

**Erring in Suspect Interviews: The Effects of Multiple Errors on
the Relationship Formation and Perceived Humaneness
(Interviewee's Perspective)**

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Abstract

This study explores the effect of multiple communication errors made by the law enforcement officer on established rapport, the suspect's trust in the interviewer, perceived humaneness, and the willingness to provide information in suspect interviews. Students were asked to imagine having committed exam fraud and were presented with a video in which an examination board member questioned them about the incident ($N = 92$). Unknown to the participants, they were randomly assigned to one out of three conditions in which the interviewer made no, one, or five errors. The findings show that one error does not affect the variables of interest. However, five errors have a negative impact on rapport, trust, and perceived humaneness. Further, no relationship was found between the number of errors and willingness to provide information. This study was the first to show the effect of multiple communication errors and the relevance of perceived humaneness in suspect interviews. Furthermore, this study confounds the strategic use of multiple errors to gain more information, as it reveals merely the adverse effects of multiple errors and no increase in willingness to provide information. Nevertheless, one error may still be effective. Future research may replicate these findings in face-to-face interactions with actual interviews.

Keywords: Communication errors, suspect interviews, relationship formation, perceived humaneness, willingness to provide information

Introduction

Erring seems unavoidable, while their effects on relationships can be critical. For instance, in a brand crisis, customers avert from firms due to the consequent negative publicity. Besides, communication errors at the workplace may disconnect employers and employees and harm the working environment (Dawar & Pillutla, 2000; Dutta & Pullig, 2011; Rosenberg, 2015). Notably, in settings where stakes are high, such as suspect interviews, these mistakes can have significant implications (Oostinga et al., 2020). Errors might impair the relationship and level of trust between law enforcement officer and suspect, which in turn may decline the willingness to provide information by the suspect (Oostinga et al., 2018c). Nevertheless, Oostinga et al. (2018a) also found that erring affects information provision positively. This counterintuitive phenomenon might be related to an increased perception of the interviewer as humane. This notion presumes that showing humaneness facilitates relationship-building between interviewer and interviewee and leads the suspect to open up more easily (Haslam, 2022). Erring may increase perceived humaneness, which then endorses information provision (Madhavan & Wiegmann, 2007).

However, there is still a significant gap in researchers' understanding of multiple errors in suspect interviews as the presented research only focused on conditions where a single error was made. Therefore, this study will investigate the effects of multiple errors on positive relationship establishment, trust, perceived humaneness, and willingness to provide information. From an academic perspective, the present study contributes to the understanding of multiple errors, which may give insights into what strategies of error management, e.g., an apology or reticence, may be applied in a setting where more than one error is made (Ferrin et al., 2007). Another value of this study is exploring the effect of perceived humaneness and how it affects willingness to provide information. From a practical perspective, police officers' awareness of the impact of multiple errors may improve their error management. It can show if the strategic use of errors reported by police officers may be detrimental if more than one error is made (Taylor & Donald, 2004).

In the following, first, the setting of a suspect interview will be introduced. Secondly, literature on the effect of communication errors will be presented. After that, the variables of interest, namely, positive relationship, trust, perceived humaneness, and willingness to provide information, will be put into relation to communication errors.

Suspect Interviews in the Netherlands

As this study only focuses on the Netherlands, it is essential to see how interviewing styles differ among countries since these may adopt distinctive values as a core. While in the

Netherlands and other western European countries, predominately an investigative interviewing style is applied, in the United States and Canada, officers widely use interrogations (Beune et al., 2010; Meissner et al., 2012; Oostinga et al., 2020). Investigative interviews aim to attain accurate accounts and achieve justice (Dillon, 1990; Weiher, 2020). In this interviewing style, law enforcement officers focus on communication skills that establish a positive relationship and trust to enhance information provision (Oostinga et al., 2020; Weiher, 2020). Similarly, police officers in suspect interviews strive to get information from an accused individual (Beune et al., 2010). Contrary, interrogations refer to questioning a criminal suspect to gain a confession (Weiher, 2020). This approach uses accusatory behaviours like confrontations and pressuring techniques to constrain confessions (Beune et al., 2010; Meissner et al., 2012; Weiher, 2020). To conclude, a suspect interview, as it will be of focus in this study, aims at attaining information from a suspect by building a friendly relationship with the accused individual.

Communication Errors in Suspect Interviews

The process of gaining information from a suspect seldomly works without difficulties like misspeaking or misunderstanding one's opponent. As elaborated above, also in suspect interviews, communication errors occur (Oostinga et al., 2020). These may range from confounding a person's name to making inappropriate inferences from what a suspect has said (Oostinga et al., 2018c). These communication errors can be distinguished into three different types, according to Oostinga et al. (2018a). The first type relates to the general context. This might, e.g., mean that a police officer leaks information the suspect is not supposed to know or uses police jargon that is difficult to grasp for the interviewee. The second type includes factual errors alluding to the content of the message. Here, the suspect might, e.g., be approached with a wrong name or the interviewer misremembers facts of the discussed event. The third type is judgment errors, which relate to denying the needs of the suspect, as in misunderstandings or disregarding etiquette norms. This could, for instance, mean that an officer continues problem-solving while the suspect still deals with difficult emotions (Oostinga et al., 2018a). In this study, only the latter two types will be included as these relate to more generalisable behaviours in suspect interviews instead of focusing on a specific case.

Rapport in Suspect Interviews and its Relation to Multiple Errors

As aforementioned, a critical goal of communication in suspect interviews is establishing a positive relationship with the suspect, which is also called rapport (Weiher, 2020). The definition of rapport in research is not clear. A common ground of accepted

conceptualisations is that it refers to a relationship between two or more people and thus cannot be established within one person (Bernieri, 2005, as cited in Weiher, 2020). For instance, Williamson et al. (2013, as cited in Weiher, 2020) define rapport as a profitable relationship between the interviewer and the suspect that relies on understanding the interaction partner's worries, goals, and intentions, resulting in a degree of mutual sympathy. Thus, unlike empathy, rapport is an intrinsic interactional phenomenon based on mutuality (Tickle-Degnen & Rosenthal, 1990). Furthermore, rapport implies a positive attitude towards the suspect and genuine respect (Hartwig et al., 2005). Consequently, in this study, rapport is defined as a mutual, respectful, empathetic, and positive connection between interviewer and interviewee.

In general, researchers have an increasing consensus that rapport building is the base of successful interviewing. However, little is known about what happens to rapport when errors occur. As Weiher (2020) points out, rapport is not static, and this means rapport cannot only be established but may also diminish. Therefore, errors might have detrimental effects on the confiding relationship. Moreover, as aforementioned, Oostinga et al. (2018c) found that errors decrease rapport. Also, Williamson et al. (2013, as cited in Weiher, 2020) argue that rapport is established through feeling understood by one's interaction partner. Considering that judgment errors relate to a form of misunderstanding and thereby cause the suspect to feel not listened to, it is hypothesised that, when errors occur, the lower the rapport will be (Oostinga et al., 2018a; Ren & Gray, 2009). The argumentation above leads to the following hypothesis:

H1: Compared to a suspect interview where no error is made, an interview in which the law enforcement officer makes one error will be associated with less rapport.

Yet, research does not clarify the impact of multiple errors on rapport. Thus, this study will also investigate: What is the effect of multiple errors on rapport in suspect interviews?

Trust in Suspect Interviews and its Relation to Multiple Errors

Another influential variable in gaining information from a suspect is the suspect's level of trust in the interviewer. Generally, trust refers to the readiness to increase one's vulnerability to a person whose behaviour is beyond control (Mayer et al., 1995; Zand, 1972). Whether an individual decides to trust another person depends not only on the propensity of the individual to trust but also on the characteristics of the trustee (Mayer et al., 1995). To better understand this, Mayer et al. (1995) propose the three virtues of ability, benevolence, and integrity as central to trust establishment. In this sense, ability refers to skills, competencies, and characteristics that enable a person to exert an impact within a specific

domain. Herewith, the ability is task-specific, and one may, for instance, trust a person to fix one's porch but would not trust that same person to mediate a conflict between oneself and a colleague (Zand, 1972). Further, benevolence is defined as the belief that the trustee aims at a good outcome for the trustor beyond selfish intents. Lastly, integrity describes the trustor's perception that the opponent acts according to an acceptable set of principles (Mayer et al., 1995). Thus, with increasing perceived ability, benevolence, and integrity, trust can be endorsed.

Nevertheless, even if one might opt or even succeed in building a trusting relationship, also trust can diminish again. It is not a stable trait but instead tied to specific situations and tasks. Thus, it is continuously reevaluated (Mayer et al., 1995). Therefore, it is interesting to look at how communication errors affect trust. Thoroughgood et al. (2013) argue that errors weaken a trusting connection. This is substantiated by Oostinga et al. (2018c). They highlight that errors decrease affective trust, which refers to the perceived potential to care for another person selflessly and thus closely resembles the components of benevolence and integrity of Mayer et al.'s (1995) definition of trust. Also, the ability is most likely to be decreased by errors as it was identified that leaders that are erring are less likely to be associated with competence by their followers (Thoroughgood et al., 2013). As competence is a component of ability and, therefore, all factors of trust are claimed to be weakened by errors, the following is hypothesised (Mayer et al., 1995):

H2: Compared to a suspect interview where no error is made, an interview in which the law enforcement officer makes one or five errors will be associated with less trust. Furthermore, trust decline is expected to be greater after multiple errors than after one. Making an error is perceived as a human characteristic and erring once is not perceived as predictive of further errors since humans are believed to be naturally prone to errors. Also, humans are believed to be adaptive in their behaviour, which makes people forgive a mistake because of dispositional factors, like effort, that is assigned to humans (Dijkstra et al., 1998; Lerch et al., 1997, as cited in Madhavan & Wiegmann, 2007). However, if multiple errors occur, the incident may not be viewed as unique anymore, resulting in a breakdown of trust. Hence, multiple errors are predicted to be associated with greater trust decline:

H3: Compared to a suspect interview where one error is made, an interview in which the law enforcement officer makes five errors will be associated with less trust.

Perceived Humaneness of the Interviewer and its Relation to Multiple Errors

The discussed relationship between errors and humaneness will be further examined in the following section. To understand how perceived humaneness can be helpful in suspect

interviews, it is important to understand the concept of humaneness in social psychology. The definition applied in this research does not necessarily refer to characteristics unique to humans, like conscientiousness but may also imply attributes that people share with other species, such as curiosity (Haslam et al., 2008). A study by Haslam et al. (2004, as cited in Haslam et al., 2008) found that traits most related to this concept are being open, warm, emotional, covetable, and vivid. However, if one perceives another as lacking these traits and, thus, humaneness, one also perceives this person as socially distant and incapable of forming social connections. This validates that humaneness is central to social connection and denying human nature in others is associated with disconnection (Haslam, 2022). Therefore, dehumanisation can lead to impaired relationships. Even though this demonstrates that humaneness is, like rapport, closely linked to social connections, at its very core, perceived humaneness is based on attributes one assigns to another (Haslam, 2022).

Linking this to the current study, humane perception might also be influenced by the frequency of errors. Oostinga et al. (2018a) suggest that errors may positively affect the information a suspect provides since it makes officers appear more humane. The phenomenon of making errors being perceived as humane is also found in distinct domains of psychology. Humans are believed to be prone to errors; therefore, erring is perceived as a human-like trait (Madhavan & Wiegmann, 2007). Due to this, the following is hypothesised:

H4: Compared to a suspect interview where no error is made, an interview in which the law enforcement officer makes one error will be associated with a greater perception of the law enforcement officer as humane by the suspect.

Nevertheless, it is unclear what the effect of multiple errors is. A prediction could be that multiple errors point to systematic mistakes, perceived as inhumane because people are expected to have learning capacities. Furthermore, human virtues may be validated as multiple errors may lead to a greater decline in trust and integrity (Dijkstra et al., 1998; Haslam et al., 2008). Based on these assumptions, it is not possible to formulate a definite optimum of errors one can make. Still, it leads to the following hypothesis:

H5: Compared to a suspect interview where one error is made, an interview in which the law enforcement officer makes five errors will be associated with a declined perception of the law enforcement officer as humane by the suspect.

Willingness to Provide Information, Its Relation to Multiple Errors, and Its Mediators

Lastly, investigative interviews may offer crucial information for the investigative process. Gaining information is the central goal of interviewing, and the amount of shared information by suspects can be a direct indicator of their cooperation (Buckwalter, 2013;

Oostinga et al., 2018c; Oostinga et al., 2020; Weiher, 2020). Thus, after introducing variables hindering or facilitating information provision, it is also essential to consider the direct effect of errors on information provision. However, as the research design does not allow participants to reply to the interviewer, this study will look into the willingness to provide information, i.e., a self-reported indication of information provision (Beune et al., 2011).

Thus far, research suggests that errors negatively impact the willingness to provide information. Even though Oostinga et al. (2018c) found no effect of errors on willingness to provide information in suspect interviews, research on regular communication underlined a negative effect, which is also suggested by the impairment of the positive relationship by errors that is aimed at in investigative interviews. In line with this, Rosenberg (2015) claims that if someone misinterprets the needs of the person they are talking to, the opponent may feel misunderstood and shut down. As factual errors and judgment errors convey that the speaker did not listen accurately, the following hypothesis is formulated:

H6: Compared to a suspect interview where no error is made, an interview in which the law enforcement officer makes one error will be associated with less willingness to provide information by the suspect.

A corresponding research question is, however, what will be the effect of multiple errors in suspect interviews on the willingness to provide information? As there is no support in the literature about the effect of multiple errors on the willingness to provide information, this introduces another exploration relevant to this research.

Next, the relationship between errors and willingness to provide information is presumed to be explained by numerous factors, as shown in Figure 1. Firstly, as research emphasises that rapport enhances information provision, it is predicted that because of the lowered rapport through the mistakes that are being made, also the willingness for information provision will decline (Kieckhaefer et al., 2014, as cited in Weiher, 2020; Vallano et al., 2015). Hence, the following is predicted:

H7: Rapport mediates the effect between errors and willingness to provide information. Compared to a condition where no error is made, an interview in which the law enforcement officer makes one error will be associated with less rapport, which leads to less willingness to provide information by the suspect.

A similar mechanism applies to the relationship between errors, trust, and the willingness to provide information. As people require trust to overcome the inhibition level of making oneself vulnerable and sharing critical information puts a person exactly in that exposed position, the following is hypothesised (Zand et al., 1972):

H8: Trust mediates the effect between errors and willingness to provide information. Compared to a condition where no error is made, an interview in which the law enforcement officer makes one or five errors will be associated with less trust, which leads to less willingness to provide information by the suspect.

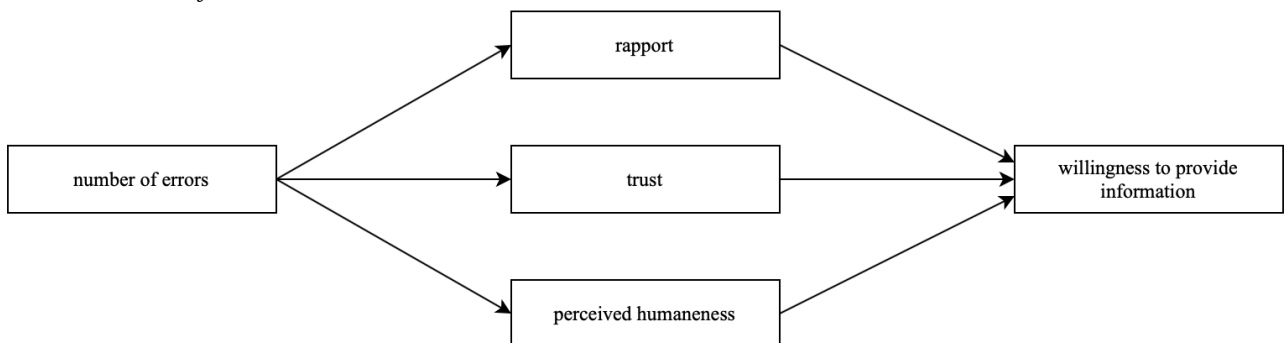
Hence, these mediators indicate that the effect of errors on the willingness to provide information will be negative.

Contrary, perceived humaneness is assumed to mediate errors and willingness to provide information positively. Oostinga et al. (2018c) state that information provision is enhanced when an error is made. One line of argumentation for this is as the above-explained increased perceived humaneness, which in turn enhances robust connection building and, thus, might influence information provision (Haslam, 2022). This is also supported by the effectiveness of the humanitarian interviewing style, which nourishes humane virtues for successful interview outcomes (Bull, 2014; Oxburgh et al., 2010; Vanderhall et al., 2011, as cited in Holmberg & Madsen, 2014). Therefore, it is assumed that the positive effect of perceived humaneness may also be transferred to the willingness to provide information:

H9: Perceived humaneness mediates the effect between errors and willingness to provide information. Compared to a condition where no error is made, an interview in which the law enforcement officer makes one error will be associated with a greater perception of the law enforcement officer as humane, which leads to a greater willingness to provide information by the suspect.

Figure 1.

Visual Representation of the Predicted Mediators Between Number of Errors and Willingness to Provide Information



Methods

Design

To investigate the effect of multiple errors on rapport, trust, perceived humaneness, and willingness to provide information, a between-subject design with one independent variable was employed. This independent variable was “number of errors”, which had three levels (no error vs one error vs five errors). The dependent variables were “rapport”, “trust”, “perceived humaneness”, and “willingness to provide information”, which were measured once at the end of the study. The former three variables also served as mediating variables. As this study was part of a larger study also “perceived competence” was assessed as a dependent variable. The design of the study was an online study in which participants were asked to imagine being accused of exam fraud and consequently being interviewed by an examination board member. Immersion into this situation was endorsed by reading a scenario and watching a pre-recorded video of an interview with the examination board.

Participants

The sample consisted of university students that possessed adequate English skills. The target group of students was chosen as these have been successfully used in studies of suspect interviews before and to ensure that the participants can identify with the presented scenario in the participants’ task. Furthermore, the sample size was defined by applying the rule-of-thumb that 30 participants per condition are satisfactory and additionally, some cushion was considered (Oostinga et al., 2018c). Participants were recruited by convenience sampling. Participants enrolled in the psychology track at the University of Twente were compensated with course credit. In total, 144 participants took part in the study, of which 52 participants were removed from the data set as they either did not fulfil the inclusion criteria of being a university student ($n = 28$), did not possess adequate English skills ($n = 1$), because their progress in the survey was less than one hundred per cent ($n = 19$) or because they did not give final informed consent ($n = 4$). Of the remaining 92 students, 66 were female (71.7%; males, $n = 24$, non-binary, $n = 1$, prefer not to say $n = 1$), 73 were German (79.3%; the others were Dutch, $n = 11$, and English, $n = 1$, Indian $n = 1$, Irish, $n = 1$, Italian $n = 1$, Norwegian, $n = 1$, Salvadoran, $n = 1$, Spanish, $n = 1$), and their mean age was 22.24, ranging from 17 to 44 ($SD = 2.93$).

Materials

The experiment took place online. Thus, participants could use their computers or smartphone to participate in the study. The questionnaires were provided using the online software Qualtrics. The videos shown to the participants were filmed with an iPhone 12 Pro in a quiet room at the BMS-lab facilities at the University of Twente. The videos were about

3 minutes long. The statistics programme IBM SPSS and its additional package PROCESS macro 4.0 by Hayes were used to analyse the data.

Measures

Rapport

To measure post-interview rapport, the “Rapport Scale for Interrogations and Investigative Interviews” (RSi3) was used (Duke et al., 2018). The scale was chosen as it directly relates to the setting of a suspect interview that is investigated in this study. The items were adjusted to the given scenario of an examination board interview. Items related to cultural background were excluded as they were not crucial to the present study. The scale finally had 21 items. Participants were asked to rate statements like “I think the interviewer is generally honest with me” or “The interviewer really listened to what I had to say” on a five-point Likert scale from “strongly disagree” (1) to “strongly agree” (5) (see Appendix A). To create a scale, the items were averaged, and a higher score on this scale represented a higher level of rapport between participant and interviewer. The scale has proven construct validity and demonstrates convergent validity to constructs such as trust, which is aimed to be measured separately in this study (Duke et al., 2018). According to the reliability classification of Glenn (2022), reliability was excellent, $\alpha = .95$.

Trust

Trust towards the interviewer was measured using 16 items of Mayer et al.’s (1999) “Measures of Trust, Trustworthiness, and Performance Appraisal Perceptions” questionnaire. The questionnaire was chosen as it measures the introduced constructs of trust. However, only the six items related to ability, four items related to benevolence, and six items related to integrity were included in this study. Items related to propensity and trust were excluded before the study took place. Apart from that, the original items were focused on trust in a company’s management team and thus not applicable to the current setting. Therefore, the items were adapted to an examination board interview setting by changing the addressed subject to an examination board member (see Appendix B). Participants were asked to indicate, on a scale from 1 (disagree strongly) to 5 (agree strongly), the extent to which they agreed with statements such as: “I would be willing to let the examination board member have complete control over my future”, after the watching the video. To create a scale, items were averaged, and a higher score on this scale represented a higher level of trust. The reliability of this scale was excellent, $\alpha = .93$ (Glenn, 2022).

Perceived Humaneness

To measure the perceived humaneness of the examination board member from the interviewee's perspective, items related to human nature provided by Haslam (2006) were used. The items were modified to the setting of an examination board interview. Items related to human uniqueness were excluded as this concept is not of interest in the presented study. Consequently, the three items used to assess high human nature included, for instance, "I think the examination board member had interpersonal warmth". Apart from that, three items like "I perceived the examination board member as superficial as if she had no depth" were used to assess low human nature (see Appendix D). Responses were indicated on a scale ranging from 1 (not at all true) to 7 (very much true). Indices of human nature were construed by reversing the low items and adding them to the high items before averaging them all, as done by Bastian and Haslam (2010). Scoring high on the constructed scale indicated greater perceived humaneness. The reliability of this scale was excellent, $\alpha = .90$ (Glenn, 2022).

Willingness to Provide Information

Willingness to provide information was measured using a self-report scale by Beune et al. (2011). For this study, the items were specified to an examination board member instead of an interviewer. Hence, participants were asked to indicate to what extent they agree or disagree with the statements "I would tell the examination board member everything", "I would provide a lot of information to the examination board member", and "I would give truthful information to the examination board member". Again, participants could indicate their answer using a scale from 1, meaning "strongly disagree", to 5, meaning "strongly agree". The final willingness to provide information score was created by averaging the scores on the three statements. A high score on this scale represented that the interviewee was more willing to provide information to the examination board member. The reliability of this scale was found to be acceptable, $\alpha = .79$ (Glenn, 2022).

Procedure

The research was approved by the Ethics Committee of the Behavioural Management and Social Sciences at the University of Twente (approval code: 220403). The experiment took place in an online environment using Qualtrics. Before the experiment started, participants were presented with the informed consent and a cover story. The cover story was used as a form of deception to cover up that the study investigated the effect of multiple errors. This was done as the errors should be incorporated rather naturally, and if participants knew about the goal of the study, the validity of the research might have been negatively impacted. Therefore, to the participants, the aim of the study was altered to look into the effectiveness of different interviewing styles in suspect interviews.

After reading the cover story, participants were provided with an exam fraud scenario. The students were asked to imagine they had to take an exam about physical safety the week before. Due to the death of their grandmother, they were not adequately prepared. However, shortly before the exam, a friend sent them a picture of the exam, which was accidentally left behind in a room. They took this opportunity and looked at the exam to still get a pass. After the exam, they had a good feeling about passing. Two weeks later, however, they received an email about being suspected of exam fraud and were invited to an interview with an examination board member (see Appendix E). The design of using a scenario was chosen as scenarios are proven to increase realism and provide standardisation among participants (Alexander & Becker, 1978). Also, the scenario was designed closely related to the participants' perceptions to ensure psychological realism (Evans et al., 2010).

In the following, a pre-recorded video of an interview with an examination board member was shown and participants were asked to imagine to be in the situation of the student in the video. Participants were randomly assigned to a condition in which either no, one, or five errors were made by the examination board member in the video (see Table 1.; see Appendix F). To increase realism, the excerpts were filmed from behind the head of the interviewee, viewing the examination board member asking questions. The design choice of using a film was made as, given the time frame for this thesis, conducting the interviews in person was not feasible. Still, using a video recording is a good choice as using computers would not fulfil the prerequisites of this study, as it is proven that relationship building, e.g., rapport and trust, with an autonomous agent, is very different from another human being (De Visser et al., 2016; Dzinolet et al., 2013, as cited in Kim & Song, 2021). Therefore, showing videos from an almost first-person perspective was the most immersive design option that was practical.

The video showed the confrontation by the examination board member with the student who is accused of exam fraud, as the examination board noticed that some students had access to the answers to the test beforehand. The student, i.e., the participant, in this case, is suspected to be one of these students as their grades improved significantly from their past performances. The interview opened with some general questions about how the student was doing and what they thought was the reason they needed to attend the meeting. In the following, the student was allowed to describe the situation from their perspective. On the whole, the interviewer asked seven questions to get a more accurate account of the situation, ending with arranging a prospective oral assessment of the exam materials. As

aforementioned, in two conditions, the interview included errors by the interviewer. Table 1. provides an overview of the errors per condition (see Appendix E for full script).

Table 1

Overview of False Assertions of Interviewer and Replies by Student in Video

	Dialogue (and error type)
One error condition	<p>Examination Board Member (M): Well, you also were not prepared for the last exams. We saw you barely passed your last exams, and on this one, you scored rather well.</p> <p>Student (S): No, you're mistaken. I studied a lot, but the last time, the exams were just more difficult. Like I said before, this time was just easier than the last ones. (Judgment error)</p>
Five error condition	<p>M: So far, you did not look like a very motivated communication science student. We took a look at your records, and since this exam was way better than your previous grades, therefore, we think you cheated.</p> <p>S: Huh? I'm a Psychology student, not a communication science student. Also, I'm a very motivated student, study a lot, and no, I did not cheat. (Factual and judgment error).</p> <p>--</p> <p>M: Well, you also were not prepared for the last exams. We saw you barely passed your last exams, and on this one, you scored rather well.</p> <p>S: No, you're mistaken. I studied a lot, but the last time, the exams were just more difficult. Like I said before, this time was just easier than the last ones. (Judgment error)</p> <p>--</p> <p>M: Oh, how fortunate that particularly this exam was so easy. Seems a little too coincidental.</p> <p>S: What do you expect me to answer to that? (Judgment error)</p> <p>--</p> <p>M: That would be it for now. Thank you for taking your time, Tony. Have a nice day.</p>

S: My name is Luca. But thanks, have a nice day as well. (Factual error)

After watching the videotape, participants were asked to fill in questionnaires that measured rapport, trust, perceived competence of the interviewer, perceived humaneness of the interviewer, and willingness to provide information. As rapport is based on mutuality, the rapport measure is not a complete indication as only the interviewee's perspective is taken into account. However, as the interviews were standardised and pre-recorded, rapport, as perceived by the interviewer, could not be measured per participant. Also, this study is specifically said to focus on the interviewee's perspective. Nonetheless, this is important to recognise.

Subsequently, participants were asked whether they noticed any communication errors, and if they indicated "yes", they were asked about the number of errors they saw. In the end, they were asked about their demographics and debriefed by an information sheet added to Qualtrics and received their credits. The experiment took about 15 minutes per participant.

Results

Descriptive Statistics and Correlations

Table 2. shows the means, standard deviations, and inter-correlations among the study variables. As expected, there were positive correlations between rapport, trust, perceived humaneness, and willingness to provide information. As rapport and trust are closely related constructs and both address interpersonal relationships, these two measures had the highest correlation. Moreover, rapport and trust are also moderately correlated with perceived humaneness. Likewise, perceived humaneness and willingness to provide information correlated significantly, which was predicted but is a new finding.

Table 2

Means, Standard Deviations, and Inter-correlations Among Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
1. Rapport	3.37	0.82	1			
2. Trust	2.98	0.66	.87**	1		
3. Perceived Humaneness	3.49	1.28	.58**	.65**	1	

4. Willingness to Provide Info	2.40	0.98	.41**	.37**	.36**	1
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Note. **. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Manipulation Check

Before the analyses of interest could be run, the efficacy of the manipulation check was assessed. An ANOVA with the first question of the manipulation check was run. Accordingly, the error condition was selected as the independent variable and the responses to the question of whether they noticed errors as the dependent variable. The difference between the conditions was found significant, $F(2, 89) = 8.45, p < .001$. A planned comparison found that differences between the control group and one-error condition were not significant, $t(89) = -1.58, p = .12, 95\%CI [-0.14, 0.50]$, while the difference between the control and five error conditions were, $t(89) = -4.05, p < .001, 95\%CI [-0.71, -0.24]$ ($M_{control} = 1.61, M_{one-error} = 1.42, M_{five-errors} = 1.13$). As specifically, the number of errors was crucial to this study, an ANOVA was run to compare if scores on the noticed errors item significantly differed between the three conditions. It was found that the difference in the number of errors that were noticed by participants between the two groups was non-significant, $F(2,54) = 1.58, p = .22$. However, the fact that they indicated noticing communication errors demonstrated that they did sense the errors. It may be that it was simply difficult to pinpoint a specific number of errors. This is also substantiated by the fact that few participants accurately indicated the number of errors they were presented with, as presented in Table 3. Generally, none of the participants indicated that they noticed five errors. Furthermore, most people that indicated that they noticed an error marked that they noticed two or three errors, regardless of the condition they were in. Furthermore, as found in a study by Koudenburg et al. (2011), even subtle disruptions of the conversational flow negatively affect the emotions of the interaction partner. Thus, as even small differences in a conversation affect how the conversation is perceived, the three groups of this study were still distinguished for the following analyses.

Table 3

Frequencies of number of errors noticed per condition

		Error condition		
		No-error	One-error	Five-errors

Errors noticed	(<i>N</i> = 28)	(<i>N</i> = 33)	(<i>N</i> = 31)
	<i>N</i>	<i>N</i>	<i>N</i>
0	17	14	4
1	3	5	2
2	4	7	13
3	4	7	9
4	0	0	3
5	0	0	0

Error Effects

Table 4 shows participants' perceptions and behaviours grouped by the error condition. A one-way ANOVA with the number of errors as the independent variable and the four dependent variables was conducted to test the prediction that communication errors have a negative effect on rapport and trust, a positive effect on willingness to provide information, and depending on the number of errors, a positive or negative effect on perceived humaneness. There was a significant main effect for the number of errors on rapport, $F(2, 89) = 15.34, p < .001$, trust, $F(2, 89) = 14.71, p < .001$, and perceived humaneness, $F(2, 89) = 3.16, p = .05$. There was no significant difference in willingness to provide information, $F(2, 89) = 0.25, p = .79$, indicating neither one error nor five errors affected willingness to provide information (H6, RQ2).

Planned comparisons were run to assess the differences between the error conditions for rapport, trust, and perceived humaneness. These showed that there was no significant difference between the control group and the one error group in the levels of rapport (H1), $t(89) = -0.76, p = .45, 95\%CI [-0.50, 0.23]$, trust in the interviewer (H2), $t(89) = 0.24, p = .81, 95\%CI [-0.26, 0.33]$, and perceived humaneness (H4), $t(89) = -1.25, p = .217, 95\%CI [-1.04, 0.24]$. However, a significant difference was found between the no error and five error condition for trust (H2), $t(89) = -4.44, p < .001, 95\%CI [-0.98, -0.37]$ and perceived humaneness, $t(89) = 2.51, p = .01, 95\%CI [0.17, 1.47]$. As it was predicted that the levels of trust are even lower in the five-errors condition compared to the one error condition (H3), another planned comparison was run, and a significant difference was found, $t(89) = 4.90, p < .001, 95\%CI [0.42, 1.00]$. Likewise, another planned comparison was performed to assess whether the effects of multiple errors on perceived humaneness indeed differed from a single error (H5). The difference was found not to be significant, $t(89) = 1.34, p = .18, 95\%CI [-$

0.20, 1.04]. Hence, the number of errors is important as one error does not affect trust and perceived humaneness, but five errors do negatively.

Additionally, a post hoc test with a Bonferroni correction was performed to test for the difference between no error, one error, and five errors on rapport (RQ1). It disclosed a significant difference between the no-error and five-errors conditions for rapport, $t(89) = 5.04, p < .001, 95\%CI [0.48, 1.39]$, as well as for the difference between one-error and five-errors, $t(89) = 4.48, p < .001, 95\%CI [0.36, 1.23]$. Comparing the means per condition signals that multiple errors negatively affect rapport, while one error does not have a significant effect.

Table 4

Means and Standard Deviations of the Study Variables per Condition

Study variable	Error condition					
	No-error		One-error		Five-errors	
	(N = 28)		(N = 33)		(N = 31)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Rapport	3.74	0.71	3.60	0.70	2.80**	0.73
2. Trust	3.19	0.60	3.23	0.53	2.52**	0.61
3. Perceived Humaneness	3.90	1.40	3.51	1.26	3.09*	1.14
4. Willingness to provide info	2.50	0.91	2.39	0.96	2.32	1.08

Note. **. Significant difference to control as well as one-error group

*. Significant difference to control group

Mediation of Rapport, Trust, and Perceived Humaneness

Lastly, it was assumed that rapport, trust, and perceived humaneness mediate the relationship between the number of errors and willingness to provide information. Nevertheless, the effect of the number of errors on willingness to provide information was non-significant. Hence, there can also be no mediation between the two variables. Therefore, rapport, trust, and perceived humaneness do not seem to influence the relationship between erring and the willingness to provide information (H7 & H8 & H9).

Additional Analyses for Altered Error Groups

As participants did not seem to notice the errors accurately, an additional ANOVA with rapport, trust, perceived humaneness, and willingness to provide information was run.

The predictor variable was the noticed number of errors, in which participants were regrouped into a no-error group, a one-error group, and a more than one (multiple) error group. The significance of the effects remained the same as before, showing significant differences for rapport, $F(2, 89) = 18.06, p < .001$, trust, $F(2, 89) = 16.50, p < .001$ and perceived humaneness, $F(2, 89) = 10.68, p < .001$, and no significant effect for willingness to provide information, $F(2, 89) = 1.09, p = .34$.

Furthermore, a post-hoc test with a Bonferroni correction was performed to test which of the groups differ on rapport, trust, and perceived humaneness. Again, no significant difference emerged between the control and the one error group for neither rapport (H1), $t(89) = 0.64, p = 1.00, 95\%CI [-0.45, 0.77]$, trust (H2), $t(89) = 0.48, p = 1.00, 95\%CI [-0.40, 0.60]$, nor for perceived humaneness (H4), $t(89) = -1.33, p = .55, 95\%CI [-1.57, 0.46]$. Also, like in the previous analysis, there was a significant difference between the one-error and the multiple error group for trust (H3), $t(89) = 3.00, p = 0.10, 95\%CI [-1.09, -0.12]$. However, unlike the previous analysis, this time there was also a significant difference for the one error condition compared to the multiple error condition for rapport (R1), $t(89) = 3.08, p = .09, 95\%CI [0.15, 1.33]$, and perceived humaneness (H5), $t(89) = -3.78, p = .00, 95\%CI [-2.49, -0.52]$. Furthermore, as before, it was found that the multiple error group differed significantly from the control group for rapport (R1), $t(89) = 5.63, p < .001, 95\%CI [0.52, 1.28]$, trust (H2), $t(89) = 5.46, p < .001, 95\%CI [0.39, 1.02]$, and perceived humaneness, $t(89) = 3.65, p = .001, 95\% CI [0.32, 1.58]$. Notably, the mean for perceived humaneness increased for the one error group ($M = 4.47$) compared to the no error group ($M = 3.91$), which is a different finding than before. All findings of the additional analysis can be found in Appendix G.

Discussion

This research was the first to consider the effect of multiple errors in law enforcement interactions and to investigate the relevance of perceived humaneness concerning this. This study suggests that the direct adverse effects of errors are dependent on the number of errors. While one error did not appear to undermine the relationship between interviewer and interviewee, five errors negatively affected rapport, trust, and perceived humaneness. Hence, also perceived humaneness is negatively impacted by multiple errors. Moreover, notably, there was no relationship between the number of errors and willingness to provide information.

Significance of Number of Errors in Suspect Interviews

Opposing to what has been hypothesised, no significant difference between the control group and the one error group on the proposed variables emerged. More specifically,

this means that suspects were not affected by a single error regarding their levels of rapport, trust, and perceived humaneness towards the interviewer. Contrary to this, research suggests that an error harms rapport and trust (Oostinga et al., 2018c). Based on what this study found, it is most likely that the effect of one error was non-significant as the error in the one error condition was too subliminal. That the error may have gone unnoticed is substantiated by the fact that the manipulation check showed that the one error condition and control condition did not significantly differ in how many errors participants noticed. Nonetheless, a trend is visible as more people in the one error condition said they noticed an error than in the control condition. Still, whether the participants noticed the error in the one error condition is in question since no clear difference emerged between the one error and the control group in the manipulation check and the expected effects did not occur.

A possible explanation for the contradicting findings in the effect of one error between Oostinga et al.'s (2018c) study and this study can be the differences in errors and the study's design. In this study, there is no concrete evidence for the conduct of the participant except for an increase in their grade. Thus, they would have a way out of their situation by arguing for themselves in the interview. Contrary in the study by Oostinga et al. (2018c), a scenario was introduced in which participants were accused of stealing money after, in fact, being caught taking the money out of a cash box of a study association. Consequently, the reproaches are based on concrete facts that cannot be explained alternatively as participants were caught in action. Hence, an error may have a more detrimental effect if more is at stake. In that situation, suspects may experience more pressure to justify their behaviour and are, thus, more irritated if an error is made. Also, the error in the study by Oostinga et al. (2018c) included the apparent motive of boredom as a reason for their criminal behaviour. Unlike this, the error in this study reproached that the person did not study without inferring the personal interests of the suspect. These two together may impact the participants' perceived relevance of an error. For this, it is also essential to consider the impact of the setting in establishing rapport. In suspect interviews, there is naturally an imbalance of power, and there is also likely that only one of the two parties, i.e., the interviewer, aims to establish rapport (Gabbert et al., 2020). Hence, being judged to a certain degree and not on an equal level with the interviewer is also what participants may have expected in such a setting. But the greater severity of the error as more is at stake may have impacted the outcomes.

Besides, the finding that multiple errors affect the relationship is relevant for practice. Prior research only investigated the impact of one error and found similar negative effects as this study (Oostinga et al., 2018c). Nonetheless, assessing multiple errors commonly reflects

a more realistic setting. Clark and Brennan (1991) found that if one error is made, the likelihood of another error increases. Hence, in this study, it was found that multiple errors negatively impact relationship establishment. This may be explained by a violation of important values needed for relationship formation. For instance, rapport is thought to be established by feelings understood by one's opponent (Williamson et al., 2013, as cited in Weiher, 2020). Further, rapport implies mutual attentiveness throughout the whole interaction (Tickle-Degnen & Rosenthal, 1987, as cited in Weiher, 2020). As errors convey judgment and indicate not having listened attentively, this aspect of rapport building may decrease with more errors, and rapport may diminish (Oostinga et al., 2018a; Ren & Gray, 2009).

Moreover, the negative effect of multiple errors on trust also aligns with the fundamental attribution error. The fundamental attribution error suggests that people underestimate the influence of situational factors on the behaviour of those around them (Kassin et al., 2018). Applying this to the current study, this means that the errors made may be associated with the malevolence and incompetence of the interviewer. As ability and benevolence are two crucial factors of trust, the perception of the interviewer's personality as malevolent and incompetent could explain the negative effect of errors on trust (Mayer et al., 1995). Furthermore, as making multiple errors object to the belief that people are capable of learning, which builds resilience for a decline in the trust after one error, multiple errors may lead to a breakdown in trust (Madhavan & Wiegmann, 2007). Likewise, missing learning capacities may also result in a less humane perception of the interviewer. Steady behaviours are usually associated with machine-like characteristics (Dijkstra et al., 1998; Madhavan & Wiegmann, 2007). This may explain the decline in perceived humaneness that was associated with multiple errors by this study.

The negative impact of multiple errors further aligns with suggestions from other literature that are not directly connected to making errors. Available research suggests that an open-minded approach by the interviewer leads to more favourable outcomes, e.g., increased and more accurate information provision and increased rapport and trust (May et al., 2020). Contrary, accusatory interviewing styles incorporating judgments diminish these aspects. As the errors in this study also included three judgment errors, the outcomes are thought to be similar. Relating these findings to the introduced interviewing styles, it may be proposed that judgments, as used in the accusatory interviewing style, could decrease rapport, trust, and perceived humaneness of the interviewer. Hence, for effective relationship formation, as intended in the investigative interviewing style, not only judgements but also errors may be avoided. However, as this was not explicitly investigated in this research, future research may

use the findings of the current study to test whether this expansion of the present findings holds true.

Perceived Humaneness in Relation to Errors

Another enhancing aspect for relationship formation in investigative interviews was proposed to be perceived humaneness (Oostinga et al., 2018a). The current study suggests that one error does not influence perceived humaneness and that multiple errors negatively affect perceived humaneness. The negative effect of multiple errors on perceived humaneness may be better understood when put into relation to the present findings of the effect of errors on rapport, as the two concepts seem to be closely related. Considering the conceptualisations of rapport and perceived humaneness, strong links become eminent as both relate to, e.g., the warmth of the interviewer. Further, researchers like Russano et al. (2014) argue that rapport efficiently is established when treating suspects humanely, which would be recognised in this study's findings in the perceived humaneness score. As this study found that rapport seems to decrease with more errors, it would be counterintuitive if perceived humaneness was still increased. Additionally, Haslam (2022) suggests that being perceived as lacking humane traits is associated with disconnection within a relationship, which again pinpoints how closely humaneness and rapport may be related. This may serve as an explanation of the results of this study. As the negative effect of errors on perceived humaneness was also visible for the one error condition, this may also apply when a single error is made. However, the results of the additional analyses contradicted this result. In an analysis with groups based on the number of errors participants indicated to have noticed, the effect of one error on perceived humaneness seemed to be positive. As this effect was eminent in a study with only ten people in the one error group, this effect may even be enhanced in a study with more participants in the one error group. Hence, the effect of one error on perceived humaneness may still be researched by future studies.

Coming back to the finding of the current study, the fact that multiple errors endorse the negative effect on perceived humaneness may relate to the fact that a mistake made by humans is not perceived as predictive of future errors. Unlike, e.g. machines, humans are perceived as being able to adapt their behaviour after making a mistake (Madhavan & Wiegmann, 2007). As this was an explorative asset of this research, it can be concluded that errors affect perceived humaneness negatively.

Errors do not Seem to Impact Willingness to Provide Information

Additionally, it was hypothesised that errors could be used to gain more information. Nonetheless, this study found no relationship between the number of errors and willingness

to provide information. Looking at the data, the effect showed a negative trend, in which willingness to provide information lowered the more errors were made. An explanation for this may be that rapport, trust, and in fact, even perceived humaneness endorse information provision and open communication (Bull, 2014; Kieckhafer et al., 2014, as cited in Weiher, 2020; Oxburgh et al., 2010; Vallano et al., 2015; Vanderhall et al., 2011, as cited in Holmberg & Madsen, 2014; Zand et al., 1972). As these factors declined with multiple errors, it would be logical that this also impacts information provision. Hence, the occurrence of errors backfires with negative effects while not contributing to reaching the goal of a suspect interview, namely, gaining information (Beune et al., 2011).

However, participants may have been biased by the instructions of the scenario, in which they were instructed that they did not want to admit to the fraud in the interview with the examination board. This may have led to a cognitive bias, in which participants disregard information based on how the situation was introduced (Korte, 2003). Hence, because participants were told they did not want to admit to the incident, they may also have filled in the willingness to provide information scale in this manner. Thus, future studies should not incorporate any such advice. Hence, one error may still be used as a strategy to gain more information (Oostinga et al., 2018a). This may also be substantiated by the fact that this study only investigated willingness to provide information instead of information provision. Similarly, Oostinga et al. (2018b) also found positive effects for actual information provision only. To conclude, as multiple errors show detrimental effects, these may not be used as a strategy. Still, future research is needed to assess if one error may be an effective strategy.

Limitations and Recommendations for Future Research

Additionally, three different aspects should be considered in future research about the effects of communication errors. First, in this study, participants were asked to read a scenario introducing them to the incident and then to watch a video of an interview with an examination board member. The interviews were not conducted with each participant as this was not feasible within the scope of this study and was also successfully done in other studies (Oostinga et al., 2018c). Nonetheless, this may have diminished immersion compared to a natural conversation. Therefore, the effects of the errors may have been reduced and not visible in the results since participants were not sufficiently immersed in the situation. This is also supported by the fact that one important aspect of communication errors is the receiver's response to an error. Participants may not have recognized the errors, as the response was also pre-scripted (Oostinga et al., 2018a). This implies that emotional identification with the scenario would have been increased with actual interviews, and the accuracy of pinpointing

errors may have been improved. To be precise, real-life interviews may have endorsed the effects of the errors, also of one error. Hence, future studies may want to conduct real-life interviews to increase immersion in the scenario. Also, investigating interviews in actual law enforcement interactions can further give insights into the effects of error-making on academia and practice.

The second consideration is that the nature of this research was online research. This design choice was made due to the limited capabilities of this study. Furthermore, technological developments may lead to a future online assessment of suspects (McGinn & Croson, 2004). As Oostinga (2018b) pointed out, a crucial component of suspect interviews is face-to-face interaction, a criterion that was not met in this study. Particularly, cooperation and rapport building are less likely to develop in such an environment (McGinn & Croson, 2004). Also, Bayles (2012) argues that many behavioural cues are lost in online interactions, which may be critical for establishing rapport and trust (Weiher, 2020). Hence, the effect of errors and precisely one error may have been less pronounced than in a real-life interaction. Therefore, future studies recognize that face-to-face interviews may enhance the validity of this research branch.

Lastly, a possible explanation for the non-significant effects of the one error condition is the condition itself. Even though this study incorporated all components of an error, according to Oostinga et al. (2018a), the manipulation check did not show clear differences from the control group. Also, additional analyses of the outcomes of the manipulation check showed that the results were on whole the same even if groups were divided according to how many errors participants reported to have noticed. Another possible explanation for this could be a failed manipulation check, which may have been influenced by a hindsight bias and the participants' motivation to do well on the task. Being asked for an error makes it likely that this was part of the study. Thus, participants may have indicated they recognized one, even though they did not (Roese & Vohs, 2012). This was present in the results as many people in the control condition reported to have noticed an error.

Furthermore, another substantiation for a flawed manipulation check is that no participant indicated seeing five errors. This can be explained by the moderacy response bias, which recognizes the tendency to choose a middle response, regardless of the participant's attitude (Bogner & Landrock, 2016). However, due to the aforementioned additional analyses, it is more likely that the errors were not compelling enough. Even though the additional analyses revealed that the findings were the same for conditions in which participants were divided by the number of errors they indicated they noticed, consideration

for future research could be to alter the error condition to an, e.g., more personal example, which may lead to a more evident impact on the participants and as suggested above, indeed to a positive effect on perceived humaneness. Also, participants may not have noticed five errors, as two errors were made in the same expression. Future research may want to spread the errors evenly so that the errors are recognized as separate events.

Conclusion

This is the first study that examines the impact of multiple communication errors in suspect interviews and incorporates its effects on perceived humaneness. This work is important from an academic perspective as it gives groundings for the effect of multiple errors, which can pioneer research about error management in a more realistic setting of multiple instead of only one error. Furthermore, this study gives insights into the perception of the humane characteristic of law enforcement officers and proposes a reliable scale to measure this construct for future research. In practice, this research is essential as it gives insight into the negative effect of multiple errors on relationship formation. While one error may be tolerated by an interviewee and may still be used as a strategy by law enforcement officers, this study disproves the notion that multiple errors may be used to attain more detailed answers by suspects by indicating that multiple errors only affect the interview negatively. Overall, this study may be used as groundwork to advance interviewing techniques of law enforcement officers. These techniques may, e.g., include that erring is unprofitable when multiple errors are made. Further, the relationship between erring and perceived humaneness may be further investigated to develop strategies to present a more humane perception of the interviewer, which may lead to a more open conversation.

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Appendix A
Rapport Scales for Investigative Interviews and Interrogations 2 (RS3i) Interviewee
Version

Statement	Answer				
1. I think the examination board member was generally honest with me.	SD	D	N	A	SA
2. The examination board member did her job with skill during this interview.	SD	D	N	A	SA
3. The examination board member respects my knowledge.	SD	D	N	A	SA
5. The examination board member performed expertly during the interview.	SD	D	N	A	SA
6. I think that the examination board member can generally be trusted with her word.	SD	D	N	A	SA
8. The examination board member really listened to what I had to say.	SD	D	N	A	SA
9. I was motivated to perform well during the interview.	SD	D	N	A	SA
10. I feel I can trust the examination board member to keep their word to me.	SD	D	N	A	SA
11. The examination board member made an effort to do a good job.	SD	D	N	A	SA
12. The examination board member acted like a professional.	SD	D	N	A	SA
13. The examination board member paid careful attention to my opinion.	SD	D	N	A	SA
14. The examination board member and I got along well during the interview.	SD	D	N	A	SA
15. The examination board member and I worked together well as a team.	SD	D	N	A	SA
17. I wanted to do a good job during the interview.	SD	D	N	A	SA

18. The examination board member was attentive to me.	SD	D	N	A	SA
19. Communication went smoothly between the examination board member and me.	SD	D	N	A	SA
20. The examination board member was interested in my point of view.	SD	D	N	A	SA
21. I felt committed to accomplishing the goals of the interview.	SD	D	N	A	SA

Select SD if the statement is definitely false or if you **strongly disagree**.

Select D if the statement is mostly false or if you **disagree**.

Select N if the statement is about equally true or false, if you cannot decide, or if you are **neutral** about the statement.

Select A if the statement is mostly true or if you **agree**.

Select SA if the statement is definitely true or if you **strongly agree**.

Appendix B

Measures of Trust, Trustworthiness, and Performance Appraisal Perceptions (Adjusted to Investigative Interviews)

The following instructions prefaced the scales. The anchors shown below were consistent throughout. Headings of construct names are for the clarity of exposition and were not included in the surveys.

Indicate the degree to which you agree with each statement by using the following scale:

1	2	3	4	5
Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly

Think about the law enforcement officer shown in the video. For each statement, write the number that best describes how much you agree or disagree with each statement.

Ability

- The examination board member is very capable of performing her job.
- The examination board member is known to be successful at the things she tries to do.
- The examination board member has much knowledge about the work that needs to be done.
- I feel very confident about the skills of the examination board member.
- The examination board member has specialized capabilities that will help the case to be solved.
- The examination board member is well qualified.

Benevolence

- The examination board member is very concerned about my welfare.
- My needs and desires are very important to the examination board member.
- The examination board member really looks out for what is important to me.
- The examination board member will go out of her way to help me.

Integrity

- The examination board member has a strong sense of justice.
- I never have to wonder whether the examination board member will stick to her word.
- The examination board member tries hard to be fair in dealings with others.
- The actions and behaviours of the examination board member are not very consistent. *
- I like the values of the examination board member.

Sound principles seem to guide the behaviour of the examination board member.

* - reversed item score

Appendix C

Perceived Humaneness Scale

The next few questions are about the Examination Board member, please indicate the extent to which you agree or disagree with the following statements on a scale from 'not at all true' (1) to 'very much true' (7).

1	2	3	4	5	6	7
Not at all true	Not true	Somewhat not true	Neither true nor untrue	Somewhat true	True	Very much true

I think the examination board member had interpersonal warmth.

I think the examination board member was open-minded, they could think clearly.

I think the examination board member was emotional like they were responsive and warm.

I perceived the examination board member as superficial as if she had no depth. *

The examination board member acted like an object, not a human. *

I perceived the examination board member as mechanical and cold like a robot. *

* - reversed item score

Appendix D
Informed Consent Including Cover Story

Welcome.

Thank you for participating in this study! In this study, we investigate the effectiveness of different interviewing styles in suspect interviews. For that, you must imagine yourself in a situation where you are suspected of exam fraud. Subsequently, we will show you a video of an interview, where you will see a student that is interviewed by an Examination Board member. You are asked to imagine being the student in that situation. After that, we will ask some questions about your experiences in the interview. After that, we will ask some questions about your experiences in the interview.

The study will take in total 20 minutes to complete, will be in English, and the answers to the questionnaire will be used for our Bachelor theses. Students from the University of Twente that take part in the Psychology program will have the chance to gain SONA credits. Otherwise, there will be no further benefits or risks resulting from participation in this study.

The study has been reviewed and approved by the BMS Ethics Committee of the University of Twente. This means that all data will be stored anonymously. Participation is completely voluntary, and participants are free to withdraw at any time.

Questions?

This study is part of the BSc Psychology thesis project of Julie Erber and Jana Schulte and supervised by dr Miriam Oostinga and dr Lynn Weiher. In case of questions or comments on this study, participants are welcome to contact us (j.erber@student.utwente.nl; j.l.schulte@student.utwente.nl). In case there are any questions about the ethics of this study, please contact the BMS ethics committee < ethicscommittee-hss@utwente.nl >.

For this study, it is important that you are a university student and you can read/listen to English on an intermediate level (i.e., have simple conversations about familiar topics).

Are you a university student? Yes/no

Can you read/listen to English on an intermediate level? Yes/no

Date: 01/04/2022

I, hereby, declare to have read the above-stated information and voluntarily agree to participate.

yes/no

Appendix E

Scenario Participants Received at the Beginning of Participation

Imagine you are a second-year psychology student named Luca. A week ago, you took part in an exam about physical safety but due to personal circumstances, you were not able to study properly. Two weeks before the exam, your grandmother passed away and it affected you a lot so that you were not able to concentrate on the test. Shortly before the exam, a friend of yours told you that he was able to take a picture of the answers to the test questions. Since your previous grades were not too good and you needed to pass this exam, you were relieved to have this opportunity and asked your friend to send you the answers. When you took the test, you knew most of the answers and had a very good feeling about passing.

A few days after the exam, you received an email from the Examination Board that said you were suspected of exam fraud. The Board members heard that someone took a picture of the correct answers to the test, and they approached all students that seemed to have an unusually high grade. The Examination Board invited you to a meeting to talk about the exam to find out whether you were one of those students who cheated. When you received that email, you felt guilty but at the same time, you knew that you really need the high grade and thought it was unfair that you would not pass because of your circumstances. Therefore, you did not want to admit that you cheated on the test.

You are now about to meet one of the Examination Board members, imagine you are the student that sits in front of the Board member.

Appendix F

Complete Script of Presented Interviews

Script no-error condition

Member examination board (M): Hello Luca, how are you doing?

Student (S): Yeah I am fine, just a bit nervous. I am not really sure what to expect from this interview.

M: Don't worry, we just want to start by clarifying what happened. What do you think: why are you here today?

S: I am here because of the email I got from the Examination Board where I was accused of exam fraud. The email said that I had the questions and answers to the exam even before I took the test.

M: Did you have the questions beforehand?

S: No, I did not cheat.

M: Can you describe the situation from your perspective?

S: Yes, I went to uni a bit earlier that day to discuss some last things about the exam with my friends and we had lunch together on campus. Then we went to the room where the exam took place and met a few other people before the test started. After the exam, I went to the bathroom and then immediately went home.

M: Did you feel prepared for the exam?

S: No, because I have some personal stuff going on that restricted me from studying. My grandmother passed away two weeks ago and therefore I also had a lot of other things on my mind. Due to the situation, I was not able to prepare as much as I would have otherwise. Nevertheless, I tried my best to prepare as much as I could, and luckily I found out during the test that the questions were not too difficult.

M: Oh, I am sorry to hear. My condolences. Nevertheless, we saw that you did much better on this exam than usual.

S: As I said before, the exam was just not as difficult as the last ones.

M: Still, we will discuss in the next few days how to proceed from here and will inform you about the outcomes via email. Usually, we propose an oral examination to give you the chance to prove that you were able to answer the questions yourself. Are you okay with that or do you have any other remarks or questions?

S: No, that's alright with me. When would this examination take place?

M: We would like to discuss this with your examiner and let you know as soon as we find a date.

S: Alright, thank you.

M: That would be it, for now, thank you for taking your time, Luca. Have a nice day.

Script one-error condition

Member examination board (M): Hello Luca, how are you doing?

Student (S): Yeah I am fine, just a bit nervous. I am not really sure what to expect from this interview.

M: Don't worry, we just want to start by clarifying what happened. What do you think: why are you here today?

S: I am here because of the email I got from the Examination Board where I was accused of exam fraud. The email said that I had the questions and answers to the exam even before I took the test.

M: Did you have the questions beforehand?

S: No, I did not cheat.

M: Can you describe the situation from your perspective?

S: Yes, I went to uni a bit earlier that day to discuss some last things about the exam with my friends and we had lunch together on campus. Then we went to the room where the exam took place and met a few other people before the test started. After the exam, I went to the bathroom and then immediately went home.

M: Did you feel prepared for the exam?

S: No, because I have some personal stuff going on that restricted me from studying. My grandmother passed away two weeks ago and therefore I also had a lot of other things on my mind. Due to the situation, I was not able to prepare as much as I would have otherwise. Nevertheless, I tried my best to prepare as much as I could, and luckily I found out during the test that the questions were not too difficult.

M: Well, you also were not prepared for the last exams. We saw you barely passed your last exams and on this one, you scored rather well.

S: No, you're mistaken. I studied a lot but the last times, the exams were just more difficult. Like I said before, this time was just easier than the last ones.

M: Still, we will discuss in the next few days how to proceed from here and will inform you about the outcomes via email. Usually, we propose an oral examination to give you the chance to prove that you were able to answer the questions yourself. Are you okay with that or do you have any other remarks or questions?

S: No, that's alright with me. When would this examination take place?

M: We would like to discuss this with your examiner and let you know as soon as we find a date.

S: Alright, thank you.

M: That would be it, for now, thank you for taking your time, Luca. Have a nice day.

Script five-error condition

Member examination board (M): Hello Luca, how are you doing?

Student (S): Yeah I am fine, just a bit nervous. I am not really sure what to expect from this interview.

M: Don't worry, we just want to start by clarifying what happened. What do you think: why are you here today?

S: I am here because of the email I got from the Examination Board where I was accused of exam fraud. The email said that I had the questions and answers to the exam even before I took the test.

M: Did you have the questions beforehand?

S: No, I did not cheat.

M: So far, you did not look like a very motivated communication science student. We took a look at your records and since this exam was way better than your previous grades, therefore, we think you cheated.

S: Huh? I'm a Psychology student, not a communication science student. Also, I'm a very motivated student, study a lot and no, I did not cheat.

M: Can you describe the situation from your perspective?

S: Yes, I went to uni a bit earlier that day to discuss some last things about the exam with my friends and we had lunch together on campus. Then we went to the room where the exam took place and met a few other people before the test started. After the exam, I went to the bathroom and then immediately went home.

M: Did you feel prepared for the exam?

S: No, because I have some personal stuff going on that restricted me from studying. My grandmother passed away two weeks ago and therefore I also had a lot of other things on my mind. Due to the situation, I was not able to prepare as much as I would have otherwise. Nevertheless, I tried my best to prepare as much as I could, and in the end, the questions were not too difficult.

M: Well, you also were not prepared for the last exams. We saw you barely passed your last exams and on this one, you scored rather well.

S: No, you're mistaken. I studied a lot but the last times, the exams were just more difficult. Like I said before, this time was just easier than the last ones.

M: Oh, how fortunate that particularly this exam was so easy. Seems a little too coincidental.

S: What do you expect me to answer to that?

M: I just wanted to point that out. Still, we will discuss in the next few days how to proceed from here and will inform you about the outcomes via email. Usually, we propose an oral examination to give you the chance to prove that you were able to answer the questions yourself. Are you okay with that or do you have any other remarks or questions?

S: No, that's alright with me. When would this examination take place?

M: We would like to discuss this with your examiner and let you know as soon as we find a date.

S: Alright, thank you.

M: That would be it, for now, thank you for taking your time, Tony. Have a nice day.

S: My name is Luca. But thanks, have a nice day as well.

M: Oh yes, Luca.

Appendix G

Outcome Table of Additional Analyses with Adjusted Error Groups

Study variable	Error condition					
	No-error (<i>N</i> = 35)		One-error (<i>N</i> = 10)		Multiple errors (<i>N</i> = 47)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Rapport	3.85	0.68	3.69	0.61	2.95*	0.72
2. Trust	3.35	0.56	3.25	0.44	2.64*	0.61
3. Perceived Humaneness	3.91	1.28	4.47	1.32	2.96**	1.03
4. Willingness to provide info	2.59	0.99	2.37	0.82	2.27	1.00

Note. *. Significant difference to control as well as one-error group

*. Significant difference to control group