# The Effect of Multiple Communication Errors on the Quantity and Quality of the Information Given by a Suspect During a Suspect Interview

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### **Abstract**

This study delves into the effect of multiple communication errors made by police officers during suspect interviews on the actual information and the quality of this information a suspect gives during the interview. As the literature shows that suspect interviews are a crucial part of the investigation and communication errors are able to influence this process greatly by changing the outcome, interaction and relationship between the individuals. In this study, the students were given a scenario and POV video of shoplifting crime, of a tshirt and were questioned by a 'police officer' (researcher) about the crime face-to-face (N = 33). The participants were unaware, and randomly assigned to a condition, either zero, one or five errors made by the interviewer. The findings of the study show a trend that the errors affect the actual information and the quality of information, however it is not significant. The trend that is shown is that when the number of errors increased, the amount of information (actual) and the truths (quality of information) decreased. The study was one of the first to research and present the effect of multiple communication errors and the effect on the given information in suspect interviews. Furthermore, the study can help future researchers as it gives an idea on how to improve and execute a similar study, thus this study can be used as a foundation for future research.

*Keywords:* Communication errors, suspect interview, actual information, quality of information

### Introduction

Effective communication is key for any given situation: during work hours to adequately complete tasks, amid sporting events concerning winning matches as a team or building friendships and relationships. Within high pressure situations, high responsibility, high stakes and consequences are at play (Renden et al., 2017), and when communication is done well in high pressure situations, 'it can build trust and agreement, enabling beneficial solutions and constructive behaviour even in the face of fear and anxiety' (Covello, 2021). A tense situation which will be the focus of this thesis, are suspect interviews, which are adverse for both the suspect and interviewer / investigator. Effective communication within suspect interviews is needed and used to find the suspect; Whether the investigators would focus on the reduction of communications, potentially in the future investigations can be wrapped up at a quicker pace, making the number of abandoned investigations decrease conceivably. Since in the Netherlands a criminal police investigation can take a maximum of 24 months (van Hermens Advocatuur, 2023). However, in the Netherlands, in 2022, 62,293 police investigations have not been completed, and each year this number increases (NOS, 2022). This number is relatively high. When an authority, like a police officer, makes an error, perceived humanness could increase for the suspect, leading to a gain of provided information (Madhavan & Wiegmann, 2007).

It has been shown that of selected suspect interviews in the UK and USA, 92% consists of one communication error and 74% contains multiple errors (Filipović, 2022). Suspect interviews are a crucial component of police investigations, to obtain accurate, reliable information and / or a (accurate and reliable) confession to discover the truth about the concern of the investigation, plus test the given information against evidence. It is critical as the interviews help to guide and close crime investigations (Kassin et al., 2010); however, this process can be potentially disturbed when communication errors are made. On the contrary, errors could lead to a positive outcome, Oostinga et al., (2018a) mentions a management approach. Seeing an error as a learning opportunity for both the sender as receiver, evaluating one's own and other errors and thereby improving future interviews for both the suspect as the interviewer. For the receiver it is possible to reflect on how to handle the errors mentally and verbally (Vignovic & Thompson, 2010). By improving forthcoming interviews, could lead to more information provided by the suspect when less/no errors are made by police officers.

Nevertheless, there is a gap in research of multiple errors made by the interviewer in suspect interviews, thus this study will explore the effect of multiple errors on the actual information and the quality of information given by the suspect. As there is a significant gap of research on the quality and actual information given by the suspects when errors are made too. It is important to research this topic as it can help police investigators. Further, suspect interviews will be presented, communication errors are introduced, the variables actual information and the quality of information are explained.

# **Suspect Interviews**

The police use a variety of techniques in order to stop the suspect from keeping silent, access necessary information or to let the suspect get stuck in their own statements (Politie-Verhoor, 2022). The techniques can be split into two categories, one where pressure is applied to the suspect in order to get a confession, which is known as an interrogation. The other category is when a rapport is built during an interview and empathy used to get information from the suspect, acknowledged as the suspect interview (Walsh & Marques, 2022). Rapport is an important aspect, as it is a harmonious relationship (Spink, 1987). Rapport is built of three aspects, first is mutual attentiveness, which refers to both the suspect and investigator being both aware and focused on the interaction, mutual attentiveness should be high for both parties during the whole interaction (Abbe & Brandon, 2014). Positivity means that there should be an upbeat atmosphere, however, the positivity can decrease throughout the interview (Miller, 2019). In The Netherlands, 382.600 suspects were heard by the police in the form of a suspect interview in 2010 (Leertouwer & Kalidien, 2011). As mentioned above, the suspect interview is used to obtain information from the suspect within a legal process about a committed crime. But for suspects, an opportunity to describe and talk about (if wanted) their point of view of the acquisitions (May et al., 2021). The Dutch police have three sections within interview (User, 2023), starting with the first contact, when the police officers and suspect briefly familiarise with each other. Secondly, the police ask questions about the person, their personality, private and social life, in order to become enlightened about the suspect as a person. The last section is case focussed, where questions about the crime are asked and the police try to gather information about what has happened. By using the three sections, the officers are able to get an overview of the suspect and all their facets (St-Yves & Meissner, 2014). As a conclusion, within this study a suspect interview with a rapport-based focus, is used to obtain any information from the suspect, while in

some interview's communication errors are made by the interviewer.

### **Communication Errors**

Since a suspect interview is an interaction between at least two individuals (Soukara et al., 2018). With interactions, communication errors can arise when the sender or receiver misunderstands or says inaccurate or false information (Yang et al., 2023), these errors by police officers could be stating the wrong name or naming incorrect motive to commit a crime (Oostinga, et al., 2020). Communication errors can be divided into three groups, judgement, factual and contextual (Oostinga et al., 2018b). The first type, judgement error, relating to etiquette norms which are neglected. For instance, the police naming a wrong motive of the crime or moving too quickly during an interview while the suspect is emotionally suffering and not addressing their struggle. The second error type is when factual errors are made. This is when the police state facts wrongly, for instance, naming the wrong date at which the crime is committed, address the suspect with the wrong name or other relevant details. The last error category is the contextual errors. Potentially being that the police officer is using wrong terminology, as jargon, which is challenging to understand for the suspect (Oostinga et al., 2018a). For this research the judgment and factual errors are used, contextual errors are left out due to the generalisability, as contextual errors are focussed on a specific crime or context and not the interaction between suspect and officer.

Communication errors have a possibility to shift the suspect's perception of the police officer, affecting the rapport negatively leading to the suspect not wanting to talk and using their right to remain silent (Vallano et al., 2015).

### **Actual Information**

The actual information given by the suspect stands for how many statements the suspect gives during the suspect interview (Haaland et al., 2023). Multiple studies around the world show that around 16%, in The Netherlands 17% (Wartna et al., 1999), of the suspects plan to deny or use their right to remain silent, meaning no actual information is given. Actual information, when told by the suspect will help the police to get a clear image on what had happened before, during and after the crime. The Dutch judicial system tries to encourage suspects to give actual information, instead of lying and giving false information to the police by both lowering sentences when the suspect cooperates. Plus, vise versa, intensifying the punishment when the suspect had lied and obstructed the

investigation (de Bruijn, 2020), this all in favour of receiving more actual and accurate information. Looking at the communication errors and information provision, the study by Canevello & Crocker (2010) exhibits the suspects to become more judgemental towards the officer when more errors are made. Causing the suspects to become less responsive to the interviewer's questions, meaning less actual information is given during the suspect interview. According to Canevello and Crocker the reason for the decrease in information provision is because the communication errors effect the relationship between the officer and suspect negatively.

**Hypothesis 1:** The actual information given by the suspect, during a suspect interview, decreases when five errors are made, as to one or no errors made.

# **Quality of Information**

Actual information provided as mentioned above, does not mean the information is good and correct, this is where the quality of information is needed. Information is knowledge, which can be either learned or communicated. During this study, the focus is laid on the information which is communicated by the suspect. Quality of information is divided in four dimensions, according to Wang and Strong (1996). The dimensions being intrinsic which looks into the accuracy and believability, the contextual dimension, seeking the relevance of the information and its completeness. The third dimension, representational, is about the coherence and format of the information, and at last, accessibility, looking at the accessibility of the information.

For this research the focus is on the contextual dimension particularly completeness, plus, the dimension of intrinsic inspecting the accuracy of the information to see how much information is given by the interviewee (suspect). Completeness of information stands for how much essential information is given (Gates, 2023) during the interview by the suspect. Meaning all the facts and details which are fundamental to understand the situation of the crime. It has been shown that only 33% of the suspects planned to confess and give complete information on the committed crime, however it does depend on the type of crime as non-violent crimes are confessed much more often to violent crimes, 56% to 32% (Deslauriers-Varin, St-Yves, 2006). When complete information is given by the suspect, the crime can be solved by the police, and the criminal can be convicted.

Faller and Henry (2000) have analysed 323 suspect interviews and court files, withdrawn interviews with errors, this analysis showed that 65% of the suspects confessed. Showing

interviews with zero errors have a 65% confess rate, giving quality information, in case of having done the crime. However, on average 12% of confessions are false. (Volbert et la., 2019).

Furthermore, there is a big gap regarding communication errors and quality of information in research. However, it can be shown that quality and quantity (actual information) are related, as Becker and Lewis (1973), concluded that these are closely related. Regarding information prevision, the two variables are positively related, as quantity increases, quality would too (Branco et al., 2016). Plus looking at the knowledge from Canevello and Cocker, as above mentioned in the actual information, the same is expected for the effect of errors. Since when more errors are made by the police officer, the less quality of information is given. Since, a decrease in actual information (H1) would relatively lead to a decrease in the quality of information.

**Hypothesis 2:** In a suspect interview, five communication errors have a greater negative impact on the quality of given information compared to one and none errors.

## Methods

# **Design**

To investigate the hypotheses, an experiment was done, using a design with three comparison groups; one group of participants who have a suspect interview with zero errors, a group who receives one error within the interview and the last group who have five errors in the suspect interview. All participants engaged in a suspect interview as the suspect, the interviews were transcribed and analysed for the actual information given and the quality of the information.

# **Participants**

The participants in this study were university students who study at the University of Twente (UT). Students are retrieved via the SONA system, which is used by the UT to reward and encourage students to participate in studies. The inclusion criteria for participants were: (a) are able to write, speak and understand English, and (b) a minimum age of 18 years old to provide informed consent. Participants who met the inclusion criteria were recruited through SONA, flyers which were put throughout the university, and people

within our own network. Participation was voluntary and participants were allowed to withdraw from the study as they wish.

In total  $36^1$  people participated, with an age range of 19 to 28, mean age of 22.7 (SD = 2.3), in total 18 males and 18 females. The category of 'zero error' had 13 participants, a mean age of 21.8 (SD = 1.8), of which five males and eight females. Regarding the category 'one error', 12 participants with a mean age of 23.5 (SD = 2.8), of which eight males, four females. The "five errors" group comprised 11 participants (M = 22.8, SD = 1.9), with five males and six females. In the study, there were 18 German people (50%), eight Dutch (22.2%) and other (27.8%) (Others were Spanish, n = 2; Kazakh, n = 1; Ghanaian, n = 1; Egyptian, n = 1; Moldavian, n = 1; Italian, n = 1; Russian/French, n = 1; Chinese, n = 1; Iranian, n = 1).

## **Materials**

A vignette was used to recruit people from the university to participate, the flyer showed crucial information and email addresses of the researchers to get into contact and possibly make an appointment. These flyers were distributed around the campus. Before the interview, a video was shown together with the scenario, therefore a (phone)camera was needed, as well as a laptop with internet in order to show the video and stable WIFI connection. The video the participants watched is shot by the researchers and shows a point of view (POV) of the suspect shoplifting from a clothing shop in the city centre of Enschede. In the video it can be seen a body of someone, whose wearing gloves, walking through the shop, looking around and seeing a few t-shirts and picking one shirt and putting the shirt in a bag and afterwards going to the shop exit. The reason for choosing the person in the video to wear gloves, is to have a bigger chance of the participants being able to see themselves in the position. E.g. the participant having a different skin colour then the person in the video, which could lead to distance between the participant and their role (Chance & Goldstein, 2014). The video was 45 seconds long (0:45 min). The reason why a video was chosen to give information to the participants, was so the participant was able to visuals themselves better into the body and mind of the thief. Showing a video next to the scenario was done to give the participant information, plus a better understanding of the

<sup>&</sup>lt;sup>1</sup> Three participants were later removed for further analysis, but kept in the participant information, as it is unknown which recording (participant) went missing

surrounding and handling of the thief. The written scenario which was given to the participants (Appendix A) which gave a broader information on why and how the crime was committed. This to give the participants more background information. Furthermore, an audio recording device was needed (phone) to record the audio of the interview. At last, for analyses regarding the manipulation check a Kruskal-Wallis test and a Dunn post hoc test was needed in RStudio.

# Measure

# Actual Information

The interviews were transcribed, and the answers from the suspects were analysed using ATLAS.ti. Actual information was measured by counting the statements made by the suspect (Clemens & Grolig, 2019). Statements are seen as information, being ideas, opinions or facts, given through (verbal) sentences (Hartwig et al., 2006). Therefore, questions and stutters ('uhm', 'hmm', etc) were not recorded as statements. An example of statement regarding actual information is: 'But I did not steal the shirt' or 'I took the bus afterwards', but also 'I am not sure, can you tell me again'. Every sentence, whether related, or not related to the crime, has been seen as a statement, excluding the exceptions mentioned above. A higher score in actual information indicates more statements made by the suspect.

# Quality of information

Using the video, and script from the scenario a list of observable facts was made. This fact sheet was used against the statements identified earlier for the actual information. To see how many of the statements made were correct according to the set scenario (Duke et al., 2018). Causing to see how many truths were reported by the suspect. Quality of information is therefore measured by counting how many of the statements made by the suspects are true. An example for the quality of information, 'I got a letter about a shoplifting crime' or 'I used my bicycle, that's how I get around', meaning statements which are true according to the script and scenario. Like the actual information, the higher the score on the quality of information, the more truths were told by the suspect.

# **Procedure**

For each participant, two researchers were involved for data recording. The first researcher welcomed the participant and gave a laptop. Each participant was asked to read the provided information sheet with information about the study, afterwards informed consent was given via the laptop. However, the information sheet stated that the research was about interview techniques instead of communication errors, this to not give the participant crucial information beforehand, as the participant might focus on the errors, possibly taking away an authentic response from the participant. This study, and the deception was approved by the Ethics Committee BMS/Domains Humanities & Social Sciences by the University of Twente (approval code: 240514). After this, the scenario was read as many times as needed, to get a good understanding of the story the participant should see themselves in. The scenario was about a student who has lost their jobs, causing money issues for the student as not much money can be spent otherwise the rent cannot be paid. However, the student has a date planned and wants to wear a nice shirt to the date. The student is too ashamed to ask friends for some money as this is already done, but still decides to go to a shop to check out some clothes. A nice shirt is found but the students have too little money and notice that the cashiers are not paying attention and no cameras can be seen so the students decide to put the shirt into their bag and leave the store without paying. The POV video of the shoplifting crime was reviewed afterwards, again the participants could replay the video as many times they wish, this to give the participant a better overview and more insight of the scenario. Further, it gave the participant a better connection with the character they had to play. Afterwards, the first researcher left the room, and the second researcher entered the room, asked for permission to audio record, and then conducts the suspect interview, according to the beforehand made script (Appendix B), in order to keep every interview standardised. All researchers stayed true to the script, even when the participant was asking questions back. Questions used in the scripts were 'Did you have any interaction with employees there?' and 'Did you notice anything strange that day?', Mostly open-ended questions, this in order to get as much information possible form the participant. For the zero error script, there were no manipulations, however, the one error script contained a judgement error, 'So, you stole it because you were bored?', as this is not the real reason the student stole the t-shirt, as the real reason was not having enough money, the police officers made a judgement error using this question. The five error script had three factual errors, wrong store was mentioned, wrong clothing item and the incorrect living situation was named by the police officer. Besides, two judgement errors were included, the above mentioned judgement

error plus 'Why did you not ask others for money? Were you too lazy to do so?', however, the student was not lazy but embarrassed to do so causing a judgement error. Causing manipulations regarding each script, having in total six errors spread over two scripts, with three factual errors and three judgement errors in total. The errors were spread out through the interview, so the participant would not be overwhelmed, especially in the five error interview. Plus, no errors were placed at the end of the interview as the participant would not have been able to react and information provision was not affected as the interview already had ended. Furthermore, when the interview was finished the second researcher stopped the audio recording and left the room. The first researcher entered the room and gave instructions to the participant on filling out remaining questions regarding demographics, plus how many errors were noticed, this so the manipulation check was able to be conducted. At last, the debrief was done, revealing the real purpose of the study and again asking if the participant still wants their data to be used in the study.

## Results

# **Descriptive Statistics and Correlation**

The mean of actual information given is 24.09 (SD = 5.60), regarding the quality the mean is 11.21 (SD = 4.44). As predicted, there is a positive correlation between actual and quality of information, as the correlation was found at .67, meaning p < .001. The correlation is moderate positive, as actual information increases, the quality of information moderate increases too.

# Manipulation Check<sup>2</sup>

Before analysing the hypothesis, a manipulation check was conducted. A Kruskal-Wallis rank sum test was done, the independent variable being the error condition and the dependent variable how many errors were noticed by the participant. The reason for doing a Kruskal-Wallis rank sum test was to determine a potential statistically significant difference between the three groups (o error, 1 error and 5 errors group). The Kruskal-Wallis test indicated that there is a significant difference in the noticed errors across the

<sup>&</sup>lt;sup>2</sup> Three participants were removed for later analysis, but kept in the manipulation check, as it is unknown which recording (participant) went missing

three groups,  $X^2$  (35, N = 36) = 14.9, p < .001. The median of the dependent variable was 1 for the zero error condition, 1 for the one error condition and 3 for the five error condition.

Regarding the quartiles, Table 1 shows the quartiles per condition. Concerning the interquartile range (IQR), for zero error the IQR = 2. Meaning that the middle (50%) of the dataset, and the data is compared to the one and five error condition more spread out, as for both the one and five error conditions the IQR = 1. ( $M_{\text{zero-error}} = 1.17$ ,  $M_{\text{one-error}} = 0.75$ ,  $M_{\text{five-error}} = 3.1$ ). As can be seen in Table 2, participants indicated how many errors were noticed. Generally, no participants indicated five errors noticed, however, most people indicated that zero errors were noticed but only for the zero error and one error condition. Furthermore, when an error was observed, the participants reported to notice two errors, disregarding the condition.

Additionally, a Dunn post hoc test was done, with a Bonferroni correction, to test for the differences between no error, one error and five errors regarding the manipulation check. Between zero error and one error, there is no significance, p = .575. However, zero error and five errors is found to be significant as p = .002 plus the difference between one error and five errors is significant too, p < .001.

**Table 1**Quartile Ranges of Noticed Errors per Error Condition

Error condition	Median	Lower quartile	Upper quartile
0 error	1	0	2
1 error	1	0	1
5 errors	3	2	3

Frequencies of Number of Errors Noticed per Condition

Table 2

	Error condition				
	0 error (N = 13)	1 error (N = 12)	5 errors ( <i>N</i> = 11)		
Errors noticed	N	N	N		
	6	5	0		
	2	5	1		
	4	2	3		
	0	0	7		
	1	0	0		
	0	0	0		

# **Error Effects**

To refresh, the first hypothesis was that the actual information given by the suspect, during a suspect interview, decreases when five errors are made, as to one or no errors made. Secondly, the second hypothesis states that in a suspect interview, five

communication errors have a greater negative impact on the quality of given information compared to one and none errors. Table 3 shows the perception of the participants organised by error conditions regarding the number of errors noticed. The data was analysed to understand how communications errors made during a suspect interview, effect the actual and quality of information given during a suspect interview.

An ANOVA test was done since the data was normally distributed and a similar variance, as a Leven's test was conducted, p = .709 for actual information and p = .344 for quality of information. For the test, the independent variable being the number of errors (zero, one and five) and the dependent variable the data on actual information and quality of information. As there can be a pattern seen regarding the mean decreasing when the errors increase for both variables, there is a non-significant effect of the number of errors on actual information (H1), F(2, 32) = 1, p = 0.372 and the quality of information (H2), F(2, 32) = 2.2, p = 0.131. Indicating communication errors in suspect interviews do not affect actual and the quality of information, meaning both hypotheses should be rejected.

Table 3

Mean Score per Condition and Standard Deviation for Each Study Variable

	Error condition					
	0 error ( <i>N</i> = 12)		1 error $(N=12)$		5 errors $(N=9)$	
Study variable	M	SD	M	SD	M	SD
Actual information	25.4	4.5	24.3	6.2	22	5.4
Quality of information	13	3.2	11.1	5.1	9	3.7

# Discussion

This research was done to research the effect of communication errors during suspect interviews on the actual information the suspect gives (number of statements) and the quality of this information (how many truths are told). The manipulation check shows that the noticed errors between zero and one error were not significant, however, the

difference between zero and five, plus one and five can be called significant. The findings exhibits that there is an expected decrease in actual information and its quality as more errors are made, however it is not significant to make claims. This can be due to the lack of participants and / or problems regarding the errors, which will be later discussed. Consequently, the hypotheses are rejected. Even though, there is a pattern in the right direction, it is not significant, argumentation for this can be sample size as it is relatively small, which can be the main reason for not finding the effects.

This trend found in the results were expected, as mentioned in the introduction Canevello and Crocker (2010), showing more communication errors led to fewer information from suspect. Furthermore, a claim made in the introduction by Branco et al., (2016), being that quality of information decreases as the quantity does too. Our study shows identical results, seeing the means, correlation and p value in the 'Descriptive Statistics and Correlation' section. Moreover, seeing the study by Korte (2003), by reason of the instructions given to the participants, to not (immediately) admit to committing the crime, explains that the participants, in our study, could show cognitive bias. Since the scenario was not respected anymore, and sometimes completely new scenarios were made by the participant.

Furthermore, after and during the debrief, the participants spoke about the errors and how some did not recognise them. To start off, participants stated that 'errors' are an unknown concept, there are different definitions and perceptions people use and have about errors (Senders & Moray, 2020). Potentially causing struggle for the participants to recognise certain errors. For example, in the one error script, there was a judgement error ("So, you stole it because you were bored"), however, multiple participants mentioned that their thought was that police can make assumptions and that it is a technique used to make suspects confess, so therefore, not seen as an error. On the other hand, people recognised non-errors as errors. As an example, a question in our script was "Did you have any interaction with the employees there?", some participants verbally mentioned this as an error. Multiple participants stated that this is an error as it is information the police should not have, they have perceived this as a statement not a question. Assuming deliberate manipulation rather than genuine mistakes can be due to lack of trust in the police, especially among minorities (Kochel, & Skogan, 2021).

However other research could explain why the hypotheses are not accepted, it was said by Miller (2019) that suspect interviews should have an upbeat atmosphere at the start, nevertheless, due to our script, the interviews started off serious, initiating the needed aspects for rapport to be absent (Horsfall et al., 2021). Furthermore, all interviews were standardised by strictly staying true to the script, causing a downside, of taking away the nature of an interview, as the researchers (interviewers) were not able to respond to questions asked or misunderstandings by the suspect (interviewee). Koudenburg et al., (2011), elucidated that even subtle disruption of the conversation flow, such as not answering a question, can negatively influence the emotions of the interviewee and affect how the interview is perceived. It has been stated that police interviews should carefully listen to suspect's responses and act upon them, this again to create a natural flow and gain as much information needed from the suspect (Van Koppen & Mackor 2020). The above mentioned are potential justification on why the hypotheses are rejected.

## **Limitations and Future Research**

Additionally, there are some constraints regarding the study. For instance, both a strength and limitation are that this study contained four different researchers, two male and two female, who have different backgrounds, personalities and appearances, as well as style of talking, body language and clothing style which potentially influence the interaction. Bell et al., (2016), expressed that the gender of the interviewer can influence the responses of the interviewee. It is also found that there is a significant effect regarding gender (Kane & Macaulay, 1993). This limitation has perhaps influenced the dependent variable since when both the interviewer and interviewee are the same gender, the interviewee's response tends to be lengthier. Differently, when they are opposite genders, the interviewee is concise, and shows avoidance behaviour (Alhojailan, 2020). On the other hand, using different genders this study is more likely to generalise, by maximising variance, becoming this aspect a strength instead of limitations. Nonetheless, another reason to continue using different interviewers is because all researchers want to assist the research and learn about suspect interviewing within all different error conditions, by using a script we hoped to account for the standardisation. This limitation is plausible to be a struggle for different studies, as it can be time consuming to let one researcher do all the interviews themselves. Hence, further research might want to invest more time and capacity to increase the standardisation.

Regarding the errors and script, in the post-hoc test done in the difference between the zero error and one error were not significant. This is problematic because the participants have not noticed the difference between the two conditions, this shows as someone in the one error script even noticed four errors. Meaning the participant possibly might behave differently than they would have only noticed the one error. At last, in the five error script, the store name is changed, from Zizay to Appel en Ei, despite Appel en Ei not being a very known store, causing participants not noticing the error. Some stated afterwards that if a bigger chain store was mentioned, the error would have been noticed. A solution for this might be to study one type of error per study, as mentioned above the struggle with the judgement error. Another solution would be to have a test before doing the study, testing the scripts on people, to see further improvements, again to invest more time into preparation of the study and the study itself. Regarding future research, the above mentioned limitations are points to wonder and recognise how perception of errors differentiate largely and to keep this in mind when replicating the study.

Third and last consideration, is the number of participants who participated in the study. For the manipulation check, there are 36 participants, however, due to three recordings getting lost and crashing, for the descriptive analysis 33 participants were used. The sample size was too small, as we had less than the aimed 50 per condition. Brysbaert (2019) states that at least 50 participants per condition are needed to be able to analyse. Other researchers name different amounts of participants needed. As an insufficient (small) sample size is not able to demonstrate the desired significant difference (Martinez-Mesa et al., 2014). If more people would have participated in our study, the trend could possibly have increased, making the results more reliable and potential a significance p value. Even though flyers were made, various messages were sent, use of SONA and recruiting people one-on-one, not enough people were enlisted and interviewed. This is a general limitation, to a greater extent researchers struggle with a shortage of participants in scientific research (Rodriguez-Torres et al., 2021). Regarding future research, it is advised to recruit enough participants, in order to get significant and reliable results. Improving upcoming studies about communication errors in suspect interviews.

### Conclusion

This study investigated the impact of communication errors (zero, one and five) in suspect interviews and the effect on the actual information given and the quality of this information given by the suspect. The importance of the study lies in the educational and

academic perspective, being a foundation for future research as well as future suspect interviews, as this study, this by supplying ideas on how to perform and conduct similar type of studies. As well as by finding a pattern, which is the slight decrease in the dependent variables. Overall, further studies can help advance techniques during suspect interviews for police officers. As there is not much research on this topic, hopefully it interests others to help law enforcement officers to create a better understanding of the consequences of errors made in suspect interviews.

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### Appendix A

# Scenario given to each participant

### Scenario

You are a student and live in a student house on campus. To be able to pay your rent, food, clothes and go out you found work in a restaurant in Enschede. However, the restaurant had to close down because of financial issues after the COVID pandemic so one month ago you were fired. This month you already had to pay your rent and had to buy groceries and other things for the household. Unfortunately, you now are very low on your budget and you cannot spend a lot of money anymore or you will not be able to pay your rent this month

You met someone at a house party which was organised by a few friends. You liked them a lot and you got along with them very well that evening. You asked this person out for a date. Since you've been single for a while you want this to work out. Therefore, you decide that you need new clothes for this date to give a good impression. However, you do not have the money to buy something nice. You have already borrowed some money from your friends at the last parties and you do not want to ask them because you are too ashamed of your situation. Nonetheless, you still go to the Zizay in Enschede first thing in the morning to see if they maybe have something which you could buy with the money you have left.

As you walk through the store you notice that the cashier is not focusing on you. Moreover, almost nobody is in the store since you went there shortly after the store had opened. You see a nice shirt that you like and want to wear for this date. Unfortunately, the price is more than you can afford but you remember that the cashier was not attentive to what was happening in the store. You take another look and see that they are still not giving attention to you. You also do not see any cameras which could film you and there seems to be no tag on the shirt. Quickly, you take the shirt and put it in your bag. Then you leave the store and cycle back to campus.

However, a few days later you get a letter from the local police station. They want to interview you about a shoplifting crime in which you are the suspect. You decide to go there, but you want to convince the police interviewer that you did not do this crime.

However, you also decide that you might have to admit what you have done when there is no sense in denying it anymore.

## Appendix B

# Scripts used during the interview

# Zero errors script:

S:....

Interviewer: Hello, what is your name? Interviewer. Welcome \* (correct) name, do you know why you're here? S: ... I: Yes, yes. We are just here to clarify a few details. We were informed by the store Zizay of your presence during the last days. Can you tell me what you were doing in the store? S: ... I: Did you have any interaction with the employees there? I: Did you hold any conversations with other customers in the shop? I: On that day, we received intel about a stolen shirt. We got informed by the shop about your presence on the day a shirt got stolen, could you tell/explain what happened? I: So, you stole it because you did not have enough money. S:... I: Nonetheless, why did you not ask others for money? Were you too ashamed to do so? I: Did you notice anything strange that day? S: ... I: Were you aware of the cameras around the store? I: We have looked into your living situation. Seems like you live on campus? I: Okay, I have written it down. [pretends to write down things] S:.... I: How did you get home?

I: That would be enough for now. We'll be in touch regarding any further steps in the investigation. If you need to talk to a counsellor, the front desk can arrange a meeting for you. Thank you for your time.

# One error script:

Interviewer: Hello, what is your name? Interviewer. Welcome \*(correct) name, do you know why you're here? I: Yes, yes. We are just here to clarify a few details. We were informed by the store Zizay of your presence during the last days. Can you tell me what you were doing in the store? S: ... I: Did you have any interaction with the employees there? I: Did you hold any conversations with other customers in the shop? S:... I: On that day, we received intel about a stolen shirt. We got informed by the shop about your presence on the day the shirt got stolen, could you tell/explain what happened? S: ... I: Did you notice anything strange that day? S:... I: So, you stole it because you were bored. (Judgement) I: Nonetheless, why did you not ask others for money? Were you too ashamed to do so? I: Were you aware of the cameras around the store? I: We have looked into your living situation. Seems like you live on campus? S: ... I: Ok, I have written it down. [pretends to write down things] S:... I: How did you get home? S:....

I: That would be enough for now. We'll be in touch regarding any further steps in the investigation. If you need to talk to a counsellor, the front desk can arrange a meeting for you. Thank you for your time.

## **Five error script:**

Interviewer: Hello, what is your name? Interviewer. Welcome \*(correct name), do you know why you're here? I: Yes. We are just here to clarify a few details. We were informed by the Appel en Ei of your presence during the last days. Can you tell me what you were doing? (factual - wrong store) S: ... I: Did you have any interaction with the employees there? I: Did you hold any conversations with other customers in the shop? S: ... I: On that day, we received intel about stolen jeans. We got informed by the shop about your presence on the day the jeans got stolen, could you tell/explain what happened? (factual wrong item) S: ... I: Did you notice anything strange that day? S: ... I: So you stole it because you were bored. (Judgement) I: Nonetheless, why did you not ask others for money? Were you too lazy to do so? (Judgement) S: ... I: Were you aware of the cameras around the store? I: We have looked into your living situation. Seems like you live with your parents? (factual living situation) S: ... I: Oh, I am sorry that I got that wrong S: ... I: How did you get home? S: ... I: That would be enough for now, thank you for your time \*right name. We'll be in touch

regarding any further steps in the investigation. If you need to talk to a counsellor, the front

desk can arrange a meeting for you. Thank you for your time.