rechtvaardigheid niet te beïnvloeden, en het effect van uitleg op waarnemingen van interactionele rechtvaardigheid zelfs enigszins af te remmen ( $f = 0.10$ ). Dit resultaten van dit onderzoek vormen een eerste indicatie voor de belangrijke rol van het geven van uitleg en het aangaan van de dialoog met burgers, ter verbetering van de rechtvaardigheidsbeleving bij proactieve staandehoudingen door de politie. Er worden verschillende suggesties gedaan vervolgonderzoek naar hoe de interactie tussen politie en burger tijdens proactieve staandehoudingen kan worden verbeterd. Tot slot, waren de interpretaties van etniciteit op stopformulieren zeer uiteenlopend. Dit geeft aan dat deze handeling van het noteren van etniciteit voldoende uitleg aan burgers zou vergen, als het in de praktijk zou worden toegepast.

Woorden: 299

*Trefwoorden: stopformulieren, procedurele rechtvaardigheid, interactionele rechtvaardigheid, rechtvaardigheid, politie, etnisch profileren, proactieve staande houdingen, virtual reality*

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When the Black Lives Matter protests set foot in the Netherlands in 2020, it expressed once more how Dutch civilians have experienced racism in the Netherlands for a long period of time (Het Parool, 2020). Part of these experiences is rooted in interactions with the police (Ong et. al., 2014; Landman & Sollie, 2018; Kuppens & Ferwerda, 2019). Specifically, experiences of ethnic profiling, have been an ongoing topic of discussion (Amnesty, 2013; Het Parool, 2020), and the resulting tense relationship between civilians and the police calls for improvement.

When civilians have the feeling that they are treated unfairly by authorities, for example when they experience ethnic profiling, they perceive less procedural and interactional justice. Procedural justice relates to the quality of decision-making and fairness of treatment by an organisation. Interactional justice concerns the quality of treatment and relates to expressions of respect and kindness on an individual level (Moorman, 1991). Decreased perceptions of procedural and interactional justice form a serious problem, as they negatively affect the police-civilian relationship (e.g., willingness to cooperate and obey) and the legitimacy of the police (Broekhuizen et. al., 2018; Donner et. al., 2015; Gau et. al., 2012; Gau, 2013; Hough et. al., 2013; MacCoun, 2005; Miller, 2001; Tyler, 2015). More generally, the experience of unequal treatment and ethnic profiling has negative mental and behavioural consequences for civilians (Dennison & Fineldey, 2021; Schmitt et. al., 2014).

There are people within the public and the police who encourage ethnic profiling (e.g., through risk profiles). These people might doubt the usefulness of focusing on ways to improve civilians' experiences, as they believe that ethnic profiling is an effective approach to policing (Çankaya, 2012; Goodey, 2006; Svensson & Saharso, 2015). However, ethnic profiling can be considered a counter-effective approach to policing. With this approach, there remain people who are targeted based on their group identity - without having given any reasonable cause to be stopped. For these people, the (repetitive) experience of unequal treatment can lead to an impaired civilian-police relationship (as stated above). In other words, along this line of reasoning, the short-term experience of effective policing through ethnic profiling, would in the long run likely result in impaired legitimacy and effectiveness of the police.

Over time, many interventions have been implemented to counteract ethnic profiling (i.e., bodycams and investing in the diversity of the police). This was done despite the lack of academic support for the effectiveness of many of these interventions to counteract ethnic profiling (Landman & Sollie, 2018). Moreover, these interventions do not focus on perceptions of justice, while it is these *perceptions* that can have such great consequences.

Using stop forms might provide a solution to this, as this intervention has more academic support for its effectiveness to counteract ethnic profiling, and it is also expected to enhance treatment, which is key to experiences of procedural justice (Van den Bos, 2007; Landman & Sollie, 2018). This stop form is filled out by police officers during a proactive stop and includes at least the reason, legal basis and the outcome for the check, as well as some characteristics of the checked individual. Yet, the causal effect of stop forms on perceptions of procedural justice appears to have gone unstudied.

Moreover, the mechanisms that are thought to increase procedural justice, assume that the use of stop forms will result in a dialogue between the police officer and the stopped civilian (Landman & Sollie, 2018; de Ridder, 2016). However, it is very well possible that the form is handed out without further dialogue, and without an explanation of the cause and procedures for the stop. It would thus be beneficial to examine the effect of stop forms separately for situations with and without an explanation. For these reasons, the current study aims to answer the research question: *What is the Effect of the Use of Stop Forms and providing an Explanation during Proactive Stops on Perceptions of Procedural and Interactional Justice by Civilians?*

In the upcoming text, first, procedural and interactional justice, and their relation to the police-civilian relationship are discussed. Next, the current status of interventions to improve the police-civilian relationship in the context of proactive stops is considered. This is followed by a description of the stop form and the dialogue assumption. Afterwards, the hypotheses on the effect of stop form and explanation on procedural and interactional justice are drawn. Lastly, an additional explorative research question is added on the interpretation of civilians of noting down ethnicity on stop forms.

### **Perceived Procedural and Interactional Justice**

Procedural justice is a construct that consists of two dimensions, namely procedural and interactional justice. Procedural justice covers the fairness of procedures and how they are applied in the contact with civilians (decision-making), whereas interactional justice covers the quality of the interpersonal contact (treatment) between civilians and a police officer (van den Bos, 2007; Moorman, 1991; Tyler & Blader, 2003). The latter can include, among other things, behaviour, attitudes and facial expressions observed in the police officer (Bergsma, 2008). Many studies that cover procedural justice, discuss elements of interactional justice while referring to it as procedural justice (e.g., Tyler & Wakslak, 2004). There are too few studies that specifically discuss procedural and interactional justice separately. For this reason, the text below discusses the consequences and relations of the overarching construct of procedural justice, before discussing the two dimensions separately.

According to Tyler (2019), four elements are key to public perceptions of procedural justice, and a fifth and sixth element were addressed by Van den Bos (2007). First, people want to be able to voice their side of things before decisions or actions are taken (*voice*). Second, people expect that the police acts without prejudice, as well as that they explain their procedures and how they are applied in a transparent manner (*neutrality*). Third, people want to be treated as good citizens and with respect regarding their rights and dignity (*interpersonal respect*). Fourth, people want to believe that the police act in the best interest of the community (*trustworthy motives*). Fifth, Van den Bos (2007) addresses the importance of *consistency of treatment* between people and over time, and sixth, that each person that is involved within a situation is given sufficient attention (*representation principle*).

### **Consequences Procedural Justice**

In general, procedural justice has a pronounced influence on people's thoughts, feelings, and behaviours in group contexts (Lind & Tyler, 1988; Tyler & Blade, 2003; Tyler & Smith, 1997). And it

seems to have a similar impact on constructs that are specifically related to civilian-authority relations. Two meta-analyses concluded that procedural justice affects compliance and cooperation with authorities (MacCoun, 2005) and that procedural justice actions during police-civilian interactions had a positive impact on legitimacy and trust (Donner et. al., 2015). The experience of decreased procedural justice is related to lower trust and decreased legitimacy of the police, more deviant behaviours, lower willingness to cooperate and comply with authorities, and even lower willingness to obey (Broekhuizen et. al., 2018; Gau et. al., 2012; Gau, 2013; Hough et. al., 2013; Miller, 2001; Tyler, 2015). As an example, attributions of racial profiling to the police - a form of perceiving lower procedural justice - resulted in lower willingness to defer to the police and in a lower perceived legitimacy of the police (Tyler & Wakslak, 2004).

In addition to these direct relations with procedural justice, there is an indirect impact of procedural justice on the effective position of the police, via trust and legitimacy. Research shows that trust and legitimacy are rooted in procedural justice (Tyler et. al., 2015). This implies that the consequences of public trust and popular legitimacy are partially rooted in procedural justice. Trust in itself is positively related to legitimacy and to the willingness to cooperate with the authorities, such as reporting crimes (Bradford, 2013; Gau, 2013; Tyler & Fagan, 2008; Tyler & Jackson, 2014; Tyler & Wakslak, 2004). Additionally, legitimacy results in more compliance and obedience to its rules and laws (Hough et. al., 2012; Sunshine & Tyler, 2003). Lower legitimacy, on the other hand, is related to lower willingness to cooperate and more deviant behaviour (Hough et. al., 2010).

Moreover, Tyler and Blader (2003) argue that perceptions of procedural justice are mostly key to group identification as well. In their group engagement model, they argue that perceptions of procedural justice positively affect cooperative and engaging behaviours (e.g., voluntarily complying with rules and helping the police), *because* people get to identify more with a group when they perceive procedural just treatment by the authorities.

### **Status of Interventions**

All in all, perceptions of procedural and interactional justice are thus important constructs to improve police-civilian relationships. Over time, numerous interventions have been implemented within and outside of the Netherlands, in an attempt to counteract ethnic profiling, and thereby improve the police-civilian relationship. Yet, many of these interventions lack two things, namely academic support for their effectiveness, and a focus on the perception of civilians. First, when Landman and Sollie (2018) mapped these interventions, they concluded that, while many interventions were implemented, there is little academic support for their effectiveness. Only two interventions - 'investing in procedural justice' and 'stop forms' - had a reasonable evidential value. These interventions are supported by numbers and data that indicate that the interventions successfully decrease ethnic profiling. However, it remains unclear what effective mechanisms underlay the intervention (i.e., causality). The other interventions that were evaluated had a lower evidential value. Landman and Sollie (2018) recommend more investment in effect studies, but also acknowledge



difficulties that come with effect studies, such as creating an experimental setup including randomisation, whilst maintaining a realistic setup for the study.

Secondly, the interventions seem to lack focus on the perception of civilians. On the one hand, a decrease in ethnic profiling would likely increase perceptions of procedural and interactional justice, and improve the police-civilian relationship. Hence, it is logical that interventions focus on decreasing ethnic profiling. On the other hand, it is important to consider the perception of civilians separately as well (Nix, 2020). It is these *perceptions* that have major consequences, as was discussed earlier. Hypothetically, ethnic profiling could be decreased to a minimum, while the perceptions of ethnic profiling and injustice remain. If people perceive less procedural and interactional justice, that may be subjective, but it can lead to objective negative behavioural and mental consequences, and an impaired legitimacy of the police. *“If men define situations as real, they are real in their consequences”* (Thomas & Thomas, 1928, p.572). It is therefore relevant to examine the effect of interventions on civilians’ perceptions of procedural and interactional justice, separately from looking into the effectiveness to decrease ethnic profiling. This is in line with how Moorman (1991) and Van den Bos (2007) focus on *perceived* justice.

### **Stop Forms**

An intervention that is expected to increase perceived procedural and interactional justice, is the use of a stop form during proactive stops. Moreover, this is one of the two interventions with the most academic support for effectiveness to counteract ethnic profiling. A stop form is filled out by police officers to register proactive stops. Aside from the standard elements of the stop form (i.e., reason, legal basis, outcome and characteristics of the stopped person), there are variations of the stop form that include writing down someone’s ethnicity or race. However, this is not the standard procedure. Additionally, it is common practice that the checked person receives a copy of the form, including a reference to the police officer, and a description of their rights or a complaint procedure (de Ridder, 2016). The implementation of stop forms within the Dutch police has been discussed in national politics, however, this proposal was rejected. First, this was partly due to the extra administrative time investment (Landman & Sollie, 2018; de Ridder, 2016). This refers to having to fill out the stop forms as part of the procedure to conduct proactive stops. However, there are digital alternatives that would decrease the time effort. For example, a suggestion was made to integrate the stop form in the MEOS application - a digital information retrieval system, that is already used by the police (Kuppens & Ferwerda, 2019). Secondly, it was argued that the effectiveness of stop forms was not demonstrated sufficiently and that several other interventions were already implemented to counteract ethnic profiling (Landman & Sollie, 2018). However, the interventions that were already implemented, hold lower academic support than the stop forms. Therefore we still consider the effectiveness of stop forms, despite these arguments.

### ***Working mechanisms to counteract ethnic profiling***

The stop form is ought to decrease ethnic profiling by police officers through four different mechanisms, namely ‘reflection’, ‘monitoring’, ‘policy and management’, and ‘dialogue and legal position’ (de Ridder, 2016). First, to fill out a stop form is expected to result in more reflection by police officers on the reasons for and justification of the check. This should result in a more considerate procedure. Secondly, the data of stop forms should make it possible to monitor and notice possible patterns in the nature and the number of checks. This could also contribute to more awareness of the extent of ethnic profiling within the organisation. This would, however, require noting down the ethnic background of stopped and checked individuals, which is not standard practice. Thirdly, the data and awareness that result from the monitoring function of stop forms, could also influence policy and management, and offer the possibility to intervene in case of undesired patterns. Fourthly, the stop form is expected to function as a framework for dialogue that can clarify information about a person’s rights, which could strengthen the legal position of the civilian (de Ridder, 2016). However, it could be argued that this also applies to the stop form independently, as the stop form provides information about the procedure of the stop and the individual’s rights.

The dialogue function is thought to affect how police officers treat civilians (*listening/talking*), one of the four mechanisms that were defined by Landman and Sollie (2018). The quality of treatment by the organisation, as well as on an individual level, is what affects perceptions of procedural and interactional justice. Yet, little is known about how civilians perceive the stop form (de Ridder, 2016), and whether it indeed improves perceptions of procedural and interactional justice of civilians.

### ***Dialogue assumption***

The effect of the stop form on how civilians perceive the treatment by police officers rests on the assumption that the stop form will function as a framework for dialogue between the stopped and checked civilian and the police officer (Landman & Sollie, 2018; de Ridder, 2016). Research concluded that explaining is of great importance to police-civilian interactions and to the function of the stop form specifically (de Ridder, 2016). Additionally, research showed that civilians can understand certain procedures of the police, but that they wish to receive an explanation for certain actions and procedures (Ong et. al., 2014). While the dialogue function showed to be an effective manner to improve proactive stops in Spain and England (de Ridder, 2016), in practice police officers may fill out and hand over the form without providing any explanation. Hence, when studying the effects of the stop form, it would be beneficial to examine effects for instances with and without dialogue between the officer and the stopped civilian. Or, in other words, to examine perceptions of procedural and interactional justice in situations with, and without an explanation for the check and the stop form.

### **Stop forms, explanation, procedural and interactional justice**

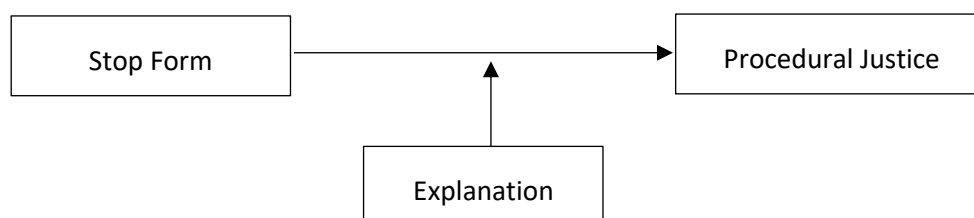
Next, hypotheses are drawn on the effects of the use of stop forms and explaining, on procedural and interactional justice, separately. Stop forms can contribute to the quality of the

decision-making process because they promote transparency and provide an explanation about procedures (Ong et. al., 2014; Tyler, 2019). The standardised procedure of the stop form could promote the perception of consistent treatment of people over time (Van den Bos, 2007). Moreover, the stop form is thought to be a method that could strengthen the legal position of civilians (Landman & Sollie, 2018; de Ridder, 2016). For these reasons, it is expected that the use of a stop form during proactive stops will positively affect the perceived procedural justice (*H1*). Additionally, it is expected that an explanation will further strengthen this effect (*H2*). A verbal explanation of the procedure and engaging in dialogue can contribute to transparent communication about the procedures. The legal position of civilians is further clarified (Landman & Sollie, 2018), and the dialogue provides the opportunity for voice (Tyler, 2019). See Figure 1.

Interactional justice refers to elements of procedural justice that regard the quality of treatment during police-civilian interactions. It is expected that especially the dialogue that arises from an explanation, will help to improve the quality of interaction and the perception of treatment (*H3*). Providing an explanation and dialogue arguably contribute to the experience of being treated with interpersonal respect and bringing across trustworthy motives. In addition, it is expected that the stop form strengthens this effect because it provides opportunities for a longer dialogue, which helps to establish a more qualitative interaction (*H4*). See Figure 2.

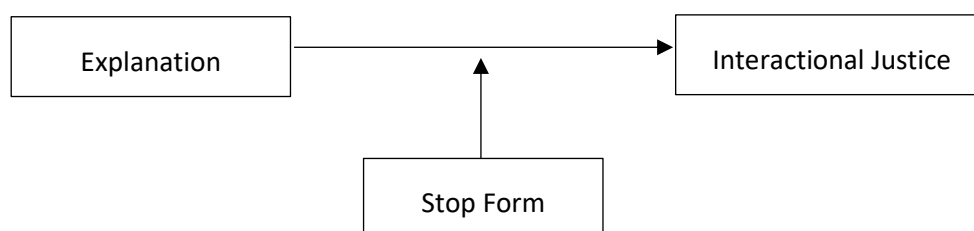
**Figure 1**

*Conceptual Model with 'Procedural Justice' as Dependent Variable, 'Stop Form' as Independent Variable and 'Explanation' as Moderator.*



**Figure 2**

*Conceptual Model with 'Interactional Justice' as Dependent Variable, 'Explanation' as Independent Variable and 'Stop Form' as Moderator.*



**H1:** Participants perceive more Procedural Justice when a Stop Form is used, as compared to when No Form is used.

**H2:** The effect of Form is moderated by Explanation; when an Explanation is given, this effect will be stronger than when No Explanation is given.

**H3:** Participants perceive more Interactional Justice when they receive an Explanation, as to when no Explanation is provided.

**H4:** The effect of Explanation is moderated by Form; when a Stop Form is provided, this effect will be stronger than when No Form is provided.

## **Explorative**

### ***Ethnicity on stop forms***

The current study focuses on the perspective of civilians, by examining their perception of procedural justice. The aim of noting down ethnicity on stop forms is to counteract ethnic profiling. This should occur through reflection by police officers, and the opportunity for the police to monitor patterns in proactive stops and to adjust policies accordingly (Landman & Sollie, 2018; de Ridder, 2016). Yet, it is unknown how civilians would interpret this action in practice. Noting down ethnicity to restrain ethnic profiling seems counterintuitive at first and civilians might interpret it differently. While the intervention aims to counteract ethnic profiling - and thereby to improve the relationship between civilians and the police - a wrong interpretation might cause the opposite, and increase attributions of ethnic profiling. Hence, it is necessary to examine civilians' interpretation of noting down ethnicity on stop forms, so that this can be taken into account if stop forms would be implemented. For this reason, the current study will ask participants for their interpretation of and attitude towards noting down ethnicity on stop forms. Thereby it aims to answer an additional research question: *How do civilians interpret noting down ethnicity on stop forms?*

## **Method**

### **Design**

This study had a 2 (Explanation: explanation vs. no explanation for the stop) x 2 (Stop form: stop form vs. no form) between-participants factorial experimental design. The dependent variables (DV) were Procedural Justice and Interactional Justice. Participants first received instructions, experienced a scenario in VR, and filled out a questionnaire afterwards. The scenario consisted of clear, unambiguous behavioural cues to conduct a proactive stop (i.e., looking inside several cars) and did not include negative consequences for the stopped civilians.

Additionally, there was an explorative element to the study, in which the interpretation of noting down ethnicity on stop forms was further explored, using quantitative items and a qualitative measure to be able to place the quantitative data into context.

## Participants

A power analysis was conducted a priori to this study with the G\*power tool (Faul et. al. 2007), with a medium expected effect size ( $f = 0.25$ ),  $\alpha = .05$  and a power of 0.8, for ‘fixed effects, special, main effects and interactions’. This indicated to aim for 128 participants.

Participants were gathered through convenience sampling as well as through purposive sampling ( $N = 130$ ). The study was conducted both in Dutch and English to increase the opportunity to gather participants (85 Dutch, 45 English). There were many Psychology and Communication sciences students. To collect a more representative sample for this study’s purposes than just university students, participants were also gathered at an MBO (secondary vocational education) and HBO (applied sciences) in a different region (i.e., purposive sampling).

In total, twelve participants were excluded from the analyses. Two participants were excluded, because they had filled out the questionnaire before they experienced the VR scenario. Another three participants were excluded, as they indicated the same answer options for all items on each of the two scales. This can indicate that participants did not fill out the questionnaire in a serious manner. Lastly, seven more participants were excluded because they looked for less than 30 seconds at the Stop Form, as this was assessed to be the minimum time necessary to read the form. After exclusion, 118 participants remained. Participants were evenly and randomly assigned to one of the four conditions (*No Form, No Explanation* = 33; *No Form, Explanation* = 28; *Stop Form, No Explanation* = 30; *Stop Form, Explanation* = 27).

Of these participants, 66 were women (55.9%), 51 were men (43.2%), and 1 participant signified themselves as other than male or female (0.8%). Participants ranged in age from 16 to 43 years ( $M = 21.91$  years,  $SD = 4.94$  years). There were 27 participants who indicated that they belong to an ethnic minority in the Netherlands (22.9%), 88 indicated that they were not (74.6%) and 3 participants did not know or did not want to indicate their ethnicity. Participants also differed in their highest (current) level of education (0.8 % lower than high school, 19.5% high school, 16.9% MBO/Secondary Vocational Education, 9.3% HBO/Applied Sciences, 50.8% Bachelor or Master, 2.5 % PhD).

## Measures

Throughout the entire questionnaire, participants were allowed to not answer questions, either by actively indicating this (*don’t know/rather not say*) or by not answering a question at all.

### *Procedural and Interactional Justice*

Two dimensions of perceived procedural justice were measured separately, as used in research from Van den Bos (2007), namely Procedural Justice and Interactional Justice. The items for Procedural and Interactional Justice were based on a translation and application from the categories of perceived justice from Moorman (1991) to the judicial context, by De Boer (2007). All items were answered on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree), with the option to indicate that participants ‘*Don’t know/rather not say*’.

**Procedural justice.** To assess Procedural Justice, nine items were used (e.g., “*I think that the police has treated me the same as others.*” and, “*I think that the police has given the opportunity to voice any possible objections.*”). Three of the items of the original questionnaire were eliminated because they were not sufficiently relevant to the scenario and the possibilities within the VR setting of the current study (“*I think that the police has involved important persons and organisations.*”, “*I think that the police has treated my complaints in an honest manner.*” and, “*I think that the police has taken into account different opinions of people.*”). See Appendix 1. An average was made of the scores. A higher score indicates that someone perceived a higher amount of procedural justice. The scale was highly reliable ( $\alpha = .90$ ).

**Interactional justice.** To assess the Interactional Justice that participants perceived, eleven items were used (e.g., “*Do you think that the police officer treated you with respect?*” and “*Do you think the police officer communicated with you in a clear manner?*”). See Appendix 2. An average was made of the scores on these scales. A higher score on a scale indicates that someone perceived a higher amount of interactional justice. The scale was highly reliable ( $\alpha = .94$ ).

### ***Prior Stops Police***

General perceptions of participants of the police were observed to explore possible differences between participants in outcomes, according to participants’ general experiences with the police. First, participants were asked whether they had been stopped and checked by the police before. Participants could indicate: *Yes, one time.*; *Yes, two to five times.*; *Yes, more than five times.*; *No, never.*; *I don’t know/rather not say.*

### ***Trust in Police***

Second, Trust in Police was measured with two items that represented general trust and trust in the context of proactive stops ( $r = .63, p < .001$ ; ‘*In general I have a lot of faith in the police.*’; ‘*I have a lot of faith in the police, when it comes to conducting proactive stops.*’), similar to how Trust in Police in the context of nightlife policing was measured by Brands and Van Doorn (2018). The items were answered on a 7-Likert scale (1 = completely agree, 7 = completely disagree). See Appendix 3. An average score was made for this scale. A higher score indicated that a participant perceived more Trust in the Police.

### ***Ethnicity on Stop Form***

**Perception (Ethnicity on) Stop Form.** Participants’ attitude towards noting down ethnicity on a stop form was measured with three items (e.g., ‘*I trust the intentions of the police when they note down my ethnicity at a proactive stop.*’). The items were answered on a 7-Likert scale (1 = completely agree, 7 = completely disagree). See Appendix 3. Higher scores on this scale express a more positive interpretation of the stop form, whereas lower scores indicate a more negative interpretation. The scale was highly reliable ( $\alpha = .83$ ).

**Interpretation Ethnicity on Stop Form.** To interpret the valence of participants’ perception of the stop form, participants were additionally asked: ‘*What do you think is the most important reason*

*that the police would note down someone's ethnicity on a stop form?*'. The responses were categorised by one coder into six different categories. For example, *'It gives an idea of what a person looks like'* was coded as 'Physical Characteristics'.

### **Demographics.**

Lastly, all participants were asked for some additional background information, namely their age, gender (female; male; other; rather not say), highest (current) level of education, current profession or study, whether they belong to an ethnic minority in the Netherlands, and their nationality (see Appendix 4).

### **Materials**

The Samsung Gear 360 (2017) was used to record two 180-degree videos simultaneously. The two separate 180-degree videos were stitched together by the Samsung 7 when downloading them with the Gallery App on this device, to create 360-degree videos. The different scenes were cut and stitched together with the help of 'DaVinci Resolve 16' software. 'Spatial meta data media injector' software was used to inject meta data into the videos, for the videos to be recognised as VR videos when they were uploaded to YouTube. The injected videos could then be viewed within the YouTube VR application on the Oculus Go, at a resolution of 2880 x 1440. The information and questions were displayed on a PC or laptop. The stop form that was shown to the participants can be found in Appendix 5.

### **Procedure**

The same procedure was conducted for the Dutch and English versions of the experiment, with the sole difference of language for the VR, the instructions and the questionnaire. Participants first read the information sheet and filled out an informed consent form (Appendix 6). Participants then read the video scenario as preparation and context for the VR video. They read that they would participate in a meeting with their colleagues and then walk around in a 360° video. They were asked to pay close attention to their environment and were informed about the expected duration of 25 minutes (Appendix 7). This cover story did not reveal that the scenario included a stop by the police, with the intention that participants would have a more natural experience of the stop. In the meantime, the researcher set up the video of the correct condition within the Oculus Go. After that, participants received instructions from the researcher for the workings of the VR (Appendix 8).

The participant then experienced the scenario in VR. This scenario was created with the support of a policeman who assisted in assuring that the scenario was realistic. All videos started in the same manner. First, there was a scene during which a meeting was wrapped up. Then one of the colleagues realised that he forgot his phone in his car (*Figure 3a*). The other colleague then offered to pick it up, as he and the participant were going to go for a walk anyway. The keys were then handed to the other colleague. After the first scene, the researcher instructed the participant to stand up and continued to monitor the participant during the video for safety reasons. Then, in the scenario, the participant and the colleague walked towards the parking lot (*Figure 3b*). Near the parking lot, the

colleague realised that it was not mentioned in which car the phone was, and he decided to look through the windows of several cars (*Figure 3c*). After he looked in several cars, a police officer arrived and approached the participant and the colleague (*Figure 3d*). Note that this scenario included a clear behavioural cause for the stops: based on this behaviour, it is clear that a police officer would perform a proactive stop.

### Figure 3

#### *Screenshots of Different Scenes of the Virtual Reality Videos*



*Note:* a) meeting is wrapped up by the other colleague, b) colleague realises he does not know in which car to look for the phone, c) colleague looks through several windows of cars, looking for the phone, d) the police officer approaches and asks for identification.

The approach of the police officer differed per condition. An Explanation could be provided about the stop (and the stop form), or not. And a Stop Form could be written and handed to the colleague, or not. As the content of the variables is somewhat dependent on the other variable, the scenarios are described below per condition.

In the condition with ‘No Explanation, No Form’, the police officer asked for identification without further explanation, also when the colleague asked for it. He notified that he checked the ID’s for warrants, and when they checked out, he told them that it was okay and then he went away again.

For the second condition with ‘No Explanation, Stop Form’ the police officer also asked for identification without any further explanation for the stop. But after this check, he took some extra time to fill out a stop form and then handed back the ID's and the stop form while saying ‘*and here you have a stop form*’ with no further explanation.



For the third condition with ‘Explanation, No Form’, the officer explained that he saw the colleague and the participant looking through cars and asked them why they did that. The police officer asked follow-up questions, and when the answers to these questions were not satisfying, he asked for identification. After this check, the police officer said that it was okay and then went away.

For the fourth condition with ‘Explanation, Stop Form’ the police officer again explained that them looking through cars was the reason for the stop. He again asked follow-up questions and when the answers were not satisfying, he asked for identification. After this check, he said that it was okay and then filled out a stop form. He explained that it was a stop form on which they could find the reason for the stop, the legal basis, the outcome, their ethnicity and a reference number to the police officer. Then he went away. The scenario for each condition is described in more detail in Appendix 9. It does include some overlap between conditions due to the overlap in independent variables.

The videos lasted 03:40 to 5:05 minutes, depending on the condition. When the video ended, the participant could take off the headset. Participants who were in a Stop Form condition first saw the stop form on the screen and were encouraged to look at it for about two minutes. All participants then continued with the questionnaire (Appendix 1-4). Lastly, the participant was debriefed (Appendix 9) about the true purpose of the study and had the opportunity to ask questions to the researcher and to withdraw their participation. The study lasted approximately 20 to 25 minutes per participant. This procedure was approved by the BMS ethics committee of the University of Twente.

## Results

Table 2 provides a general overview of the data, including means, standard deviations and Pearson correlations of the dependent variables, independent variables, demographics and additional variables, that are continuous. Overall, Procedural Justice and Interactional Justice scored around the mid-point of the scales. The mean results for Trust in Police were well above the mid-point, which indicates that, in general, participants experienced rather a lot of Trust in the Police ( $M = 5.03$ ,  $SD = 1.46$ ).

Procedural Justice and Interactional Justice highly positively correlated, which indicates that to great extent participants with higher Procedural Justice scores, also had higher Interactional Justice scores. This can be explained because these constructs are two dimensions of the same scale of procedural justice (Moorman, 1991). Participants with higher Procedural and Interactional Justice scores, in general also had higher Trust in Police scores ( $r = .39$ ,  $p < .01$ ). This is in line with expectations of a positive relation between procedural and interactional justice, and trust in authorities.

### Procedural Justice

A factorial between-participants analysis of variance (ANOVA) was used to compare the average Procedural Justice scores (DV) for differences in Explanation and Form (IVs). The average Procedural Justice scores for these groups are portrayed in Figure 4a below. Shapiro Wilk’s and Levene’s tests were used to check for normality and homogeneity respectively, which indicated that these assumptions were not violated.

**Table 1**

*Mean scores (M), Standard Deviations (SD) and Correlation Matrix for Continuous Variables of the Current Study.*

	M	SD	1	2	3	4	5	6
1. Procedural Justice	4.05	1.41	-					
2. Interactional Justice	4.35	1.47	.83**	-				
3. Trust in Police	5.03	1.46	.39**	.39**	-			
4. Perception Stop Form	3.81	1.05	.30**	.33**	.45**	-		
5. Prior Stops Police	-	-	-.06	-.05	-.30*	-.02	-	
6. Age	21.92	4.94	.13	.25**	.20*	.15	.15	-

\*\* $p < .01$ , \* $p < .05$  (2-tailed)

There was no main effect of the use of a Stop Form on Procedural Justice,  $F(1, 114) = 0.12$ ,  $p = .731$ , partial  $\eta^2 = .001$ . This means that, against expectations (*H1*), no difference was found in the amount of Procedural Justice, when a Stop form was used as compared to when No Form was used.

Against expectations, however, (no hypothesis) there was a main effect found of Explanation on Procedural Justice,  $F(1, 114) = 111.68$ ,  $p < .001$ . Participants who were given an Explanation by the police officer ( $M = 5.10$ ,  $SD = 0.97$ ,  $CI_{95\%} [3.20, 7.00]$ ) perceived significantly more Procedural Justice than participants who received No Explanation ( $M = 3.14$ ,  $SD = 1.07$ ,  $CI_{95\%} [1.04, 5.24]$ ). The effect of providing an Explanation on Procedural Justice is considered large, with  $\omega^2 = .472$ ,  $f = 0.95$  (Cohen, 1988).

There was a marginally significant interaction-effect of Form and Explanation on Procedural Justice,  $F(1, 114) = 2.90$ ,  $p = .091$ . However, planned comparisons showed that participants did not respond to differences in Form, whether they were in the Explanation condition ( $M_{\text{No Form}} = 5.29$ ,  $SD = 0.19$  versus  $M_{\text{Stop Form}} = 4.90$ ,  $SD = 0.20$ , with  $F(1, 114) = 1.96$ ,  $p = .164$ ), or in the No Explanation condition ( $M_{\text{No Form}} = 3.02$ ,  $SD = 0.18$  versus  $M_{\text{Stop Form}} = 3.27$ ,  $SD = 0.19$ , with  $F(1, 114) = 0.99$ ,  $p = .322$ ). This means that, against expectations (*H2*), whether participants received a Stop Form or No Form, did not affect their Procedural Justice scores, in the Explanation condition as well as the No Explanation condition.

### **Interactional Justice**

The same factorial between-participants analysis of variance (ANOVA) was used to compare the average Interactional Justice scores (DV) for differences in Explanation and Form (IVs). These scores are portrayed in Figure 4b. Shapiro Wilk's and Levene's tests were used to check for normality and homogeneity respectively, which indicated that these assumptions were not violated.

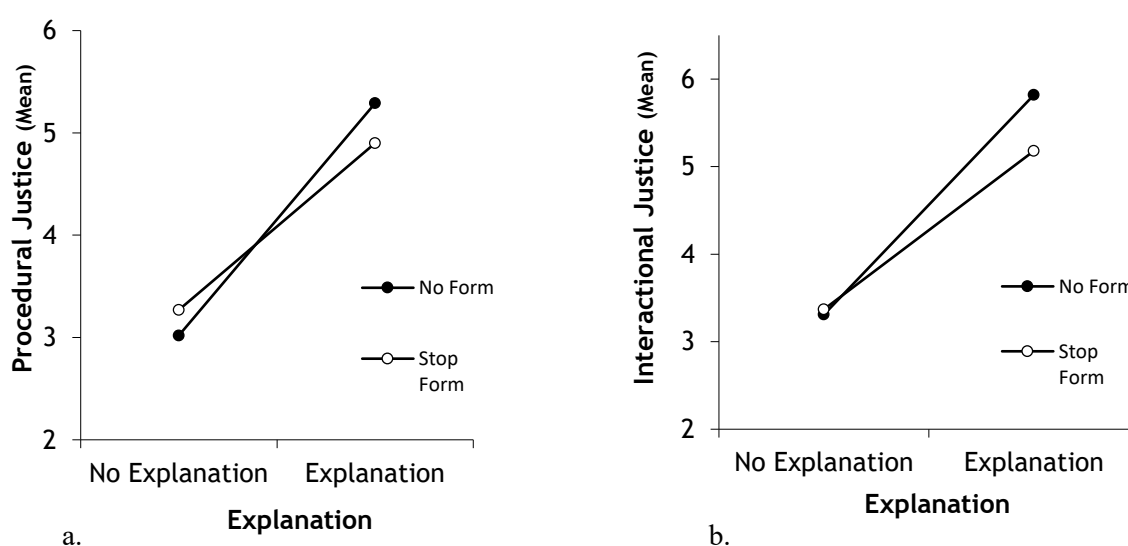
In line with Hypothesis 3, there was a main effect of Explanation on Interactional Justice,  $F(1, 114) = 145.20, p < .001$ . This means that participants who were given an Explanation by the police officer ( $M = 5.50, SD = 0.93, CI_{95\%} [3.68, 7.32]$ ) reported significantly more Interactional Justice than participants who received No Explanation ( $M = 3.34, SD = 1.04, CI_{95\%} [1.30, 5.38]$ ). This resulted in  $\omega^2 = .541, f = 1.09$ , which indicates a large effect size (Cohen, 1988).

No hypothesis was drawn about the main effect of Form on Interactional Justice. But, for the sake of completeness, there was no main effect of Form on Interactional Justice,  $F(1, 114) = 2.59, p = .110$ , partial  $\eta^2 = .022$ .

There was a marginally significant interaction-effect of Form and Explanation on Interactional Justice,  $F(1, 114) = 3.83, p = .053$ . Planned comparisons showed that in the No Explanation condition participants did not respond to differences in Form ( $M_{No Form} = 3.31, SD = 0.25$ , versus  $M_{Stop Form} = 3.37, SD = 0.18, F(1, 114) = 0.07, p = .799$ ). In the Explanation condition, the difference between the Form conditions was significant ( $M_{No Form} = 5.82, SD = 0.18, CI_{95\%} [5.47, 6.17]$  versus  $M_{Stop Form} = 5.18, SD = 0.19, CI_{95\%} [4.81, 5.55]$ , with  $F(1, 114) = 5.96, p = .016$ ). The moderately significant interaction-effect is considered small, with  $\omega^2 = .011, f = 0.10$  (Cohen, 1988). This indicates that participants who received an Explanation and received a Stop Form, generally experienced a little lower Interactional Justice, than those who received an Explanation and No Stop Form (see Figure 4). This is not in line with the expectations that the Stop Form would further increase Interactional Justice, in conditions with an Explanation ( $H4$ ).

**Figure 4**

*The Average Procedural and Interactional Justice Scores for Explanation and Form*



Note: a) The average procedural justice scores for Explanation and Form, b) the average interactional justice scores for Explanation and Form.

## Explorative analyses

### *Perception Stop Form*

The mean results for Perception of Stop Form centred around the mid-point of the scale ( $M = 3.81$ ,  $SD = 1.05$ ). Moreover, there was a positive correlation between Perception Stop Form and Procedural Justice ( $r = .30$ ,  $p < 0.01$ ), Interactional Justice ( $r = .33$ ,  $p < 0.01$ ), and Trust in Police and Perception Stop Form ( $r = .45$ ,  $p < .01$ ). This indicates that participants who reported a more positive perception of the stop form generally reported more trust in the police and more perceived procedural and interactional justice. Procedural and interactional justice, as well as trust in the police, were thus positively related to how participants perceived the stop form.

To explore participants' interpretation of noting down ethnicity on stop forms, participants were additionally asked: *What do you think is the most important reason that the police would note down someone's ethnicity on a stop form?* The answers were coded and divided into six categories (Table 2). Six participants mentioned more than one reason, in which case both reasons were reported here.

**Table 2**

*Categories of Participants' Interpretation of Noting down Ethnicity on a Stop Form*

Category	N
1. Physical Characteristics	49
2. Counteract Ethnic Profiling	21
3. Crime Statistics	14
4. Deliberate Ethnic Profiling	18
5. International Communication or Relations	10
6. No Idea or No Valid Reason	12

First, most participants (49) mentioned that the reason was to note down the 'Physical Characteristics' of civilians. Answers in this category most often focused on ethnicity as practical information, just like any other physical characteristic. For example, *'To better be able to identify you'*. Some participants thought ethnicity was noted down to gain insight into how often people of different ethnicities were being stopped: of these people, 21 indicated that the aim was to 'Counteract Ethnic Profiling' (e.g., *'To find potential bias, and to detect ethnic profiling more easily'*). Another 14 participants mentioned that the aim had to do with 'Crime Statistics' (e.g., *'... statistics about crime (is there a significant difference between ethnicities?)'*). Fourth, 18 participants mentioned 'Deliberate Ethnic Profiling' as the reason for noting down ethnicity. For example, *'To ethnically profile'*. Fifth, 10 participants mentioned 'International Communication or Relations', for example, that a translator

could be needed for communication (‘...the person is not living in the Netherlands but somewhere abroad and for the purpose of the language for communication’). Lastly, 12 participants mentioned that they had ‘No Idea’ why ethnicity would be noted down or mentioned that there was ‘No Valid Reason’ for it. For example, ‘I cannot really tell as the action of citizens should not be assessed based on their ethnicity, this is why I think it is not really justified noting it down on a stop form’.

### **Additional analyses**

Two additional ANOVA’s explored the effect of Form and Explanation on the Perception of Stop Form and Trust in Police.

#### ***Perception Stop Form***

A factorial between-participants analysis of variance (ANOVA) was used to compare the average Perception Stop Form scores (DV) for differences in Explanation and Form (IVs). The average Perception Stop Form scores for these groups are portrayed in Figure 5a below. Shapiro Wilk’s and Levene’s tests were used to check for normality and homogeneity respectively. Shapiro Wilk’s test was partly violated for No Form ( $p = .033$ ) and No Explanation (.012). The normality test for Form and Explanation, and the homogeneity tests, were not violated. The ANOVA is rather robust against violations of these assumptions in moderate to large samples such, as in the current study (Allen et. al., 2010). Yet, the results should be approached with caution.

There was a main effect of Explanation on Perception Stop Form,  $F(1, 114) = 5.54, p = .020$ . This means that participants who were given an Explanation by the police officer reported a significantly more positive Perception of the Stop Form ( $M = 4.05, SD = 0.97, CI_{95\%} [2.15, 5.95]$ ), than participants who received No Explanation ( $M = 3.59, SD = 1.08, CI_{95\%} [1.83, 5.71]$ ). This resulted in  $\omega^2 = 0.037, f = 0.20$ , which indicates a small to medium effect size (Cohen, 1988). This means that participants who received an Explanation, perceived the stop form somewhat more positively, than participants who received No Explanation.

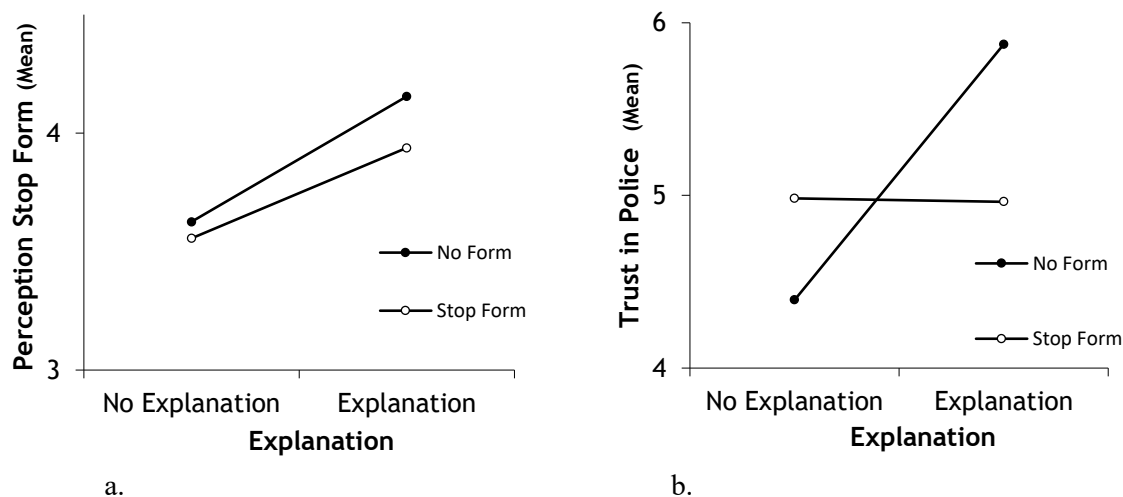
#### ***Trust in Police***

A factorial between-participants analysis of variance (ANOVA) was used to compare the average Trust in Police scores (DV) for differences in Explanation and Form (IVs). The average Trust in Police scores for these groups is portrayed in Figure 5b below. Again, Shapiro Wilk’s and Levene’s tests were used to check for normality and homogeneity respectively. Both of these tests were violated, indicating that normality and homogeneity cannot be assumed for this variable. While ANOVA is rather robust against these violations, the results should be approached with caution.

There was a main effect of Explanation on Trust in Police,  $F(1, 114) = 8.30, p = .005$ . This means that participants who received an Explanation by the police officer ( $M = 5.50, SD = 0.93, CI_{95\%} [3.68, 7.32]$ ) perceived significantly more Interactional Justice than participants who received No Explanation ( $M = 3.34, SD = 1.04, CI_{95\%} [1.30, 5.38]$ ). This resulted in  $\omega^2 = .055, f = 0.25$ , which indicates a small to medium effect size (Cohen, 1988).

**Figure 5**

*The Average Perception Stop Form and Trust in Police Scores for Explanation and Form*



Note: a) The average Perception Stop Form scores for Explanation and Form b) The average Trust in Police scores for Explanation and Form.

There was also a significant interaction-effect of Form and Explanation on Trust in Police,  $F(1, 114) = 8.77, p = .004$ . Planned comparisons showed that participants did not respond to differences in Explanation in the Stop Form condition ( $M_{\text{No Explanation}} = 4.98, SD = 1.44$  versus  $M_{\text{Explanation}} = 4.96, SD = 0.94$ , with  $F(1, 114) < 0.01, p = .96$ ). However, in the No Form condition the difference between the Explanation conditions was significant ( $M_{\text{No Explanation}} = 4.39, SD = 1.85, CI_{95\%} [0.76, 7.00]$  versus  $M_{\text{Explanation}} = 5.88, SD = 0.90, CI_{95\%} [4.12, 7.00]$ , with  $F(1, 114) = 17.63, p < 0.001$ ). This indicates that whether participants received an Explanation or No Explanation did not affect Trust in Police in the Stop Form condition. But, in the No Form condition, people reported more Trust in Police when they received an Explanation, than when they received No Explanation. The significant interaction-effect is considered medium, with  $\omega^2 = .059, f = 0.25$  (Cohen, 1988).

### ***Ethical background***

Differences in scores based on ethnicity were not explored, as only 27 participants (22.9%) indicated that they belonged to an ethnic minority in the Netherlands. This amount is considered too small to perform reliable analyses. Moreover, multiple participants mentioned to the researcher, after completing the questionnaire, that they interpreted ethnicity as nationality. Any possible relations with the ethnical background in this study would thus have had to be questioned.

### **Discussion**

The current study examined the effect of the use of a stop form and providing an explanation during proactive stops by the police, on civilians' perceptions of procedural and interactional justice. This

was done to examine what could improve the police-civilian relationship in the context of proactive stops by the police. The scenario included clear, unambiguous behavioural cues for conducting a proactive stop (i.e., looking inside several cars) and did not lead to negative consequences for the stopped civilians. It was expected that the use of a stop form would increase perceptions of procedural justice (*H1*) and that providing an explanation would strengthen this effect (*H2*). Moreover, it was expected that providing an explanation would increase perceptions of interactional justice (*H3*) and that the use of the stop form would further increase this effect (*H4*). An additional aim was to explore civilians' interpretation of noting down ethnicity on stop forms.

### **Procedural justice**

Contrary to the expectations (*H1*, *H2*), the use of a stop form did not seem to affect perceptions of procedural justice. This is unexpected, as the stop form functions to provide transparency, to strengthen the legal position of civilians and to demonstrate a consistency of treatment, which are all expected to increase perceptions of procedural justice (Van den Bos, 2007; Landman & Sollie, 2018; Ong et. al., 2014; Tyler, 2019). Thus, while the quality of the decision-making process was increased through the use of a stop form, this did not result in people *perceiving* more procedural justice. This does confirm, however, the need to examine *perceptions* of procedural justice separately from increases in procedural justice in itself, as was done in the current study and as was addressed, for example, in research by Van den Bos (2007) and research by Moorman (1991).

At the same time, providing an explanation largely increased perceptions of procedural justice. No hypothesis was drawn on the direct effect of providing an explanation on procedural justice. However, the results are in line with the prior expectations that a verbal explanation and engaging in dialogue would facilitate transparent communication, clarification of the legal position of civilians and the opportunity for voice, and would thereby further increase perceptions of procedural justice (Tyler, 2019; *H2*). This suggests that a verbal explanation and engaging in dialogue with a civilian is more effective to improve perceptions of procedural justice than providing a stop form.

So, why is there an effect of providing an explanation on procedural justice perceptions, but no effect of the stop form? There are two possible explanations for this. First, the stop form does not provide much opportunity for voice if it is presented without an explanation or dialogue. Voice refers to the opportunity to express one's views or tell their side of the story before decisions are made by an authority (Tyler, 2019), and it is a key antecedent of perceptions of procedural justice (Van den Bos, 2007; Hulst et. al., 2017). The lack of opportunity for voice that is provided by the stop form could in part explain why no effect of the stop form on procedural justice perceptions was found. Secondly, the stop form possibly had no added value for perceptions of procedural justice, because the reason for the proactive stop was rather unambiguous (i.e., looking inside several cars) and there was no negative outcome for the stopped civilians. When more uncertainty exists about the reason for the proactive stop or when there are negative outcomes, proper information sources about the proactive stop may become more relevant for perceptions of procedural justice (Tyler & Blader, 2003; Tyler & Wakslak,

2004). It is possible that the stop form would increase perceptions of procedural justice, as opposed to not providing a stop form, in more ambiguous scenarios with unclear or negative outcomes.

### **Interactional justice**

Next, providing an explanation significantly increased perceptions of interactional justice (*H3*). This confirms the expectations that the dialogue that arises from explaining, will help to establish a qualitative interaction and improve perceptions of treatment. It is thought that this contributes to the experience of being treated with interpersonal respect and to bringing across trustworthy motives of the police (Tyler, 2019). It was expected that the stop form would strengthen this effect on interactional justice, as providing the stop form would result in a longer dialogue and thereby in more opportunity to establish a qualitative interaction (*H4*). Contrary to the expectations, however, the use of a stop form slightly weakened the effect of providing an explanation on perceptions of interactional justice. Interactional justice refers to the quality of treatment - to perceptions of being treated with respect, kindness and sincerity. These perceptions inform people how they are perceived by an authority, which is important to them because this provides them with identity-relevant information. *Are we treated as respected members of society, or with disrespect as second-rank citizens?* (Tyler & Blader, 2003). It is possible that explaining the standardised elements of the stop form, comes across as less sincere than the part of the dialogue that does not refer to the form. This may communicate less identity relevant information than the explanation and dialogue without the interference of the stop form and thus be less relevant to perceptions of interactional justice. Thereby, the use of and explaining the stop form could diminish the effect of the explanation and dialogue on perceptions of interactional justice.

Overall, the results suggest that perceptions of interactional justice are increased especially through dialogue and explaining the procedure from person to person, as opposed to the use of a stop form. That explanations play an important role in improving perceptions of procedural and interactional justice, is in line with prior research that has highlighted the importance of the quality of contact and communication on civilian-police relations, related to procedural and interactional justice, acceptance and de-escalating interactions (Van Balen et. al., 2014; Tyler, 2019). Yet, the acceptance of explanations given by the police is not self-evident. For example, Landman and Kleijer-Kool (2016) reported that when civilians do not believe the explanation that is provided, they are more inclined to make attributions of ethnic profiling. As perceptions of interactional justice are perceptions of the quality of contact, it is possible that it is not so much the *content of the explanation* that results in increased perceptions of interactional justice, but that it has more to do with the respect and kindness in the interaction, that come with the *process of explaining* and engaging in dialogue. After all, interactional justice refers to the quality of the interaction, not only the content of what is being said.

In addition, the results demonstrate the value of studying the effect on the dimensions of procedural and interactional justice separately, as discussed earlier. Slightly different effects were found for explanation and stop form on procedural and interactional justice. The distinction clarifies



what dimension is affected by an intervention, which contributes to the clarity of the dimensions for future research. Additionally, it highlights the importance of both the appliance of procedures in contact with civilians, as well as qualitative treatment with respect and kindness.

### **Further effects of Explanation**

The additional analyses indicate that providing an explanation could positively affect perceptions and attitudes of civilians regarding the police beyond procedural and interactional justice. There was a positive effect of explaining on trust in the police, as well as on the perception of the stop form. The positive effect of explanation on procedural justice, and the positive relation that has been found between trust and procedural justice in previous studies (Broekhuizen et. al., 2018; Tyler, 2015), might indicate that explanations affect trust in the police, through an increase in perceptions of procedural justice, as suggested in previous studies as well (Broekhuizen et. al., 2018; Tyler, 2015). These results should be approached with precaution as the analyses were exploratory and not explanatory, and the normality and homogeneity assumptions were not all met. Still, the positive effects of explanation seem to reach beyond procedural and interactional justice, and it might be worth exploring in the future what other positive effects explaining could bring to improving the police-civilian relationship.

### **Ethnicity on stop forms**

Additionally, this study examined how civilians interpret it when ethnicity is noted down on stop forms. The original aim of stop forms is to decrease ethnic profiling. The mechanisms through which this should occur, in part, rely on noting down ethnicity (Landman & Sollie, 2018; de Ridder, 2016). Yet, it was unknown thus far how civilians would interpret this seemingly counterintuitive approach to decrease ethnic profiling. The current study confirms the expectation that the initial interpretation of this act varies greatly. Only a small part of the participants recognised the aim of counteracting ethnic profiling, whereas many thought that it was to register the physical characteristics of civilians. Others assumed that it had to do with crime statistics, deliberate ethnic profiling or international communication. This can be explained because it is rather counterintuitive to assume that the aim of the police registering ethnicity is to counteract ethnic profiling. It would be worthwhile to take into account the varying initial interpretations of noting down ethnicity on stop forms if the stop forms would be implemented in practice.

### **Limitations and Future Research**

As mentioned before, the behavioural reasons for the proactive stop in the experiment of this study were rather unambiguous and the stop did not result in negative consequences for the civilians. On the one hand, it is relevant to know that explaining already seems to affect perceptions of procedural and interactional justice within this context. On the other hand, however, different types of situations in practice could result in different effects on perceptions of procedural and interactional justice. A scenario in which behavioural cues are more ambiguous (e.g., merely walking around in an area of interest) does likely not provide clear reasons for a stop to civilians. The individual then needs

to judge whether they were stopped because of behavioural cues and trustworthy intentions of the police or not. This could for example lead to attributions of ethnic profiling when people infer that they were stopped based on their ethnicity rather than for their behaviour (Tyler & Blader, 2003; Tyler & Wakslak, 2004). Increased perceptions of procedural justice - perceiving that decisions were made fairly - could decrease the likelihood that people feel that they were ethnically profiled (Tyler & Wakslak, 2004). Several factors increase such uncertainties about the reason for the stop, namely proactive stops that occur for more ambiguous behavioural cues, with an unknown or negative outcome for the civilian, and in interaction with people with less trust in the police and of an ethnic minority background - as, logically, attributions of racial profiling occur only for these people. These uncertainties could be decreased by perceptions of being treated in a procedurally just manner. It is possible that especially these people would benefit from more formal information provision (i.e., a stop form) to decrease uncertainty for the reasons for the stop and to gain trust perhaps through the guarantee by the form. Future studies should therefore examine the effect of providing an explanation and stop form within contexts in which the reason for the stop and the outcome are more ambiguous to the civilian, among people with less trust in the police and from an ethnic minority background.

Secondly, despite efforts to make the experience of the scenario as realistic as possible for participants through VR and that part of them felt engaged enough to talk back to the video, no actual interaction with the police officer was possible. Interaction between the police officer and the civilians occurred through the 'colleague' and it could be said that this diminished the first-person experience of participants. Moreover, because of this, it was only possible for participants to experience *voice* to some extent. Participants could experience different opportunities for voice and perhaps even felt inclined to express their side of the story to the police officer, however, they could not actually do this within this experiment. This differs from police-civilian interactions in practice and could affect experiences of procedural and interactional justice, as voice is a key antecedent for procedural justice. Future studies should therefore explore whether it is possible to create an experiment in which participants could engage in interaction with the police officer themselves.

Lastly, an additional suggestion for future research would be to further examine the effects of increases in procedural and interactional justice on other concepts related to the police-civilian relation. Several studies have suggested that procedural justice is related to other factors that influence the police-civilian relationship, such as willingness to cooperate and obey, trust, and legitimacy of the police (Broekhuizen et. al., 2018; Tyler, 2019). It would be relevant to examine whether the effect of explaining reaches beyond the effects on procedural justice, on these other concepts as well within the context of proactive stops and police-civilian interactions within the Netherlands.

### **Conclusions**

In conclusion, the current study has demonstrated a positive causal relation between providing an explanation during proactive stops and the perception of procedural and interactional justice. This

suggests for the police to focus on explanations and engaging in dialogue to establish qualitative contact, in order to improve civilians' perceptions of justice and the police-civilian relationship. Against prior expectations, the stop form did not aid to improve perceptions of justice. These findings contribute to the inquiry on how to improve the relationship between the Dutch police and civilians. Future studies should examine whether these effects uphold in different contexts and among people who have less trust in the police and or who are from an ethnic minority background. Especially for these contexts and people, it is relevant to examine how interactions between the police and civilians can be improved. As well, it should examine what effect the use of a stop form has within such contexts. Moreover, it would be relevant to practice for future research to focus on the effects of explanations and stop forms on willingness to cooperate, obey, trust in the police and the legitimate position of the police as well. These are all key factors to the functioning and effectiveness of the police. Moreover, if noting down ethnicity on forms would be implemented in the future, the results suggest that people require a proper explanation for this, as the first interpretation varies greatly among civilians.

All in all, the current study has indicated promising effects of explaining and engaging in dialogue during interactions with civilians. After further examination, it could result in practical suggestions for police actions during interactions with civilians and hopefully improve police-civilian interactions for both parties.

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## Appendices

### Appendix 1: Perceived Procedural Justice

You have just joined a meeting and walked around the campus of the University of Twente with your colleague in Virtual Reality. While you were looking in several cars for the phone of your other colleague, you were stopped and checked by a police officer.

We will now first ask you a couple of questions about how you have experienced this scenario.

[...]

The following questions are about the contact that you have had with the police. Imagine that you have seen the police officer in real life and that he has really spoken to you.

[...]

The contact you have had with the police went according to certain procedures. The statements below are about how the police has acted in these procedures.

Answer the questions therefore, according to how you have felt and experienced it. There are no right and wrong answers.

Indicate how you think that the police has acted in the situation:

1. I think that the police has treated me the same as others.
2. I think that the police has followed the same procedures for me as for others.
3. I think that the police has informed themselves well about the situation.
4. I think that the police had all of the important information about the situation.
5. I think that the police has used all of the necessary information.
6. I think that the police has traded off my interests with their own interests.
7. I think that the police has handled it well when there were questions or unclarities.
8. I think that the police has given the opportunity to voice any possible objections.
9. I think that the police has handled possible objections well.

*The items were answered on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree) with the option to indicate 'Don't know/rather not say'.*

**Appendix 2: Perceived Interactional Justice**

You and your colleague have been in contact with a police officer. The following questions are about how you think that you have been treated by this police officer.

Answer the questions for how you have felt and experienced it. There are no right or wrong answers.

Do you think that the police officer ...

1. .. treated you kindly?
2. .. treated you with respect?
3. .. took the time for you?
4. .. listened to your story?
5. .. looked at your side of the story?
6. .. treated you without prejudices?
7. .. ensured that you have been treated in a sincere manner?
8. .. told you soon about things that were important?
9. .. explained to you timely why certain decisions have been made?
10. .. showed understanding for your legal position (rights and duties)?
11. .. communicated with you in a clear manner?

*The items were answered on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree) with the option to indicate 'Don't know/rather not say'.*



### Appendix 3: Questions Police General and Stop Form

The following questions are about the police in general.

*Again: the answers in this study are processed anonymously.*

Have you ever been stopped and checked by the police? (Asked for ID, cycling in a pedestrian area, vehicle check, etc.)

- Yes, one time.
- Yes, two to five times.
- Yes, more than five times.
- No, never.
- I rather not say/I don't know.

Indicate to what extent you agree with the following statements:


*The items were answered on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree) with the option to indicate 'Don't know/rather not say'.*

1. In general I have a lot of faith in the police.
2. I have a lot of faith in the police, when it comes to conducting proactive stops.

In the future, the Dutch police might give stop forms after proactive stops. This is an example of a stop form that could potentially be used.

As you can see, ethnicity of a stopped civilian is also noted down.

**Stop formulier**  
Proactieve staande houding - Nederlandse Politie



Referentie personeelsnummer politie agent: 003048.

Datum/Date: 15-11-2020 Locatie/location: University of Twente, Enschede.

Reden controle/reason stop: unusual viewing behaviour several cars parking lot

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Wettelijke basis controle/legal basis stop: Art. 7 politiewet jo Art. 2 wet ID

Uitkomst controle/outcome stop: ID check, no antecedents, no further action

---

Etniciteit/ethnicity: indo / Indonesian . Geslacht/Gender:  Man/Male  Vrouw/Female  
Anders/Other

**Rechten burger, klachtenprocedure / Rights citizen, complaints procedure:**  
Do you have a complaint about this proactive stop? The complaints procedure is aimed at arranging a conversation between the complainant and the police officer against whom the complaint was made. A personal conversation between both parties is often sufficient to handle the complaint to everyone's satisfaction. Is the complainant not satisfied? Then the next step follows in the complaint procedure. The police takes every complaint seriously. The aimed for outcome is justice. The police always aims for satisfaction for both parties. For more information, go to: [politie.nl/themas/klachtenregeling-politie.html](https://politie.nl/themas/klachtenregeling-politie.html)

What do you think is the most important reason that the police would note down someone's ethnicity on a stop form? There is no right or wrong answer. It is about your perception.

[ ]

Indicate to what extent you agree with the following statements:

*This was answered on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree). There was the option to indicate 'Don't know/rather not say'.*

1. I trust the intentions of the police when they note down my ethnicity at a proactive stop.
2. It feels just when the police notes down my ethnicity at a proactive stop.
3. I object to my ethnicity being noted down by the police at a proactive stop.

## Appendix 4: Demographics

Finally, we would like to ask you some background questions, to better understand who has participated in this study.

1. Age
2. Gender  
Female; Male; Other; rather not say
3. What is the highest level of education you followed? (or most similar to one of these)  
Lower than high school; high school; secondary vocational education; Higher vocational education/applied sciences; Bachelor's degree; Master's degree; Candidate/PhD
4. What work do you do or what do you study currently?
5. Do you find that you are part of an ethnic minority in the Netherlands?  
Yes; No; Don't know/rather not say
6. What is your nationality?  
Dutch; Not Dutch; Both Dutch and another nationality; other / don't know / rather not say

## Appendix 5: Stop Form

This is the stop form that the police officer has given to your colleague just now. Take about 2 minutes to take a look at it and then continue with the questionnaire.

### Stop formulier

Proactieve staande houding - Nederlandse Politie



Referentie personeelsnummer politie agent: 003048

Datum/Date: 15-11-2020 Locatie/location: University of Twente, Enschede

Reden controle/reason stop: Unusual viewing behaviour several cars parking lot

Wettelijke basis controle/legal basis stop: Art. 7 politiewet jo Art. 2 wet ID

Uitkomst controle/outcome stop: ID check, no antecedents, no further action

Etniciteit/ethnicity: indo / Indonesian

Geslacht/Gender:  Man/Male  Vrouw/Female  
Anders/Other

#### Rechten burger, klachtenprocedure / Rights citizen, complaints procedure:

Do you have a complaint about this proactive stop? The complaints procedure is aimed at arranging a conversation between the complainant and the police officer against whom the complaint was made. A personal conversation between both parties is often sufficient to handle the complaint to everyone's satisfaction. Is the complainant not satisfied? Then the next step follows in the complaint procedure. The police takes every complaint seriously. The aimed for outcome is justice. The police always aims for satisfaction for both parties. For more information, go to: [politie.nl/themas/klachtenregeling-politie.html](https://politie.nl/themas/klachtenregeling-politie.html)

## Appendix 6: Information Sheet and Informed Consent Form

Dear participant,

Thank you for participating in this study of the University of Twente.

In this study we will examine how much people are able to remember from their environment, when they receive the instructions to do so in advance. This can yield valuable knowledge about the possibilities of witness statements. (This study is no test of individual competences, but rather a study into general patterns in the public.)

In a moment, you will read a brief scenario. Then you will get a VR headset on you, with 360 degree videos for about 5 minutes. Afterwards, you receive a questionnaire about what you have seen and experienced. Finally, there are some more general questions. In total, this will take about 30 minutes.

The individual answers to the questionnaire will only be used for the current study. They will only be viewed by researchers of the research team. We treat your data confidentially, process them anonymously, and will never make statements on an individual level.

You can withdraw from the study at any given moment, without consequences and without providing any reason. However, it is no longer possible to withdraw your answers after all of the study is finished, as the answers will be processed anonymously.

Few people might get nauseous from virtual reality. Then as well, you can withdraw from the study at any given moment. However, only fixated videos are being used in the current study, which considerably decreases the chance of feeling nauseous.

For questions or comments, you can contact the researcher of this study:  
Chantal van Veluwen, PCRS, Psychology, University of Twente [c.vanveluwen@student.utwente.nl]

If you have any questions at this moment, you can now ask them to the researcher.

I have read and understood the study information. I have been able to ask questions and those have been answered to my satisfaction.

Yes

I take part in this study voluntarily. I understand that I can refuse to answer specific questions. I understand that I can withdraw from participating in this study at any given time, without giving any reason.

Yes

I understand that my data and answers will be processed anonymously and that they will not be shared beyond the research team.

Yes

I give permission to use the data and answers that I provide within the current experiment, for the current research.

Yes

## **Appendix 7: Video scenario**

### **Scenario**

In a moment you will participate in a meeting with your colleagues in a 360° video. Afterwards, you will walk around the campus of the University of Twente.

Pay close attention to your environment. Afterwards we will ask you a number of questions about what you have seen and experienced.

The video will last about 5 minutes. Answering the questions will take about 15-20 minutes.

## **Appendix 8: Verbal VR instructions for participant by researcher**

The participant receives VR instructions from the researcher:

The researcher asked whether the participant has ever experienced VR before, and then mentions that they will (nonetheless) receive instructions on how to use it and what to do. The researcher has informed the participant that they can completely look around them and would even be able to turn around 360° if they'd want to, but that that would not have been the trick to the experiment or so. The participant is told that they should not walk around. Firstly, because of physical restrictions of the room. Secondly, because the incongruence between what they see and physically do might cause them to feel nauseous. They have been told that in the first scene they will sit down and that they can stand up after the first scene, and that they would be told so at that moment in the video as well. (They have been informed that the headset was being cleaned in between of each participant and that the researcher would be wearing an eye mask when putting it on in between.) Then it was mentioned that the video was already ready and they would likely first see a screen that would say 'enter VR', that they would have to hold a button. Then they would enter YouTube VR and that they can then point the controller towards the play-button and click play. Then they were told that if they see any other screen, that they could mention this to the researcher so then together the right screen could be found. Lastly, it was mentioned that if the participant would feel nauseous at any moment, they could just take off the headset directly.

### Appendix 9: Scenario - Conversation between the Police Officer, the Colleague and the Participant for Stop Form and Explanation

No Explanation, No Form	No Explanation, Stop Form	Explanation, No Form	Explanation, Stop Form
<p>Police officer: <i>'I'm sorry. Can I ask you something? Do you have an ID for me?'</i></p> <p>Colleague: <i>'Why if I may ask?'</i></p> <p>Police officer: <i>'Because I'm a police officer'</i> and the colleague hands over his ID.</p> <p>Police officer checks the ID, while saying: <i>'I'm going to look for warrants.'</i></p> <p>Then the officer says: <i>'Okay. That seems in order.'</i> And hands back the ID to the colleague.</p>		<p>Police officer: <i>'I'm sorry, can I ask you something? I see you looking in all sort of cars. May I ask why?'</i></p> <p>Colleague: <i>'Yeah. We are looking for the phone of our colleague, but we don't know in which car. That's why we look through the windows. It should be on the passenger seat.'</i></p> <p>Police officer responds by asking follow-up questions (i.e., <i>'What does the phone look like?'; 'So you don't know what the phone looks like, you don't know what the car looks like?'</i>)</p> <p>When the colleague responds that he does not know those things, the officer says: <i>'That sounds like a dubious story to me... Do you perhaps have an ID with you? Then I'm going to look if your name pops up in the system, alright?'</i></p>	
No Explanation, No Form	No Explanation, Stop Form	Explanation, No Form	Explanation, Stop Form
	<p>The officer takes a bit more time for this, because he also filled out a stop form and mentioned <i>'and a stop form'</i> when handing over the stop form to the colleague, without further explanation.</p>	<p>Police officer: <i>'Alright. That seems in order.'</i></p> <p>And hands back the ID to the colleague.</p>	<p>The police officer takes some extra time to meanwhile fill out the stop form and then hands back the ID to the colleague.</p> <p><i>'Alright. That seems in order. I also give you a stop form mentioning the reason for the stop, the legal ground why I stopped you, the result of the outcome, your ethnicity, and a reference - my personal number - is also on there. Then you know who you have spoken to, okay?'</i></p>
No Explanation, No Form	No Explanation, Stop Form	Explanation, No Form	Explanation, Stop Form
		<p>Police officer: <i>'Alright. Have a nice day.'</i></p>	<p>Police officer: <i>'Alright, I hope you find the phone. Have a nice day.'</i></p>
No Explanation, No Form	No Explanation, Stop Form	Explanation, No Form	Explanation, Stop Form
<p>Colleague: <i>'So what do you think about this?'</i></p>	<p>Colleague: <i>'Do you want to see this?'</i> and presents the stop form to the participant.</p>	<p>Colleague: <i>'So what do you think about this?'</i></p>	<p>Colleague: <i>'Do you want to see this?'</i> and presents the stop form to the participant.</p>

## Appendix 10: Debriefing

This is the end of the study. Thank you for participating!

The current study was not about witness statements, but about proactive stops and checks by the police. The aim of the study is to examine whether different approaches by the police influence the perceived justice of the stop by civilians. With different approaches it is meant whether or not an explanation for the stop is given and whether or not a stop form is given. In total there were four conditions. You took part in the condition with(out) explanation and with(out) a stop form.

We expect that people who receive an explanation and stop form for the stop will perceive more justice than those who did not.

It is considered in the Netherlands to implement the use of a stop form during proactive stops to decrease instances and experiences of ethnic profiling. Ethnicity would be noted down on the stop forms, so that the police can self-reflect and monitor who they stop. An additional topic of interest within this study is therefore what civilians think of their ethnicity being noted down on a stop form.

The actual aim of the study was initially not disclosed, because it is important that the police stop would be realistic and thus come unexpectedly. Hence, we want to ask **you not to discuss this study with anyone** who could possibly still participate in this study.

If you want to withdraw from the study after having received this information, you can express this **now** to the researcher. There are no consequences for withdrawing and you do not have to provide a reason. After completion of this questionnaire, it is no longer possible to withdraw your answers, because the answers and data will be processed **anonymously**.

In case that you have any questions about the study, you are free to contact the researcher per e-mail: [c.vanveluwen@student.utwente.nl](mailto:c.vanveluwen@student.utwente.nl). In case of any complaints about this study, you can contact the Ethical Committee of the Faculty of BMS: [ethicscommittee-bms@utwente.nl](mailto:ethicscommittee-bms@utwente.nl).

Do you know anyone else who would want to participate in this VR study? E-mail for possibilities to: [c.vanveluwen@student.utwente.nl](mailto:c.vanveluwen@student.utwente.nl).

Thanks again for your participation!

Kind regards,  
Chantal van Veluwen

*"I understand the aim of the study. I understand that my data will be processed anonymously and I give my consent for this. I have been able to voice any possible objections to the researcher."*

Yes.