**Evaluating the Impact of Evidence Disclosure Timings on Rapport and Information Sharing during Suspect Interviews**

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**Abstract**

Investigative interviews are a common practice by the police in the investigation of crimes to gain as much true information about an incident possible. To support investigators in achieving this goal, the current study examined how the disclosure timing of evidence inherent to different interviewing techniques influences the development of rapport and the amount of information shared by the suspect with the interviewer. The two techniques examined are the Tactical use of evidence (TUE) to which a gradual evidence disclosure is central, and the Strategic use of evidence (SUE) that is characterized by a late evidence disclosure. To do so, a 2 (suspect status: guilty vs. innocent) x 2 (disclosure timing: late vs. gradual) design was implemented, replicating an online study by Geschiere (2025), with the difference that the current study took place in a face-to-face setting. The participants of this study ($N = 93$) took part in a mock suspect interview, which was followed by questionnaire that evaluated the rapport established during the interview, while counting the pieces of novel information shared. The first $2 \times 2$ ANOVA revealed no significant effect of disclosure timing and suspect status on rapport, so innocent suspects did not report higher rapport than guilty suspects, regardless of the interviewing technique. Contrary, the second $2 \times 2$ ANOVA revealed significant effects of disclosure timing and suspect status on information sharing. Concretely, a gradual evidence disclosure was associated with higher information sharing, especially among innocent suspects. These findings suggest that in comparison to revealing evidence at the end of the interviews, a gradual evidence disclosure motivates suspects to share more information, which supports interviewers in achieving the goal of suspect interviewing.

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# Introduction

When being confronted with a crime, a central step in its investigation to later identify the perpetrator, is to conduct so-called suspect interviews (Vrij et al., 2014). These interviews are conducted during an investigation to gather information or evidence from a witness or suspect with the goal to get an accurate, detailed, and complete overview of a certain incident to evaluate the suspect's involvement in it (Wakefield & Fleming, 2009). When conducting these interviews, investigators are often confronted with several obstacles to the goal of information gathering. These include involuntary memory fading over time but also active deception, which is a common practice, especially among guilty suspects (Vrij et al., 2014). There are various reasons for the suspect to lie to the investigator, the most obvious is that they want to avoid being convicted and by that, to receive legal punishment. Other possible reasons are trying to gain insights into how much information the investigator holds against the suspect, or the attempt by the suspect to protect other people involved in the incident of investigation (Olteanu, 2014). Further, the outcome of investigative interviews is highly dependent on social dynamics, for example the development of rapport between the suspect and interviewer (Vrij et al., 2014). This implies that the presence of rapport would enhance the suspect's willingness to share information with the investigator, which will be further discussed in the following section.

## Rapport and Information Sharing

As a positive relationship between the interviewer and suspect enhances the outcome of the interview, it is beneficial for the interviewer to focus on building rapport during such (Vrij et al., 2014). Although rapport lacks a universal definition, the most common derives from the tripartite model of rapport as developed by Tickle-Degnen and Rosenthal (1987). According to this model, rapport consists of three components: attentiveness, positivity and coordination. Mutual attentiveness means that the people involved should listen to and show authentic interest in each other. Positivity refers to a positive attitude towards the other person and mutual respect. Finally, coordination indicates that both, suspect and interviewer, harmoniously interact with each other through appropriate speech and gesture (Tickle-Degnen & Rosenthal, 1987).

In the context of investigative interviews, rapport was described as the connection between the interviewer and suspect, characterized by empathy and positivity (Vallano et al., 2015). Although the difficult circumstances, rapport is especially relevant in investigative

interviewing as the investigator is dependent on the suspect's willingness to cooperate (Cowell, 2025) and building rapport is shown to enhance cooperation and recall abilities of the suspect, which in turn benefits the amount and quality of information shared by them (Abbe & Brandon, 2012; Brimbal et al., 2021). Additionally, the results of a study by Vallano and Compo (2011) indicate that rapport improved the quality of the witness' recall as the percentage of accuracy of the information given was found to be increased, especially when suspects were asked open questions. These findings imply a positive relationship between rapport and information sharing, making a high amount of information shared the product of well-established rapport. In the present context, this means, that building rapport will be helpful in achieving the main goal of investigative interviews, namely collecting as much accurate information on an incident as possible (Brimbal et al., 2021).

Because the situation of the interview, a police investigation, is critical as the goal of a guilty suspect is opposed to the one of the interviewer, the relationship between them faces several threats. Concretely, the different status of the people involved lead to a power imbalance between them, which can hinder rapport (Powell et al., 2005). Further, the different goals (e.g. deception for a guilty suspect and the conviction of such for the investigator) hinder the development of a working alliance, which makes the establishment of true rapport difficult, but Vallano et al. (2015) found that it still is possible to create a communication alliance.

As the development of rapport is dependent on how the interviewer behaves towards and interacts with the suspect, it is relevant how they conduct the interview. Here, two techniques are distinguished, the Strategic Use of Evidence (SUE) technique and the Tactical Use of Evidence (TUE) technique, which both concern the timing of evidence disclosure to the suspect.

**Strategic Use of Evidence**

Utilizing the evidence already available to the investigator in order to broaden their information, the Strategic Use of Evidence (SUE) is characterized by a late disclosure of evidence (Oleszkiewicz & Watson, 2020). As mentioned previously, deceiving the interviewer is usually the goal of a guilty suspect during an investigative interview, therefore SUE was initially developed to detect such deception attempts. To do so, interviewers that make use of this technique would share the evidence that is available to them, like reports of eyewitnesses or video footage, only after the suspect gave their complete account about the

event of investigation. By that, a deceiving suspect would be more likely to create so-called statement-evidence inconsistencies (Oleszkiewicz & Watson, 2020), which refer to discrepancies between the information given by the suspect and the evidence hold against them. Such inconsistencies usually arise because the suspect tries to appear innocent by lying about or omitting critical details concerning the incident of investigation, while not being aware that the investigator already knows about the true details (Oleszkiewicz & Watson, 2020). The presence of such inconsistencies would then pose the indicator for deception and by that identify a lying suspect (Oleszkiewicz & Watson, 2020). This technique is based on the self-regulation theory, a psychological framework stating that individuals control their behaviors to achieve personal goals through continuously monitoring and adjusting their actions based on external feedback (Carver & Scheier, 2012). It predicts that when initial behaviours fail, people make use of avoidance, denial, escape, and repair strategies. Therefore, in the context of applying SUE, evidence is used to shift a suspect's strategy to provoke mistakes, i.e. creating statement-evidence inconsistencies (Oleszkiewicz & Watson, 2020).

Although this technique enables the detection of deception, it holds the risk of threatening the relationship between interviewer and suspect. On the one hand, immediate confrontations are avoided during the suspect providing their account, which keeps them feeling in control throughout the conversation (Gabbert et al., 2020), but as soon as the evidence gets disclosed to them, they might feel deceived, due to the interviewer's dishonesty manifested in withholding evidence. By that, the interviewer acts against the concept of transparency central to rapport, which can negatively affect the relationships between suspect and investigator later in the interview and for further meetings (Oleszkiewicz & Watson, 2020). Considering the previous introduced tripartite model of rapport, exhibiting the SUE technique, is then expected to lower positivity, attentiveness and coordination as the suspect feels deceived by the investigator, leading to their disengagement from the interview. Even if the interviewer keeps making effort to support these three components, the further interaction will lack mutuality which is crucial for true rapport (Tickle-Degnen & Rosenthal, 1990). Nonetheless, Weiher et al. (2023) found that rapport can also be re-established in later interviews.

**Tactical Use of Evidence**

Contrary to the identification of deception attempts central to SUE, for TUE the primary goal rather lies in the assessment of a suspect's credibility and gathering of information in a more neutral way which can be used to support decision makers. To do so, interviewers make use of a gradual disclosure of the evidential information to the suspect, precisely after each of the suspect's statements (Oleszkiewicz & Watson, 2020). Similar as in SUE, the TUE technique assumes that guilty suspects are likely to give a short, less detailed account of the event in comparison to innocent suspects but predicts that this is due to limitations of the working memory and the increase of cognitive load when lying (Oleszkiewicz & Watson, 2020). This means concretely that through maintaining a simple story, guilty suspects keep the opportunity to still add details without entangling themselves in lies as they have to remember less information which then limits the cognitive load they have to deal with (Oleszkiewicz & Watson, 2020). Contrary, innocent suspects are assumed to leave out details because they forget about them or think they are not relevant for the investigation. Overall, disclosing evidence little by little gives the investigator the opportunity to reassess the suspect's status by being able to detect inconsistencies within the suspect's statements or to verify the honest account of a suspect throughout the interview (Dando et al., 2013). Still, due to the gradual revealing of information, the suspect is rather able to adjust the statements they are about to share with the interviewer accordingly to appear more convincing, which makes the detection of deception more difficult (Geschiere, 2025; Oleszkiewicz & Watson, 2020).

Concerning rapport, in comparison to SUE, TUE is expected to have less impact on the relationship of the interviewer and suspect, because of the absence of deception by the interviewer about the information they hold (Oleszkiewicz & Watson, 2020). Contrary, it could be argued that the suspect faces many immediate confrontations throughout the conversation, which could also hinder rapport building as the suspect would feel less in control of the situation (Gabbert et al., 2020).

According to the findings of Oleszkiewicz and Watson (2020), it is likely that guilty suspects share overall less details than innocent ones to not entangle themselves in lies. This implies that no matter the interviewing technique, innocent suspects are more willing to share information than guilty ones, so this research further aims to explore which of the interviewing techniques introduced will motivate guilty suspects to share more information through establishing higher rapport than the other.

**Previous Studies and this Research**

Regarding previous research, a similar study was conducted in an online environment by Geschiere (2025), examining the impact of evidence disclosure timing (gradual vs. late) and suspect status (guilty vs. innocent) on rapport. The 67 participants read a mock crime scenario in which, dependent on their suspect status, they either committed a heist (guilty) or visited a museum for a day (innocent). Then, an online mock police interview followed where participants were instructed to convince the interviewer of their innocence. There was a significant positive effect found of gradual disclosure on rapport. Further, rapport was significantly higher in innocent suspects compared to guilty suspects, but there were no significant interaction effects found between evidence disclosure timing and suspect status.

Although her results might still be applicable, contrary to her study, most real suspect interviews are done in person. Further, since her study was conducted online, rapport-building might have been complicated by using the laptop as a medium. This is because coordination, as one of the main components of rapport, is limited to facial mimicry and hand gestures instead of full body-language (Tickle-Degnen and Rosenthal, 1987), while natural eye contact gets hindered via camera (Vallano et al., 2015). Additionally, the uncontrollability of the participant's physical environment as present in Geschiere's study, could have led to distractions or influenced rapport, which threatens the standardization of the study (Geschiere, 2025).

To make the results of this study more inferable and further close the research-gap on rapport-building during suspect interviews, rapport will be investigated in a face-to-face setting in neutral rooms to resemble the context of actual suspect interviews as closely as possible, ultimately increasing the authenticity of the current study. The mock interviews will be carried out using the timing of evidence disclosure according to either the TUE or SUE technique to gather information on the suspect's involvement in the incident.

The aim of this study is to deepen the understanding of rapport, its building and maintenance, as well as its consequences for suspect interviewing. The results of this research provide practical insights into whether and how the TUE or SUE technique can be used to build rapport during such interviews to achieve optimal outcomes by getting as much true information on an incident as possible. This is helpful for investigators for convicting a guilty suspect and reduces the risk of accusing innocent people as well as for collecting evidence to support legal decision-makers, like judges, in making adequate verdicts.

**Hypotheses**

*H1*: Innocent suspects will report higher levels of rapport than guilty suspects, regardless the disclosure timing of evidence.

*H2*: Guilty suspects interviewed using a late disclosure of evidence (SUE) will report lower levels of rapport and share less information than those interviewed using gradual disclosure of evidence (TUE).

**Methods**

**Design**

To investigate the effect of the evidence disclosure timing of SUE and TUE on the dependent variables, rapport and information sharing, a 2 (suspect status: guilty vs. innocent) x 2 (disclosure timing: late vs. gradual) design was implemented. This study was approved by the Ethics Committee of the University of Twente in 2025 (ID: 250145).

**Participants**

The inclusion criteria for this experiment were the ability to speak English fluently and to be older than 18 years. There were no exclusion criteria besides previous participation in two different online studies (one concerning how the public forms sentencing decisions in the court room and one mock crime memory task) as they were too similar to the present study, which could influence its results as participants might be too aware of its true matter of interest. The participants were collected via SONA, an online platform to manage participant recruitment, scheduling, and data collection for research studies (see Appendix A for the entry on SONA). Additional participants were recruited from the researchers' social environment (i.e. friends, family, colleagues, etc.), but never interviewed by the recruiter themselves to prevent biases in the rapport-rating. After removing one participant due to a lack of transcript of the related interview, the final sample of this research consisted of 93 participants. They were aged 19 to 30 years with a mean age of 22.27 ($SD = 2.4$). Overall, 42 participants identified as male, 50 as female and one as non-binary/third gender. Within the gradual disclosure condition, 24 participants were 'innocent' and 24 'guilty'. Regarding the late disclosure, 21 participants were 'innocent' and 24 'guilty'.

**Materials**

*Technical Requirements*

To conduct the study, a laptop for the participant to sign the informed consent, read the instructions and fill in the questionnaires was necessary. For the transcription of the interview, the software *Microsoft Word* was used.

### *Informed consent*

The informed consent (Appendix B) consisted of the purpose of the research, its length, general instructions, the inclusion criteria and potential risks which mainly consisted of potentially feeling stressed. Additionally, the storage of the anonymized data was explained, and the participant was informed about the possibility to withdraw from the study at any point without any justification. Finally, the contact information of the researchers and supervisors were provided, and the participant was asked to give their consent by ticking five boxes ensuring that they understood the main points of the information given.

### *Mock Crime*

For the mock crime, one out of two different scenarios was presented to the participant, dependent on their randomly assigned suspect status. When assigned to the innocent condition, they read a scenario about planning to go to Berlin for a job interview and to visit a museum with some friends afterwards. Here, they received information about their financial situation, academic background and were introduced to their friends, Anna, Femke and Pascal (Appendix C). After doing so, the participants filled out a survey in which they were asked to react to transcripts of voice messages and pictures from Anna with further instructions and details about the plan for the day, including their travel, accommodation, physical appearance, and expertise. The participant chose from one out of two answers to these messages like "Well, I will wear a suit for the interview. So you probably also do not recognise me much either." or "Maybe I will put on some fake glasses so I don't feel left out in having changed so much". These answers were not relevant for the experiment itself but intended to make the scenarios more vivid. Afterwards, they read another short abstract about how their day in Berlin went, that ended with officers taking them to the police department where they are awaiting the interview with the investigator (Appendix C). The innocent condition was designed to make the suspect feel just as involved in the crime as for the guilty condition by using the same evidence making them suspicious to the police. The difference is that the innocent suspects are provided with sufficient information to plausibly explain the evidence hold against them.

Guilty participants received a scenario in which they plan to steal a painting from the same museum in Berlin, including information on the same topics as the innocent condition and get introduced to the painting they are about to steal (Appendix D). Through the survey of this condition, they were introduced to their accomplices, Anna, Marcel and Sally, and received details of the heist through encrypted messages from Anna. The messages included information on the same topics as for the innocent condition but with emphasis on the alarm system and layout of the museum. Here, the participants chose from answers like "Are we sure we can rely on the others?" or "This seems very risky.". As for the innocent condition, these were irrelevant for the outcome of the experiment. This survey ended with a description of how the heist went and a police officer arresting the participant. Finally, they received the instruction to appear cooperative and to convince the police of their innocence (Appendix D).

### *Interview*

For conducting the interview, a room with two chairs, one for the participant and one for the interviewer, was necessary to make the scenario of a suspect interview seem authentic and ensure a quiet interview setting. Additionally, two different scripts, according to either SUE (Appendix E) or TUE (Appendix F), similar to the ones used for the research of Geschiere (2025), were utilized. The scripts ensured that all relevant topics, namely the suspect's expertise, their group membership, and activities within the museum, were covered during the interview. Further, the scripts supported standardization by ensuring consistency among the interviews to rule out confounds regarding the development of rapport, so the experimental conditions were the main factor to influence it.

The script for SUE was initially based on the Shift of Strategy (SoS) approach (Luke & Granhang, 2022), where interviewers present evidence in a non-accusatorily way and challenge inconsistencies between a suspect's statement and the available evidence to provoke a shift in the suspect's strategy from the withholding to sharing information. It was adjusted to fit the late disclosure, so instead of challenging the suspect's statements right away, the interviewer first locked the suspect's complete account. Further, the script instructed the interviewer to hold the interview according to Nyström et al. (2024) regarding phrasing and how to detect (in)consistencies, and with respect to what was recommended by Hartwig et al. (2014) about how to take and lock an initial account before revealing the evidence. These practices are expected to encourage rapport building by using open-ended

questions and framing them in a non-accusatory way (Hartwig et al., 2014; Nyström et al., 2024).

The script to apply the TUE technique was mostly based on the Scenario's Onderzoekende Methode (SOM) (Van Beek & Bull, 2023). It holds similarities to the SoS approach, but the interviewer summarizes and questions the information given by the suspect right after each topic. Although contrary to the initial principle of SOM, funnelling was for the script of TUE limited to prevent being overly directive and to enable comparison between the evidence disclosure timings by keeping the interview questions for both scripts as similar as possible, since the timings were the main focus of this research.

Both scripts started with the interviewer introducing themselves and establishing that the suspect was in the museum that day, as otherwise the interview could not be continued. Then, the suspect was asked to describe their day in Berlin in as much detail as possible and the interviewer proceeded to discuss each of the topics mentioned with them. An example of a question regarding their group membership was "Did you meet anyone at the museum?". If they denied meeting anyone, the interviewer said, "To confirm, you're saying you were alone at the museum and didn't meet anyone?".

Now, the script of SUE prescribed that when the suspect adjusted their answer, they were asked to elaborate. If not, the interviewer proceeded with the next topic until the suspect gave their whole account on all topics. Finally, the interviewer revealed the evidence they held against the suspect and asked their explanations for possible contradictions between their statements and the evidence.

Contrary, the script for the TUE technique gave instructions to disclose the evidence gradually. Referring again to group membership as an example, after the same questions as for SUE were posed and the suspect insisted that they were alone in the museum, they were immediately confronted with the evidence available on this topic, which was video footage that shows the suspect with other people in front of the stolen painting, and given the opportunity to explain the discrepancy before continuing with the next topic.

Both scripts ended with asking the participant if they had more to add and thanking them for coming.

***Bernieri Rapport Scale***

Investigating the rapport established during the Interview, the Bernieri Rapport Scale (Bernieri, 1991) was used. It consisted of seven scales, that measured rapport through the participants' degree of agreement to statements like "the interaction seemed harmonious" or "the interaction seemed positive" (Bernieri et al., 1991) (see Appendix G for the full questionnaire of Bernieri). The participants indicated their answers on a 5-point Likert scale where one indicated "strongly disagree" and five indicated "strongly agree", leaving three as a neutral response, indicating "neither agree nor disagree".

*Debrief*

Finally, the participants received a detailed debrief with a clear explanation of the true purpose of the research, its importance and, again, withdrawing policies as well as contact information of the researchers for further questions (Appendix H).

**Procedure**

After given the general context of the study by the researcher, giving their consent (Appendix B), and entering their participant number, the participants received general instructions on the questionnaire.

After being randomly assigned to either the innocent or guilty condition, the participant read the belonging scenario (Appendix C & D), followed by filling out the survey, reacting to their friend's/accomplices' messages. While doing so, the researcher stayed with the participant to guide them through the questionnaire and answer possible questions.

After finishing the questionnaire on the scenario, the researcher left the room. Then, the interviewer entered and started conducting the interview according to one of the two scripts (Appendix E & F), as soon as the participant allowed the conversation to be transcribed. Which technique was used, was based on the interviewer's preference and to keep balance between the four conditions.

When the interview was done, the interviewer left the room and the researcher re-entered, helping the participant, if necessary, with filling out the Bernieri Rapport Scale (Appendix G) and demographics. After reading the debrief (Appendix H), the participant was thanked for their participation and asked if any questions remained. If not, the participant left.

**Data Analysis**

The programme R (version 2024.04.1+748) was used to analyse the data. First, these packages were installed: readxl, tidyverse, lawstat, stringr, car, ggplot2, readr and dplyr. Then, Pearson's correlation coefficient was computed to test for the correlation between the Bernieri Rapport Scale and information sharing. Afterwards, the data was tested for the assumptions of normality and homoscedasticity. To test for the first assumption, a Q-Q plot of the residuals was created. After that, the Levene's test was performed to test the data for homoscedasticity. If any of these assumptions were violated, non-parametric alternatives like the Kruskal–Wallis test and transforming the data to improve distribution characteristics, were considered, but since all assumptions were sufficiently met, ANOVA was used to test the hypotheses. Precisely, two 2 x 2 ANOVA were computed. Out of these, the first ANOVA compared disclosure timing of evidence (late vs. gradual) and suspect status (guilty vs. innocent) on rapport while the second ANOVA compared disclosure timing and suspect status on the amount of information shared during the interview. The information sharing was quantified by counting each time the suspect shared a new piece of information regarding their group membership, activities within the museum and expertise, no matter if true or not. Additionally, to ensure the consistency among the three researchers who coded the information sharing, an Intraclass correlation coefficient (ICC) across ten transcripts was computed.

## Results

### Descriptive Statistics

While the mean score on the Bernieri Rapport Scale was 3.55 ($SD$ = 1.17), the mean score of the information shared per participant equalled 13.17 ($SD$ = 6.31). The ICC performed indicated an excellent level of agreement between the three researchers across 10 out of 93 transcripts ($ICC(2,3)$ = .99, 95% CI [.98, 1.00], $F(9, 18)$ = 166, $p < .001$). To investigate whether there is a relationship between the total information shared by each participant and their score on the Bernieri Rapport Scale, the Pearson correlation coefficient was calculated and revealed $r(91)$ = .07, $p$ = .53, 95% CI [−.14, .27], which implied that rapport and information sharing are not correlated.

### Assumptions Testing

To ensure the data can be investigated through parametrical tests, two assumptions were tested for. The assumption of independence of observations was met due to the experiment's design, as each participant was assigned to only one condition. Then, the

assumptions of homoscedasticity of variance and normality of residuals were tested for the Bernieri scores. Levene's test revealed $F(1, 91) = .25$, $p = .86$ which means that the variances of the Bernieri scores across the participants are statistically equal and suggested that the assumption of homogeneity of variance was met. However, the assumption of normality was slightly violated (left-skewed) as shown by the Q-Q-plot, which indicated that the residuals of the data were not normally distributed (Appendix I). This violation means that the results of following parametric tests, such as ANOVA, should be interpreted with caution, as they may be less reliable than under normal conditions. Nevertheless, ANOVA is generally considered robust to mild deviations from normality, especially with larger sample sizes.

To test the assumptions for the data of the information sharing, the previous procedure was repeated. Here, Levene's test revealed $F(1, 91) = 1.28$, $p = .29$, which means that the variances of the shared information scores across the participants are statistically equal, so the data is homogenic, too. The assumption of normality was met as shown by the Q-Q-plot which indicates that the residuals of the data are normally distributed (Appendix J).

The visual inspection of the Q-Q plots created, revealed several lower-end outliers, particularly in guilty suspects of the SUE condition (Appendix I & J). These were still retained, as they reflected meaningful variation rather than error.

**Main Analysis**

This study investigated the impact of two independent variables, disclosure timing of evidence (late vs. gradual) and suspect status (guilty vs. innocent), on the dependent variables rapport and information sharing. To test the hypotheses, two 2 x 2 ANOVA were carried out.

***Rapport***

First, a 2 x 2 ANOVA investigating the effect of suspect status and disclosure timing on rapport was carried out. It revealed that there was no significant main effect of suspect status on rapport, $F(1, 89) = 2.63$, $p = .108$ (*H1*), no significant main effect of disclosure timing on rapport, $F(1, 89) = .91$, $p = .342$ (*H2*) and no significant interaction effect between disclosure timing and suspect status, $F(1, 89) = .03$, $p = .875$ (*H2*). These results show that, rapport scores did neither differ based on whether the suspect was guilty or innocent, nor for a late or gradual disclosure timing of evidence. Further, as there was no significant interaction effect found, the effect of disclosure timing on rapport also did not differ for suspect status.

Contrary, comparing the mean rapport score of innocent ($M$ = 3.75, $SD$ = 1.19) and guilty ($M$ = 3.36, $SD$ = 1.14) suspects implies that innocent suspects reported slightly higher rapport, regardless of disclosure timing. Further comparing the means revealed that suspects reported on average higher rapport under the late condition ($M$ = 3.67, $SD$ = 1.05) than under the gradual evidence disclosure ($M$ = 3.44, $SD$ = 1.28). Considering the means of the each condition revealed that on average, innocent suspects under the late evidence disclosure reported the highest level of rapport ($M$ = 3.9, $SD$ = 1.0), followed by the innocent suspects of the gradual condition ($M$ = 3.61, $SD$ = 1.34) and that the mean rapport score of guilty suspects under the late disclosure was slightly higher ($M$ = 3.46, $SD$ = 1.06), than under the gradual disclosure ($M$ = 3.26, $SD$ = 1.23). Comparing the mean scores show that overall, innocent suspects indicated higher rapport scores than guilty ones and that the late evidence disclosure led to slightly higher rapport scores than the gradual condition.

### Information Sharing

A second two-way ANOVA investigated the effect of disclosure timing (late vs. gradual) and suspect status (guilty vs. innocent) on information sharing. The analysis revealed a significant main effect of disclosure timing, $F(1, 89)$ = 5.38, $p$ = .023, a significant main effect of suspect status, $F(1, 89)$ = 8.06, $p$ = .006, and a marginal interaction between disclosure timing and suspect status, $F(1, 89)$ = 3.48, $p$ = .065, which did not reach significance.

Comparing the means revealed that innocent suspects shared on average more information ($M$ = 15, $SD$ = 6.38) than guilty suspects ($M$ = 11.45, $SD$ = 5.8) and that the gradual disclosure of evidence ($M$ = 14.54, $SD$ = 6.93) led to more information shared than the late disclosure of evidence ($M$ = 11.71, $SD$ = 5.26). Further, the mean score of information shared by guilty suspects was slightly higher when interviewed with a gradual disclosure timing ($M$ = 11.71, $SD$ = 5.67) than for late disclosure timing ($M$ = 11.19, $SD$ = 6.03). Regarding innocent suspects, a gradual disclosure ($M$ = 17.38, $SD$ = 7.02) also led to higher information sharing than a late disclosure ($M$ = 12.3, $SD$ = 4.29). These results pose strong evidence that both, disclosure timing and suspect status, influenced how much information is shared by the suspect. Concretely, the gradual disclosure led to more information shared than the late disclosure of evidence, especially among innocent but also guilty suspects.

Overall, the results found do not pose evidence for *H1*, as innocent suspects did not report significantly higher rapport than guilty ones, so the related *H0* cannot be rejected. Further, as there was also no interaction effect found, the effect of disclosure timing on rapport did not differ for suspect status. Therefore, guilty suspects did not report significantly lower rapport when interviewed using the late disclosure compared to the gradual disclosure of evidence. Contrary, comparing the means indicated that rapport was even slightly higher under the late disclosure, which contradicts *H2*. Nonetheless, guilty suspects disclosed less information under the late disclosure of evidence than the gradual. This suggests that gradual evidence disclosure enhanced information sharing but did not necessarily improve perceived rapport among guilty suspects, so overall *H2* was only partially supported.

## Discussion

The present research investigated whether the evidence disclosure timings of SUE and TUE had an impact on the development of rapport and willingness to share information regarding the suspect's status in the context of suspect interviews. The results of the study did not find support for the first hypotheses, stating that innocent suspects will report higher levels of rapport than guilty suspects regardless of disclosure timing of evidence (*H1*) but partially supported the second hypotheses, predicting that guilty suspects interviewed using a late disclosure of evidence (SUE) will report lower levels of rapport and share less information than those interviewed using a gradual disclosure of evidence (TUE) (*H2*). This means that overall, innocent suspects would not perceive higher rapport than guilty ones, but guilty suspects would share less information under a late than gradual evidence disclosure, although rapport was not significantly influenced by disclosure timing.

### Rapport

Interpreting these findings, it can be concluded that according to the rapport scores, innocent suspects would not perceive higher rapport than guilty ones, no matter the disclosure timing of evidence. This is not in line with the initial expectation that overall, rapport would be higher for innocent suspects, which was based on the assumptions that, compared to guilty suspects, innocent suspects are more likely to develop a working alliance with the interviewer, as they do not have opposed goals to them, which facilitates rapport-building (Vallano et al., 2015). This means that, as innocent suspects are aware that they did not commit the crime and therefore have reasonable explanations for the evidence, they are more likely to be cooperative than guilty suspects. The absence of differences in rapport scores

regarding suspect status implies that either the effect of a working alliance was not as impactful as expected or that other factors hindered rapport for the innocent or enhanced rapport for guilty suspects, leading to the scores only differing insignificantly. On the one hand it could be argued that enhanced stress and frustration of innocent suspects due to feeling that their honesty is not valued or accepted as concluded through additional questioning by the interviewer, could have led to a more negative evaluation of them and diminished trust, ultimately lowering rapport. On the other hand, as found by Alison et al. (2013) rapport only gets significantly hindered when the interviewer fails to execute basic communication skills, implying that as long as such were implemented, rapport can be established without the presence of a working alliance and with little difference concerning the suspect status.

Considering rapport regarding the disclosure timing of evidence, the rapport scores did not differ significantly when comparing a gradual and late evidence disclosure, which was against the initial expectation. Contrary, comparing the means indicated that rapport was even slightly higher under the late disclosure, although not significantly. On the one hand, this aligns with the assumption that, although there is no deception diminishing rapport as in SUE, the immediate confrontations throughout the conversation, as part of TUE, might affect rapport equally as negative (Gabbert et al., 2020). On the other hand, it could be argued that, the scripts for both techniques were created with a focus on a respectful interaction and considering the findings of Alison et al. (2013), rapport only gets truly harmed when the basic social interactions are abounded, which would explain the similar rapport scores.

Further attempting to explain the discrepancy between the hypotheses and findings, it could be that the Bernieri Rapport Scale does not measure the same aspects of rapport as the ones relevant in this context, as rapport lacks a concrete definition (Vallano et al., 2015). Rating items like 'The interaction seemed positive' might give an impression of the suspect's overall experience of the interaction, but as they are rather broad, it is difficult to evaluate what specifically was measured by them. Especially considering that the statements rather evaluate the overall interaction instead of the interviewer's behaviour or concretely the presence of the components as proposed by the tripartite model of rapport, attentiveness, positivity and coordination (Tickle-Degnen and Rosenthal, 1987). Still, the Bernieri Rapport Scale offered a concise and comprehensive scale with limited influence on the rapport perception as it is relatively non-directive due to its generality.

**Information Sharing**

        Considering the amount of information, innocent suspects shared more information than guilty ones, which can be explained by innocent suspects not fearing to entangle themselves in lies through mentioning to many details to keep track of (Oleszkiewicz & Watson, 2020). Nonetheless, the innocent condition was provided with a certain number of details, while guilty suspects had to spontaneously come up with explanations for the evidence themselves. This implies that the study design could have influenced the amount of information shared as well.

        As expected, suspects interviewed according to a gradual evidence disclosure shared more information than suspects interviewed according to a late evidence disclosure. Although, this was theorized to be due to the lower impact of TUE on rapport as the suspect does not feel deceived by the interviewer withholding information when using SUE (Oleszkiewicz & Watson 2020; Geschiere, 2025), the equal rapport scores do not support this assumption. This implies that the amount of information shared must not necessarily be the result of enhanced rapport. Since the inconsistencies would be discussed right after their occurrence, especially innocent suspects were more likely to add more information when the topic was more proximate than when brought up again in the end of the interview along with the other topics.

        Although the relationship found between information sharing and rapport was positive as expected, the correlation did not reach statistical significance. While limited statistical power due to the sample size might have contributed to this, it is probable that other factors influenced the finding as well. As mentioned in the previous section, the information sharing was enhanced by applying the gradual disclosure, but this must not necessarily mean that this effect was due to higher rapport. Nonetheless, taking the willingness to share information as an indicator for perceived rapport (Brimbal et al., 2021), support for the initial expectation that rapport is higher for innocent suspect may still be concluded.

**Limitations**

        Reflecting on the study design and implementation, some limitations were encountered that might have influenced the results of the study.

        The first limitation concerns the sample of the present research as it was mostly recruited through convenience sampling, because only few people signed up through SONA.

These circumstances lead to a very narrowly characterized sample, producing a so-called WEIRD sample (standing for Western, Educated, Industrialized, Rich, and Democratic) that additionally was clustered around young students (Henrich et al., 2010). This is a problem for the inference of the results, because this sample does not represent the people that are typically being interviewed in real police investigations. To counteract this, detailed mock crime scenarios were used which were further supported by their interactivity as the participants were asked to choose the answers themselves which had the effect of making the situation more engaging and by that trigger emotions and responses as authentic as possible. Additionally, the sample size was significantly bigger than the one of the replicated study by Geschiere et al. (2025), which supports the interpretation of these findings.

Additionally, the artificial set-up of the study might pose a further limitation of this research as the study took place in a highly controlled laboratory setting. Further, neither the interviewer, nor the participant are actually police investigator or suspect. This means for the interviewer, that although they adhered to best practice, they are lacking proper training and experience in guiding investigations, especially compared to investigators in other studies in similar domains (Dando & Bull, 2011). For the participant that means that, even if they were able to empathize with the situation to some extent, the emotions they had were probably not as intense as for actual suspects (Holmberg & Christianson, 2002). Additionally, it is probable that because the participants were given information about their day in Berlin instead of experiencing it themselves, the authenticity of their responses and behaviour is limited. Further, the participants were aware that they are not seriously at risk of legal consequences, which could affect how they disclose information and experience rapport overall (Herrema et al., 2025). These circumstances hinder the authenticity of the perceived emotions for both sides and by that further affect the findings. Still, by using the scripts, the interaction was kept as close to a real investigation as possible and the lack of training and experience was minimized, and they further supported the generalizability of the study.

Further, social desirability could have posed a threat to the results of the study for both parties of the interview. As experienced by myself, for a person that usually avoids confrontations, especially with strangers, it was hard to repeatedly counteract the participant, which sometimes lead to the continuation with the next topic instead. For the participant, social desirability could have an impact on the results of the Bernieri Rapport Scale, because they might have indicated higher levels of rapport than truly experienced to reassure the interviewer and the results of their study (Horsfall et al., 2021). To minimize the effect of

social desirability, the scripts helped with sticking to certain topics, and the debrief made it clear that the contradictions by the interviewer were part of the experiments. Further, the participants were informed that the data of the whole study, including the Bernieri Rapport Scale was anonymized, so the results could not be connected to a specific participant.

Finally, as the interviews were held in English, the interviewer and most participants had to use another language than their mother tongue. This not only impacts the understanding of the study but also the authenticity of both, interviewer and suspect, which further affects their relationship and might dimmish rapport-building (Rogerson-Revell, 2007). Nonetheless, holding all interviews in the same language supported the standardization of the study, so the results found are more reliable than switching the language depending on the participant's mother tongue. Further, all participants were fluent in English as this was one of the inclusion criteria so the impact on rapport is moderate.

**Conclusion**

Overall, comparing the results to the original study, the findings did not replicate what was previously found by Geschiere (2025) as her study revealed a significant positive effect of gradual evidence disclosure on rapport through the examination of the scores on the Bernieri Rapport Scale. A possible explanation for that could be that she was working with a much smaller sample size and the effect found not being significant enough to occur for a broader sample as well. Still, the current study found a significant effect of the disclosure timing of evidence on the amount of information shared, so both studies underline the positive effects of using the TUE technique for the beneficial outcome of investigative interviews.

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**AI Statement**

In the context of this study, ChatGPT was used to create codes and identify and fix errors in the RStudio script. All of these codes were thoroughly checked before being used for any analysis. Further, ChatGPT was used to check whether the results were reported in APA style 7th edition.

## Appendix A

## Entry on SONA

Study Information

| Study Name | 1.25 Credits - Can you get away with crime? (Mock police interview study) |
|---|---|
| Study Type | **Standard (lab) study** This is a standard lab study. To participate, sign up, and go to the specified location at the chosen time. |
| Study Status | **Visible to participants :** Approved **Active study :** Appears on list of available studies |
| Duration | 45 minutes |
| Credits | 1.25 Credits |
| Abstract | The aim of this research is to gain a better understanding of the interaction between police interviewers and suspects and how this affects the outcome of interviews. If you take part you will be asked to play the role of a suspect accused of a crime. |
| Description | You will be asked to play the role of someone visiting a museum in Berlin. You will be given a brief description that describes your activities. You will need to read this information carefully because you will be asked questions about it within the interview. After reading through the material, you will take part in a mock police interview. During the interview, the police interviewer will ask you a series of questions. Your task will be to convince them of your innocence. After the interview you will complete a questionnaire and the experimenter will provide a debrief which explains the study in more detail. |
| Eligibility Requirements | To take part you must be at least 18 years of age or older and be fluent in English. |
| Preparation | No preparation needed. |

Restrictions ⌄

| Sign-Up Restrictions | **Must NOT have signed up or completed ANY of these studies:** • Jury Duty - Sentencing Decisions of the General Public II • Mock crime memory task |
|---|---|
| Prescreen Restrictions | No Restrictions ⟳ View/Modify Restrictions ⟳ Set Prescreen Response Distribution ❓ |

Additional Study Information ⌄

| Participant Sign-Up Deadline | 24 hours before the study is to occur |
|---|---|
| IRB Approval Code | 250145 (expires 30 May 2025) |
| Direct Study Link | https://utwente.sona-systems.com/default.aspx?p_re This is a direct URL for participants to access the study. You may use this in an email or study advertisement. |
| Date Created | 17 February 2025 |

**Appendix B**

**Informed Consent**

**Purpose of the research**

The aim of this research is to gain a better understanding of the interaction between police interviewers and suspects and how this affects the outcome of interviews. If you take part you will be asked to play the role of a suspect accused of a crime. Participating in this research takes up to 40-45 minutes.

**What will I have to do?**

You will be asked to play the role of someone visiting a museum in Berlin. You will be given a brief description that describes your activities. You will need to read this information carefully because you will be asked questions about it within the interview. After reading through the material, you will take part in a mock police interview which will take place online. During the interview, the police interviewer will ask you a series of questions. Your task will be to convince them of your innocence. After the interview you will complete a questionnaire and the experimenter will provide a debrief which explains the study in more detail.

**Who can take part in this research?**

To take part you must be at least 18 years of age or older and be fluent in English.

**Are there any risks associated with taking part?**

There is minimal risk involved in participating in this study. However, some participants might feel stressed because you must play the role of a suspect accused of a crime within a police interview. If you are worried about how this might affect you, we ask

you to consult the research team before deciding to participate. Our contact details can be found at the end of this form. There will be no danger to your physical well-being or safety, and you can end the interview at any time without having to provide an explanation.

**How will my data be stored and used?**

Your data will be used for the completion of BSc theses, and the research may also be presented at academic conferences or within academic journals. Your questionnaire data will be stored only in an anonymized form. Access to the research data can therefore not be used to identify specific individuals. The interviews will be recorded in order to be able to analyze the obtained data. The recorded data will be stored on secure university servers for 10 years according to the University of Twente's data policy. All data (audio and questionnaire) will be stored on the universities' password-protected servers to ensure maximum security. The audio will only be available to the research team, unless you specify, at the end of this study, that the audio may be used for educational purposes or to present the research. The anonymized data may be made public in accordance with the principles of open science, but any publicly available data will be in a fully anonymized form (including the removal of any participant numbers) and so it will not be possible to identify any single individual from the available data.

**What are my rights and how can I withdraw?**

Participating in this research is entirely voluntary and you do not have to take part if you do not want to. You have the right to withdraw from participation at any time, without giving any reasons, without any consequences. You can simply hang up the call, the researcher will not call you back. However, if you lose connection accidentally, the researcher will remain available to call back for 5 minutes. Upon your request we will

immediately delete the audio of you, you need only provide us with your participant number, so we know which audio to delete. Participating in this research can be terminated at any moment. Presuming that you terminate this research, all your data will be fully deleted and omitted from the research.

Questions or remarks regarding this research can be directly emailed to the researchers [c.m.heukingstudent.utwente.nl] or the project supervisor (s.j.watson@utwente.n and l.weiher@utwente.nl).

Complaints or concerns about this research can instead be emailed to the secretary of the Behavioural Management and Social Sciences Ethics Committee of the University of Twente. (Drs. L. Kamphuis-Blikman, Tel: +31 (0) 53 489 3399, or Email: l.j.m.blikman@utwente.nl).

**Appendix C**

**Scenario innocent**

You are in debt. You are desperately looking for a job and you need extra cash to pay your rent, because your landlord is already threatening to have you evicted and you have nowhere to go if you lose your flat. Anna, who you met at some social events during your studies in computer science, told you about a job in Berlin when you met her again recently at a bar with some mutual friends. You apply and got an interview. As you have some friends in Berlin, you decided to stay a day longer in Berlin to meet your old friends.

The day of the interview comes – and seemed to go well enough but you won't hear back for a week or two whether you got the job. You buy your tickets to the metro using cash, meet the others in the museum. You spend some time looking at The Monk by the Sea. Nobody seemed particularly surprised by your now apparently blonde hair – well, not all jokes can work out. You and Pascal spend some time looking around at the security cameras and joking about how you'd be have to be able to delete the data to get away with your joke heist. You explore the museum a little more, and you think your nightmare at the zoo is going to repeat, as Femke says she thinks she might be having a seizure at around 6pm. You take her to the disabled toilets in the basement for some calm, but fortunately it turns out to be a false alarm. After staying in the toilet for about 10 minutes chatting with her you come out and rejoin Anna and Pascal who were waiting outside in case you indicated you needed help from the museum staff. You go out for food and watch some of Femke's boyfriends band, but, still concerned about Femke's health you all go back home to Anna's cousin's place a bit early. The next morning you travel back home. About one week after the heist there is a knock on your door at your apartment. A police officer checks your name, then tells you that you are under arrets for art theft. In a few minutes time you will be interviewed by a

detective. You are innocent of any crime and decide that you will try to convince them of your innocence by giving your side of the story.

**Appendix D**

**Scenario guilty**

You are in debt, desperately looking for a job and need extra cash to pay your rent because your landlord is already threatening to have you evicted and you have nowhere to go if you lose your flat. Anna, who you met at some social events during your studies in computer science, approached you at a bar recently with some mutual friends and asked you whether you would like to join in a heist. She convinces you that you will only steal a painting from a museum with limited risk of being caught, and no chance of anyone being harmed, so you agree. You have already been in contact with the team numerous times via encrypted messages.

The day of the heist comes – and the plan seems to work perfectly. You buy your tickets to the metro using cash, meet the others in the disabled toilet just before 7pm. Your device seems to work perfectly, and Sally was able to remove and replace the painting with remarkable speed and skill. The replacement looked just as good as the original to you. You slip out of the museum at midnight as planned, and travel to Anna's cousin's flat. Anna tells you your share of the money will be arriving within a couple of weeks, but one week after the heist there is a knock on your door at your apartment. A police officer checks your name, then tells you that you are under arrests for art theft. Ina few minutes time you will be interviewed by a detective. You decide that you will try to appear cooperative and convince them of your innocence.

**Appendix E**

**Script SUE**

**Interview topic guide – Late SUE**

Part 1 – Opening and initial free narrative

Hello, my name is NAME.

I am investigating an incident at the Natural History Museum in Berlin. There has recently been some criminal activity there. A painting has been stolen and we have reason to believe you may have been involved.

Because of that, I need to ask you some questions about your recent visit there. Please answer our questions as fully as you're able to. This is your chance to give your side of the story so we don't make any wrong decisions.

1. First, can you let me know in as much detail as possible about your visit to the museum?

Part 2 – Probing and locking the account

Topic 1 - Establishing they were at the museum

If they admit being at the museum and in Berlin within the opening statement, then these items can be omitted.

If not, then they need to be disclosed to prove that we know they were there – a way to get the ones who want to be too clever to engage properly with the task:

1. Thank you for giving me an overview of your day, but you don't discuss being at the museum and we have reason to believe you were in Berlin and at the museum at the time of the event. Can you tell us what you were doing there and what you did while you were there?

If still deny being there:

2. I'm sorry, but we have train tickets in your name travelling to Berlin before the event, and CCTV footage of you entering the museum. So we have a discrepancy here with what you're saying and the evidence we have. Please let me know what you were doing during the visit to the museum.

*Possible contradictions and clarifications to note for later probing*:

Method of travel – you have tickets showing they were on the U5 metro line to Berlin.

You have CCTV of the suspect entering the museum alone.

Did they describe and explain wearing the disguise shown in the CCTV?

Topic 2 – Expertise

1. One thing we wanted to ask you about was your background, can you tell us a bit about your education and profession?

2. Can you tell us any more about your expertise in physical security measures, like alarm systems?

If they have not yet mentioned a reason to know about or purchase tools and materials for physical security:

3. To clarify, you are saying that there is no reason why you would need access to materials for building physical security devices?

*Possible contradictions and clarifications to note for later probing*:

Do they mention they studies computer science and security – you know about their study and employment history in security design.

Do they explain why they might have ordered parts to make physical security devices – you have financial records showing they purchased equipment needed to make a device to interrupt the museum security systems.

Topic 3 – Group membership

If they have not mentioned meeting anyone at the museum:

1. Did you meet anyone at the museum?

If they still deny meeting anyone/fail to describe them:

2. To confirm, you're saying you were alone at the museum and didn't meet anyone?/Can you tell me any more about the people you were with? (If not after latter, thanks them and move on)

*Possible contradictions and clarifications to note for later probing*:

Claiming to be alone.

Lying about/not mentioning being in contact with the other people.

Topic 4 – Activities within the museum

Depending on if they already explained being in in the disabled toilet:

1. While you were in the museum, did you need to use the bathroom at any point? (ask to elaborate if only say yes)

If they deny:

2. Again, just to make sure I have your story right, you're saying you did not visit the bathroom while you were there?

If they indicate any bathroom other than the disabled one in the basement:

3.  Again, just to make sure I have your story right, you're saying you only visited that bathroom, and no others?

Depending on if they already explained being in room 3.06 or being by "the monk by the sea"

4.  Did you go to the third floor of the museum?/You mentioned going to the third floor of the museum can you remind us what you were doing there?

If they deny (only the bits that are appropriate, e.g. if they admit being at the third floor but deny being at the painting):

5.  Just to check my understanding, you're saying you did not go up to the third floor and did not view the painting "The monk by the sea"?

*Possible contradictions and clarifications to note for later probing*:

Not mentioning being in the disabled toilet – You have their fingerprints showing they were in the disabled toilet.

Not mentioning being on 3rd floor/by painting – you have CCTV they thought they had deleted showing the group together in front of the painting and being on the third floor before the heist.

Part 3 – Evidence disclosure

*Can skip items that are fully addressed in the initial account*

If ALL evidence is accounted for (possible in innocent condition) then these questions can be skipped.

If in the first prompt the suspect gives an account thank them and say that this conforms with the evidence piece by disclosing it. E.g. "That makes sense, we have some CCTV of you

entering the museum wearing what looks like a disguise, which seemed odd to us. Let's move on to the next thing".

If they still do not explain the evidence after the direct disclosure of the evidence remain polite and non-confrontational but make it clear that what they have said contradicts the evidence held. E.g. "Your story doesn't really align with the evidence we have, but let's move on to the next thing".

Thank you for giving us your account. Some of the things you said don't align with some of the evidence we have, so I wanted to give you another opportunity to explain what happened.

Topic 2 – Expertise

1. We have reason to believe you would have the capability to build a device that could prevent the museum security from working properly. Is there anything you can tell us about that?

If this remains unexplained:

2. We know you have an education in computer science, have worked building security for museums in the past, and we have financial records showing you have ordered the parts that would be needed to build a device like the one used to interrupt the alarm systems in this theft. Can you explain why you decided to not tell us about this?

Topic 3 – Group membership

1. We have reason to believe you were planning to meet with some others at the museum, and we also suspect these people might also be involved in the heist. Do you want to tell me any more about anyone you might have met at the museum?

If this remains unexplained:

2. We have phone records showing you were in contact with one other person about meeting them at the museum, and that you planned to meet some others there. We also believe these people have some expertise that would be needed to perform a heist. Can you tell us any more about your plans to meet people at the museum?

Topic 4 – Activities within the museum

1. You indicated that you were never in the basement disabled persons bathroom, but we have some information indicating you were in that room. Can you help me to understand why our information conflicts with your story?

If unexplained:

2. We have your fingerprints from multiple surfaces in that bathroom. Can you help me to understand how that could have happened if you were not in that room?

3. We have additional information that indicated that you were in room 3.06, by the painting that was stolen. Can you explain why our information doesn't match with what you've told us?

If unexplained:

4. We recovered some CCTV footage that someone had attempted to delete showing you in that room with a group of people that match some our other suspects. Can you explain for me why we would have that footage if you were not in that room or by the painting?

Part 4 – closing

1. That's all the questions I have for now, I wanted to thank you for coming in and talking to us. Is there anything else you want to add before I close the interview?

Then we are finished for now. Please stay here with us and my colleague will be with you shortly and explain the next steps.

**Appendix F**

**Script TUE**

**Interview topic guide – The gradual method**

Part 1 – Opening and initial free narrative

Hello, my name is NAME.

I am investigating an incident at the Natural History Museum in Berlin. There has recently been some criminal activity there. A painting has been stolen and we have reason to believe you may have been involved.

Because of that, I need to ask you some questions about your recent visit there. Please answer our questions as fully as you're able to. This is your chance to give your side of the story, so we don't make any wrong decisions.

1. I want to go through each piece of what happened part by part, but first can you let me know in as much detail as possible about your visit to the museum?

Part 2 – Probing and locking the account plus evidence disclosure

Topic 1 - Establishing they were at the museum

As for late, skip questions where evidence is accounted for in the initial story.

1. First can you tell me about how you travelled to the museum?
2. Is there any reason you'd do anything special with your clothing on the day you visited the museum?

If any evidence is omitted or contradicted, challenge after these two questions.

E.g.

1. "I ask you because we have train tickets in your name for the U5 metro indicating that you travelled to the Museum on the day of the theft. Can you explain for me what you were doing travelling toward the museum?"

2. We have CCTV footage of you wearing what seems to be a disguise entering the museum, and that doesn't really match the story you've given us so far. Can you help us to understand the discrepancy?

*Possible contradictions and clarifications to note for probing*:

Method of travel – you have tickets showing they were on the U5 metro line to Berlin.

You have CCTV of the suspect entering the museum alone.

Topic 2 – Expertise

1. One thing we wanted to ask you about was your background, can you tell us a bit about your education and profession?

2. Can you tell us any more about your expertise in physical security measures, like alarm systems?

If they have not yet mentioned a reason to know about or purchase tools and materials for physical security:

3. To clarify, you are saying that there is no reason why you would need access to materials for building physical security devices?

If any evidence is omitted or contradicted, challenge after three questions are asked

3. We have reason to believe you would have the capability to build a device that could prevent the museum security from working properly. Is there anything you can tell us about that?

If this remains unexplained:

4. We know you have an education in computer science, have worked building security for museums in the past, and we have financial records showing you have ordered the parts that would be needed to build a device like the one used to interrupt the alarm systems in this theft. Can you explain why you decided to not tell us about this?

*Possible contradictions and clarifications to note for later probing*:

Do they mention they studies computer science and security – you know about their study and employment history in security design.

Do they explain why they might have ordered parts to make physical security devices – you have financial records showing they purchased equipment needed to make a device to interrupt the museum security systems.

Topic 3 – Group membership

If they have not mentioned meeting anyone at the museum:

1. Did you meet anyone at the museum?

If they still deny meeting anyone/fail to describe them:

2. To confirm, you're saying you were alone at the museum and didn't meet anyone?/Can you tell me any more about the people you were with? (If not after latter, thanks them and move on)

If any evidence is omitted or contradicted, challenge after two questions are asked

3. We have reason to believe you were planning to meet with some others at the museum, and we also suspect these people might also be involved in the heist. Do you want to tell me any more about anyone you might have met at the museum?

If this remains unexplained:

4. We have phone records showing you were in contact with one other person about meeting them at the museum, and that you planned to meet some others there. We also believe these people have some expertise that would be needed to perform a heist. Can you tell us any more about your plans to meet people at the museum?

*Possible contradictions and clarifications to note for later probing*:

Claiming to be alone.

Lying about/not mentioning being in contact with the other people.

Topic 4 – Activities within the museum

Depending on if they already explained being in in the disabled toilet:

1. While you were in the museum, did you need to use the bathroom at any point? (ask to elaborate if they only say yes)

If they deny:

2. Again, just to make sure I have your story right, you're saying you did not visit the bathroom while you were there?

If they indicate any bathroom other than the disabled one in the basement:

3. Again, just to make sure I have your story right, you're saying you only visited that bathroom, and no others?

Depending on if they already explained being in room 3.06 or being by "the monk by the sea"

4. Did you go to the third floor of the museum?/You mentioned going to the third floor of the museum can you remind us what you were doing there?

If they deny (only the bits that are appropriate, e.g. if they admit being at the third floor but deny being at the painting):

*Toilet fingerprints*

5. You indicated that you were never in the basement disabled persons bathroom, but we have some information indicating you were in that room. Can you help me to understand why our information conflicts with your story?

If unexplained:

6. We have your fingerprints from multiple surfaces in that bathroom. Can you help me to understand how that could have happened if you were not in that room?

*CCTV of the group in the room*

7. We have additional information that indicated that you were in room 3.06, by the painting that was stolen. Can you explain why our information doesn't match with what you've told us?

If unexplained:

8. We recovered some CCTV footage that someone had attempted to delete showing you in that room with a group of people that match some our other suspects. Can you explain for me why we would have that footage if you were not in that room or by the painting?

*Possible contradictions and clarifications to note for later probing*:

Not mentioning being in the disabled toilet – You have their fingerprints showing they were in the disabled toilet.

Not mentioning being on 3rd floor/by painting – you have CCTV they thought they had deleted showing the group together in front of the painting and being on the third floor before the heist.

Part 3 – closing

1. That's all the questions I have for now, I wanted to thank you for coming in and talking to us. Is there anything else you want to add before I close the interview?

Then we are finished for now. Please stay here with us and my colleague will be with you shortly and explain the next steps.

**Appendix G**

**Bernieri Rapport Scale**

Please rate the interaction between yourself and the police officer on each of the characteristics listed below on a scale from 1 = "Strongly disagree" to 5 = "Strongly agree". Please pick the answer that best describes the way you feel.

The interaction seemed…

...well-coordinated.

...cooperative.

...harmonious.

...positive.

...friendly.

...respectful.

...attentive.

**Appendix H**

**Debrief**

**Study objective**

This study is interested in how the timepoint of disclosure of evidence influences rapport, cognitive load, cues to deception and amount of information given by the participants.

This study hopes to answer the question of how the procedure of disclosing evidence influences you as the interviewee on aforementioned topics.

**How did it work?**

As a participant in this study you received the case vignette and were sequentially assigned to one of the four conditions: innocent, guilty and late disclosure of evidence or gradual disclosure of evidence. Late disclosure of evidence means that evidence is discussed at the end of the interview, while gradual disclosure of evidence means that evidence is discussed throughout the interview, point by point. After the interview everyone received the same survey with which we want to measure if rapport, cognitive load, cues to deception and the amount of given information differ between the four conditions.

**Why is this important?**

By participating in this study, you contributed your part to research with regard to forensic strategies when interviewing suspects. This research adds to the existing pool of knowledge on investigative interviewing with a focus on police interviewing techniques. The purpose of this research is to develop a better understanding of how different techniques influence the quality of the investigative interview.

**Withdrawing Policy.**

If you decide that you want to withdraw from this research, please contact us (researchers) within 10 days and quote your participation number to allow us to locate your data and withdraw it.
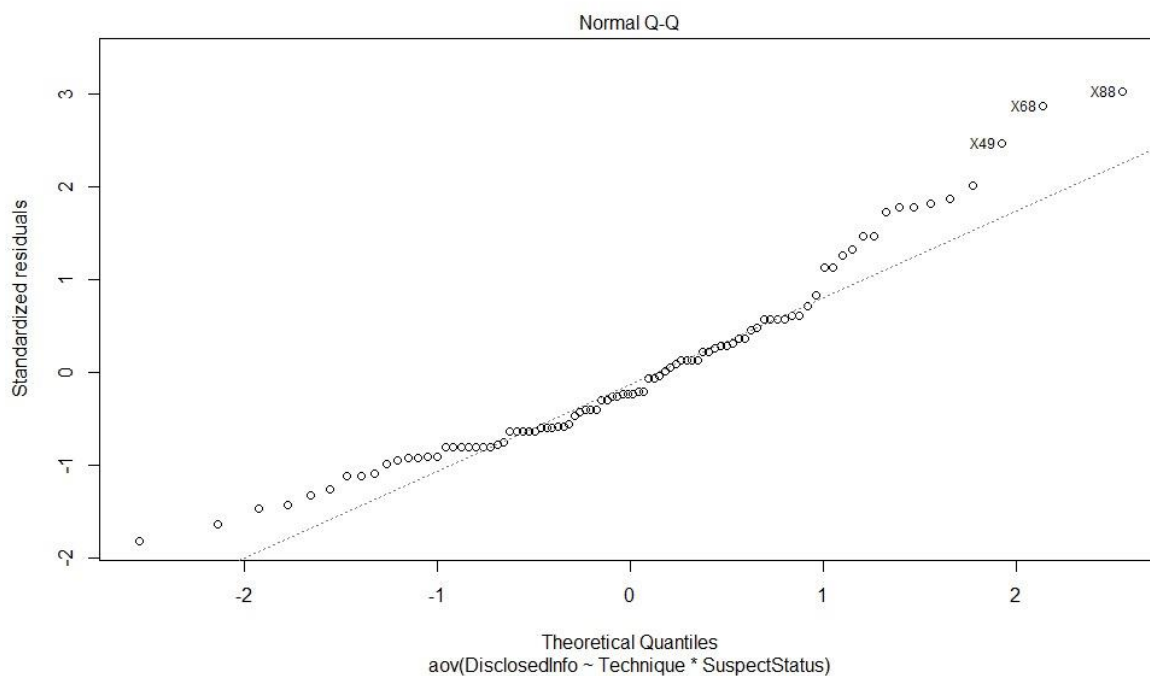
**Appendix I**

**Q-Q plot of residuals, Bernieri Scale**



Normal Q-Q

aov(Rapport ~ Technique * SuspectStatus)
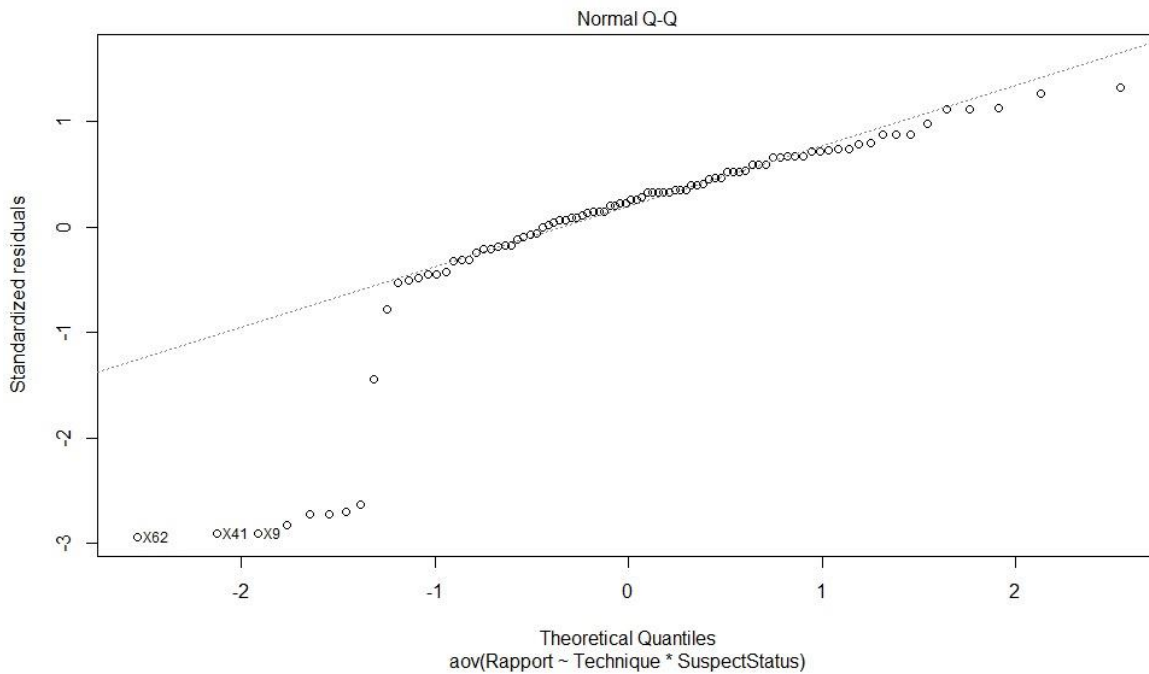
*Note. The Q-Q plot was used to assess the normality of residuals of the Bernieri scale, a key assumption in the analysis of variance (ANOVA). Slight deviations from normality were observed (left-skewed).*

**Appendix J**

**Q-Q plot of residuals, Information shared**



*Note.* The QQ plot was used to assess the normality of residuals of the Information sharing, a key assumption in the analysis of variance (ANOVA). No significant deviations from normality were observed.