Police Officers' Perspective of Making a Communication Error in a Suspect Interview

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Content

Abstract

Communication is considered the key feature in suspect interviews. To date, studies have investigate in finding ways how to use communication in suspect interviews, although less attention is given to what happens when communication fails. Therefore, we examined police officers' perspective of the making of a communication error in suspect interviews. We assessed which psychological and behavioural consequences police officers experienced after the making of an error, which repair strategy they used to repair the error, how they estimated the suspect's affective, cognitive and relational perceptions, and what influence the suspect's stance after the error had. Police officers (*N* = 68) were asked to conduct a suspect interview role-play, in which the role of the suspect was played by a confederate of the researchers. The police officers were randomly assigned to a condition in a 2 (communication error: factual vs. judgment) x 2 (suspect's stance: cooperative vs. non-cooperative) between subject design or a control group in which no error was included. During the role-play their psychophysiological arousal level was measured using an EDA-wristband. Our findings demonstrate that police officers show significantly more perceived stress (not supported by their psychophysiological arousal level) and that they get more distracted after the making of a communication error in comparison to police officers that made no error. Specifically, after the making of a factual error, police officers experience also more guilt and shame. Additionally, we found that police officers who made a communication error estimated the suspect's view on rapport between the suspect and themselves lower compared to police officers who made no error. Specifically after the making of a factual error, police officers also estimated the suspect's level of affective- and cognitive trust in them lower. Furthermore, when dealing with a non-cooperative suspect after the making of a communication error, police officers thought that the suspect's level of affective trust in them and the suspect's view on rapport were lower than when dealing with a cooperative suspect. Surprisingly, police officers' self-oriented anger was higher when dealing with a cooperative suspect, compared to dealing with a non-cooperative suspect.

Keywords: Communication errors, response strategies, suspect interview, police officers' experienced psychological and behavioural consequences, estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect, suspect's stance.

Samenvatting

Communicatie wordt beschouwd als het essentieel element in politie verhoor. Tot nog toe hebben onderzoeken zich vooral gericht op hoe communicatie gebruikt kan worden in verhoor, waarbij minder aandacht is geschonken aan wat er gebeurd als de communicatie verkeerd gaat. Derhalve, hebben wij onderzocht hoe politieagenten aankijken tegen hun eigen communicatie fouten in een verhoor. We concentreerde ons op welke psychologische- en gedragsconsequenties politieagenten ervaarden na het maken van een communicatie fout, welke herstelstrategieën ze gebruikten om de fout te herstellen, hoe ze de affectieve, cognitieve, en rationele percepties van de verdachte inschatten en welke invloed de houding van de verdachte na de fout had. Politieagenten (*N* = 68) werden gevraagd om een verhoor te doen in de vorm van een rollenspel, waarbij de rol van verdachte gespeeld werd door een handlanger van de onderzoekers. Participanten werden random ingedeeld in een conditie van een 2 (communicatie fout: feitelijke fout vs. inschattingsfout) x 2 (houding verdachte: coöperatief vs. niet-coöperatief) tussen proefpersonen design, of in de controle groep waarbij geen fout werd gemaakt. Tijdens het interview werd hun psychofysiologische prikkelingsniveau gemeten met een EDA-polsband. Onze bevinden toonden aan dat politieagenten significant meer stress (niet ondersteund door hun psychofysiologische prikkelingsniveau) en afleiding ervoeren na het maken van een communicatie fout, vergeleken met politieagenten die geen fout maakten. In het bijzonder zorgde het maken van een feitelijke fout tevens voor meer schuldgevoel en schaamte. Aanvullend konden we aantonen dat politieagenten die een fout maakten de kwaliteit van de band die de verdachte ervoer tussen hen ("rapport") lager schatten, vergeleken met agenten die geen fout maakten. In het bijzonder zorgde het maken van een feitelijke fout voor een lagere inschatting van het affectieve- en cognitieve vertrouwen van de verdachte. Tevens schatten agenten die te maken hadden met een niet-coöperatieve verdachte na het maken van een fout het niveau van het affectieve vertrouwen van de verdachte en de kwaliteit van band die de verdachte ervoer tussen hen als lager in, vergeleken met agenten die te maken hadden met een coöperatieve verdachte. Een opvallende bevinding is zelfgeoriënteerde boosheid van politieagenten hoger was wanneer ze te maken hadden met een coöperatieve verdachte, vergeleken met agenten die te maken hadden met een non-coöperatieve verdachte.

Police officers' Perspective of Making a Communication Error in a Suspect Interview

Generally, gathering complete and reliable information and eventually finding the truth are seen as the main goals of (Dutch) suspect interviews. Accumulate information can help a police case in a variety of ways, such as serving justice (Dillon, 1990), establishing a motive (McConville & Baldwin, 1982), or trying to reconstruct what happened by taking the suspects statement, the evidence, and its implications into account (Irving, 1980). This information can contribute to legitimizing a police narrative and, eventually, in finding the truth (Baldwin, 1993). Research in policing, which includes interviewing suspects, states that communication skills should be considered the foundation of all skills these professionals should possess (Zumbrum, 2006). Communication is an essential factor of getting useful information of a suspect during a suspect interview. To date, suspect interview research has mainly focused on identifying communication that encourages cooperation (Beune, Giebels, & Sanders, 2009; Holmberg & Madsen, 2014) and how to communicate evidence that is known to the police (e.g., Inbau, Reid, Buckley, & Jayne, 2001; Starrett, 1998).

Recently, Oostinga, Giebels, and Taylor (2017a) tried a different approach. They explored what happens when a communication error is made in police communication. In this exploratory study 11 semi-structured interviews with Dutch crisis negotiators were conducted and analyzed. They identified three types of communication errors and four categories of repair strategies. In another research, Oostinga, Giebels, and Taylor (2017b), focused on the effects of communication errors on suspects. Here they demonstrated that errors of police officers are harmful for the affective trust of a suspect in a police officer and for the suspect's view on rapport between themselves and the police officer. To date, Oostinga, Giebels, and Taylor are the only ones that have given attention to communication errors in police communication. This means we are still quit unaware of the consequences of communication errors in police communication and what effects they might have. The current study is conducted to look into the effects of communication errors from the perspective of police officers. We are especially interested in which psychological and behavioural consequences police officers experience when making an error, what repair strategy they use to repair the error, how they estimate the suspect's affective/cognitive (trust) and relational (rapport) perceptions, and what effect the suspect's stance after the error has.

Specifically, we focus on, the amount of stress, self-oriented anger, guilt, shame, and distraction police officers experience after the making of an error. We also examine the extent to which these psychological and behavioural consequences might influence their choice of repair strategy. Furthermore, we look at the influence of communication errors on police officers' estimated affective- and cognitive trust of the suspect in themselves, and how communication errors influence police officers' estimation of the suspect's view on the rapport between the suspect and themselves. In examining these effects, we also take the influence of the suspect's stance after the communication error into account, as police officers might encounter both cooperative and non-cooperative responses of suspects in reality.

In the following sections, we discuss what a (Dutch) suspect interview is and how they are conducted, and what communication errors are and how they can occur in a suspect interview. Later on, we talk about what psychological and behavioural consequences police officers may experience after the making of a communication error in a suspect interview. This includes what police officers themselves experience, as well as what they think the suspect experiences because of the error. We discuss if the stance of the suspect after the error, either cooperative of non-cooperative, may have an influence on the consequences police officers experience after the making of an error and on police officers estimated perceptions of suspect. Last, we analyze if the suspect's stance can influence police officers' choice to hold on or to change their initially chosen repair strategy after the making of an error.

A Suspect Interview

In the late 70s researchers realized that suspect interviews are the crucial stage in most criminal cases (Baldwin & McConville, 1977; Bottoms & Mcclean, 1976; Morris, 1980). The importance of forensic evidence is growing, but nevertheless interviews are still one of the most important means employed in crime investigations (e.g., Holmberg & Christianson, 2002). Suspect interviews can determine the success of an investigation by often becoming the key feature in criminal investigations (Davies & Beech, 2012; Holmberg, 2004).

A Dutch suspect interview is a formal way of questioning a suspect and typically consists of two parts; a social interview and a case-oriented interview (Buckwalter, 1983; Op den Akker, Bruijnes, Peters, & Krikke, 2013; Policeacademy, 2014). The social interview

consists of an introduction of the police officer(s) and an explanation of what the suspect can expect during the interview. It implies an inquiry into the social and financial circumstances of the suspect with a focus on relationship building. A trusting relationship is established to obtain more (accurate) information (Villalba, 2014). The case-oriented interview consists of an inquiry about the content of the criminal act and an explanation of what the suspect is accused of. In the majority of the cases an interview plan is made prior to the suspect interview, including what questions are going to be asked and in which order (Policeacademy, 2013). This plan is constructed out of a police report, which can also consist of witness statement(s). The preparation of a suspect interview can take hours to weeks, depending on the content and severity of the case.

Especially in Western European countries, such as The Netherlands, the focus of suspect interviews is on information gathering rather than accusatory behaviours (e.g., Beune, Giebels, & Sanders, 2009; Milne & Bull, 1999). Beune et al. (2010) identified that over 70% of all behaviour of Dutch detectives can be classified as influencing behaviour that is used to gather information. Influencing behaviour is the deliberate action of a police officer to change the stances and/or behaviours of the suspect (Gass and Seiter, 1999). For many years now Dutch police uses the Strategic Use of Evidence (SUE) technique as interview approach, in which available evidence against the suspect is taken into account (Van Koppen, 2012). Besides, by using the evidence in a strategic manner the SUE technique actively elicits cues to deception and truth (Clemens, 2013).

To have success within a suspect interview, it seems understandable to make sure the police officer connects with the suspect. In fact, it can be highly conductive to gain trust and build a relationship with the suspect (Baldwin, 1993; Beune et al., 2010; Komter, 2003; Williamson, 1991). All the same, nowadays it becomes harder to understand the perspective of suspects in The Netherlands, due to the wide variety of backgrounds, stances and preconceptions among criminals tried in the Dutch justice system (Centraal Bureau van Statistiek, 2016). Their styles of communication differ, and so the best way to communicate with suspects differs as well (Hall, 1976). Combining the ideas that that errors are inevitable (Dimitrova, van Dyck, van Hooft, & Groenewegen, 2015) and that communication with suspects in The Netherlands is more challenging than ever, it seems reasonable to assume that suspect interviews are susceptible to communication errors.

Communication Errors (in Suspect Interviews)

A communication error occurs when a mistake is noticed and addressed by a communication partner (Brown, 1996). A mistake in this case can be a non-understanding or misunderstanding of the opposing party. In general, there is a collaborative process of recovery, causing that small mistakes frequently go unnoticed (Clark, 1994). However, this is not always the case in practice.

The process of communication error management has no universally accepted definition, which made Oostinga et al. (2017a) create a definition of it themselves for their crisis negotiation study. As we both conduct studies in the domain of police communication, we decided to go with their definition for the current study. Oostinga et al. (2017a) defined communication error management as follows "the negotiator (e.g., police officer) utters a message; the receiving perpetrator (e.g., suspect) judges the message to contain an error; the perpetrator (e.g., suspect) (in)directly addresses the error; and, the negotiator (e.g., police officer) realizes the error and responds to it in a prompt or delayed fashion" (p. 2).

Oostinga et al. (2017a) classified communication errors into three categories: factual, judgment, and contextual errors. Factual errors relate to communication whereat the content is incorrect. In a suspect interview context, this can be a police officer that states an incorrect location of the crime or is addressing the suspect by the wrong name. This type of communication error can emerge when a police officer receives wrong information or no information at all from a colleague or his or her interpretation or recollection of certain information is incorrect.

Judgment errors relate to communication whereat the feelings and thoughts of the communication partner are interpreted wrongly. In a suspect interview context, this can occur when addressing an individual informally while formally is more appreciated. Another example is, not correctly addressing empathy towards the suspect in a sensitive situation. It is a misunderstanding of the relationship between the communication partners (Bohus & Rudnicky, 2005; Skantze, 2005). This type of communication error can emerge when a police officer incorrectly estimates the suspect's age, preference for (in)formality or emotional state of mind. Oostinga et al. (2017a) concluded that in crisis negotiations this type of communication error has a more detrimental effect than factual or contextual errors.

Contextual errors relate to communication whereat the content is not clear to the communication partner or should not have been known to him or her. In a suspect interview context, this can be using police tactical language in the presence of a suspect or telling information that could have been used as evidence against the suspect's statement. This type of communication error can emerge when a police officer is so used to mention certain abbreviations or concepts and in the process overlooks the suspects' ignorance.

Research in leadership concluded that task and relationship errors, which can respectively be compared with factual and judgment errors (Oostinga et al., 2017b), are both negative for the progress of an interaction (Thoroughgood, Sawyer, & Hunter, 2013). Therefore, the focus of the current study is on factual and judgment errors. These error types have a direct impact on the relationship between the police officer and the suspect and they are directly related to the misjudging of a suspect. Contextual errors are beyond the focus of the current study, since these error types are more directed at differences in knowledge between the parties, than at misjudging the suspect.

Police Officers' experienced Psychological and Behavioural Consequences

Policing is the first line of defense in The Netherlands, which includes decisions that have potentially severe consequences. Responsibility for protecting the public can be a challenge and heavy burden to carry. By conducting a suspect interview as smooth and effective as possible, police officers can contribute to keep the public safe. It is understandable that a communication error disturbs the progress of the interview, and so we expect it has affective and cognitive effect on police officers. The psychological and behavioural consequences we expect in police officers are discussed one at the time in following sections. Every section starts with a new effect and ends with a relevant expectation. After the last section the hypotheses are formed.

A study including 873 police officers in the United Kingdom showed that 41% scored highly on detection of stress and stress factors that where work related, although was claimed that this was more due to the work environment and context of police officers than the danger of the work itself (Collins & Gibbs, 2003). Stress is the bodily processes as a reaction of conditions that have physical or psychological demands on an individual (Selye, 1973). Classify the conducting of a suspect interview as a psychological demand for police officers makes sense, since through good communication they can get important

information about a case. Hence, a suspect interview can on itself be a stressful situation for police officers. So, imagine what is must be like to make a communication error in a suspect interview. Police officers have to repair the error before they can continue with the already demanding conversation. Taken together, it is expected that police officers that make a communication error experience more stress than police officers that do not make an error (H1a).

As stress decreases over time, the feeling of anger can arise together with an overall feeling of uncertainty (Baltaş & Baltaş, 1996; Kaufman, 1999). According to Cox, Stabb, and Bruckner (1999) is anger a maladaptive attempt which is the result of conflict and personal disturbance in dealing with a stressful situation. The perception of threat evokes an anger reaction, yet this anger does not always lead to aggressive behaviour (Peurifoy, 2002). Handling anger feelings can be unconscious or conscious and can manifest itself as expressing, suppressing, and calming oneself (Saxe-Clifford, 2006). After a communication error in a suspect interview, there is no place for police officers to express anger feelings. Therefore, it is expected that any potential anger is oriented towards the self. This is called self-oriented anger, in which the individual beliefs that (s)he is fully responsible for the error (e.g., Berkowitz & Harmon-Jones, 2004; Hansen & Sassenberg, 2011). Taken together, it is expected that police officers that make a communication error experience more self-oriented anger than police officers that do not make an error (H1b).

The feeling of moral failure resulting from errant or insufficient action or intention can trigger feelings of guilt (Dost & Yagmurlu, 2008; Woien, Ernst, Patock-Peckham, & Nagoshi, 2003). Related with this state of mind are feelings of remorse and regret. In general, theorists have agreed that it is elicited by an interpersonal transgression and is experienced as self-disappointment (Amodio, Devine, & Harmon-Jones, 2006). We assume that communication errors can evoke feelings of moral failure, and so it is expected that police officers that make a communication error experience more guilt than police officers that do not make an error (H1c).

The feeling of shame arises from perceiving moral failure due to negatively assessed inherent nature of the self (Dost & Yagmurlu, 2008; Woien et al., 2003). It is the result of inherent and irreparably inadequate feelings about the self (Lynch, Hill, Nagoshi, & Nagoshi, 2012). According to Goffman (1955), it is the chance of public shame or loss of 'face' that people try to avoid. Shame is typically experienced as self-loathing (Tangney and Dearing,

2003). Communication errors may evoke feelings of inadequacy and hatred towards the self, since police officers experience loss of 'face' due to their error. Taken together, it is expected that police officers that make a communication error experience more shame than police officers that do not make an error (H1d).

Last, the focus of police officers must be shifted for a moment when the suspect tells them that an error is made. Instead of focusing on finding the truth, police officers could have distracting thoughts, such as doubt about what did go wrong, how to repair it and, and how to prevent it from happening again. Therefore, it is expected that police officers that make a communication error experience more distraction than police officers that do not make an error (H1e).

All together this lea to the following hypotheses:

H1: Compared to a suspect interview in which no communication error is made, an interview in which police officers make a factual or judgement communication error will be associated with higher levels of police officers' stress (H1a), self-oriented anger (H1b), guilt (H1c), shame (H1d), and distraction (H1e).

Repair Strategies

Oostinga et al. (2017a) found through semi-structured interviews four different repair strategies that are used by crisis negotiators: accepting, apologizing, attributing, and contradicting. Accepting relates to police officers that acknowledge the communication error. Apologizing relates to police officers that apologize to the citizen and explain how this error could have happened. Attributing relates to police officers that blame someone else for the communication error, such as a colleague that has passed over wrong information. Last, contradicting relates to police officers that do not accept the communication error and potentially blame the citizen for mishearing the information.

Oostinga et al. (2017a) suggest that their classification is similar to that of Benoit (2013), who claims that the type of repair strategy seems to be determinative for how well a communication error can be repaired. Hence, we can assume that using the right response strategy can also repair an error in the police domain. Benoit (2013) judged the quality of the response based on how much responsibility is taken and concluded that accepting the error works best, followed respectively by apologizing, attributing and contradicting. A recent study in law enforcement interaction discovered similar results, although they did not

include attributing (Oostinga et al., 2017b). They did however conclude that accepting and apologizing are more effective than contradicting.

In case of a police officer's communication error in a suspect interview it seems desirable to repair the error by means of a suitable response, as then the search for the truth can be continued and fully focused on. For now we can start with finding out if the use of a repair response is influenced by what reaction police officers have towards errors and what kind of response strategy is more likely to be used. In the following sections is discussed how stress, shame, and distraction could stimulate the use of a less responsibility-taking repair strategy, and how self-oriented anger and guilt could stimulate the use of a more responsibility-taking repair strategy.

First of all, stress can inhibit accurate information processing directly, which can influence someone's choice for a certain decision or reaction (Kaufman, 1999). Dopaminergic reward pathways are stimulated (Ungless, Argilli, & Bonci, 2010) and stress hormones (e.g., cortisol) are released into the brain which helps the body respond to a challenge (Sapolsky, 2004). Moreover, stress-sensitive brain regions are critically involved in decision-making (Starcke & Brand, 2012). This results in more hurried and unsystematic decisions without considering all options (Janis & Mann, 1977). This way, police officers that get stressed of making an error probably choose for a fast and easy response and do not hold themselves accountable for the error they made. The foundation on how shame can have an influence on decision making is different. Acute shame emotions increase physiological stress responses and due to the painful focus on the 'self', people can feel diminished, worthless, and exposed (Tangney, Stuewig, & Martinez, 2014). Individuals feel vulnerable to social criticism. As a reaction to this, individuals often respond defensive, as they want to escape, hide, deny responsibility, and blame others for their wrongdoing. So similar to stress, it could be that police officers that experience shame of making an error are less likely to take responsibility for the error they made. In addition, we assume that being distracted also has an influence on the response of police officers to the making of an error. Reasonably, when an individual is distracted, less attention is focused on the ongoing process and a lack of full consideration of all options can possibly arise. Simply, when distracted a well-considered response seems harder to perform. Therefore, we assume that police officers that get distracted of making an error probably take less responsibility for the error they made.

According to Ellsworth and Tong (2006), individuals that experience self-oriented anger have a greater willingness to accept what happened. Self-oriented anger evokes self-correction behaviour and the need to 'fix' the situation (Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). This could manifest itself in a more responsible-taking response of police officers after they make a communication error. Likewise, individuals that experience guilt are more likely to take responsibility for their error. Feeling guilty does not affect an individual's identity, however it gives the need to change their 'bad' behaviour (Lewis, 1971). Guilt leads to self-reflection and directs attention to the self and it generates the motivation to repair (Fischer & Tangney, 1995; Pagano & Huo, 2007). It evokes feelings of tension, remorse, and regret and so stimulates reparative action, such as apologizing for the error (e.g., De Hooge, Zeelenberg, & Breugelmans, 2010; Fischer & Tangney, 1995; Tangney et al., 2014).

An analysis of results of the current study has to show if the accepting, apologizing, attributing and contradicting repair strategies of Oostinga et al. (2017a) also apply for the suspect interview context. Nevertheless, the main thought that stress, shame, and distraction evoke less responsibility-taking responses and self-oriented anger and guilt more responsibility-taking responses, after a communication error in a suspect interview still stands. In short, stress, shame, and distraction generate unsystematic decisions, and an overall avoidance of the situation, and self-oriented anger and guilt generate acceptance and stimulate reparative actions. For the current domain is not determined yet, how much responsibility works best for repairing the error. So, even though taking more responsibility in other fields is seen as more useful (Benoit, 2013), it is important to note that taking a certain amount of responsibility in this case is not necessarily a good or bad strategy to use.

This leads to the following hypotheses:

H2: The more police officers experience stress, shame, and distraction after the making of a factual or judgement communication error, the less responsibility they take in their first response after the making of an error in comparison to police officers that experience a less stress, shame, and distraction.

H3: The more police officers experience self-oriented anger and guilt after the making of a factual or judgment communication error, the more responsibility they take in their first response after the making of an error in comparison to police officers that experience less self-oriented anger and guilt.

Police Officer's Estimation of the Suspect's Affective, Cognitive and Relational Perceptions

Clear is that the success of a suspect interview is closely related to the quality of relationship building between the police officer and the suspect. We believe that a communication error can evoke certain psychological and behavioural consequences by police officers (see second last section), however in addition, it could give the police officers also certain ideas about what the suspect must think of the situation. When a communication error is made it seems reasonable that police officers think that this is not favorable for the connection between themselves and the suspect. Police officers estimated affective, cognitive and relational perceptions of de suspect could influence their view on how well the interview is going. Since fears can have an impact on perception (Madon, Willard, Guyll, & Scherr, 2003), it is reasonable that police officers behave and react on the basis of their estimation of the suspect. Therefore, it is important to know how the making of a communication error affects police officers thoughts about the suspect's level of trust in them on a personal (e.g., affective) and professional (e.g., cognitive) level and how it affects their idea of how positive the suspect sees the conversation (e.g., in terms of rapport).

Porter, Lawler, and Hackman (1975) state that trust is based on the feeling that others will not take advantage of you. Research in organizational effectiveness (McAllister, 1995) argues that trust can be seen as risk situations in which an individual has confident, positive expectations about the words, actions, and decisions of another individual. A distinction is made between affective trust and cognitive trust. Affective trust is based on more irrational feelings about the other person. It is the emotional bond between individuals (Lewis & Weigert, 1985). By contrast, cognitive trust is more rational and conscious decision based on experience and believe of reliability in the other individual (McAllister, 1995). It is expected that police officers that make a communication error think that the suspects level of affective trust (H4a) and cognitive trust (H4b) in them is lower than police officers that make no communication error.

Rapport is the most important element in interpersonal communication (e.g., Collins, Lincoln, & Frank, 2002; Newberry & Stubbs, 1997), making it crucial to be positive in suspect interviews as well. Rapport enhances the quality of the interaction in clinical, experimental and forensic settings and is defined as a relation that is harmonious, empathetic, or sympathetic (Newberry & Stubbs, 1997). It creates harmony in the interview, which results

in willingness of mind. It is expected that police officers that make a communication error think that the suspect's view on rapport between them is lower than police officers that make no communication error (H4c).

This leads to the following hypotheses:

H4: Compared to an interview in which no communication error is made, an interview in which police officers make a factual or judgment error will be associated with lower levels of police officers estimated affective- (H4a) and cognitive trust (H4b) of the suspect in them, and lower levels of police officers' estimation of the suspect's view on rapport between the suspect and themselves (H4c).

(Non-)Cooperative Suspect

In 2009, Beune et al. noted that, "irrespective of whether a suspect is guilty or not, he or she may be showing resistance for various reasons" (p. 598). Resistance to cooperate can, for example, be caused by embarrassment for the act, revenge towards the police in general, or the protection of a friend (Smith & Parrent, 2013). Resistance of a suspect includes acts that thwart, obstruct, and impede officers' attempts to elicit information, acts that undermine authority, and physical proactive or reactive acts against officers' attempt to control a suspect (Terrill, 2003). According to Terrill (2013) in 13% of all encounters police officers experience some form of suspect resistance. Because the suspect's stance has everything to do with how the interaction goes and we focus on interaction-related communication errors, we assume the suspect's stance after a communication error affects what police officers experience and think the suspect experiences, and if they change the amount of responsibility in their repair strategy.

As for police officers' experienced psychological and behavioural consequences and police officer's estimated affective, cognitive and relational perceptions of a suspect, a non-cooperative suspect can highlight the seriousness of making an error in a suspect interview that reflects on these consequences and estimated perceptions. Arguing or refusing to talk after an error makes it, for example, more clear how 'bad' making an error is. On the other hand, a suspect that is more cooperative could give the police officer the idea that an error could happen to anyone and does not matter. Consequently, we expect that police officers experience more psychological and behavioural consequences (H5) and the estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect by the police

officer (H6) are lower when dealing with a non-cooperative suspect after the making of a communication error, compared to when dealing with a cooperative suspect.

As for repair strategies, the stance of a suspect after police officers make an error can give police officers an impression about what the suspect thinks about their chosen repair strategy. A non-cooperative reaction of the a suspect after the police officer makes an error can, for example, give the police officers the impression that their chosen repair strategy is not accepted by the suspect. On the contrary, a cooperative reaction of the suspect can give police officers the impression that their chosen repair strategy is accepted. Either way, after the reaction of the suspect to the repair strategy, police officers can choose to hold on their repair strategy or change it in response to the stance of the suspect towards the error. We expect that a non-cooperative suspect causes police officers to question their repair strategy and that they therefore try another repair strategy, while a cooperative suspect gives police officers the impression their strategy is acceptable and that they therefore hold on to their repair strategy (H7).

This leads to the following hypotheses:

H5: The effect of making a factual or judgment communication error on police officers' stress (H5a), self-oriented anger (H5b), guilt (H5c), shame (H5d), and distraction (H5e), is stronger when dealing with a non-cooperative suspect, compared to when police officers deal with a cooperative suspect, i.e. a non-cooperative suspect causes higher levels of police officers' stress, self-oriented anger, guilt, shame, and distraction.

H6: The effect of making a factual or judgment communication error on police officers' estimated levels of affective, cognitive and relational perceptions of the suspect, including affective trust (H6a), cognitive trust (H6b), and rapport (H6c), is stronger when dealing with a non-cooperative suspect, compared to when police officers deal with a cooperative suspect, i.e. a non-cooperative suspect causes a lower estimation of the suspect's affective/cognitive (trust) and relational (rapport) perceptions than a cooperative suspect.

H7: Changing of repair strategy happens more often when police officers deal with a non-cooperative suspect after the making of a factual or judgment communication error, compared to when police officers deal with a cooperative suspect.

Method

Design

The current study employs a 2 (communication error: factual error vs. judgment error) x 2 (stance suspect: cooperative vs. non-cooperative) between subject design with a control group (no error, no stance). All participants were randomly assigned to one of the five conditions.

Participants

The final dataset consists of 68 police officers[1] that had experience with suspect interviews, including fifty males and eighteen females (M_{age} = 41.18, SD_{age} = 11.04). The participants had a variety of functions, including uniform police (*n* = 28), district investigator (*n* = 20), investigator (*n* = 12), head of uniform police (*n* = 3), expert suspect interview ('VAT'; *n* = 3), or sexual offence expert (*n* = 2). On average, they spend 3.16 hours on interviewing each week (*SD* = 3.93)[2] and 32.4% had followed additional interviewing trainings, such as Basic Interviewing, Broadening of questioning ('RIMOZ'), and Professional interviewing with vulnerable persons. All of them spoke Dutch fluently and were randomly assigned to one of the five conditions; Factual error with cooperative suspect (*n* = 12), Factual error with non-cooperative suspect (*n* = 12), Judgment error with cooperative suspect (*n* = 13), Judgment error with non-cooperative suspect (*n* = 12), and No error (*n* = 19).

Procedure

In its essence, the current study was a suspect interview role-play for the participants (police officers). We have chosen this form of experiment, since Dutch suspect interviews are often trained in a form of role-play (Op den Akker et al., 2013). So, police officers are used to do role-plays, and as they normally get judged by their performance, they know that they must take it seriously. To prepare them for the interview, participants were instructed to read a police report. This police report was based on a role-play scenario of Beune,

[1] Two participants (participant 9 and 13) were excluded as they did not make a factual communication error while assigned to the factual error condition. As we consider the error making as crucial to the current study, we decided to eliminate them for further analysis.

[2] Must be interpreted with caution. The participants noted that estimating their hours of interviewing per week was difficult to do, because it depends on how many suspects there are at that moment and on which cases they are put on.

Giebels, and Sanders (2009) who examined influencing behaviour of police officers during a suspect interview. In the current study, some of the participants were seduced by a confederate of the researchers (actor who played the suspect during the interviews) into making a communication error. While conducting the interview, the participants wore an Empatica 4 (E4) wristband. After the interview they filled in a questionnaire and were debriefed. The following sections explain in more detail how the current study was implemented, beginning with general information and respectively followed by the confederate's instructions, and the guidance of participants through the experiment.

General information. An arrangement between the researchers and the police was made to conduct the experiment at two police stations in the North-East of The Netherlands during March and April 2017. The Behavioural Management and Social sciences (BMS) Ethics Committee of the University of Twente approved the current study and a local actor (chairman and actor of a local theater group) agreed to be the confederate of the researchers and play the suspect.

Instructions confederate. The confederate was instructed based on the role-play scenario of Beune, Giebels, and Sanders (2009). The following was told to the confederate: *The name of the character you will play is Jaap Verhoeven (male), who went to a biology research recently. He filled in a short questionnaire about eating habits after the receptionist told him there was a small cash box for traveling expenses of the participants in that same survey room. For a moment he was alone in the room while filling in the questionnaire, during which he took the opportunity to steal 200 euro from the cash box. For him this was not a very bad thing to do, since no personal damage to anyone was done. One day later he got called by the police and asked to come by to answer some questions. With the idea they cannot touch him, he went to the police station today. Jaap has to tell the truth if there is no way out.* Stressed was that the confederate should behave similarly to each participant, considering the condition the participant was assigned to. For the full instruction, see Appendix 1.

Participants. Participants were asked to participate by the police supervisor that assisted the researchers of the current study. One by one police officers were asked to leave their workplace for about 20 minutes to work on a project of the University of Twente. All participants were tested in sequence, for which around 20 minutes was needed per participant. They were told that it was about conducting a police interview as they normally

would do, and that they would not be judged by their performance (as is standard in police academy role-plays).

Next, participants got an oral instruction (see Appendix 2) in a separate room, where they were welcomed, thanked for participation and told about the purpose and length of the 'exercise'. The purpose of the study was stated as trying to find out if there is a difference in police officers' feelings when conducting a suspect interview alone or together. We told all participants that they were assigned to the single interviewer condition. By not telling them about the real purpose, we made sure participants did not experience any effects, like fear or other feelings, by knowing they could be seduced into making an error. These additional feelings could have interfered with the participants' psychological and behavioural consequences we attempted to measure in the current study. Meanwhile the E4 wristband was put on, telling them it was needed to compare their feelings with the feelings of participants in the couple condition. Last, we told the participants that the interview was audio recorded.

After the oral instruction, participants got ten minutes to read a police report with information about the case and the suspect, including a witness statement (see Appendix 3). The report was on behalf of the University of Twente and listed a 200 euro theft from a cash box meant for participants' travel expenses during an eating habit research. According to a statement of the biologist in charge (Rene Stoelhorst), a participant named Jaap Verhoeven was the only person that had the opportunity to take the money. The witness statement was on behalf of the receptionist in function on that day. When she was picking up the internal mail, she saw through the open survey room door that Jaap Verhoeven was standing in front of the closet with the cash box inside. She finished her postal round and never saw Jaap again. The participants got the same police report and witness statement, however they were treated differently by the confederate when using the information during the interview.

While reading a ballpoint and paper was offered for notes and they were left alone in the room. After ten minutes one of the researchers asked if they had had enough time (no one needed extra time), and checked if the E4 was still working by pressing a button. Any additional questions participants had, were only answered if it did not influence how well they were informed compared to other participants. If they did, it was told that the answer was unknown or that the question would be answered after the suspect interview.

Subsequently, participants were escorted to the interview room (a real interview room in which they normally also conduct suspect interviews) and entered it alone.

The moment participants entered the interview room the confederate assumed the role belonging to the condition to which the participant was randomly assigned. Except for standard lines belonging to the concerned condition, the interviews were as similar as possible. The whole interview was audio recorded. The interview was stopped by one of the researchers after about five minutes telling them 'this is it', regardless of the progress of the interview. Participants were again escorted to a separate room, this time to complete a post-interview-questionnaire. In about 5-7 minutes they were finished, and a debriefing followed. In the debriefing was explained that some of the terminology used at initiation of the exercise was misleading to prevent them from acting different than usually. Besides it was clarified that there was no couple condition, that the E4 was used to measure their psychophysiological arousal level, and that they were intentionally manipulated into making an error if they were assigned to an error condition. Participants were asked if they agreed with the use of their data (anonymous), and if so, to sign an informed consent. E-mail addresses of the researchers and the ethical committee were given to the participants for follow-up questions or remarks later on. All participants signed, participated voluntarily and a chocolate bar was offered to thank them for their time.

Dependent Variables

Stress. Measuring stress can be conducted in the form of self-reports and physiological measures (Centre for Studies on Human Stress, 2007). Using both ways for the current study makes sense, because in other fields (e.g., stress during cardiac arrest simulation) is already proven that perceived stress is not always in line with the physical reaction of the sympathetic nervous system (SNS; Sandroni et al., 2005). We are interested in how police officers perceive their stress level after a communication error and in how they react physically to a communication error.

To measure perceived stress four items were derived from the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). The items were adjusted to the interview situation of the current study following Ströfer, Ufkes, Noordzij, and Giebels (2016). In particular, participants were asked to rate, using a scale ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following questions: "To what

extent did you feel stress after using the wrong name?"; "To what extent did you feel upset after using the wrong name?"; "To what extent did you feel nervous after using the wrong name?"; and "To what extent did you feel tension after using the wrong name?". Each participant's total score, which has a minimum of 4 and a maximum of 20, was divided by four so that it was possible to analyze the perceived stress score together with the other dependent variables. A high score on this scale means that the participant perceived a higher level of stress. The Cronbach's alpha coefficient regarding to perceived stress was .87.

Different methods are used for measuring physiological arousal, including electrodermal activity (EDA), heart rate (HR), hart rate variability (HRV), and blood pressure (BP; Bernardi, Valle, Coco, Calciati, & Sleight, 1996; Healey & Picard, 2000; Lundberg et al., 1994; Vrijkotte, van Doornen, & de Geus, 2000). An acceptable method is always minimally obtrusive, so the participants have no restrictions or limitations and can perform their job as usually (Fensli, Pedersen, Gundersen, & Hejlesen, 2008). We chose for EDA by means of wristband, as it is a minimally intrusive method and is an often used psychophysiological parameter (Prokasy & Raskin, 1973). EDA gives information about arousal, stress, and anxiety. It is the skin's continuous variation in subtle electrical changes and this allows us to observe increases in the SNS as a direct reflection of the fight or flight reaction that comes with stress. These unconscious electrical changes called skin conductance responses (SCRs), become stronger as a result of more emotional arousal and weaker along with less emotional arousal ("Support page E4 wristband," 2016). The process is controlled by innervating signals from the brain to the skin, causing an increase in the sweat level, but is unnoticeable to most people. To measure EDA, a low constant voltage is applied to the skin. This is an easy, non-invasive method that can detect changes in the SNS activity with a single measurement (Dawson, Schell, & Filion, 2000; Fowles et al., 1981).

SCRs consist of slowly drifting signals, called tonic EDA, indicting the overall conductivity of long time intervals, and overlaying fluctuations, called phasic EDA, indicating short local fluctuation (Boucsein, 2012; Figner & Murphy, 2010). Tonic EDA is measured over a longer period of time without measuring effects of discrete environmental stimuli. It is used to measure how the skin conductance level (SCL) slowly changes over time. Phasic EDA on the other hand is sensitive to abrupt, short-lived changes. Mostly it is used when the effect of a discrete environmental stimuli is measured, which show as abrupt increases in skin conductance.

In the current study we used the E4 wristband of Empatica Inc. (25g, 110-1190mm) to measure psychophysiological arousal. To minimize any hinder of the device, it was worn by the participant on the wrist of their non-dominant hand. The E4 has two electrodes responsible for the minuscule amount of current needed do measure EDA. By passing current between each other the electrical conductance of the sweat level can be measured in micro Siemens (μS). For the current study we used only phasic EDA data extracted from the raw EDA data of the E4 (Boucsein, 2012; Roth, Dawson, & Filion, 2012), since we are interested in the effects of a discrete environmental stimuli (the making of an error).

Computing phasic EDA often brings difficulties, such as that it is difficult to distinguish slow changing tonic EDA from overlaying SCRs (Boucsein, 2012). However, the method we used, Continuous Decomposition Analysis (CDA), is known to control for that. Matlab-based software Ledalab is applied to conduct a CDA, which decomposes skin conductance data into tonic and phasic EDA and is generally recommended for this kind of data (Benedek & Kaernbach, 2010). It is untangled by general response shape causing temporal precision. CDA aims to retrieve the signal characteristics of the sudomotor nerve activity (SMNA), which includes everything that stimulates the sweat glands that are exclusively activated by the SNS.

A baseline was set for each participant, to compare their phasic EDA error-data to. An EDA-baseline is the average phasic level during rest, so we collected this data when the participant was reading the police report prior to the interview. We collected roughly ten minutes of EDA-data of each participant, but only used the data collected between two to seven minutes of wearing the E4 for their baseline[3]. This was decided to make sure that the participant was adjusted to wearing the wristband and that their EDA-data was not higher in the end because of anticipatory arousal (Elfering & Grebner, 2011). Besides, a baseline of five minutes is an acceptable amount of time as EDA does not vary wildly over time and other researchers that work with EDA also take about two to five minutes (e.g., Barreto, Zhai, & Adjouadi, 2007; de Santos Sierra, Sanchez Avila, Guerra Casanova, Bailador del Pozo, & Jara Vera, 2010; Erisman & Roemer, 2010; Hogervorst, Brouwer, & Vos, 2013; Ströfer, Ufkes, Noordzij, & Giebels, 2016). Since the baseline (300 seconds) was longer than the SCR

[3] For two participants a baseline after 30 seconds of wearing the E4 was taken, because otherwise their baseline was not long enough.

data after the error (10 seconds; see next section), the baseline data was modified. We divided the data by 30, making the two comparable. The mean of SCR baseline was 0.30 µS (*SD* = 0.12 µS, *range* = 0.00 - 2.80 µS).

The SCR error data was collected two till twelve seconds after stimulus onset (standardized sentence of the confederate), because police officers took maximally ten seconds to react and the SNS activity takes one to four seconds to be carried out by the sweat glands (Roth et al., 2012). The sum of the significant SCR amplitudes is taken, using a minimum amplitude threshold criterion of .01 µS following Boucsein et al. (2012).

The mean SCR error-data was subtracted from the mean SCR during the baseline measurement to control for individual variation in skin conductance. On recommendation of Boucsein (2012), a natural logarithm was taken to normalize this data. We used this data to analyze our hypotheses (LN_EDA), although the not-normalized data (EDA) was used in the tables to be able to easily interpret the data. A high score on these variables means that the participant experienced a higher level of psychophysiological arousal.

Self-oriented anger. To measure self-oriented anger one item was used. In particular, participants were asked to rate, using a scale from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following question: "To what extent were you angry at yourself after using the wrong name?". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant perceived a higher level of self-oriented anger.

Guilt. To measure guilt one item was used. In particular, participants were asked to rate, using a scale from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following question: "To what extent did you feel guilt after using the wrong name?". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant perceived a higher level of guilt.

Shame. To measure shame of one item was used. In particular, participants were asked to rate, using a scale from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following question: "To what extent did you feel shame after using the wrong name?". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant perceived a higher level of shame.

Distraction. To measure distraction one item was used. In particular, participants were asked to rate, using a scale from 1 (strongly disagree) to 5 (strongly agree), the extent

to which they agreed with the following question: "To what extent did you get distracted from the job after using the wrong name?". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant perceived a higher level of distraction.

Affective trust. Affective trust of the suspect estimated by the participant was measured using one items derived from the Cognition-Based Trust Scale (Colquitt, Lepine, Piccolo, Zapata, & Rich, 2012). The item was adjusted to the interview situation of the current study. In particular, police officers were asked to rate, using a scale ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following statement: "The suspect thought I was capable in empathizing when I used the wrong name". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant estimated a higher level of the suspects' affective trust in them.

Cognitive trust. Cognitive trust of the suspect estimated by the participant was measured using one items derived from the Cognition-Based Trust Scale (Colquitt et al., 2012). The item was adjusted to the interview situation of the current study. In particular, police officers were asked to rate, using a scale ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following statement: "The suspect perceived me as being competent when I used the wrong name". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant estimated a higher level of the suspects' cognitive trust in them.

Rapport. To measure participants' estimated level of the suspect's view on rapport between the suspect and themselves one item was derived from Vallano and Compo (2011). The item was adjusted to the interview situation of the current study. In particular, police officers were asked to rate, using a scale ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which they agreed with the following statement: "The suspect judged our relationship to be positive when I used the wrong name". A high score on this scale, which has a minimum of 1 and a maximum of 5, means that the participant estimated a higher level of the suspect's view on rapport between them.

Background information. Socio-demographic information was measured at the end of the questionnaire. In particular, participants were asked their age, gender, job function, for how long they have practiced suspect interviews, how often they do suspect interviews, and if they had followed a special interview training.

Independent Variables

Manipulation Communication Errors. For each of the five conditions the confederate had different instructions to manipulate participants into a communication error. For all other communication the confederate reacted as appropriate for the situation, with regard to whether the condition included a cooperative or non-cooperative suspect.

To manipulate participants into a factual or judgment communication error, the confederate was instructed to use certain reactions to certain things participants said during the interview. For the factual error conditions, the confederate reacted to the first time his name ('Jaap') was used by the participant. For the judgment error conditions, the confederate reacted to the first time he was addressed formally by the participant (either by the Dutch polite form of 'you' or by the name of 'sir')[4]. Reactions of the confederate for factual and judgmental conditions respectively were 'No, you are not talking to Jaap!' (the confederate played that he was called André Verhoeven) and 'How dare you call me sir!'. A second standardized reaction followed right after the participant reacted to the first standardized sentence of the confederate, which depended on the suspect's stance. When cooperative, it was 'No problem, that also happens to me sometimes', when non-cooperative, it was 'Pff, forget about it with your interview'.

For the control condition (no error), the confederate reacted to the first time his name was used or the first time he was addressed formally by the participant, depending on what came up first. The first, and only standardized reaction was 'Yes, I am Jaap yes' or 'Yes, I am a sir yes' respectively.

Repair strategies. To classify the responses of the participants towards the standardized sentences of the suspect, all suspect interviews were transcribed on the basis of the audio recordings. Subsequently, the responses of the participant after the standardized sentences were separately classified by the first two researchers. They agreed on recognizing four repair strategies, namely apology, exploration, deflect, and no

[4] Pilot participants were used to test the procedure. First, we assumed that police officers would address the suspect informally, after which the confederate would react offended, told them to address him formally and so participants had made a judgment error. However, through the pilot participants we found out that it is police culture to address every suspect formally, despite of their age. Subsequently, we changed the judgment error into a scenario where the confederate reacted offended when he was addressed formally.

alignment. All responses were classified into one of them. Two responses could be classified with two codes (exploration and no alignment), for now we chose to classify them with the reaction that was most prevalent.

Apology relates to responses that react directly to the error and take responsibility for it, such as apologizing, admitting, and being understanding. Exploration relates to responses that include open follow-up questions or responses, such as asking how the suspect wants to be called, repeat or confirm the information, or in case of the judgment error, blaming it on upbringing or habit. Deflect relates to responses that include closed follow-up questions or responses, such as blaming someone else, something defensive, or telling the suspect that this is the way to do it. No alignment relates to responses that do not react to the error, such as saying something completely unrelated. For an overview of the repair strategies, see Table 1.

Cohen's κ was used to measure the agreement between the two researchers on whether the 68 participants used apology, exploration, deflect, or no alignment as a repair strategy after the first standardized sentence of the confederate. There was substantial agreement between the researchers' judgments, $\kappa = .781$, $p < .001$ (Landis & Koch, 1977). Nine encodings did not match, for which no certain pattern between them is found. To gain agreement, the researchers explained their choice of coding to each other and afterwards agreed on which strategy fitted best. In the end 2 responses were classified into apology, 36 into exploration, 15 into deflect, and 15 into no alignment. The same is done for the repair strategies used after the second standardized sentence of the confederate. There was moderate agreement between the researchers' judgments, $\kappa = .601$, $p < .001$ (Landis & Koch, 1977). A reason for the lower agreement here could be that one researcher took more of the context around the response into account. In retrospect, the latter agreed that for the non-matching encoding, the context was important to consider and agreed on most encodings of the other researcher. In the end 5 responses were classified into apology, 25 into exploration, 3 into deflect, and 13 into no alignment.

Table 1

Explanations and Examples of Police Officers' Responses Classified into a Repair Strategy

Repair strategy	Explanation	Example
Apology	Reacts to the error itself and takes responsibility, such as apologizing, admitting, being sympathetic, etc.	"I would like to apologize for that."
Exploration	Reacts to the error with an open follow-up question or reaction, such as asking what he wants to be called, repeating or confirming the information, blaming it on upbringing, etc.	"So what is your name then?
Deflect	Reacts to the error with a closed follow-up question or reaction, such as blaming someone else, being defensive, etc.	"Well, older people are supposed to be addressed like that."
No alignment	Reacts to the error by saying something completely unrelated, such as saying something weird, ignoring the error, continuing with their own routine, etc.	"I am a suspect interviewer."

Results

Information and Correlations Variables

Table 2 shows the means and standard deviations of dependent variables and the correlations between them. Not surprisingly is, that all significant correlations between police officers' experienced psychological and behavioural consequences are positive, all significant correlations between estimated affective, cognitive and relational perceptions of de suspect are positive and all significant correlations between those two kinds of variables are negative. Which makes sense, because the police officers' experienced psychological and behavioural consequences we measured are all negative consequences of a communication error. The same goes for estimated affective, cognitive and relational perceptions of de

suspect, only reversed. These variables are indications of a positive conversation, of which we believed that all of them became lower after a communication error. Since the police officers' experienced psychological and behavioural consequences of the current study become higher and estimated perceptions of suspects become lower after an error, it makes sense that those variables correlate negatively with each other. Remarkably, the EDA-data correlates not significantly with any of the other variables.

Table 2

Means, Standard Deviations, and Pearson Product-moment Correlations between measures of Police Officers' Experienced Psychological and Behavioural consequences and Estimated Affective, Cognitive and Relational Perceptions of de Suspect by the Police Officer (N = 68)

	M	***SD***	1.	2.	3.	4.	5.	6.	7.	8.
1. Perceived Stress	2.06	0.81	-							
2. Self-oriented anger	1.32	0.70	.35*	-						
3. Guilt	1.46	0.76	.42*	.25*	-					
4. Shame	1.66	0.94	.56*	.37*	.66*	-				
5. Distraction	2.47	1.11	.64*	.32*	.34*	.55*				
6. Affective trust	2.79	0.86	-.37*	-.29*	-.38*	-.29*	-.24*	-		
7. Cognitive trust	2.54	1.00	-.42*	-.23	-.37*	-.41*	-.30*	.50*	-	
8. Rapport	2.53	0.95	-.46*	-.24	-.42*	-.36*	-.27*	.65*	.59*	
9. EDA	0.59	1.33	.10	.02	-.05	-.01	.04	.04	-.21	.08

* $p < .05$ (2-tailed)

Police Officers' Experienced Psychological and Behavioural Consequences

Table 3 shows the means and standard deviations of police officers' experienced psychological and behavioural consequences per communication error. To test our hypotheses that compared to a suspect interview in which no communication error is made, an interview in which police officers make a factual or judgment communication error will be associated with higher levels of police officers' stress (H1a), self-oriented anger (H1b), guilt (H1c), shame (H1d), and distraction (H1e), we first ran a one-way between-groups multivariate analysis of variance (MANOVA). The MANOVA had communication error as

Independent Variable (IV) and perceived stress, self-oriented anger, guilt, shame, and distraction as Dependent Variables (DVs). The Box's tests proved to be non-significant according to the guidelines of Field (2013), $p = .043$. This suggests equal covariance matrices causing no violation of the homogeneity assumption. Using Pillai's trace, communication error had a significant effect on the level police officers' experienced psychological and behavioural consequences, $V = 0.44$, F (10, 124) = 3.50, $p < .001$.

Table 3

Means and Standard Deviations of the Police Officers' Experienced Psychological and Behavioural Consequences per Communication Error (N = 68)

	No error (*n* = 19)		**Factual (*n* = 25)**		**Judgement (*n* = 25)**	
	M	*SD*	*M*	*SD*	*M*	*SD*
Perceived stress	1.47	0.52	2.52[a]	0.73	2.06[a]	0.79
Self-oriented anger	1.05	0.23	1.42	0.83	1.44	0.77
Guilt	1.00	0.00	1.92[a]	0.97	1.36	0.57
Shame	1.05	0.23	2.21[a]	1.18	1.60	0.71
Distraction	1.63	0.83	2.96[a]	1.12	2.64[a]	0.95
EDA	0.62	1.05	0.78	1.67	0.38	1.16

[a] differs significantly from the control group

Subsequently, separate multiple analysis of variances (ANOVAs) were conducted for each hypotheses. The tests revealed significant communication error effects (all with $p < .001$) on perceived stress (F [2, 65] = 11.81, $\omega = 0.49$), guilt (F [2, 65] = 10.19, $\omega = 0.46$), shame (F [2, 65] = 10.36, $\omega = 0.46$), and distraction (F [2, 65] = 10.19, $\omega = 0.46$). However, contrary to our expectations, no effect was found for self-oriented anger (F [2, 65] = 2.04, $p = 0.138$). Post-analyses were explored to see which communication error groups indeed differed from each other for perceived stress, guilt, shame, and distraction. The AVOVAs showed that two out of these four significant ANOVAs (guilt and shame) showed violation of homogeneity, however the slightly different sample sizes was at stake by all of them. For this reason, the latter was given priority and so Gabriel's test is used for the post-hoc analyses.

Supporting our prediction, the making of a factual error leads to more perceived stress, guilt, shame, and distraction (all with $p < .001$) compared to an interview in which no

error was made. Partly these results were found for interviews with a judgment error. As expected, in comparison with the control condition, the making of a judgment factor led to more perceived stress (p = .023), and distraction (p = .004). However against our predictions, there was no difference in guilt (p = .228), and shame (p = .097) between the control condition and the judgment error condition. Taken together, hypotheses 1a and 1e are confirmed for both factual and judgment errors and hypotheses 1c and 1d are confirmed in case of a factual error.

In addition, we also ran an univariate ANOVA to analyze hypothesis H1a (Compared to a suspect interview in which no communication error is made, an interview in which police officers make a factual or judgment communication error will be associated with higher levels of police officers' stress) using participants' psychophysiological arousal level instead of their perceived stress level as DV. The ANOVA had communication error as IV and LN_EDA as DV. Contrary to our expectations, the model was statistically not significant, F (2, N = 65) = 0.85 p = .431. This indicates that the model was not able to distinguish between police officers who made a factual or judgement error and police officers that did not. This suggests that the making of an error does not lead to higher EDA, and thereby disconfirming hypothesis 1a. This contradicts the findings of testing hypothesis 1a with as DV perceived stress, where is demonstrated that perceived stress is higher in an interview with a factual and judgment error compared to interviews which do not include an error.

Repair Strategies

For testing hypotheses 2 and 3 a distinction was made, based on Benoit's (2013) method, in which repair strategies were classified on how responsibility-taking they are. Repair strategies apology and exploration indicate engagement in the ongoing situation and acceptability for the error. Therefore, both were classified as more responsibility-taking repair strategies. Mostly participants that made a factual error used this strategy. Repair strategy deflect, by contrast, shows engagement, but users do not take responsibility for the error. Therefore, deflect was categorized as a moderate responsibility-taking repair strategy. Mostly participants that made a judgment error used this strategy. Repair strategy no alignment was classified as the least responsibility-taking repair strategy a police officer could use. It indicates no engagement and the user does not take responsibility for the error.

This strategy was mostly used by participants in the control condition. For an overview of the frequencies of the repair strategies per condition, see Table 4.

Table 4

The amount of Police Officers' per Error Condition that used a More, Moderate, or Less Responsibility-taking Repair Strategy in their First and Second Response to the Communication Error they made (n = 49)

	Responsibility taking*		
	More	**Moderate**	**Less**
	First (second)**	First (second)	First (second)
Factual, non-cooperative	10 (9)	2 (0)	0 (2)
Factual, cooperative	10 (7)	1 (0)	1 (3)
Judgment, non-cooperative	6 (7)	6 (3)	0 (2)
Judgment, cooperative	6 (7)	5 (0)	2 (6)
Total	32 (30)	14 (3)	3 (13)

** More responsibility-taking strategy includes apology and exploration strategies, moderate responsibility-taking repair strategy includes deflect strategies, and less responsibility-taking repair strategy includes no alignment strategies*

*** First and second responses after the making of a communication error*

Three separate binary variables were made, representing if participants used or did not use a less (1), moderate (2) or more (3) responsibility-taking repair strategy. Table 5 shows the means and standard deviations of police officers' experienced psychological and behavioural consequences for the amount of responsibility they take in their first repair strategy.

Unfortunately, we were not able to test hypothesis 2 (The more police officers experience stress, shame, and distraction after the making of a factual or judgement communication error, the less responsibility they take in their first response after the making of an error in comparison to police officers that experience a less stress, shame, and distraction). Police officers used in their first reaction a less responsibility-taking repair

strategy only three times, see table 4. This is a too small amount to make any predictions with about the current data.

Table 5

Means and Standard Deviations of the Police Officers' Experienced Psychological and Behavioural Consequences for the Amount of Responsibility they take in their First Response towards the Making of a Communication Error (n = 49)

	Less responsibility-taking		**Moderate responsibility-taken**		**More responsibility-taken**	
	M	*SD*	*M*	*SD*	*M*	*SD*
Perceived stress	2.17	0.81	2.17	0.77	1.67	0.77
Self-oriented anger	1.37	0.71	1.33	0.62	1.20	0.77
Guilt	1.61	0.89	1.47	0.64	1.07	0.26
Shame	1.89	1.11	1.60	0.63	1.13	0.35
Distraction	2.63	1.17	2.67	0.72	1.87	1.13
EDA	0.33[a]	0.64	0.65	1.69	1.17	1.72

[a] differs significantly from the other responsibility-taking groups

To test our hypothesis that the more police officers experience self-oriented anger and guilt after the making of a factual or judgment communication error, the more responsibility they take in their first response after the making of an error in comparison to police officers that experience less self-oriented anger and guilt (H3), a direct logistic regression was performed. The regression had self-oriented anger and guilt as IVs and More Responsibility-taking as DV. Contrary to our expectations, the model was statistically not significant, χ^2 (2, N = 49) = 1.30, p = .523. Table 6 shows that no independent variables made a unique statistically significant contribution. This indicates that the model was not able to distinguish between participants who used a more responsibility-taking repair strategy and who did not. This suggests that higher levels of self-oriented anger and guilt do not evoke police officers to use a more responsible-taking response after the making of a factual or judgment error in a suspect interview, and thereby disconfirming hypothesis 3.

Table 6

Logistic Regression Predicting the Likelihood of Using a More Responsibility-taking Repair Strategy (N = 49)

	B	S.E.	Wald	df	p	Odds Ratio	95% C.I. for Odds Ratio	
							Upper	Lower
Self-oriented anger	-0.19	0.39	0.24	1	.623	0.83	0.39	1.77
Guilt	0.44	0.42	1.10	1	.294	1.56	0.68	3.56
Contrast	0.21	0.81	0.07	1	.799	1.23		

Police Officers Estimation of the Suspect's Affective, Cognitive and Relational Perceptions

Table 7 shows the means and standard deviations of estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect by the police officer per type of error. To test our hypothesis that compared to an interview in which no communication error is made, an interview in which police officers make a factual or judgment error will be associated with lower levels of police officers estimated affective- (H4a) and cognitive trust (H4b) of the suspect in them, and lower levels of police officers' estimation of the suspect's view on rapport between the suspect and themselves (H4c), we ran a one-way between groups MANOVA. The MANVOA had communication error as IV and estimated affective trust, cognitive trust, and rapport as DVs. The Box's test proved to be non-significant according to the guidelines of Field (2013), $p = .005$. This suggests equal covariance matrices causing a no violation of the homogeneity assumption. Using Pillai's trace, communication error had a significant effect on the police officers' estimated level of a suspect's affective, cognitive and relational perceptions, $V = 0.41$, F (6, 128) = 5.46, $p < .001$.

Subsequently, separate univariate ANOVAs were conducted for each hypothesis. The tests revealed significant communication error effects for affective trust (F [2, 65] = 6.75, $p = .002$, $\omega = 0.38$), cognitive trust (F [2, 65] = 11.87, $p < .001$, $\omega = 0.49$), and rapport (F [2, 65] = 11.01, $p < .001$, $\omega = 0.48$). Post-analyses were explored to see which communication error groups indeed differed from each other for affective trust, cognitive trust and rapport. The ANOVAs showed that one out of these three ANOVAs (affective trust) showed violation of homogeneity, however the slightly different sample sizes were at stake by all three of them.

For this reason, the latter was given priority and so Gabriel's test is used for the post-hoc analyses.

Table 7

Means and Standard Deviations of the Estimated Affective/cognitive (Trust) and Relational (Rapport) Perceptions of the Communication Error (N = 68)

	No error (*n* = 19)		**Factual (*n* = 25)**		**Judgement (*n* = 25)**	
	M	*SD*	*M*	*SD*	*M*	*SD*
Affective trust	3.26	0.45	2.38[a]	0.92	2.84	0.85
Cognitive trust	3.11	0.81	1.88[a]	0.85	2.76	0.93
Rapport	3.26	0.81	2.08[a]	0.78	2.40[a]	0.91

[a] differs significantly from the control group

Supporting our prediction, the making of a factual error led to lower estimated levels affective trust (p = .002), cognitive trust (p < .001), and rapport (p < .001), compared to an interview in which no error was made. Partly these results were found for an interview with a judgment error. As expected, the making of a judgment error led to a lower level of the estimated suspect's view on rapport (p = .003), compared to an interview in which no error was made. However, against our predictions, there was no difference in estimated level of the suspect's affective trust (p = .226) and cognitive trust (p = .474). Taken together, hypothesis 4c is confirmed for both factual and judgment errors and hypotheses 4a and 4b are confirmed in case of a factual error.

(Non-)Cooperative Suspect after a communication error

Table 8 shows the means and standard deviations of police officer's psychological and behavioural consequences after the making of a communication error, considering the suspect's stance. To test our hypothesis that the effect of making a factual or judgment communication error on police officers' stress (H5a), self-oriented anger (H5b), guilt (H5c), shame H5d), and distraction (H5e), is stronger when dealing non-cooperative suspect, compared to when police officers deal with a cooperative suspect, we first ran a one-way between-groups MANOVA. The MANOVA had suspect's stance as IV and perceived stress, self-oriented anger, guilt, shame, and distraction as DVs. Since the suspect's stance is only

deliberately applied in the error conditions, the control condition is excluded from the following analysis. The Box's tests proved to be non-significant according to the guidelines of Field (2013), p = .109. This suggests equal covariance matrices causing no violation of the homogeneity assumption. Using Pillai's trace, the suspect's stance had a significant effect on the police officer's psychological and behavioural consequences, V = 0.228, F (5, 43) = 2.54, p = .042.

Table 8

Means and Standard Deviations of Police Officers' Experienced Psychological and Behavioural Consequences after a Communication Error, Considering the Suspect's Stance (n = 49)

	Cooperative suspect		**Non-cooperative suspect**	
	M	*SD*	*M*	*SD*
Perceived stress	2.17	0.80	2.41	0.78
Self-oriented anger	1.64	0.99	1.21	0.41
Guilt	1.48	0.82	1.79	0.83
Shame	1.92	1.04	1.88	0.99
Distraction	2.88	1.13	2.71	0.95
EDA	0.56	1.35	0.59	1.54

[a] differs significantly from the other suspect's stance

Subsequently, separate ANOVAs were conducted for each hypothesis. One of the tests revealed an almost significant effect of suspect's stance on self-oriented anger, F (1, 47) = 3.87, p = .055, ω = 0.19. Surprisingly, the test showed that a cooperative suspect after the making of a communication error causes a higher level of self-oriented anger, than when police officers deal with a non-cooperative suspect. The remaining tests showed, contrary to our expectations, no significant effects of the suspect's stance for perceived stress (F [1, 47] = 1.11, p = .299), guilt (F [1, 47] = 1.74, p = .194), shame (F [1, 47] = 0.02, p = .88), and distraction (F [1, 47] = 0.33, p = .569).

Taken together, hypothesis 5 is not supported by the current data. Dealing with a non-cooperative suspect after the making of a communication error does not lead to more

perceived stress, self-oriented anger, guilt, shame, or distraction by the police officer compared to when they have to deal with a cooperative suspect.

In addition, we also ran an one-way between-groups ANOVA to analyze hypothesis 5a (The effect of making a factual or judgment communication error on police officers' stress, is stronger when dealing non-cooperative suspect, compared to when police officers deal with a cooperative suspect) using participants' psychophysiological arousal level instead of their perceived stress level as DV. Since the suspect's stance is only deliberately applied in the error conditions, the control condition is excluded from the following analysis. The ANOVA had suspect's stance as IV and LN_EDA as DV. Contrary to our expectation, no effect was found of the suspect's stance on EDA, F (1, 47) = 0.05, p = .831. This indicates that the model was not able to distinguish between if police officers dealt with a cooperative or non-cooperative after a communication error. This suggests that a non-cooperative suspect after a communication error does not lead to higher EDA, and thereby disconfirming hypothesis 5a. This is in line with the findings of hypothesis 5a with as DV perceived stress. Taken together, dealing with a non-cooperative suspect after a communication error does not lead to a higher level of police officers' perceived or physiological stress level, compared to police officers dealing with a cooperative suspect.

Table 9 shows the means and standard deviations of the police officers' estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect after the making of a communication error, considering the suspect's stance. To test our hypotheses that the effect of making a factual or judgment communication error on police officers' levels of estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect, including affective trust (H6a), cognitive trust (H6b), and rapport (H6c), is stronger when dealing with a non-cooperative suspect, compared to when police officers deal with a cooperative suspect, we ran a one-way between-groups MANOVA. The MANVOA had suspect's stance as IV and affective trust, cognitive trust, and rapport as DVs. Since the suspect's stance is only deliberately applied in the error conditions, the control condition is excluded from the following analysis. The Box's tests proved to be non-significant according to the guidelines of Field (2013), p = .897. This suggests equal covariance matrices causing no violation of the homogeneity assumption. Using Pillai's trace, the suspect's stance had a significant effect on police officers' estimated levels of the suspect's affective, cognitive and relational perceptions, V = 0.27, F (3, 45) = 5.49, p = .002.

Table 9

Means and Standard Deviations of the Suspect's Estimated Psychological and Behavioural Consequences after a Communication error, Considering the Suspect's Stance (n = 49)

	Cooperative suspect		**Non-cooperative suspect**	
	M	*SD*	*M*	*SD*
Affective trust	3.00[a]	0.82	2.21[a]	0.83
Cognitive trust	2.48	1.05	2.17	0.92
Rapport	2.60[a]	0.87	1.88[a]	0.68

[a] differs significantly from the other type of suspect's stance

Subsequently, separate ANOVAs were conducted for each hypothesis. As predicted, the tests showed that police officers' estimation of the suspect's level of affective trust (F [1, 47] = 11.2, p = .002, ω = 0.40) and police officers' estimation of the suspect's view on rapport (F [1, 47] = 10.57, p = .002, ω = 0.38) were significantly lower when dealing with a non-cooperative suspect after the making of a communication error, than when dealing with a cooperative suspect. Contrary to our expectations, no significant effect of the suspect's stance was revealed for cognitive trust, F (1, 47) = 1.24, p = .271.

Taken together, hypotheses 6a and 6c are confirmed by the current data. Dealing with a non-cooperative suspect does lead to a higher estimation of the suspect's level of affective trust in them and a higher estimation of the suspect's view on rapport by the police officer, compared to police officers have to deal with a cooperative suspect after a communication error. This result is not found for estimated cognitive trust, disconfirming hypothesis 6b.

For testing hypothesis 7 we analyzed police officers' repair strategies after they made a communication error, which followed after the first and second standardized sentences of the confederate. The second standardized sentence was either cooperative or non-cooperative. We were interested in if the suspect's stance would change the amount of responsibility police officers' take their repair strategy. A binary variable was made that represents if police officers changed or did not change of repair strategy. We had 6 missing cases for this variable, as some police officers did not respond to the first and/or second standardized sentence of the confederate. Besides, 19 participants were excluded as they

were assigned to the control condition where in the suspect's stance was not manipulated. In the end 45 participants were included in the analysis of hypothesis 7, of which 22 police officers dealt with a cooperative suspect (n_{change} = 15, $n_{non\text{-}change}$ = 7) and 23 dealt with a non-cooperative suspect (n_{change} = 11, $n_{non\text{-}change}$ = 12).

To analyze if changing of repair strategy happens more often when police officers deal with a non-cooperative suspect after the making of a factual or judgment communication error, compared to when police officers deal with a cooperative suspect (H7), a Chi-square test for independence with Yates Continuity Correction is conducted. The Chi-square test indicated no significant association between the suspect's stance (cooperative vs. non-cooperative) and the change of repair strategy, χ^2 (1, n = 46) = 1.44, p = 0.23, *phi* = -.22, meaning that hypothesis 7 is not supported by the current data. Dealing with a non-cooperative suspect after a communication error does not let police officers change their repair strategy rather than when dealing with a cooperative suspect.

Discussion

To date, the focus of communication research within a suspect interview has been mainly focused on identifying communication that encourages cooperation (Beune et al., 2009; Holmberg & Madsen, 2014) and how to communicate evidence that is known to the police (e.g., Inbau, Reid, Buckley, & Jayne, 2001; Starrett, 1998). Oostinga et al. (2017a; 2017b) have recently started to research the effect of communication errors on suspects and crisis negotiators as regard to what type of errors and repair strategies exist. Still, less is known about what the effect of communication errors is on police officers during a suspect interview. The current study has investigated police officers' view on their own communication errors in suspect interviews by focusing on what psychological and behavioural consequences they experience, which repair strategies they use, how they estimate the suspect's trust and view on rapport, and what influence the suspect's stance after the error had. It is the first study that explores the police officer's view of communication errors in suspect interviews.

As predicted, our analyses demonstrated that police officers experience more psychological and behavioural consequences after a suspect interview in which they made a

communication error, compared to an interview in which no error was made. Besides, the by the police officers estimated affective, cognitive, and relational perceptions of the suspect were, as expected, lower. Police officers that made a factual or judgement error showed significantly more perceived stress (not supported by their psychophysiological arousal level) and were more distracted, and they estimated the suspect's view on rapport between them as lower than police officers that did not make an error. Factual errors alone also evoked more guilt and shame in police officers, and lower levels of the suspect's estimated affective- and cognitive trust.

Remarkably, factual errors evoke more guilt and shame, and lower levels of estimated affective and cognitive trust than judgement errors. The difference in experienced affect (guilt and shame), has to do with socialization and consciousness (Grainger, 1991). Specifically, guilt tells us that police officers did not meet their personal standards, and shame tells us that they did not meet someone else's standards (either that of the suspect or that of their police team) after a making a factual communication error. The matter of meeting (personal) standards seems to be not, or at least less, of an issue when they make a judgment error. The difference in estimated trust (affective and cognitive) has to do with how police officers estimate the suspects view on reliability and capability in them (McAllister, 1995; Porter et al., 1975). After the making of a factual error police officers seem to be more inclined to believe that the suspect thinks that they are less capable and reliable. In general, police officers seem believe that the suspect thinks that they are taking advantage of the situation, for example by using their dominant role to force the suspect to confess.

When making a judgment error, police officers apparently do not think the suspect's distrusts them. They think they are blamed more on a personal and professional level for making a factual error than for making a judgement error. This contradicts with the finding of crisis negotiations, in which judgment errors seems to be more detrimental than factual errors (Oostinga et al., 2017a). A big difference between crisis negotiations and suspect interviews is how well prepared police officers are for the conversation. Crisis negotiators are immediately needed at the scene and find out what is going on during the conversation. Maybe this is why crisis negotiators are more accepting about their factual error, since they have to figure out facts on the spot. Police interviewers on the other hand, have time to prepare themselves for the interview, and have more control over the starting time of the

interview. Police interviewers are way more informed about the situation than crisis negotiators. So, when they make a factual error, it seems reasonable that they are less accepting about their factual error, since they had time to get it right. Therefore, future research should investigate the difference between crisis negotiations and suspect interviews more thorough, to confirm the notion that police officers conducting suspect interviews have more information beforehand. This could shed more light on the impact of preparation time for a police conversation on the experience of communication errors, whether they are positive or negative.

Surprisingly, we found a strong indication that police officers experience more self-oriented anger after the making of a communication error when dealing with a cooperative suspect, compared to when dealing with a non-cooperative suspect. We expected that this would be the other way around, as we believed that a non-cooperative suspect would emphasize the wrongness of the error, and would therefore evoke more self-oriented anger than a cooperative suspect. An alternative theory is that police officers do not have the chance to take out their frustration about the communication error, when the suspect reacts kindly to the error. If the suspect instantly accepts that an error is made, for example by expressing this out loud by saying 'No problem, that also happens to me sometimes', police officers do not get the chance to explain or elaborate on the error. It creates a situation in which they have to move on with the suspect interview immediately. It could be the lack of expression about the error, that makes police officers frustrated and therefore more likely to blame themselves for the error. John and Gross (2004) support this theory. They claim that suppressing emotions makes individuals more prone to experience negative emotions. Whether or not police officers get the opportunity to explain the error could have an effect on their self-oriented anger. Future research should focus on this.

As predicted, we found that a non-cooperative suspect after the making of a communication error causes a lower estimation of the suspect's affective (trust) and relational (rapport) perceptions, compared to when dealing with a cooperative suspect. However, this was not found for estimated cognitive trust. Why police officers think the stance of the suspect tells something about the suspect's affective trust and view on rapport, but not on the suspect's cognitive trust, could prove to be interesting. A possibility is that police officers know that someone's (e.g., suspect's) stance is a (un)conscious judgment on how they (e.g., suspects) feel about and relate to the one they (e.g., suspects)

are interacting with (e.g., the police officer), whereas the believe in skills and competence, elements that can be used to describe cognitive trust, are not built on how others act towards us (Scherer, 2005). According to Feuerstein, Feuerstein, and Falik (2010), the feeling of being competent is built on self-confidence, being able to meet challenges and the skill to be able to deal with the present situation. Indeed, none of these abilities indicate that feelings of competence are built on someone else's stance towards us. So, feelings of competence experienced by police officers during a suspect interview are most likely not based on how the suspect acts towards them. Therefore, it seems logical that the stance of the suspect has no influence on how police officers estimate the suspect's cognitive trust in them.

Contrary to our expectations, we found that communication errors have no effect at all on police officers' self-oriented anger. From this we can conclude that the claim of Baltaş & Baltaş (1996) and Kaufman (1999), that stress transforms into anger over time, does not seem to apply to current situation. However, it is possible that a five minute interview is not long enough for police officers to transform their stress into anger. The lack of self-oriented anger could also be explained by the lack of a higher psychophysiological arousal level after the making of a communication error. Their perceived stress was indeed higher after the making of of a communication error. However we were not able to notice this in the form of a physiological reaction. This could indicate that the participants were not as stressed by the error as they thought they were, meaning that their stress level could never transform into self-oriented anger in the first place. Besides, some consideration must be given to the idea that we assumed that the anger would be self-oriented, while it could also be directed at someone else. For example, towards the person that gave them wrongful information or towards the suspect for pointing out the mistake in the first place. Blaming someone else seems likely, as deflect (moderate repair strategy) was used as a first repair response 15 out of 49 times. Since the current study did not include moderate repair strategy in the analyses, it could prove interesting to find out if this strategy has any influence. Future research should extend the interview duration and could explore the direction of potential experienced anger by looking into who police officers blame for the error and if so, if they are likely to use deflect as repair strategy.

The difference we found in perceived stress and psychophysiological arousal level (i.e. EDA) is not surprising. It is known that an individual's perceived stress not always

matches an individual's physiological arousal reaction (Sandroni et al., 2005). However, this difference can also be explained by the difference in time of measurement between perceived stress and EDA. The E4 made it possible to assess the EDA of the police officers at the exact moment after the error, while perceived stress was filled in minutes after the error. It is possible that perceived stress levels are markedly higher, because police officers had time to dwell on their error, while they had no time for that the moment EDA was measured. This could also explain why EDA did not significantly correlate with any of the other dependent variables. EDA was measured directly after the error, while the other DVs were all measured retrospectively. For the current study it was relevant to measure EDA right after the error, as we were interested in what influence psychophysiological arousal level could have on the repair strategy right after the error. However, future research could analyze the difference in perceived stress and psychophysiological arousal level by looking beyond the EDA of police officers right at the moment of the error.

Contrary to our expectations, an analysis showed that police officers' repair strategies after the making of a communication error are not more responsibility taking when experiencing a higher amount of self-oriented anger and guilt. Besides, we could not test if strategies become less responsibility taking when police officers are more stressed, ashamed, or distracted or when their EDA is higher, as we had not enough participants that used this strategy. So, in the current study we could not establish a relationship between the psychological and behavioural consequences police officer experience after a communication error and the amount of responsibility they take when repairing the error they made. This is in contrast with experimental studies (e.g., Janis & Mann, 1977; Tangney et al., 2014; Ellsworth & Tong, 2006; De Hooge et al., 2010; Fischer & Tangney, 1995; Tangney et al. 2014).

That we did not find a connection between psychological and behavioural consequences and the use of a certain repair strategy, could be explained by the urge of police officers to live up to their professional role as a police officer. It is possible that self-monitoring and self-correcting processes become active and help them to not act on the psychological and behavioural consequences they experience after the making of an error. This way, it does not dominate their response, and therefore it cannot define the amount of responsibility they take in their response. Future research should invest in finding a way to find out if professionalism is the reason why police officers do not base their repair

strategies on the psychological and behavioural consequences they experience. For example, by investigating if police officers that are off duty do let the psychological and behavioural consequences influence the amount of responsibility they take after an error.

Subsequently, and not completely surprising, dealing with a non-cooperative suspect after a communication error does not cause higher levels of police officers' perceived stress, guilt, shame, distraction, and EDA, than when dealing with a cooperative suspect. Since our expectation was not based on literature, simply because there is none yet, this tells us that the suspect's stance after an error probably does not have dominance over all the psychological and behavioural consequences that police officers experience. As seen before, self-oriented anger seems to be influenced by the suspect's stance, although further analyses are needed to verify if this indication is right. For now, we must assume that the suspect's stance does not have influence on most psychological and behavioural consequences police officers experience after the making of a communication error.

Finally, we concluded that the suspect's stance was not the reason for whether or not police officers changed the their repair strategy. Police officers did notice the difference between a cooperative and non-cooperative suspects, as they pointed that out clearly during the debriefing. Then, why does this not result in them changing or keeping their repair strategy in their attempt to repair a communication error? Perhaps, this could also be due to police officers' urge to act professional. Changing their strategy would possibly be experienced by police officers as letting the suspect have control over their reactions or behaviours. Future research should explore if police officers that are off duty change their repair strategy after the making of a communication error, depending on their communication partner's stance towards the initially chosen repair strategy.

Between the lines, already some concerns of the current study are mentioned. However, two general concerns are also worth pointing out. First of all, the role play setting could have influenced the behaviour of the police officers. They might have responded differently in a real life scenario. Some experience role-play as challenging, for example, as it is 'theatrical' and individuals have to adopt a role (Lane & Rollnick, 2007). Besides, they could have had worries about being observed. Uncertainty about how to act and worries about being judged could have changed the way they normally conduct a suspect interview. In addition, the suspect played guilty during all interviews, while there is empirical evidence

that in reality there is a difference in behaviour between guilty and innocent suspects (Hartwig, Granhag, & Strömwal, 2007).

The role-play itself and an always guilty suspect, put the ecological value of the current study at risk. However, the method of this study was reality-based constructed, which compensates for both points. A police supervisor was asked for advice and helped with designing the experiment, the police report, and the character of the suspect. This helped in an overall accurate scenario, including a suspect that knew how to behave. Besides, it was of enormous value that we could conduct the suspect interviews in a real police interview room. In addition, police officers pointed out, during the debriefing, that it felt like as if there was a lot at stake, just like in a real suspect interview. This made the whole 'exercise' feel real to them. Although we told them that the 'exercise' was not for judging them for the quality of their performance, they could not shake the feeling that their performance was important. So although the source of the pressure to perform is different than in reality, it was present during the current study and made the scenario realistic and reliable. Nonetheless, future research should focus on analyzing the difference between guilty and innocent suspects, to increase the ecological validity of the results.

Secondly, the interviews in this study were five minutes of length. This does not come close to representing a real-life timeframe. Although, it did give us the possibility to test police officers quickly, and so it made it easier to convince them to participate. Still, short interviews do not give enough insight in the long-term impact of communication errors and the consequences of making more than one communication error in the same interview. Moreover, we were not able to measure what kind of an impact a communication error could have in another moment of the conversation. For example, what happens when the error is made after the social part of the interview where the relationship building takes place? Two scenarios are evident; firstly, the police officers do not think of the error as a big deal, since they think the suspect probably already trusts them, or secondly, the police officers think it is a big deal, since they think an error after bonding can wipe out all the positive effects of bonding with the suspect. Future research, could for example, analyze an error later in the conversation by analyzing a role-play training police officers have to follow anyways. This way they do not have to interrupt police officers during their work, and still have the opportunity to analyze a suspect interview that takes longer than five minutes.

In the current study we examined communication errors in suspect interviews from a police officer's perspective with its focus on personal psychological and behavioural consequences, estimated affective/cognitive (trust) and relational (rapport) perceptions of de suspect, and police officers repair strategies. Research in this area is important, because communication skills are considered to be the foundation of suspect interviews (Zumbrum, 2006). Therefore, it makes sense to focus on a situation where something goes wrong in the communication. Future research should focus on why factual errors seem to be the most detrimental, on which person police officers direct their anger feelings, if these anger feelings are strengthened by not getting the opportunity to explain themselves, and what role police officers' professionalism plays. Researchers should try to analyze longer suspect interviews and thereby should try to put variability in the error making. Besides, they should let some suspects play guilty, while others should play innocent. Lastly, they could look into the difference in perceived stress and psychophysiological arousal level. By knowing what police officers experience after a communication error and what kind of repair strategies they use, we hope we can eventually help police officers to handle communication errors and thereby also increase the success rate of suspect interviews.

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Appendix 1: Instructions confederate

English:

Please imagine the following situation and try to act like it as much as possible. Yesterday you went to a biology research. You did not know what the aim was for the research, but all you did was filling in a short questionnaire about your eating habits. Someone you know did the research before and sold you that a biologist keeps a big amount of money in the research room. This money was intended for traveling expenses of the participant of the research. This money stood in a small cash box in an opened cabinet in the room you did the research in. You saw this as a real opportunity and sneaked out, unnoticed, 200 euro from the small cash box. Because the money is out of a budget for the research, no personal damage is done by taking the money. I mean, who will notice that you took only 200 euro from such a big amount? Act as normal as possible, because you do not want to notice anyone that you took the money. So, yesterday you filled in the questionnaire and finished the research. Afterwards you did not tell anyone what you had done.

Meanwhile, it is one day later. Yesterday after the research you went for a drink with some friends. This morning you got called by someone of the police. You were asked to come by, because they wanted you to ask some questions. You do not know what it is about, but decide that it is best to just go. Since you in a hurry, you put on yesterday's clothing and your muddy shoes. No time to clean them. You decide to not any pay attention to it anymore. While dressing you comfort yourself with the idea that they cannot touch you. At the police station you register at the reception. There they tell you that you are arrested for theft and that you soon will be questioned.

Try to make it a difficult task for the police to find out what happened yesterday. Your behaviour and story most be credible in some way, so you can throw off the scent to distract the police officer, but if there is no way out, you have to tell the truth. You act like a non-cooperative suspect, so when the police officer comes in you do not even want to introduce yourself. If he asks you why you do not what to you can react with; "That on your paper right?" or "Can you even read?!" or "You are really poorly informed".

Next tree scenarios are possible:

1. No error: the police officer calls you by the right name. You react with: "Yes, my name is Jaap, yes".
2. Factual error: the police officer calls you by the wrong first name, so to speak Jaap Verhoeven, while your name is André. You react with: "No, you are not talking to Jaap!".
3. Judgment error: the police officer cannot call you by your first name (= Jaap). React with: "How dear you call me sir". In Dutch: "Hoe durf je mij meneer te noemen!".

When an error is made and the police officer is recovered, there are two possible scenarios:

- Cooperative: "No problem, that also happens to me sometimes".
- Non-cooperative: "Pff, forget about it with your interview".

One of the researchers will tell you, before every new participant, which scenario to play. Try to act as *naturally* as possible and try to treat every participant *equally*.

Dutch:

Stel je de volgende situatie voor en leef je zo goed mogelijk in. Gisteren heb je met een onderzoek meegedaan van een biologe. Je wist niet precies wat het doel van het onderzoek was, maar je moest een korte vragenlijst invullen over eetgewoonten. Een bekende van jou heeft eerder meegedaan aan het onderzoek en heeft je verteld dat de biologe een groot geldbedrag in de onderzoeksruimte bewaart. Het geld is bestemd voor de reiskostenvergoeding van de deelnemers aan het onderzoek. Het geld bevond zich in een geldkistje in een openstaande kast van de ruimte waarin je je onderzoek hebt uitgevoerd. Je zag dit als een buitenkansje. Je hebt de 200 euro onopgemerkt uit het geldkistje weggenomen. Omdat het geld uit een budget voor onderzoek afkomstig is, breng je bovendien niemand persoonlijke schade toe door het bedrag weg te nemen. Wie merkt nou dat je 200 Euro hebt weggenomen op zo'n groot bedrag? Verder heb je je zo normaal mogelijk gedragen. Je wilde natuurlijk niet dat iemand erachter kwam dat jij het geld had weggenomen. Je hebt dus gewoon de vragenlijst ingevuld en het onderzoek afgemaakt. Na het onderzoek heb je aan niemand verteld wat je hebt gedaan.

Inmiddels is het een dag later. Je bent gisteren na het onderzoek van de biologe een drankje gaan drinken met een aantal vrienden. Vanmorgen ben je wakker gebeld door iemand van de politie. Je bent gevraagd om langs te komen omdat ze je een aantal vragen willen stellen. Ze hebben niet gezegd waar het precies over gaat, maar je besluit dat het beter is om wel langs te gaan. Omdat je haast hebt, schiet je snel in de kleren die je gisteren ook droeg. Er zit ook wat modder aan je schoenen, maar je hebt geen tijd om deze van je schoenen af te halen. Je besteed hier ook verder geen aandacht aan. Terwijl je je aankleedt, stel je jezelf gerust met de gedachte dat ze je niets kunnen maken. Je gaat er heen en je meldt je bij de receptie. Hier hoor je dat je aangehouden bent voor diefstal en dat je zo meteen wordt verhoord.

Je mag nu proberen om het voor de politie zo moeilijk mogelijk te maken om te achterhalen wat er gisteren precies is gebeurd. Jouw gedrag en je verhaal moeten tijdens het verhoor echter wel geloofwaardig blijven. Dus je mag de rechercheur om de tuin leiden, maar als je denkt dat er geen andere uitweg meer is moet je de waarheid vertellen. Je bent een niet meewerkende verdachte. Wanneer hij binnenkomt wil je jezelf ook niet voorstellen.

Wanneer hij vraagt waarom niet, kun je reageren met: "dat staat toch op het papier?" of "kun je niet lezen" of "wat ben jij slecht geïnformeerd".

Hierna zijn er drie mogelijke scenario's:

1. Geen fout: de verhoorder noemt je bij de naam ('Jaap'). Reageer hierop met de zin: "Ja, ik ben Jaap, ja".
2. Feitelijke fout: de verhoorder noemt de verkeerde voornaam ('Jaap'), gezien je André heet. Reageer hierop met de zin: "Nee je spreekt niet met Jaap!"
3. Inschattingsfout: de verhoorder mag je niet formeel aanspreken (ofwel door het aanspreken met 'u' of door je 'meneer' te noemen). Reageer hierop met de zin: "Hoe durf jij mij meneer te noemen!" of "Hoe durf je mij U te noemen?".

Wanneer er een fout is gemaakt en de verhoorder zich herstelt, zijn er twee mogelijke scenario's:

1. Meewerkend: "Geen probleem, gebeurt mij ook wel eens".
2. Niet meewerkend: "Pff, je bekijkt het maar met je verhoor".

Voordat het verhoor begint zal een van de onderzoekers aangeven welk scenario aan de beurt is. Probeer zo *natuurlijk* mogelijk te reageren en iedere tegenspeler ongeveer *gelijk* te behandelen.

Appendix 2: Instructions participant

English:

Welcome to the research 'police interview'. First, I want to thank you for coming and that you want to participate in our study. In a moment a police interview will take place, where you will be asked to interview a suspect that is suspected of committing a theft.

Of all suspects that participate in our study some have and some have not actually commit the theft. Like in reality your suspect can be both guilty as not guilty.

In a moment you have 10 minutes to prepare for the police interview. For this you get more information. We would like you to prepare the police interview and conducting it like you do normally. To avoid any effects I would like you to not discuss this study with colleagues or others. It is not intended that you have contact with the suspect on forehand, which is why I ask you to wait in this room until the suspect is in the interview room and you are asked to go there. It is imported for the research that you always stay in your detective role. You cannot talk with the suspect about the study, even not when the interview is over. The suspect will be in the interview room already, so the moment you enter the room the interview starts. You go in alone and do not have to write down the specifics of the interview. The interview is audio recorded, so this can be done later on.

We are really interested in the difference between interviews that are conducted by one police officer and interviews that are conducted in couples. I would like to put this wristband on you. This measures how you are feeling during the interview. It measures how you feel during the interview. Later on, we will compare these feelings with the feelings of participants that conducted the interview in a couple.

Do you have any questions?

I am going to give you the police report with information about the offence and the suspect. You can prepare yourself for the suspect interview with this police report. You have 10 minutes to prepare yourself.

Dutch:

Welkom bij het onderzoek 'Verhoren'. Allereerst wil ik je bedanken dat je naar ons toe bent gekomen en wilt meedoen aan ons onderzoek. Zo meteen zal een verhoor plaatsvinden, waarin je gevraagd wordt om een verdachte te verhoren die wordt verdacht van het plegen van een diefstal.

Van alle verdachten die aan ons onderzoek mee doen hebben sommige wel en andere niet deze diefstal ook daadwerkelijk gepleegd. Net als in werkelijkheid kan uw verdachte dus zowel schuldige als onschuldig zijn.

Zodadelijk heb je 10 minuten om het verhoor voor te bereiden. Daarvoor krijg je uiteraard ook meer informatie. Wij willen je vragen het verhoor zoveel mogelijk voor te bereiden en uit te voeren zoals je gewend bent om te doen. Om andere effecten te vermijden wil ik je vragen om niet met je collega's of anderen te overleggen tot dat het onderzoek is afgelopen. Het is ook niet de bedoeling dat je eerder contact hebt met de verdachte daarom vraag ik je om hier in de kamer te blijven tot dat de verdachte in de kamer is en je gevraagd wordt om naar de kamer te gaan. Het is belangrijk voor het onderzoek dat je altijd in je rol als rechercheur blijft. Je mag dus niet met de verdachte over het onderzoek praten, ook al is het verhoor afgelopen. De verdachte is al in de verhoorkamer, dus op het moment dat je de kamer binnenkomt gaat het verhoor beginnen. Je verhoort alleen en je hoeft het niet direct uit te werken. Het verhoor wordt namelijk opgenomen, zodat dit achteraf kan worden uitgewerkt.

We zijn heel geïnteresseerd in de verschillen tussen alleen verhoren en in koppels. Ik wil je deze polsband graag omdoen. Deze meet hoe je, je voelt tijdens het verhoor. Deze gevoelens kunnen we vervolgens vergelijken met verhoren die uitgevoerd zijn in koppels.

Heb je nog vragen?

Ik ga je nu het proces verbaal geven met de gegevens over het delict en de verdachte. Je kunt je dus aan de hand van dit proces verbaal voorbereiden op het verhoor. Dan heb je 10 minuten om je voor te bereiden.

Appendix 3: Official Police Report and Witness Statement

POLITIE OOST-NEDERLAND
DISTRICT NOORD- EN OOST GELDERLAND
RECHERCHE APELDOORN

Proces-verbaalnummer : PL0500-2017001286-1

P R O C E S - V E R B A A L
aangifte

Feit : Diefstal in/uit school (niet gekwal.)
Plaats delict : Voorsterallee 25, 7203 DN Zutphen
Pleegdatum/tijd : Op maandag 20 maart 2017 te 09:00 uur

Ik, verbalisant, ********* (NOG***),
medewerker van politie Oefenomgeving Oost-Nederland, verklaar het volgende:

Op maandag 20 maart 2017 te 15:00 uur, kwam ik ter plaatse van het misdrijf op de
locatie Voorsterallee 25, 7203 DN Zutphen, bij een persoon die mij opgaf te zijn:

Achternaam : Stoelhorst
Voornamen : Rene
Geboren : 1 juni 1979
Geboorteplaats : Zutphen in Nederland
Geslacht : Man
Nationaliteit : Nederlandse
Adres : Van der Capellenlaan 58 A
Postcode plaats : 7203 BP Zutphen

Hij deed aangifte namens de benadeelde

Achternaam : Universiteit Twente
Adres : Drienerlolaan 5
Postcode plaats : 7522 NB Enschede

"Ik wil aangifte doen van diefstal. Ik doe aangifte namens de Universiteit Twente.
Ik ben door de directie van de universiteit gemachtigd tot het doen van aangifte.

Op maandag 20 maart 2017 was ik werkzaam als bioloog in het gebouw van de
Politieacademie, gevestigd aan de Voorsterallee 25 te Zutphen. Ik doe dit onderzoek
namens de Universiteit Twente (UT).
Gezien het feit ik in Zutphen woon en graag ook proefpersonen uit deze regio wilde
onderzoeken heb ik bij de Politieacademie een ruimte kunnen huren.
Voor het onderzoek heb ik diverse vrijwilligers uitgenodigd om als proefpersoon mee
te werken aan het onderzoek over voedingsgewoonten. Zij ontvangen na afloop een
vergoeding voor de reiskosten.
Deze vergoeding wordt door mij contant uitbetaald aan hen.

Deze betaling gebeurt in genoemde kamer 024 D, gevestigd op de begane grond van

de D vleugel in de Politieacademie.
In de kast in mijn kantoor staat een geldkist.
In deze geldkist zit het geld dat voor reiskostenvergoeding wordt gebruikt.
In totaal zat er die dag omstreeks 10:00 uur een bedrag in van 850 euro.
Ik weet dit omdat ik een lijst bijhoud waarop ik alle uitbetalingen noteer.

Toen ik op maandag 20 maart 2017 omstreeks 14:30 uur een proefpersoon wilde
uitbetalen, zag ik dat in het geldkistje een bankbiljet van 50 euro bovenop lag.
Ik vond dit vreemd, want toen ik bij de vorige uitbetaling, 1 uur hiervoor, de kas had
opgemaakt, lag er een bankbiljet van 100 euro bovenop.
Ik vermoedde dat er iets met het geld was gebeurd en ik heb het bedrag nageteld.
Ik zag dat in de geldkist een bedrag zat van 650 euro, terwijl er volgens de
ingevulde geldstaat een bedrag van 850 euro in moest zitten.
Uit de geldkist is dus een bedrag van 200 euro weggenomen.

Ik kan u vertellen dat tussen genoemde tijdstippen heeft het volgende plaatsgevonden:

Die dag omstreeks 13:00 uur, kwam er een man genaamd Jaap Verhoeven als proefpersoon
in het instituut.
Jaap heeft zich gemeld bij de receptioniste en is hier door mij afgehaald.
Ik ben met hem naar genoemde kamer 024 D gegaan.

Ik heb Jaap op een gegeven moment even alleen gelaten omdat ik een vragenlijst
moest ophalen op de eerste verdieping van het gebouw.
Ik denk dat hij ongeveer 4 minuten alleen in de ruimte is geweest.
Ik weet nog dat ik de deur van het kantoor open heb laten staan.
Hierna heeft hij een vragenlijst ingevuld en is hij vertrokken.
Behalve deze man is er niemand tussen deze tijdstippen alleen in mijn kantoorruimte
geweest. Als ik er niet ben is het kantoor op slot.

Het geld behoort geheel toe aan de Universiteit Twente. Er is aan niemand toestemming
gegeven het geld daar weg te nemen en zich toe te eigenen. De Universiteit Twente is
tegen dergelijke schade niet verzekerd. Het is wenselijk dat de schade verhaald wordt
op de verdachte. Ik wens op de hoogte te worden gehouden van het verloop van het
onderzoek.

Aan niemand werd het recht of de toestemming gegeven tot het plegen van het feit."

Nadat de aangever de verklaring had doorgelezen, volhardde hij daarbij, waarna wij
ondertekenden.

De aangever, De verbalisant,

R. Stoelhorst *********
(NOG*****)

Slachtofferzorg
Betreft Universiteit Twente

U wilt de schade verhalen op de verdachte.
U wilt op de hoogte gehouden worden van de voortgang van het onderzoek.

Aanvullende gegevens verstrekt door verbalisant
Er is informatie met betrekking tot verdere procedure en kans op opheldering
verstrekt.

Waarvan door mij is opgemaakt dit proces-verbaal, dat ik sloot en ondertekende te
Zutphen op 20 maart 2017.

********* NOG*****) op ambtseed

POLITIE OOST-NEDERLAND
DISTRICT NOORD- EN OOST GELDERLAND
RECHERCHE APELDOORN

Proces-verbaalnummer : PL0500-2017001286-2

P R O C E S - V E R B A A L
van verhoor getuige

Documentcode	:
Naam onderzoek	:
Betreft	: Verhoor van getuige C. Veldkamp
Parketnummer	:
RC-Nummer	:

Ik, verbalisant, ********* (NOG*****),
medewerker van politie Oefenomgeving Oost-Nederland, verklaar het volgende:

Op maandag 20 maart 2017, hoorde ik een vrouw die mij opgaf te zijn:

Achternaam	: Veldkamp
Voornamen	: Caroline
Geboren	: 6 september 1973
Geboorteplaats	: Utrecht in Nederland
Geslacht	: Vrouw
Nationaliteit	: Nederlandse
Adres	: Aletta Jacobshoeve 12
Postcode plaats	: 7207 GC Zutphen

Verklaring getuige
De getuige verklaarde:

"Ik ben werkzaam als receptioniste van de Politieacademie gevestigd aan de Voortserallee 25 in Zupthen.

Op maandag 20 maart 2017 was ik ook daar aan het werk en had ik werkzaamheden achter
de balie waar mensen die binnenkomen zich moeten melden.

Omstreeks 13:00 uur die dag, kwam een man zich melden bij de receptie.
Hij legitimeerde zich met zijn paspoort en vertelde dat hij zich kwam melden als
proefpersoon.
Ik heb zijn gegevens uit zijn paspoort genoteerd.

Toen ik zijn gegevens genoteerd had, heb ik de heer Stoelhorst gebeld met de
mededeling dat er een proefpersoon bij mij bij de receptie stond.
Ik weet dat de heer Stoelhorst vandaag bij ons een ruimte in de D-vleugel heeft
gehuurd. Ik heb gezien dat deze Jaap met de heer Stoelhorst is meegelopen.

Op een gegeven moment, het zal ongeveer een kwartiertje daarna zijn, kwam mijn
collega me aflossen en verliet ik de receptie om interne post op te halen.
Toen ik langs kamer D.024 liep, zag ik dat de deur van de kamer open stond.
Zodoende kon ik in de ruimte naar binnen kijken.
Ik zag dat een man, die ik herkende als Jaap die zich zojuist daarvoor bij mij aan de receptie had gemeld, alleen in de kamer stond.
Ik zag dat hij voor een kast stond waarvan de deuren geopend waren.
Ik ben doorgelopen met mijn postronde en daarna heb ik hem niet meer gezien."

De getuige,

C. Veldkamp

Nadat de getuige haar verklaring had doorgelezen verklaarde zij daarin te volharden
en ondertekende deze.

Ik beëindigde het verhoor op 20 maart 2017 te 16:56 uur.

Waarvan door mij is opgemaakt dit proces-verbaal, dat ik sloot en ondertekende te
Zutphen op 20 maart 2017.

*********(NOG*****) op ambtseed