

Interviewing Suspects:
Examining the Adaptive Decision-Making of Guilty Suspects

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Abstract

This study examines the adaptability of suspects and resulting provision of information. In addition, the relationship with information in two strategic interviewing techniques was compared: The Shift-of-Strategy approach and the Late Disclosure technique. In a mock crime, participants ($N= 50$) were asked to take on the role of an animals' rights activist and were given information about their interfering with cruel animal testing. They were to collect evidence against the researcher conducting the illegal animal experiments. Critically, participants were not instructed how to proceed during the interview but only to appear innocent. As predicted, the SoS approach resulted in significantly more adjustments (vs. the LD technique). In addition, more adjustments could overall be linked to increased forthcomingness. As predicted, the SoS approach resulted in significantly more admissions (vs. the Late Disclosure technique). The late disclosure technique was shown to partially elicit suspects' inconsistency with evidence but the SoS approach was able to match this result. More adaptive suspects were shown to provide more case-relevant information and fewer inconsistencies with evidence. This study provides rather strong support for the Shift-of-Strategy approach in affecting suspects' counter-interrogation strategies and, as a result, eliciting admissions and statement-evidence inconsistencies.

Keywords: Adaptability, Shift-of-Strategy Approach, Late Disclosure technique, information elicitation

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In response to the number of false confessions brought forth by unethical interview practices, research into interviewing has worked on turning towards a more ethical and effective interview procedure. The focus has shifted from interrogation to investigative interviewing. Primary goals consist of establishing the veracity of the suspect's statements and producing a confession (Granhag & Hartwig, 2008). Therefore, earlier lie detection studies have focussed on eliciting cues to truth and deception (Granhag & Hartwig, 2015). However, distinguishing between truth and deceit involves complex factors such as body language and expressions of nervousness as signs (DePaulo et al., 2003). Presumed professionals' ability to assess veracity has oftentimes been shown to be close to that of lay people (DePaulo et al., 2003). In addition, many of these factors have shown to be similar for both guilty and innocent suspects (Hartwig, Granhag, & Luke, 2014; Bond & DePaulo 2006). Hence, this does not enable a valid differentiation.

A main example for improving interview techniques is provided by the PEACE framework. As described by Clark, Milne, and Bull (2011), this new interviewing model was built on a foundation of research regarding communication skills, memory, as well as management of conversations. The focus is placed on building rapport, following the idea that being kind is more effective than being accusatorial (Clark, Milne, & Bull, 2011). Results have shown that interviewing in accordance with the PEACE model can improve the general interviewing skills of the interviewer and, hence, gather more case-relevant information. However, Clark, Milne, and Bull (2011) stressed that such a technique does not seem able to stand by itself and requires supplementary efforts. In general, providing a new framework for conducting interviews, the shift from confession-oriented interrogation to the information-seeking investigative interviewing was underlined.

Current studies suggest moving away from traditional research on detecting deception in a direction of eliciting cues (Vrij & Granhag, 2012). In other words, rather than passively observing the cues to deception and truth, research is advised to focus on techniques actively eliciting cues to deception. As a major step forward, lying or deceiving suspects were shown to employ significantly different strategies in information disclosure than those providing truthful accounts (Granhag & Hartwig, 2015). Therefore, more recent research has focused on developing interview approaches that aim at affecting suspects' counter-interrogation strategies.

First, the suspects' counter-interrogation strategies are outlined. Second, the strategic use of evidence and the shift-of-strategy approach that aim at affecting these strategies are described. Third, a connection is drawn to the adaptability of suspects. Adaptability is then

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linked to adjustments of the counter-interrogation strategies. Lastly, the focus of the current research is outlined. This focus lies on examining the adaptive adjustments of suspects and the effect on information provided during the interview. Overall, the shift-of-strategy approach is compared to the late disclosure technique.

Counter-Interrogation Strategies

Counter-interrogation strategies entail the set of strategies that suspects employ to keep up the image of innocence. These strategies are commonly understood by means of self-regulation theory which is focused on motivated, goal-oriented behaviour (Hartwig, Granhag, Stromwall, & Doering, 2010). In other words, suspects try to convince the interviewer that statements are true and, therefore, do not want their statements to be classified as deceptive (Granhag & Hartwig, 2015). The counter-interrogation strategies (CIS) are connected to theories of decision control and information control since suspects have to manage the information they hold. In specific, guilty suspects have to make decisions about which parts of the truth to tell and which not (Granhag & Hartwig, 2015). This decision is based on inferences of how much information the interviewer holds and to what extent own information can be concealed. Here lies a crucial difference between liars and truth tellers, since liars aim at concealing information, whereas truth tellers try to be forthcoming.

As part of the strategic decision-making, guilty suspects commonly report strategies and planning before entering the interview. If given the opportunity, they will avoid disclosing critical information (Granhag, Hartwig, Giolla, & Clemens, 2014). However, if deprived of the avoidance alternative, they will turn to escape responses. In other words, if faced with direct questions about incriminating information, the strategy will be to deny critical information (Granhag, Hartwig, Giolla, & Clemens, 2014). In general, guilty suspects have to strike an appropriate balance of concealing incriminating information and offering details to appear credible (Alison, L., Alison, E., Noone, Elntib, Waring, & Christiansen, 2014). As a result, suspects engage in strategic decision-making regarding which information to avoid, deny or disclose during the interview, labelled as counter-interrogation strategies.

To be able to understand strategies by suspects, perspective-taking is required (Vrij & Granhag, 2012). In doing so, interviews can make use of the insight into decision making of suspects during interviews, particularly when evidence is presented (Hartwig, Granhag, Stromwall, & Kronkvist, 2006). As pointed out by Granhag and Hartwig (2015), when planning, executing, and analysing interviews, an in-depth understanding of the suspect's perspective seems necessary to successfully assess the veracity of the account.

The Strategic Use of Evidence

The *strategic use of evidence* (SUE) approach is employed to affect the counter-interrogation strategies of suspects. As important part of the investigative interview, this approach serves as novel aid in assessing the veracity of a suspect's account (Vrij & Granhag, 2012). In doing so, the SUE approach takes into account that innocent and guilty suspects employ different counter-interrogation strategies to appear innocent.

In practice, the SUE technique is a tactic in which evidence is strategically disclosed (Hartwig, Granhag, Stromwall, & Kronkvist, 2006). This strategic interviewing entails four phases of evidence disclosure that involve the same routine as outlined in the following (Granhag & Hartwig, 2015). As a brief outline, the suspect first has the opportunity to disclose any relevant information in relation to the given theme. Next, if inaccurate information was disclosed, the suspect is confronted with the evidence. Following this routine per evidence, the suspect is manipulated to believe that the interviewer holds evidence about most of the criminal activities.

The theoretical framework of the SUE technique is the *SUE model*. It outlines four main principles inherent to the effectiveness of this technique (Granhag & Hartwig, 2015). Highlighting the relationship of these principles, a) the suspect's perception of evidence dictates the choice of b) counter-interrogation strategies (CIS), which in turn dictate c) verbal responses (Granhag, & Hartwig, 2015). As a fourth instance, d) the interviewer's perspective-taking should take all of the three prior principles in account to effectively employ the strategic interviewing technique. In the following, the principles on which the technique rests are considered in more detail.

The *first principle* relates to the suspect's perception of evidence held by the interviewer. Guilty suspects seem to form hypotheses about the evidence held about the suspect or crime (Granhag & Hartwig, 2015). Therefore, the SUE technique places a focus on relating a) the suspect's perception of evidence with b) the interviewer's actual knowledge. If perception and actual knowledge do not match, a mis-calibration can occur in two ways, either under- or overestimating how much information the interviewer holds. This is the basis for suspects becoming more forthcoming.

The *second principle* relates to the counter-interrogation strategies (CIS) employed by the suspect. Since the CIS are impacted by the suspect's perception of evidence, the SUE technique explicitly focuses on perspective-taking to understand the decision processes that are involved in the suspects' choice of strategies. In specific, the suspect can follow several

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potential courses of action. Firstly, if suspects do not expect the interviewer to hold certain incriminating information, they turn to a strategy of avoidance or escape. This means, the suspect either does not disclose any information or denies given information. In contrast, suspects are more likely to decide for cooperation if they believe the interviewer to hold incriminating information. This means, the suspect discloses asked-for information because 'there does not seem any use in hiding what is already known anyway'.

The *third principle* is linked to the ultimate verbal responses. The verbal responses serve as basis for detecting cues to truth and deception and may provide new case-relevant information (Granhag & Hartwig, 2015; Hartwig, Granhag, & Luke, 2014). Suspects have to continuously adjust their statement to fit the presented evidence. This is linked to discrepancies or contradictions between a suspect's outline and the presented evidence, namely, statement-evidence inconsistencies (Hartwig, Granhag, Stromwall, & Kronkvist, 2006). Hence, the verbal responses of the suspects might contain statement-evidence inconsistencies as well as new case-relevant information.

Granhag and Hartwig (2015) illustrate that the strategic use of evidence cannot only elicit cues to deceit (in first three phases) but, additionally, new information (fourth phase) can be extracted that might be relevant to the investigation (Tekin et al., 2015). Studies have shown that the SUE serves as successful interviewing technique in increasing cues to deception and lie detection accuracy (Tekin et al., 2015). The unintentional disclosure of case-relevant or self-incriminating information highlights a special benefit of this approach. Consequently, this research focuses on two main categories of provided information, first, statement-evidence inconsistencies and, second, admissions of case-relevant information.

The *shift-of-strategy* (SoS) technique was added as recent extension to the SUE technique. The SoS approach aims at influencing suspects to change their strategy to become more forthcoming (Hartwig, Granhag, & Luke, 2018). This technique is based on the rationale that suspects make inferences regarding the interviewer's disclosure pattern. The disclosure pattern repeats the same routine across themes (Oleszkiewicz & Granhag, 2019). The suspect is enabled to read the interviewer's strategy of starting with an open question so that the suspect avoids revealing critical information and is then confronted with the evidence (Oleszkiewicz & Granhag, 2019). The interviewer's strategy will elicit inconsistencies between the suspects' statements and evidence. Ultimately, suspects realise that their counter-interrogation strategy of avoiding has not fulfilled its aim of appearing credible and innocent. As a result, the suspect is led to miscalibrate the amount of information the interviewer holds and decides that a change

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of strategy would be beneficial. Due to the suspects' shift of strategy, the interviewer can ask questions about a theme for which no evidence is held.

To further establish the SoS technique, empirical studies aimed to support its value. The SoS technique has been researched by using an experimental set-up in which subjects engage in criminal activities. In the later interview, these activities are grouped into different phases so that the pattern of evidence disclosure can be repeated. The initial phase in the interview approach, as outlined above, aims at manipulating the suspect's perception so that the amount of information the interviewer holds is overestimated. Then, the final phase covers information that no evidence is held about. This final phase consists of three questions regarding the criminal activities that are asked at once. This differs from the regular SUE technique since it commonly introduces one new theme for which lacks critical information (Granhag & Hartwig, 2015). The set of three questions asked in the SoS approach potentially leads to a *shift of strategy* as suspects are required to be more forthcoming. This way, the suspect is led to reveal information about critical criminal activities. Since suspects are expected to overestimate the amount of information held, they unintentionally disclose information that is actually new to the interviewer.

Studies on the SoS technique have shown that suspects perceive the interviewer as holding relatively more information on the critical phase (i.e., final phase) and, therefore, provide more admissions (Tekin et al., 2015). In this final phase, inconsistencies are highlighted and confronted so that suspects become more forthcoming. In particular, suspects are immediately confronted with evidence and remain focused on appearing credible since the opportunity of explaining inconsistencies is offered (Tekin et al., 2015). This particular way of handling inconsistencies seems to be the basis for the effectiveness of the technique.

In experimental set-ups, the SUE technique was predominantly contrasted with Early or No disclosure techniques (Tekin et al., 2015). Therefore, the current study contrasts the technique with a *Late disclosure strategy*. In the late disclosure, the interview is parted into two phases. The initial phase of the interview consists of open questions in which the suspect provides a free recall of events. Here, the suspect can share any information so that the interviewer moves to the next question irrespective of the accuracy of statements. In the final phase, the suspect is confronted with all evidence held. Here, the suspect has a last opportunity to adjust statements and explain the evidence. The initial free recall phase is used to elicit statement-evidence inconsistencies as cues to deception.

In contrast, the shift of strategy is used to advance the SUE interview and lead suspects

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to shift their strategy in the final phase to become more forthcoming. This shift in strategy suggests that counter-interrogation strategies are less fixed than how they have previously been studied.

Adaptability in the Interview

Although previous research has shown the relevance of counter-interrogation strategies, it has yet to consider the suspects' *adjustments* of strategies. As new strategic ways of interviewing are employed, this requires the suspect to respond to novelty and uncertainty (Granhag & Hartwig, 2015; Luke, Hartwig, Shamash, & Granhag, 2015). This uncertainty can be linked to *adaptability*. Therefore, this research focuses on adaptability which is understood as the suspects' adjustments to changes in the situation. To investigate adaptability in the interviewing context, it is crucial to a) define what exactly adaptability entails, and b) in which way it can be distinguished from other concepts.

Firstly, as described by Martin (2017), the individual is expected to have a certain goal or outcome in mind during the interview. Therefore, cognitive, behavioural, and emotional adjustments are required (Martin, 2017). This becomes particularly relevant when it comes to claims of innocence. Hence, adaptability is defined as adjustments that are made while pursuing a specific goal, namely, keeping up the image of innocence.

Connected to risky experiences, adjustments are especially required in situations of danger. These adjustments are summarised as resilience (Martin et al., 2013). Per definition, resilience is described as successful adaptation in regard to challenges or threats (Martin et al., 2013). In particular, resilience is triggered by a substantial acute or chronic threat and emphasizes the effective coping in dangerous situations (Masten, 2001). Distinguishing resilience from adaptability, resilience covers areas of adversity in which the individual remains resilient in the face of threatening circumstances. In contrast, adaptability is connected to uncertain or novel demands. In general, a suspect might understand an investigation as threat or challenge. However, the particular interview procedure of the SoS approach exclusively entails uncertain and novel elements (Masten, 2001; Martin et al., 2013). Therefore, rather than a threat, the adjustments are done in response to this uncertainty.

Not yet considered by previous research, the suspects' adjustments can be linked to the research on counter-interrogation strategies. As adjustments are made to pursue a certain goal, suspects adjust behaviour and information disclosure while working towards a set outcome. In other words, the suspects adjust CI strategies to effectively pursue the goal of keeping up the image of innocence. In doing so, suspects are assumed to hold certain expectations about the

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interviewer's behaviour in regard to the pursuit of that goal (Granhag & Hartwig, 2015). For instance, suspects believe the interviewer to hold a certain amount of information regarding the crime. However, these expectations are not met if the interviewer's behaviour (i.e., disclosure of information and evidence) violates the suspects' expectations. As a result, suspects have to adjust to these new circumstances, requiring adaptive decision-making. Therefore, adaptability is more specifically understood as adjustments made in the counter-interrogation strategies. As outlined by Martin (2017), suspects have to be able to modify or adjust strategies effectively to meet the novel and uncertain circumstances and successfully pursue the goal of keeping up the image of innocence. This emphasizes the need to understand adjustments from the suspects' perspective.

As described above, the SUE technique explicitly aims at manipulating the suspects' perception of evidence and, hence, their employed strategies. The further shift of strategy that is induced by the SoS approach highlights that suspects are required to adjust. Therefore, it is differentiated between two types of adjustments. First, *adjustments* can be internally motivated and are, hence, linked to trait adaptability. Second, *changes* can be externally induced and, hence, are brought about by the strategic interview technique. As a result, it is differentiated between adjustments connected to internal adaptability and changes externally motivated by the interview technique.

Whether adjustments are effective can be examined by looking at the contradictions in the suspects' statements (SEI) and how much new information is revealed (admissions). Suspects with a lower frequency of adjustments should be less able to incorporate held evidence in their account. As a result, a greater number of inconsistencies between statements and evidence occurs. Since this undermines the suspects' credibility in keeping up the image of innocence, it is labelled as ineffective adjustments. In contrast, more adjustments should lead suspects to incorporate more case-relevant information. As a result, statements fit the evidence so that less inconsistencies occur. Since suspects can appear more credible, this is labelled as effective adjustments. From the suspects' perspective, the goal of appearing credible is met and, in addition, the admissions desired in the SoS are achieved.

The Present Study

The main aim of the present study is to investigate suspects' adaptive adjustments during the interview. This is measured as changes in counter-interrogation strategies. Second, the relationship between information (statement-evidence inconsistencies and admissions) and adaptability (adjusting strategies) is examined. In addition, it is differentiated between

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adjustments connected to internal adaptability and changes externally motivated by the interview technique. Therefore, the study design entails interview technique, either the SoS approach or the late disclosure approach, as independent variables. The elicitation of information is chosen as dependent variables consisting of statement-evidence inconsistencies and admissions.

First, the extent to which suspects adjust their strategies during the interview is considered. For the late disclosure, no predictions are made. This is because this technique does not provide an opportunity for suspects to adjust to any significant extent. Therefore, no effect is expected. In the SoS approach, the evidence is disclosed in the initial phase so that suspects are more forthcoming in the final phase. Therefore, more adjustments are expected in the initial phase.

Hypothesis 1a: Suspects will adjust their behaviour more in the initial phase than in the final phase of the interview.

Hypothesis 1b: Suspects interviewed with the SoS protocol will adjust their behaviour more in the initial phase than in the late phase of the interview.

Second, the relationship of adjustments and statement-evidence inconsistencies (SEI) is explored. If adjusting more, it is predicted that suspects are able to incorporate more information in their statements, in line with the evidence. This effect is expected to hold in the SoS approach, since it explicitly targets suspects' adjustment of counter-interrogation strategies. In the late disclosure technique, no effect is expected and, therefore, no prediction was made.

Hypothesis 2a: Suspects who adjust their behaviour more will provide less statement-evidence inconsistencies than suspects who adjust their behaviour less.

Hypothesis 2b: Suspects who adjust their behaviour more will provide less statement-evidence inconsistencies in the Shift-of-Strategy interview than those adjusting their behaviour less.

Third, the relationship of adjustments and admissions is explored. Suspects adjusting more are assumed to provide accounts closer to the evidence and, hence, incorporate more case-relevant information (admissions) into their explanations. This effect is expected to hold in the SoS approach, since it explicitly aims at affecting suspects' strategies so that they become

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more forthcoming. In the late disclosure technique, no effect is expected and, therefore, no prediction was made.

Hypothesis 3a: *Suspects who adjust their behaviour more will provide more admissions than suspects who adjust their behaviour less.*

Hypothesis 3b: *states that suspects who adjust more will provide more admissions in the SoS condition than those adjusting their behaviour less.*

Changes and Interview Outcomes

Since main effects of the interview techniques occur in different interview sections, suspects' externally induced adjustments and interview outcomes are examined per interview section, in an exploratory manner. For the SoS approach, suspects are expected to shift their strategy considerably. The main effect of adjustments is predicted for the initial phase. The late disclosure technique does not manipulate suspects' adjustments and, therefore, no predictions are made.

Method

Participants

Participants included 50 adults (21 male and 29 female) between 19 and 28 years of age ($M= 22.46$, $SD= 1.70$). The majority of the sample was German ($n= 44$; 88%) whereas the minority was Dutch ($n= 2$; 4%) or Other ($n= 4$; 8%). Participants were randomly allocated to two interview conditions, either the SoS approach (SoS, $n= 23$) or the Late Disclosure technique ($n= 27$). The participants were recruited at the University of Twente via flyers (spread across the University buildings) and the university's platform for recruiting research participants (i.e., SONA system). The study was advertised as research on criminal decision-making and informed that participants would receive 5€ and, if part of the SONA platform, one SONA credit for taking part in the study. To be eligible to participate, the participants had to have a basic level of familiarity with the University buildings and locations, and a smartphone to be able to receive instructions. Before their participation, participants had to agree to an informed consent. Furthermore, the participants had to re-confirm their consent after a full debrief after the experiment had ended. Participation required approximately one hour per participant.

If data for parts of the questionnaire was missing, participants were consistently

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excluded. Two other participants were excluded because of incomplete questionnaire data. Similarly, in case of inappropriate implementation of the interview protocol (i.e., deviation or omitting of parts), participants' data were fully excluded. For two participants the interview protocol lacked appropriate implementation. One participant was chosen as pilot participant. Therefore, five participants were ultimately excluded.

Design and Procedure

Design. The experiment used a between-subjects design and studied the relationship between interview technique, adjustments, and ultimate statement-evidence inconsistencies. The SoS approach and the Late Disclosure technique were used as grouping variable. A main dependent variable used for this study was suspects' strategic adjustments during the interview. As further dependent variables, statement-evidence inconsistencies and admissions were coded.

Background and planning. As participants arrived, the informed consent (see Appendix A) was signed and they received a background story to take on the role of an animals' rights activist working against cruel animal testing at the University. Provided on a sheet of paper, the participant received instructions informing them about the background of the role, their involvement and contact with an investigative journalist as well as an animal rights organisation (for the full description of the provided background story, see Appendix B). Thereby, the participant could understand the importance of gathering evidence against the researcher who was conducting illegal animal testing. To achieve their goal, participants received instructions to perform a series of mock criminal activities to collect the proof needed to support the story of an investigative journalist. Hence, all participants were guilty suspects.

Criminal activity. Before engaging in the criminal task, participants received a checklist detailing the thirteen tasks they had to perform step-by-step (for the checklist, see Appendix C). The researcher explained to read the instructions carefully so that any questions could be discussed before starting the tasks. To keep the execution straightforward, each individual step was listed as subpoint on the checklist and is described in Table 1.

Starting the task, participants received a text message (1) from their contact person in the animal rights organisation and were asked to go to the location established via the text message (2) to pick up an envelope, using the locker code specified in the message. Within this envelope, participants found a USB stick. Next, participants had to access the researcher's office (3) where information regarding the experiments would be found. Using the researcher's computer, the USB stick was inserted (4) to collect evidence regarding the experiments. In

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addition, the folder titled ‘experiments’ was located (5) and copied onto the stick. After copying the folder, the USB stick as well as the envelope were taken (6) and participants left the office. The participants went to a further room in which a secure computer was placed (7) and used to log into their mail account (8). The files from the stick were sent to a specified mail address of the investigative journalist (9). Furthermore, participants searched for a folder titled ‘contracts’ to take pictures of the documents inside (10), serving as additional evidence. These pictures were then sent to the accomplice (11) from whom participants initially received the text message. The USB stick was put back into the envelope and placed inside a folder on the desk titled ‘private’ (12) for the accomplice to pick it up. Completing the criminal activity at this point, participants were instructed to return to the last room (13).

Table 1.

Step-Wise Criminal Activity and Collected Evidence

Chronological Criminal Activity	Evidence
1. Text message from contact person	a) Interception of text message
2. Picking up envelope from locker in entrance area	b) Eye witness saw pick up envelope
3. Access researcher’s office	c) Witness saw around researcher’s office
4. Insert USB stick into computer	d) Object with suspect’s fingerprints found inside office
5. Locate and copy folder ‘experiments’	
6. Take USB stick and envelope	
7. Go to next room with secure computer	e) Seen on webcam footage of computer that was used
8. Log into mail account	
9. Mail files from stick to journalist	
10. Take pictures of documents in folder	

‘contracts’

11. Send pictures to accomplice via phone
 12. Place USB stick in envelope and put in folder ‘private’
 13. Return to last room
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Evidence. The different steps of criminal activities generated a set of evidence used during the interview (see Table 1). Starting the activities, participants received a text message that was (a) intercepted and found to be suspicious. Next, while picking up the envelope at the lockers, participants were (b) seen by an eyewitness. However, no evidence was held regarding the exact content of the text message as well as the content of the envelope. Afterwards, participants were seen close to the researcher’s office by a further eyewitness (c). Using the researcher’s computer, participants left their fingerprints on an object (d) used to cover the mouse of the computer. No evidence was held about the critical part of stealing the data from the computer. Furthermore, the participants’ presence in another room was confirmed by (e) webcam footage of the computer that was used. No evidence was held about the critical and final part in which the suspects send both the data as well as pictures of documents to a third party.

Beyond the collected evidence, the interviewer aimed at gathering information regarding (A) instructions to commit the crime, (B) stealing materials from the computer, and (C) sending the materials to a third party. In this study, the interviewer aimed to elicit nine key admissions from the interviewee: (1) the text message and (2) its content, (3) the USB stick in the envelope, (4) entering the office, (5) using the computer inside the office, (6) copying the files onto the USB stick, (7) the disposal of the USB stick, and (8) photographing and (9) sending the documents found inside the folder.

Interview preparation. After having completed the criminal activities, participants were instructed to wait inside the room in which further information prepared for the interview. Participants received a sheet of paper informing them that they had been requested to be interviewed by the police. The participants had approximately 5 minutes to prepare for the interview (for the full description, see Appendix D). Each participant was informed about the need to appear innocent during the interview. The necessity of coming across as innocent was

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highlighted and motivated by pointing out that all prior activities would become redundant and not lead to the desired outcome of convicting the researcher performing the illegal animal testing. In addition, the claims for innocence were provided as rationale for why they should waive their right to remain silent and why they should agree to be interviewed without requesting an attorney (i.e., they were told that not doing so would speak against their innocence).

Importantly, however, the participants did not receive any instruction for how to behave during the interview and were asked to make their own decisions to appear innocent. For instance, they were not provided with any cover story or alternative explanations. Therefore, the individuals had to decide for themselves what pieces of information to share to accomplish the goal of appearing innocent and how much of the activities they wanted to hide from the interviewer. The interview protocol started with explaining that the interview would be audio recorded.

The interview. Despite the different interviewing protocols (for interview protocols, see Appendix E and F), all interviews began and ended in an identical manner and involved disclosure of the same pieces of evidence. In both interview conditions, the interviewer entered the room in which the participant had received the pre-interview instructions. The interviewer introduced him- or herself as part of a team investigating the crime and sat down opposite the suspect.

The interviewer then explained the investigation of the crime and outlined the suspicion of the participant's involvement in the criminal activities (i.e., breaking into the facilities and stealing of confidential data). The aim of the interview was described as understanding the suspect's behaviours and observations of that day. In addition, the interviewer noted that suspects could choose to have a lawyer present or not to answer any of the questions.

The questioning started with an opportunity to confess (or deny) being involved in any criminal activities ('Do you confess or deny having engaged in any criminal activities?'). Next, participants were asked an open-ended question: 'You can start by freely telling me how you arrived at the university today and what you did there'. After ensuring the participants had provided as much information as they wished to give, the interviewer went on with asking four more specific (shown in the first four boxes of Figure 1 and Figure 2). Per evidence phase, the interviewer first asked for an explanation of respective activities by means of an open-ended question, such as: "Have you been around the entrance area of the building (i.e., Cubicus)

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today?” However, the interview protocols differed in the treatment of the four questions and in when evidence was disclosed.

Late disclosure of evidence. In the late disclosure protocol, the suspect was allowed to freely answer each of the four questions. As seen in Figure 1, each box represents a question that was asked. If the interviewee remained silent, a prompt to “please tell me about that” was given once. Irrespective of the account provided by the suspect, the interviewer responded in a non-judgemental way (i.e., the interviewer the suspect for the explanation) and moved on to the next question.

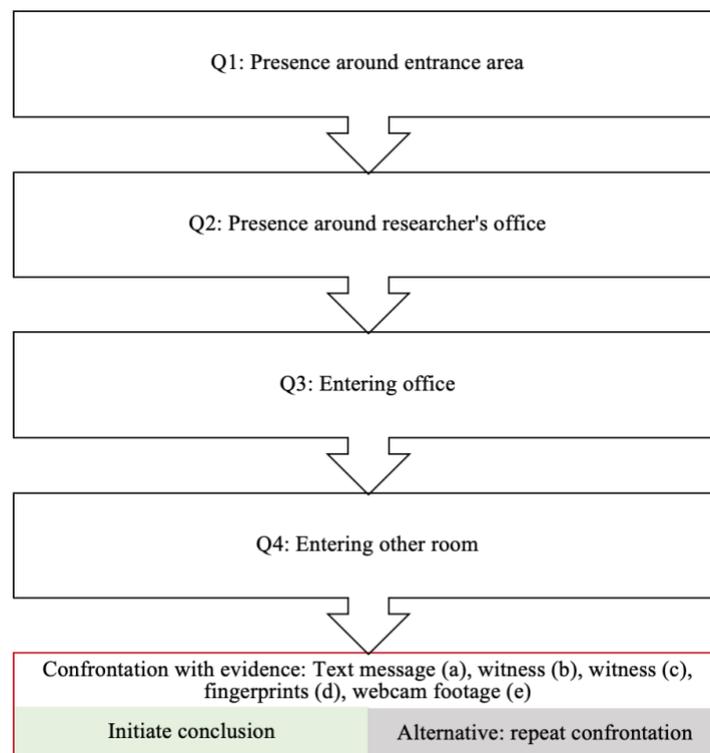


Figure 1. Interview Outline in Late Disclosure Protocol

After the set of four specific questions, the suspect is confronted with all the known evidence at once (see red box, Figure 1). In chronological order of the performed mock crime, it was explained that a) a witness saw the suspect pick up the envelope, b) the received text message was intercepted, c) another witness saw the suspect close to the researcher’s office where confidential data was stolen, d) fingerprints of the suspect were found on an object inside the office, and e) a webcam captured footage of the suspect using the computer in another office. The evidence disclosure was concluded with a statement (“I need you to add all the details that you left out before”) allowing the participant to explain the claims. If suspects

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avoided an explanation, the confrontation with the evidence was repeated. If suspects provided an explanation, the interviewer thanked the participant (“thank you for the explanation”) and initiated the conclusion of the interview.

Shifting-of-strategy approach. In the SoS protocol, the suspect was allowed to freely answer each of the four questions. If the interviewee remained silent, a prompt to “please tell me about that” was given once. As a main point, the interviewer’s responses differed depending on the suspects’ outline (i.e., noted as accept or discredit in Figure 2).

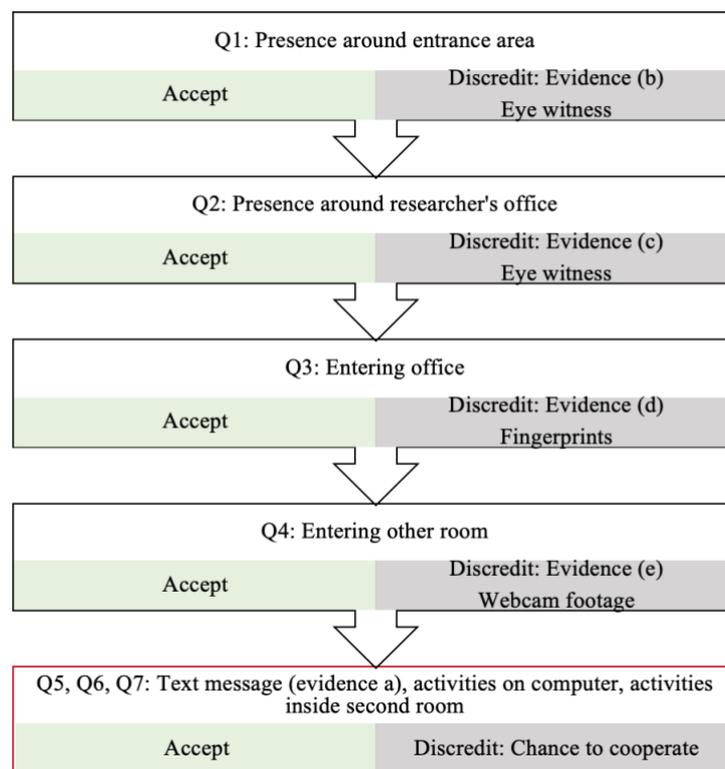


Figure 2. Interview Outline in Shifting-of-Strategy Protocol

If a correct account was provided, the interviewer accepted the participants’ statement by thanking the participants for their cooperation (“what you say fits the evidence we have”). If an incorrect account was provided, the interviewer discredited the statement by highlighted the inconsistency with evidence held against the suspect (“what you say does not fit the evidence we have”). Therefore, evidence was strategically disclosed per theme. In doing so, the participants statements could immediately be accepted or discredited with the aim of fostering forthcomingness. Therefore, the participant was then given the chance to respond to the presented evidence by providing an explanation.

In the further course of the interview, this approach of questioning and confronting

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with evidence was then implemented structurally similar across the following phases of a) the presence at the entrance area, b) the proximity to the researcher's office, c) fingerprints on an object from inside the office, and d) webcam footage on the computer inside the second office.

As the ultimate shift in strategy, the interview approach advanced in so far that the interviewer posed three open-ended questions at once (see red phase, Figure 2), demanding an explanation of several activities: "I need you to explain the text message you received; you have to clarify what you did on the computer in the researcher's office; and I need you to describe exactly what you did in room x (i.e., second office)." If suspects avoided an explanation, the benefit of cooperation was highlighted. If suspects provided an explanation, the conclusion of the interview was initiated.

Interview conclusion. Similar to the beginning, the final part of the interview was identical in both interview conditions. In case of inconsistencies in response to the last question, the interviewer pointed out that: "[...] you're better off, the more information you provide voluntarily. I'll give you one last chance to cooperate by answering my questions." Afterwards or in case of cooperation, the interviewer concluded the interview by providing another opportunity to confess to or deny any involvement in the crime ("I will ask the same question I started with: Do you confess or deny having engaged in any criminal activities?") and thanking participants for their time.

Interviewers. The interviews were performed by the five researchers running the experiment. To standardise the procedure, all interviewers were instructed to strictly follow the interview protocols word-by-word and, therefore, were not allowed to deviate from what was stated in the protocols. In doing so, reliability of procedures was assumed to increase by maximising standardisation since all participants within a condition had to respond to the exact same questions and evidence. The number of interviews conducted by each interviewer was spread evenly and, later, approximately evenly (i.e., due to exclusion of data) over the two interview conditions – each interviewer did an equal number of interviews for both conditions.

Post-interview questionnaire. After the participation in the interview, the role-taking part of the activities was concluded questions should be answered from the participant's perspective, as honestly as possible. The questionnaire was filled in with an iPad (for full questionnaire, see Appendix G). First, general demographics in form of gender, age, nationality, and occupation were assessed.

To check for appropriate role-playing, two questions targeted the motivation to take on the role of the suspect ('How motivated were you to complete the role you assumed for this task?') and motivation to convince the interviewer of not having engaged in illegal

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activities ('How motivated were you to convince the interviewer of your innocence?'). Questions were answered on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*extremely*).

To assess the perception of the interviewer's knowledge, questions were asked per theme during the interview. For all six evidence themes, it was asked whether the participant expected the interviewer to already know the information, for instance, 'Did you expect the interviewer to know about you picking up the envelope?'. This was rated on a 5-point Likert scale ranging from 1 (*did not expect at all*) to 5 (*did expect very much*).

Next, the adjustments of participants' strategies in response to the evidence presented per theme were assessed. First, participants rated whether they felt the need to adjust their strategy in response to the disclosed evidence, for instance, 'Did you feel the need to change your strategy when the evidence regarding you picking up an envelope was presented?'. Second, the ability to adjust their strategy was assessed, asking: 'Were you able to develop a new way of dealing with the situation to help you through?'. The average of the latter question was used as basis for the variable of adjustments. Both questions were rated on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*very much*).

To assess the perception of information the participant provided during the interview, the question 'If you think back to the conversation, how much of the total information did you share with the interviewer?' asked for the perception of the total amount of information shared in relation to whether the interviewer already knew this before the interview. This question was rated on a 5-point Likert scale ranging from 1 (*none at all*) to 5 (*all of it*).

To assess the level of trait adaptability, the Adaptability scale was used as a version modified to an interview context (Martin et al., 2013). Cognitive, behavioural, and emotional adaptability were measured with 3 questions each. For instance, 'I was able to think through a number of possible options to assist me in the situation' (cognitive adaptability), 'I was able to seek out new information, alternative scenarios, or useful memories to effectively deal with the situation' (behavioural adaptability), and 'I was able to reduce negative emotions (e.g., fear, frustration) to help me deal with unexpected evidence' (emotional adaptability). Questions were rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability of the scale was assessed as good, Cronbach's $\alpha = .87$ and Guttman's $\lambda_2 = .88$.

Debriefing. After having filled in the questionnaire, participants were debriefed. Briefly explained, the researcher described the interview approach and the assessment of adaptability within the questionnaire. Participants were then encouraged to ask further questions before they re-confirmed the initially given consent and received the monetary payment. They were then thanked for their participation.

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Coding

Outcome variables. Adaptability was measured as the suspects' adjustments of strategies in the interview and assessed as 'ability to change one's strategy'. These adjustments were categorised in low ($n= 22$) and high groups ($n= 28$) via a median split at 2.5, ranging from 1 (*not able to adjust*) to 5 (*very able to adjust*). In line with these sections, the *adjustments* variable was split into two: adjustments in response to initial questions (asked before the strategic shift) were coded as *adjustment 1* and adjustments in response final questions (asked after the initial questions) were coded as *adjustments 2*.

The interview outcome was first measured in terms of statement-evidence inconsistencies (SEI) on the part of the suspect. This was coded as contradictions between the statements provided during the interview and presented evidence. Contradictions means that a statement clearly did not match held evidence. Therefore, participants' accounts could contradict one of the five pieces of evidence collected from the criminal activities (see Table 1). Since all contradicting statements were grouped with one of the evidence pieces, the scores could range from 0 to 5.

Second, admissions were assessed as amount of information pieces revealed. 18 pieces of information which were related to the crime could have been shared during the interview (see Figure 3). These admissions involved admitting to information that was presented during the interview (e.g., presence in entrance area) as well as evidence (e.g., received text message). However, pieces of information could also go beyond what was presented during the interview (e.g., identifying sender of text message). Participants were ascribed a number in the range of 0 to 18, depending on how many pieces of information they provided during the interview.

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Evidence A	Evidence B	Evidence C	Evidence D	Evidence E
<ul style="list-style-type: none"> • Text message (1) • Identification of sender (2) • Content of message (3) 	<ul style="list-style-type: none"> • Using locker (4) • Envelope (5) • USB stick (6) 	<ul style="list-style-type: none"> • Presence around office area (7) 	<ul style="list-style-type: none"> • Entering office (8) • Using computer (9) • Copying files (10) 	<ul style="list-style-type: none"> • Entering second room (11) • Using computer (12) • Sending mail (13) • Receiver of mail (14) • Content of mail (15) • Took pictures of documents (16) • Sent pictures to accomplice (17) • Location of USB stick (18)

Figure 3. Pieces of Information for Variable Admissions

The interview was divided in two sections: *Initial* open-ended questions (set of four specific questions) and *final* questions. Final questions related to the confrontation with evidence in the late disclosure and to the three critical questions asked in the SoS approach. In line with this, variables were created as *SEI 1* and *SEI 2* or *admissions 1* and *admissions 2*, respectively.

Interrater reliability. Two researchers coded 50% of the interviews each, revising the coding procedure in case of disagreements. Interrater reliabilities were not performed due to time constraints. Examining differences between the coders, the interviewer effect was assessed on main dependent variables, but no significant differences were found.

Results

In respect to the participants' motivation, the mean score of motivation to take on the role ($M= 4.06$, $SD= 0.69$) and motivation to appear innocent ($M= 3.98$, $SD= 0.75$) were well above the midpoint of the scale and a t-test showed no difference between interview conditions on motivation to take on the role, $t(48)= 1.19$, $p = 0.24$, or motivation to appear innocent, $t(48)=$

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0.78, $p < 0.44$. To examine proof of concept, a Pearson's correlation showed that suspects higher in trait adaptability made more adjustments, $r(48) = 0.68$, $p < .001$. A regression ANOVA showed a significant effect, $F(1,48) = 42.29$, $p < 0.001$, where trait adaptability explained 47% variance in adjustments ($R^2 = 0.47$). A t -test showed no differences in trait adaptability between interview conditions, $t(48) = 0.04$, $p = 0.97$, $d = .01$.

Adjustments During the Interview

Hypothesis 1a stated that *the suspects will adjust their behaviour more in the initial phase than in the final phase of the interview*. A General Linear Model repeated measures with adjustments initial and final as within-subject factor showed that suspects made more adjustments in the initial phase ($M = 2.71$, $SD = 1.09$) than in the final phase ($M = 2.44$, $SD = 1.08$) of the interview, $F(1,49) = 5.56$, $p < .05$, Wilk's $\lambda = .90$. A positive correlation indicated that suspects adjusting more in the initial phase also adjusted more in the final phase, *Pearson's* $r = .73$, $p < .00$. Thus, the hypothesis 1a was supported.

Hypothesis 1b stated *the suspects interviewed with the SoS protocol will adjust their behaviour more in the initial phase than in late phase of the interview*. A GLM repeated measures showed that suspects made more adjustments in the initial phase ($M = 2.86$, $SD = 1.11$) than in the final phase ($M = 2.51$, $SD = 1.01$) of the interview with the SoS protocol, $F(1,22) = 5.15$, $p = .03$, Wilk's $\lambda = .81$. Thus, hypothesis 1b was supported.

For the late disclosure technique, no prediction was made. A GLM repeated measures showed that suspects did not make more adjustments in the final phase ($M = 2.38$, $SD = 1.15$) than in the initial phase ($M = 2.58$, $SD = 1.08$) of the interview with the late disclosure protocol, $F(1,26) = 1.43$, $p = .24$, Wilk's $\lambda = .95$.

Effects of Adjustments on Interview Outcome

Adjustments and statement-evidence inconsistencies. Hypothesis 2a stated that *the suspects who adjust their behaviour more will provide less statement-evidence inconsistencies than suspects who adjust their behaviour less*. A t -test showed that suspects that adjusted more ($M = 3.86$, $SD = .80$) provided fewer statement-evidence inconsistencies than those that adjusted less ($M = 4.36$, $SD = .95$) in the interview, $t(48) = 2.04$, $p = .047$, $d = .57$. A significant negative correlation between adjustments and SEI was found, *Pearson's* $r = -.28$, $p = .047$. Thus, hypothesis 2a was supported.

Hypothesis 2b stated that *the suspects who adjust their behaviour more will provide*

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less statement-evidence inconsistencies in the Shift-of-Strategy interview than those adjusting their behaviour less. A t-test showed that suspects adjusting their behaviour more ($M= 3.67$, $SD= .82$) did not provide more statement-evidence inconsistencies than those adjusting their behaviour less ($M= 4.13$, $SD 1.25$) in the Shift-of-Strategy condition, $t(21)= 1.07$, $p= .30$, $d= .44$. Thus, hypothesis 2b was not supported.

For the late disclosure technique, no prediction was made. A t-test showed that suspects adjusting their behaviour more did not provide less statement-evidence inconsistencies ($M= 4.08$, $SD= .76$) than those adjusting their behaviour less ($M= 4.50$, $SD= .76$) in the late disclosure condition, $t(25)= 1.45$, $p= .16$, $d= .55$.

Adjustments and admissions. Hypothesis 3a stated that *the suspects who adjust their behaviour more will provide more admissions than suspects who adjust their behaviour less.* A t-test showed that suspects with more adjustments provided more admissions ($M= 4.32$, $SD= 3.20$) than those with less adjustments ($M= 2.23$, $SD= 2.91$) in the interview, $t(48)= -2.39$, $p= .02$, $d = .68$. Adjustments and admissions showed a significant positive correlation, *Pearson's* $r= .33$, $p < .05$. Thus, hypothesis 3a was supported.

Hypothesis 3b stated that *the suspects who adjust more will provide more admissions in the SoS condition than those adjusting their behaviour less.* A t-test showed that suspects with more adjustments did not provide significantly more admissions ($M = 5.73$, $SD = 3.51$) than those with less adjustments ($M = 3.63$, $SD = 3.85$) in the SoS condition, $t(21)= -1.33$, $p= .20$, $d = .57$. Thus, hypothesis 3b was not supported.

For the late disclosure technique, no prediction was made. A t-test showed that suspects with more adjustments did not provide significantly more admissions ($M= 2.69$, $SD = 1.80$) than those with less adjustments ($M = 1.43$, $SD = 1.95$) in the late disclosure condition, $t(25)= -1.75$, $p= .09$, $d = .67$.

Changes During the Interview

While hypothesis 2a and 3a were confirmed, low versus high adjustments on Information showed a lack of effect per interview condition. Therefore, the relationship of adjustments as changes induced by interview condition on main dependent variables was further explored per interview technique and phase.

Statement-evidence inconsistencies per phase. A t-test showed that suspects in the SoS approach provided a similar number of SEI ($M= 3.83$, $SD= .95$) compared to suspects in the late disclosure ($M= 4.30$, $SD= .78$) during the interview, $t(48)= 1.89$, $p = .0$, $d = .54$. A repeated measures ANOVA with the two interview conditions and the low versus high adjustments

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groups as between-subjects factor and statement-evidence inconsistencies (initial, final) as within-subject factor was conducted. A significant effect of statement-evidence inconsistencies showed that suspects provided significantly less statement-evidence inconsistencies in the final phase ($M= 0.72$, $SD= 0.45$) than in the initial phase ($M= 3.38$, $SD= 0.75$) of the interview, $F(1,46)= 511.89$, $p < .001$, Wilk's $\lambda = .08$. The adjustments \times SEI interaction showed that differences between SEI over interview sections did not depend on level of adjustments, $F(1,46)= .83$, $p = .37$, Wilk's $\lambda = .98$. The interview \times SEI interaction showed that differences between statement-evidence inconsistencies provided in the initial phase compared to the final interview phase depended on the interview condition, $F(1,46) = 4.73$, $p < .001$, Wilk's $\lambda = .91$. The interaction was analysed further by use of GLM repeated measures for each interview condition (see Table 2).

The repeated measures showed that, in the late disclosure interview, suspects provided significantly less SEI in the final phase ($M= .70$, $SD= .47$) than in the initial phase ($M= 3.63$, $SD= .63$) of the interview, $F(1,26)= 379.13$, $p < .001$, Wilk's $\lambda = .06$. In addition, in the SoS interview, suspects similarly provided significantly less SEI in the final phase ($M= .74$, $SD= .45$) than in the initial phase ($M= 3.09$, $SD= .79$) of the interview, $F(1,22)= 183.29$, $p < .001$, Wilk's $\lambda = .11$. A t-test showed significant differences between the interview conditions for SEI in the initial phase, $t(48)= 2.70$, $p < .05$, $d = .76$. A second t-test did not show significant differences between interview conditions for SEI in the final phase, $t(48)= -.27$, $p = .79$, $d = .09$.

Table 2.

Initial and Final Statement-Evidence Inconsistencies per Interview Condition and Low versus High Adjustments

Variable	Late Disclosure		Shift-of-Strategy	
	Adjustment low	Adjustment High	Adjustment Low	Adjustment High
SEI Initial	3.71 (0.61)	3.54 (0.66)	3.38 (0.92)	2.93 (0.70)
SEI Final	0.78 (0.43)	0.62 (0.51)	0.75 (0.46)	0.73 (0.46)
SEI Total	4.49 (0.76)	4.16 (0.76)	4.13 (1.25)	3.66 (0.82)

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Admissions per phase.2 A t-test showed that suspects in the SoS approach provided considerably more admissions ($M= 5.00, SD= 3.69$) compared to suspects in the late disclosure technique ($M= 2.04, SD= 1.95$) during the interview, $t(48)= -3.62, p = .001, d = 1.00$. A repeated measures ANOVA with the two interview conditions and the low versus high adjustments groups as between-subjects factor and admissions (initial, final) as within-subject factor was conducted. First, the difference of admissions from initial to final phase was not shown to be significant, $F(1,46)= .163, p = .67, \text{Wilk's } \lambda = .97$. Second, the adjustments \times admissions interaction was not shown to be significant, $F(1,46)= .05, p = .83, \text{Wilk's } \lambda = .99$. The interview \times admissions interaction showed that differences between admissions provided in the initial phase compared to the final phase depended on the interview condition, $F(1,46)= .83, p = .37, \text{Wilk's } \lambda = .98$. The interaction was analysed further by use of GLM repeated measures for each interview condition (see Table 3).

The repeated measures showed that, in the late disclosure interview, suspects provided significantly more admissions in the final phase ($M= 1.59, SD= 1.69$) than in the initial phase ($M= 0.44, SD= 0.70$) of the interview, $F(1,26)= 12.27, p < .05, \text{Wilk's } \lambda = .68$. In the SoS interview, suspects provided significantly less admissions in the final phase ($M= 1.65, SD= 3.05$) than in the initial phase ($M= 3.35, SD= 2.19$) of the interview, $F(1,22)= 4.53, p < .05, \text{Wilk's } \lambda = .83$. A t-test showed significant differences between the interview conditions for admissions in the initial phase, $t(48)= -6.53, p < .001, d = 1.79$. A second t-test did not show significant differences between interview conditions for admissions in the final phase, $t(48)= -.09, p = .93, d = .02$.

Table 3.

Initial and Final Admissions per Interview Condition and Low versus High Adjustments

Variable	Late Disclosure		Shift-of-Strategy	
	Adjustment low	Adjustment High	Adjustment Low	Adjustment High
Admission	0.31 (0.60)	0.65 (0.81)	2.60 (2.01)	3.92 (2.22)
Initial				
Admission	1.25 (1.53)	2.09 (1.87)	1.30 (2.00)	1.92 (3.73)
Final				
Admissions	1.56 (1.95)	2.74 (1.80)	3.90 (3.85)	5.84 (3.51)
Total				

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Interaction of admissions and SEI. Based on the exploratory analyses, a relationship between admissions and statement-evidence inconsistencies was explored. More admissions were linked to less statement-evidence inconsistencies, *Pearson's* $r = -.60, p < .001$. This relationship was confirmed for the late disclosure interview, *Pearson's* $r = -.67, p < .001$, and the SoS interview, *Pearson's* $r = -.53, p < .05$.

Discussion

The current study examined the adaptability of suspects when interviewed with two different strategic evidence disclosure techniques, the SoS approach and the late disclosure technique. More adaptive suspects were shown to provide more case-relevant information and statements that were more consistent with evidence. The SoS approach was employed with the aim of generating a shift of strategy in the suspect. Ultimately, this should elicit information that was not known to the interviewer prior to the interview. For the SoS approach, it was shown that it can successfully affect changes in the suspects' strategy and forthcomingness. The late disclosure technique was employed with the aim of eliciting cues to deception in the form of inconsistencies with evidence. For the late disclosure, it was shown that it can partially foster inconsistencies but the SoS approach was similarly capable.

Adaptability in the Interview

Adaptability was investigated by means of suspects' *adjustments* of counter-interrogation strategies. Therefore, these terms are used interchangeably. In the late disclosure interview, suspects adjusted their strategy to some extent but not as much as in the SoS approach. As potential explanation, suspects in the late disclosure technique cannot read the interviewer's strategy. Therefore, they might not perceive the necessity to adjust. As indicated by the name, the final phase of this technique contains a late disclosure of all held evidence. When suspects had to respond to this presented evidence, they can make the decision to change their strategy. However, at this late point of the interview, they might not perceive a change of strategy as effective or beneficial to their coming across as innocent.

Within the *shift-of-strategy approach*, it was found that a considerable number of adjustments occurred. In the SoS interview, it was differentiated between two phases. First, the initial phase entailed four open questions and the challenging with evidence. This means that, suspects are challenged with evidence after every statement they provide. Adaptive suspects were thought to adjust more during the initial phase since they should be able to evaluate own performance and see the benefit of adapting their strategy (Martin et al., 2013). Therefore, they

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can start reading the interviewer's technique and, hence, decide to adjust their strategy. In line with this expectation, the initial phase of the SoS approach resulted in significantly more adjustments than the final phase. Second, the final phase consisted of three critical questions without challenging the suspects with evidence. Towards the final phase, suspects might have seen through the interviewer's strategy so that there is a lower need to adapt.

It was overall confirmed that a suspect's capability to adjust was related to the number of statement-evidence inconsistencies. Statement-evidence inconsistencies were shown to decrease when suspects adjusted more. In other words, suspects who changed their strategies more seemed to become more consistent with the evidence. In addition, it was overall confirmed that a suspect's capability to adjust was related to the number of admissions. Admissions were shown to increase when suspects adjusted more. In other words, suspects who changed their strategies seemed to provide more case-relevant information. Overall, the suspects who adjusted their strategy more frequently provided more admissions and less SEI. In other words, if adjusting their strategies more, suspects provided more case-relevant information and became more consistent with evidence. This underlines the idea that suspects have to balance how much information they should provide to still keep their credibility.

An interesting connection was found for how suspects managed this balance of not being too forthcoming or too withholding. Suspects who adjusted more were shown to provide less statement-evidence inconsistencies and more admissions. First, keeping this balance might entail that suspects provide some information but also some statement-evidence inconsistencies. In doing so, suspects can appear credible but do not incriminate themselves too much to be prosecuted. This might hold some risk of being too forthcoming and, hence, facilitating the investigation too much. Those suspects high in adaptability showed a pattern of SEI and admissions in line with this suggested balance. Second, suspects might decide to be more withholding. Thereby, they could come across as lying or deceptive but do not provide any more information. This seems quite safe in not being prosecuted. Those suspects low in adaptability showed a pattern of SEI and admissions in line with this second suggestion. Overall, less adaptive suspects seemed less willing to be forthcoming. This seems to indicate that adaptive suspects managed the balance better in terms of coming across as credible.

These findings seem in line with Martin's (2012) definition of adaptability. Thereby, it was highlighted that the behavioural adjustment is done in response to uncertainty or novelty and aims toward a constructive purpose or outcome. The desired outcome would hereby be to keep up the image of innocence. To effectively work towards this goal, the suspect needs to evaluate own performance and identify necessary modifications (Martin et al., 2012).

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Therefore, suspects have to find a balance of negotiating the uncertainty (i.e., amount of knowledge the interviewer was perceived to hold) and novelty (i.e., challenge with the evidence). When suspects expect the interviewer to hold more information, they deliberately provide case-relevant information (Granhag & Hartwig, 2015). It was found that the increased adjustments were linked to increased admissions and less inconsistencies with the evidence. In other words, adaptive suspects changed their strategy more often and became more forthcoming and consistent with evidence.

The prior findings suggest that more adaptive suspects would potentially play into the hands of the interviewer in the SoS approach. This is because these suspects appeared more forthcoming. The less adaptive suspects seemed to potentially play into the hands of the interviewer in the late disclosure approach. This is because these suspects provided more statement-evidence inconsistencies. However, the effect that adjustments had on information did not transfer to the distinct interview techniques. This means, the relationship of adjustments with statement-evidence inconsistencies and admissions was only shown as overall effect. Taking the different interview techniques into account, this effect was not confirmed. It seems reasonable to assume that adjustments are to some extent based on a trait level of adaptability and, hence, internally motivated. This was confirmed by the finding that adjustments in the initial phase were positively correlated with those in the final phase. Consequently, this indicated that suspects were either consistently adjusting less or adjusting more throughout the interviews. Based on this, it seems that the interview techniques are robust against suspects' level of adaptability. Since this internal adaptability seemed to have little effect over evidence-disclosure strategies, changes in behaviour as induced by the interview techniques were looked at in more detail.

Changes During the Interview

Changes in behaviour were examined as externally induced by the interview techniques. Therefore, the interview techniques were considered in more detail and information (admissions, statement-evidence inconsistencies) were considered per initial and final interview phase. Differences between phases might be relevant since the main manipulation of each technique is assumed to occur in different interview phases.

The late disclosure technique was expected to elicit statement-evidence inconsistencies. This is based on the fact that the late disclosure technique aims at eliciting cues to deception in the form of inconsistencies with evidence (Hartwig, Granhag, Stromwall, & Vrij, 2005). The findings confirmed that most statement-evidence inconsistencies of the late disclosure

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interview were elicited in the initial phase. In this phase, the suspect is allowed to provide a free account of activities. This finding was expected since suspects do not read the interviewer's strategy and, hence, feel comfortable lying. Suspects are given a perception of "what I am doing is working well. I can continue to lie, withhold and deny critical information". (Oleszkiewicz & Granhag, 2019). This leads suspects to maintain their strategy and more inconsistencies with evidence result. In the final phase of the late disclosure interview, statement-evidence inconsistencies decreased considerably. This might indicate that suspects are then able to read the interviewer's strategy and do not provide further statements that are inconsistent with the evidence. However, the SoS approach was similarly capable to elicit statement-evidence inconsistencies. This might be the case because suspects need some time to figure out the interviewer's strategy in the SoS approach. As a result, they might be inconsistent with evidence for some parts until they decide to become more forthcoming. Therefore, it could be confirmed that the late disclosure technique and the SoS approach were similarly effective in eliciting statement-evidence inconsistencies.

The SoS approach was expected to elicit more admissions than the late disclosure technique. This is based on the fact that the SoS approach specifically aims at affecting suspects' counter-interrogation strategies so that they become more forthcoming. To achieve this, the SoS approach manipulates the suspects' perception of how much information the interviewer holds. This is done by immediately challenging inconsistent statements with evidence (Granhag & Hartwig, 2015). Based on the belief that the interviewer already holds the information anyway, suspects are more willing to provide information (Granhag & Hartwig, 2015). Therefore, the changed perception leads suspects to change their strategy to become more forthcoming (Tekin et al., 2015). The current study could confirm this assumption: Suspects exposed to the SoS approach provided considerably more case-relevant information compared to suspects exposed to the late disclosure technique. This finding was expected since suspects can read the interviewer's strategy and, hence, do not feel comfortable lying. Suspects are given a perception of "what I am doing is *not* working well. If I continue with this behaviour, the interviewer will figure out my deception and it will impact the outcome negatively for me" (Oleszkiewicz & Granhag, 2019). This led suspects to change their strategy and they became more forthcoming. Therefore, this study could confirm the effectivity of eliciting admissions in the SoS approach.

The increase in suspects' forthcomingness was assumed to occur in the final phase rather than the initial phase of the SoS interview. This is because suspects provided an account of their activities in the initial phase which was immediately discredited with evidence if a

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wrongful account was provided. Therefore, the initial phase aimed at making suspects believe their withholding or denial strategies would be futile (e.g., “the interviewer knows more than I thought, maybe I should try to tell him what he already knows”, Granhag & Hartwig, 2015). As a result, suspects were thought to change their strategy to become more forthcoming in the final phase. However, suspects already provided a considerable number of admissions during the initial phase of the SoS interview compared to the late disclosure. This indicates that suspects already changed their strategy in the initial phase and provided more admissions. The forthcomingness still seemed to transfer into the final phase, since the SoS approach was overall more effective than the late disclosure technique in eliciting admissions.

Compared to the effect in the SoS approach, suspects in the late disclosure interview provided less admissions. Most admissions took place in the final phase of the late disclosure technique in which the challenging with evidence occurred (Hartwig, Granhag, Stromwall, & Vrij, 2005). Due to the challenging with evidence, suspects had to provide a more accurate account of their activities. However, the amount of admissions that suspects provided in the SoS approach exceeded those of the late disclosure technique by far. Even though suspects already adjusted and admitted a lot in the initial phase of the SoS interview, they still provided a considerable amount of admissions in the final phase. This means, that the late disclosure technique did not outperform the SoS approach despite the fact that suspects in the late disclosure provided very little admissions in the initial phase. Overall, the SoS approach resulted in an almost seven times larger number of admissions. These findings confirm the purpose of eliciting more case-relevant or self-incriminating information in the SoS interview technique. Therefore, the SoS approach was shown to be more effective in eliciting admissions than the late disclosure technique.

Limitations and Recommendations

The current study comes with a number of limitations. First, participants were categorized into groups of low and high level of adjustments. This was done by means of a median split of the continuous adjustment variable at approximately half of the participants. However, a logical issue with categorizing a continuous variable is that all values above the median are considered equal (i.e., high adaptability) and all values below are similarly categorized as one group (i.e., low adaptability). Especially towards the median, values can be very close but part of two different groups. In addition, within the category, those values closer to the median cannot be differentiated from those far above or far below. Therefore, future research might benefit from having a pre-selection phase. This pre-selection would take place

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prior to the conducted experiment. Participants' level of adaptability could be assessed so that, for instance, three groups could be formed. Ultimately, the middle group could be dropped to create some separation between the low and high group. However, this would result in dropping an approximate third of the sample. As a result, the level of adaptability could be determined prior to the study rather than as part of the study to better separate between the groups.

Second, an overall link between adjustments and information was drawn. The information was assessed in terms of inconsistencies of statements with evidence and admissions. Therefore, only the provided inconsistencies or admissions in relation to an absolute number of information pieces that could be achieved was taken into account. However, for future research it might be advisable to differentiate between criticality of information. This means, it should be considered to what extent information can be used to prosecute a suspect. A hierarchy of how critical certain pieces of information are to the prosecution should be considered.

Implications and Conclusion

First, the findings of this study seem to show an interesting connection of suspects' internal adaptability and information provided during interviews. The suspects higher in adaptability seemed to adjust more to the changing nature of the interview by providing more case-relevant information and being more consistent with the evidence. However, since no differences in the effect of adaptability on information were found between the interview techniques, this might indicate that the techniques are robust against adaptive suspects.

Second, the findings of this study show an interesting connection between suspects' behavioural changes as externally induced by the different interview techniques. Thereby, it was shown that the main purpose of the late disclosure technique could be confirmed to some extent. This technique does not aim at shifting the strategy that suspects employ and, hence, adjustments were considerably lower than in the SoS approach. Rather, the late disclosure technique aims at eliciting cues to deception in the form of statement-evidence inconsistencies (Hartwig, Granhag, Stromwall, & Vrij, 2005). This was confirmed to some extent since the late disclosure technique was shown to elicit inconsistencies. However, the SoS approach was at least as capable in generating inconsistencies with evidence compared to the late disclosure technique. Overall, suspects' adjustments of strategies seemed to lead them to become more consistent with evidence. Since the late disclosure technique aims at catching suspects lying, adjustments were shown to not be to the benefit of interviewers.

Third, the main purpose of the SoS approach could be confirmed. The SoS approach

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primarily aims at affecting the strategy that suspects employ so that they become more forthcoming (Granhag & Hartwig, 2015). In line with this expectation, a considerable number of adjustments occurred in the SoS interview. This number was significantly higher than adjustments in the late disclosure technique. In terms of SEI, both techniques were shown to be similarly effective. However, the SoS approach provides the added advantage of changing suspects' strategies. Based on the suspects' change in strategy, the SoS approach further aims at eliciting admissions (Granhag & Hartwig, 2015). The increased number of adjustments in the SoS approach had a positive effect on admissions. This means that suspects who adjusted more provided more case-relevant information. As a result, the adjustments did not counter the effectiveness of the Shift-of-Strategy approach but rather further enhanced the positive effect on the interview outcome. Since the SoS approach aims at retrieving information, suspects' adjustments were shown to be to the benefit of interviewers.

Overall, it was shown that suspects in the SoS approach adjusted their strategy more often. As these suspects provided more case-relevant information, this indicates that suspects became more forthcoming. Therefore, the main aim of shifting the suspects' strategy was confirmed. In comparison to the late disclosure technique, the SoS approach was also effective in eliciting statements that were inconsistent with the evidence. In general, it seems that suspects were required to modify their counter-interrogation strategies to meet the uncertain and changing structure of the SoS approach.

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References

- Alison, L., Alison, E., Noone, G., Elntib, S., Waring, S., & Christiansen, P. (2014). Whatever you say, say nothing: Individual differences in counter interrogation tactics amongst a field sample of right wing, AQ inspired and paramilitary terrorists. *Personality and Individual Differences*, 68, 170-175. doi: 10.1016/j.paid.2014.04.031
- Bond, C. F. & DePaulo, B. M. (2006). Accuracy of deception judgements. *Personality and Social Psychology Review*, 10(3), 214-234. doi:10.1207/s15327957pspr1003_2
- Clark, C., Milne, R. & Bull, R. (2011). Interviewing suspects of crime: The impact of PEACE training, supervision and the presence of a legal advisor. *Journal of Investigative Psychology and Offender Profiling*, 8(2), 149-162. doi:10.1002/jip.144
- DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), 74-118. doi:10.1037/0033-2909.129.1.74
- Granhag, P. A. & Hartwig, M. (2008). A new theoretical perspective on deception detection: On the psychology of instrumental mind-reading. *Psychology, Crime & Law*, 14(3), 189-200. doi:10.1080/10683160701645181
- Granhag, P.A. & Hartwig, M. (2015). The strategic use of evidence technique: A conceptual overview. In P.A. Granhag, A. Vrij and B. Verschuere (Eds.), *Detecting Deception: Current Challenges and Cognitive Approaches*, (pp. 231–251). New York, NY: John Wiley & Sons, Ltd.
- Granhag, P. A, Hartwig, M., Giolla, E. M., & Clemens, F. (2015). Suspect' verbal counter-interrogation strategies: Towards an integrative model. In P. A. Granhag, A. Vrij & B. Verschuere (Eds.), *Detecting deception* (pp. 293-313). Chichester: John Wiley & Sons, Ltd.
- Hartwig, M., Granhag, P. A., & Luke, T. (2014). Strategic use of evidence during investigative interviews: The state of science. In D. Raskin, C. Honts, and J. Kirchner (Eds.), *Credibility Assessment*, Oxford: Elsevier Inc.
- Hartwig, M., Granhag, P. A., & Strömwall, L. (2007). Guilty and innocent suspects' strategies during interrogations. *Psychology, Crime & Law*, 13, 213–227. doi:10.1080/10683160600750264
- Hartwig, M., Granhag, P. A., Stromwall, L.A. & Doering, N. (2010). Impression and

ADAPTABILITY IN INTERVIEWED SUSPECTS

- information management: On the strategic self-regulation of innocent and guilty suspects. *The Open Criminology Journal*, 3(1), 10-16.
doi:10.2174/1874917801003020010
- Hartwig, M., Granhag, P. A., Stromwall, L. A., & Kronkvist, O. (2006). Strategic use of evidence during police interviews: When training to deception works. *Law and Human Behavior*, 30, 603-619. doi:10.1007/s10979-006-9053-9
- Hartwig, M., Granhag, P. A., Stromwall, L. A., & Kronkvist, O. (2006). Strategic Use of Evidence during police interviews: When training to detect deception works. *Law and Human Behavior*, 30, 603–619. doi:10.1007/s10979-006-9053-9
- Hartwig, M., Granhag, P. A., Stromwall, L.A. & Vrij, A. (2005). Detecting deception via strategic disclosure of evidence. *Law and Human Behavior*, 29(4), 469-484.
doi:10.1007/s10979-005-5521-x
- Luke, T. J., Hartwig, M., Shamash, B. & Granhag, B. A. (2015). Countermeasures against the strategic use of evidence technique: Effects on suspects' strategies. *Investigative Psychology and Offender Profiling*, 13(2), 131-147. doi:10.1002/jip.1448
- Martin, A. J. (2017). Adaptability – what it is and what it is not: Comment on Chandra and Leong (2016). *American Psychologist*, 72(7), 696-698. doi:10.1037/amp0000163
- Martin, A. J., Nejad, H., Colmar, S. H., & Liem, G. A. D. (2012). Adaptability: Conceptual and empirical perspectives on responses to change, novelty and uncertainty. *Australian Journal of Guidance and Counselling*, 22(1), 58-81.
doi:10.1017/jgc.2012.8
- Martin, A. J., Nejad, H., Colmar, S. H., & Liem, G. A. D. (2013). Adaptability: How students responses to uncertainty and novelty predict their academic and non-academic outcomes. *Journal of Educational Psychology*, 105(3), 728. doi:10.1037/a0032794
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238. doi:10.1037/0003-066X.56.3.227
- Smit, A.S., Eling, P.A.T.M., & Coenen, A.M.L. (2004). Mental effort causes vigilance decrease due to resource depletion. *Acta Psychologica*, 115(1), 35-42.
doi:10.1016/j.actpsy.2003.11.001
- Tekin, S., Granhag, P. A., Hartwig, M., Stromwall, L., Giolla, E. M., & Vrij, A. (2015). Interviewing strategically to elicit admissions from guilty suspects. *Law and Human Behavior*. 39(3), 244-252. doi:10.1037/lhb0000131
- Vrij, A., & Granhag, P. A. (2012). Eliciting cues to deception and truth: what matters are the

ADAPTABILITY IN INTERVIEWED SUSPECTS

questions asked. *Journal of Applied Research in Memory and Cognition*, 1(2), 110-117. doi:10.1016/j.jarmac.2012.02.004

Oleszkiewicz, S., & Granhag, P. A. (2019). Establishing cooperation and eliciting information: Semi-cooperative sources' affective resistance and cognitive strategies. In R. Bull and I. Blandon-Gitlin (Eds), *The Routledge Internal Handbook of Legal and Investigative Psychology*. (n.p.): Routledge

Oleszkiewicz, S., Granhag, P. A., & Montecinos, S. C. (2014). The Scharff-Technique: Eliciting intelligence from human sources. *Law and Human Behavior*, 38(5), 478-489. doi:10.1037/lhb0000085

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Appendix A **Informed Consent**

Criminal Decision Making **Informed Consent**

Purpose

This study is about criminal behavior. An important feature of a criminal investigation is to understand the behavior of suspects of crime. The current study will examine your perceptions and behaviors as a suspect who commits a mock crime.

More detailed information regarding the theoretical background, such as underlying concepts or frameworks, cannot be disclosed at the present moment to ensure that you behave as normal and natural as you would in reality. Any detailed information will be provided upon request after the experiment is done.

Procedure

As a participant in this study, you will be instructed to perform some criminal activities and afterwards you will be interviewed about it and fill in a questionnaire about your perceptions of your experiences. The interview will be audio recorded.

Once you have filled in the questionnaire the study is completed. Because it is important to protect the validity of psychological experiments (i.e., that you behave as normal and natural as possible during the operation), we cannot tell you everything about the study at this time. After the study is complete you will be fully debriefed and we will answer any questions that you may have about the study. If you decide to enroll in this study, your involvement will last for up to 60 minutes and you will receive 1 SONA credit for your participation. To ensure confidentiality, your responses will be anonymous (i.e., personal identifying information cannot be matched with your answers) and we only analyze group averages (i.e., individual performances will not be analyzed). The recorded data is treated confidentially and only available to the research team. In case of publication, it is obligatory to store the material for up to 10 years.

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Participant Rights

Your participation is voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without consequences. Also, the audio recordings will be destroyed immediately at your request. You will receive the full compensation also if you stop participating. For further information about this study, contact the principal investigator Simon Oleszkiewicz, Ph.D. at s.oleszkiewicz@utwente.nl

Consent and Authorization Provisions

Your signature indicates that you voluntarily agree to participate in **Criminal Decision Making**, that the study has been explained to you, that you have been given the time to read the document, and that your questions have been satisfactorily answered.

Name

Signature

I consent to participate in the study on criminal behavior

Signature

I consent to be audio recorded during the interview

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Appendix B **Background Story**

Background

Imagine that you are a person who was raised in a house full of love for pets, especially cats and dogs. Having been around animals all your life you have developed a very special bond to them. Simply put, you love cats and dogs.

You are currently studying at the UT and from your fellow students, you just heard some rumors that made your bones chill to the core: There is a professor at the University who does animal testing on dogs. You found out that this professor is doing his research on animals illegally, and that he violates the strict ethical procedures for animal handling. However, it seems as if the university is turning a blind eye. Because of your love for animals, you decided that this was too much: There is no way such cruel treatment of animals can be justified, you had to do something to make it stop!

Since your gruesome discovery, you have made several attempts to put an end to this horror. You have emailed the professor directly, you have arranged demonstrations, talked with the heads of several faculties, the HR department, study advisors, you name it. However, this has only resulted in straight out denials – nobody acknowledges any unethical animal treatment. At this point in time, your hard work and efforts have not paid off at all, and you conclude that only one option remains: To collect evidence about the unethical behavior and forward it to an investigative journalist that will publish a story about it in the news.

To collect the evidence you need help, so you contacted the organization *Rights for Animals*. However, this organization is currently under investigation for other crimes. Therefore, they cannot play any major role in gathering evidence, but they are willing to help you work out the necessary activities to secure the necessary evidence.

What you are going to do

You're planning to collect evidence that the UT is involved in illegal and cruel treatment of animals. The organization *Rights for Animals* supports you. Soon, they will get into contact with you and help you with your mission. The collected evidence will then be forwarded to an employee at *Rights for Animals*.

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Briefly put, to complete your mission you have to (specific instructions will follow later):

- (1) gain access to the lab
- (2) collect evidence in the lab
- (3) provide the evidence to your accomplice

You will next receive detailed instructions for what you have to do to collect and forward the evidence. Read the instructions carefully so you know it by heart. You will be allowed to take these instructions with you, so you do not need to memorize every word. Feel free to check this paper if you get insecure or can't remember what to do next.

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Appendix C**Checklist of Criminal Activities****Instructions**

These instructions will be performed in consecutive order. Meaning that once you have ticked of a box, you move to the next box directly under it. Do not jump between boxes; you have to follow the order from top to bottom.

- received text message from your contact person from the animal rights organization (mission starts) → WhatsApp message
- collect envelope at the given location established by the text message
- go into the lab where you find information regarding the animal experiments (room _____)
- start the computer and plug in the USB stick to collect the necessary evidence
- search the file 'experiments' and copy it on the USB stick (located on Desktop)
- take the USB stick and the envelope and leave the lab
- go to room _____ (there you can find a secure computer)
- use the computer to log into your email- account
- send the files of the USB stick to KalleBlomNews@gmail.com (a journalist who belongs to *Rights for Animals* who wants to publish your story)
- next to the computer, search for the folder 'contracts' and take a picture of the Documents which you find inside. They serve as additional evidence.
- send it via WhatsApp to this number that contacted you in the beginning

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put the USB stick back into the envelope and place it into the folder 'private'
(your accomplice will collect it)

return to room _____

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Appendix D**Participants' Pre-Interview Preparation****Instructions for Participant (Before the Police Interview Starts)**

In 5 minutes, you will be interviewed by a police officer. You are instructed to interact with the police, so please try to imagine how you would answer possible questions in reality.

Please imagine that you have already concluded that it is important for you to give an innocent appearance and that this will best be done by speaking with the police. Hence, you concluded that using your right to remain silent will only make you seem more suspicious. In addition, during the interview you will be asked whether you want to have a lawyer present. Please imagine that you have already considered this option and decided it was best to not invite a lawyer, because in this way you look more innocent. Hence, you are instructed to answer this question with a 'No'.

Don't forget: You are an activist for animal rights. While getting your information about the cruel researcher, you were, however, committing a crime. In order to complete your mission, you should try to convince the interviewer of your innocence. Otherwise, *Rights for Animals* won't be able to publish your findings as their work will be linked to your criminal activity; all your work would be for nothing. Please imagine that this is very important for you: If you don't come across as innocent during the interview you will fail to save the animals.

Please note that it is the interviewer who will end the interview. The interviewer will then tell you what you need to do after the interview is over.

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Appendix E**Interview Protocol Late Disclosure**

“Hello, my Name is XXX. I am part of the team investigating a crime that was committed here at the University today. Someone broke into the University’s facilities and stole confidential data. There is reasonable suspicion that you have committed this crime, and I will therefore ask you some questions about your behavior and your observations around the University today. Because of the suspicion against you, you do have the right to have a lawyer present during this interview. Would you like to consult one?

I also want to mention that you have the right to remain silent and that you do not have to answer any of my questions.

#Response of Suspect

Do you confess or deny having engaged in any criminal activities?

#Response of Suspect

You can start by freely telling me how you arrived at the university today and what you did there.

#Response of Suspect

Thank you. I have a few more specific questions.

Have you been around/ You mentioned being at **the study area on the ground floor of the Cubicus building** today?

#Response of Suspect

if suspect remains silent or only answers with a ‘yes’ after the first question of each evidence theme, prompt once by saying: Please tell me about that

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Have you been around/you mentioned you were around the office of one of the professors after being at the study area?

#Response of Suspect

Have you recently entered/ you mentioned that you entered the office of a professor?

#Response of Suspect

Have you entered/you mentioned that you entered another room after you left the office?

#Response of Suspect

Is there anything you would like to add at this point?

#Response of Suspect

Okay, thank you. We have collected some evidence that I would like you to address. Our tech team intercepted the text message you received today, shortly thereafter a witness saw you pick up an envelope from one of the lockers in the Cubicus building. Later on, another witness saw you near the office of the professor. We have also found your fingerprints inside the office, and a webcam has shown that you used the computer in room XXX. Before we conclude this interview, would you mind explaining all these activities.

#Response of Suspect

Alternative Deceptive: I would like to point out that you're better off, the more information you provide voluntarily. I'll give you one last chance to cooperate by answering my questions.

#Response of Suspect

If suspect remains silent

So, do you have anything to add?

If suspect objects or complains, simply read out the evidence again

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Okay, to conclude this interview I will ask the same question I started with: Do you confess or do you deny having engaged in any criminal activities?

Okay, thank you for your time. If we find something in need for further clarification, we will ask you to come back at a later time. Have a good day.

(Investigator opens the door for participant)

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Appendix F**Interview Protocol Shift-of-Strategy Approach**

“Hello, my Name is XXX. I am part of the team investigating a crime that was committed here at the University today. Someone broke into the University’s facilities and stole confidential data. There is reasonable suspicion that you have committed this crime, and I will therefore ask you some questions about your behavior and your observations around the University today. Because of the suspicion against you, you do have the right to have a lawyer present during this interview. Would you like to consult one?

I also want to mention that you have the right to remain silent and that you do not have to answer any of my questions.

#Response of Suspect

Do you confess or deny having engaged in any criminal activities?

#Response of Suspect

You can start by freely telling me how you arrived at the university today and what you did there.

#Response of Suspect

Thank you. I have a few more specific questions.

Evidence 2: Seen at study area in the Cubicus building

Have you been around/ You mentioned being at the study area on the ground floor of the Cubicus building today?

if suspect remains silent after the first question of each evidence theme, prompt once by saying: Please tell me about that

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Discredit: What you say doesn't fit the evidence we have. A witness has seen you picking up an envelope from one of the lockers there. Would you like to respond to that statement?

#Response of Suspect

Go to the next question

Accept: What you say fits the evidence we hold, as a witness has seen you picking up an envelope from one of the lockers there.

Go to the next question

Evidence 3: Proximity to the office

Have you been around/you mentioned you were around the office of one of the professors after being at the study area?

Discredit: What you say does not fit the evidence, as an employee has seen you there today. Can you explain what you did there?

#Response of Suspect

Go to next question

Accept: Okay, very good. We have evidence that supports your answer. An employee saw you there today at that time.

***Go to next question ***

Evidence 4: Fingerprints on object

Have you recently entered/ you mentioned that you entered the office of a professor?

Discredit: What you say does not fit the evidence. We found "an object" inside the office with your fingerprints on it. Would you mind explaining how they got there?

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#Response of Suspect

Go to next question

Accept: Thanks for clarifying this. We did find your fingerprints on “an object” inside the office.

***Go to next question ***

Evidence 5: Webcam footage of Computer

Have you entered/you mentioned that you entered another room after you left the office?

Discredit: What you say does not fit the evidence we hold. Our technical team accessed the webcam of a computer in room XXX and it shows clear footage of you. Would you mind explaining what you did on the computer?

#Response of Suspect

Go to next question

Accept: Thank you for working with me here. Our technical team accessed the webcam of the computer in room XXX and the footage clearly shows you at the computer.

***Go to next question ***

The three questions:

Okay, I have three additional questions I need you to address before we end this interview. I need you to explain the text message you received just before going to the lockers in the study area; you have to clarify what you did on the computer in the office; and I need you to describe exactly what you did in room XXX.

#Response of Suspect

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Alternative Deceptive: I would like to point out that you're better off, the more information you provide voluntarily. I'll give you one last chance to cooperate by answering my questions.

If suspect remains silent

So, do you have anything to add?

Okay, before we end this interview, I will ask the same question I started with: Do you confess or deny having engaged in any criminal activities?

Ending:

Okay, thank you for your time. If we find something in need for further clarification, we will ask you to come back at a later time. Have a good day.

(Investigator opens the door for participant)

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Appendix G
Post-Interview Questionnaire

To finalize the study, we ask you to answer questions regarding your perceptions of the interview. Please answer the questions honestly and openly, as you are no longer playing the role of the suspect. The completion of this questionnaire will take around 15 minutes. We would like you to make sure that you answer every question. At first, please enter your demographics.

Q1 Gender

- Female
- Male
- Diverse

Q2 Age _____

Q3 Nationality

- Dutch
- German
- Other _____

Q4 Occupation

- Student
- Affiliate at the UT
- Other _____

In the following, we would like you to answer two questions to get a better understanding of your role-playing.

Q5 How motivated were you to complete the role you assumed for this task? [Likert scale: 1 (*not at all*) to 5 (*extremely*)]

Q6 How motivated were you to convince the interviewer of your innocence? [Likert scale: 1 (*not at all*) to 5 (*extremely*)]

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Prior to the interview, you had time to prepare a strategy (that you could use during the interview).

Q7 Did you have a strategy prior to the interview? [*Yes/ No*]

If yes to Q7: Q8 What was your strategy? Please explain with a few words.

Q9 Did you adjust your strategy at any point during the interview? [*Yes/ No*]

If yes to Q9: Q10 What were significant changes in your new strategy in comparison to your initial strategy that you planned out? Please explain with a few words.

If yes to Q9: Q11 What made you adjust your strategy? Please explain with a few words.

Q12 How effective did you find your strategies?

- Your initial strategy [Likert scale: 1 (*not effective at all*) to 5 (*extremely effective*)]
- Your adjusted strategy [Likert scale: 1 (*not effective at all*) to 5 (*extremely effective*)]

Q13 What was the result of your strategies?

- Your initial strategy [Likert scale: 1 (*it made it much worse for me*) to 5 (*it made it much better for me*)]
- Your adjusted strategy [Likert scale: 1 (*not effective at all*) to 5 (*extremely effective*)]

We have some questions about specific moments during the interview. Try to think back and remember your behavior and thoughts as accurately as possible during these specific questions.

Q14 You were seen in the entrance area picking up the envelope.

- Did you expect the interviewer to know about you picking up the envelope? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]
- How much did you expect the interviewer to know in regard to you picking up the envelope? [Likert scale: 1 (*nothing*) to 5 (*everything*)]

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- Did you feel the need to change your strategy when the evidence regarding you picking up an envelope was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]
- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

Q15 You received a suspicious text message.

- Did you expect the interviewer to know about the text message? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]
- How much did you expect the interviewer to know in regard to the text message? [Likert scale: 1 (*nothing*) to 5 (*everything*)]
- Did you feel the need to change your strategy when the evidence about the text message was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]
- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

Q16 You were around the office of the researcher today.

- Did you expect the interviewer to know about your presence around the office? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]
- How much did you expect the interviewer to know regarding your presence around the office? [Likert scale: 1 (*nothing*) to 5 (*everything*)]
- Did you feel the need to change your strategy when evidence regarding your location was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]
- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

Q17 You entered the office.

- Did you expect the interviewer to know about your entering the office? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]

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- How much did you expect the interviewer to know regarding you entering the office? [Likert scale: 1 (*nothing*) to 5 (*everything*)]
- Did you feel the need to change your strategy when evidence regarding your entering was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]
- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

Q18 You left fingerprints on an object inside the office.

- Did you expect the interviewer to know about your fingerprints on the object? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]
- How much did you expect the interviewer to know regarding your fingerprints on the object? [Likert scale: 1 (*nothing*) to 5 (*everything*)]
- Did you feel the need to change your strategy when evidence regarding your fingerprints was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]
- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

Q19 You were seen on webcam pictures.

- Did you expect the interview to have a webcam recording of you inside the room? [Likert scale: 1 (*did not expect at all*) to 5 (*did expect very much*)]
- How much did you expect the interviewer to know regarding your actions inside the room? [Likert scale: 1 (*nothing*) to 5 (*everything*)]
- Did you feel the need to change your strategy when evidence regarding the webcam recording was presented? [Likert scale: 1 (*not at all*) to 5 (*very much*)]

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- Were you able to develop a new way of dealing with the situation to help you through? [Likert scale: 1 (*not at all*) to 5 (*absolutely*)]

In general, when incriminating evidence was presented ... [Likert scale: 1 (*strongly disagree*) to 7 (*strongly agree*)]

Q20 I was able to think through a number of possible options to assist me in the situation.

Q21 I was able to revise the way I was thinking about the evidence to help me through the situation.

Q22 I was able to adjust my thinking or expectations to assist me in the situation when it was necessary.

Q23 I was able to seek out new information, alternative scenarios, or useful memories to effectively deal with the situation.

Q24 When I was uncertain of what evidence the interview held, I was able to develop new ways of going about things (e.g. a different way of answering questions or new ways to redirect/interfere the interviewer's questions) to help me through.

Q25 To assist me when being presented with the evidence, I was able to change the way I responded when necessary.

Q26 I was able to reduce negative emotions (e.g., fear, frustration) to help me deal with unexpected evidence.

Q27 When uncertainty arose about what evidence was actually known to the interviewer, I was able to minimize frustration or irritation so I could deal with it best.

Q28 To help me through when presented with unexpected evidence, I was able to draw on positive feelings and emotions (e.g., enjoyment, satisfaction).

Q29 Try to think back to the interview and describe how you perceived the interview situation. Please describe to what extent you would describe the situation of being presented with evidence during the interview with words such as... [Likert scale: 1 (*extremely inadequate*) to 7 (*extremely adequate*)]

- A change (different)
- An adversity (unpleasant and difficult)
- A novelty (new, unfamiliar)
- A threat (threatening, dangerous)

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- An uncertainty (uncertain, unpredictable)
- A challenge (challenging, demanding)
- A confrontation (confronting, opposing)

In the next part, we are interested in the amount of information you shared and how this compares to what you had planned prior to the interview.

Q30 If you think back to the conversation, how much of the total information did you share with your contact person? [Likert scale: 1 (*none at all*) to 5 (*all of it*)]

Q31 Of all the information you shared, how much of it do you think was completely new information to the interviewer? [Likert scale: 1 (*none at all*) to 5 (*all of it*)]

Q32 In comparison to what you had initially planned, did you give more or less information during the actual conversation (than planned)? [Likert scale: 1 (*a lot less*) to 5 (*a lot more*)]

Q33 Which of the following information did you plan to share?

- Being around the entrance area
- Picking up an envelope at the lockers
- Receiving a text message
- Content of the text message
- Being around the office
- Entering the office
- What you did inside the office

Q32 Which of the following information did you ultimately share?

- Being around the entrance area
- Picking up an envelope at the lockers
- Receiving a text message
- Content of the text message
- Being around the office
- Entering the office
- What you did inside the office

Q33 How much information do you think the interviewer had about the incident prior to your conversation? [Likert scale: 1 (*very little information*) to 5 (*a lot of information*)]

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Q34 What specific information regarding the incident did you perceive the interviewer as knowing prior to your conversation? Select the alternatives that describe the information you perceived the interviewer as already knowing prior to your conversation. It is important you select only the alternatives you are sure your contact person already knew. This information will be compared to what the interviewer actually knew prior to your conversation.

[Likert scale: 1 (*no, the interviewer did not know it*), 2 (*I do not know how much the interviewer knew*), 3 (*yes, the interviewer knew it*)]

- The content of the message
- That you went to the lockers
- That you went inside the office
- That you copied the folder onto a stick
- The content of the folder
- That you send the mail
- To whom you send the mail
- What you did with the USB stick afterwards
- Who the accomplice is

Some last questions aim at getting a better understanding of your role-playing in this task.

[Likert scale: 1 (*does not describe me*) to 5 (*describes me extremely well*)]

Q35 I prefer structured situations to unstructured situations (or social interactions with a sense of structure as opposed to unstructured or open interactions)

Q36 I prefer specific instructions to broad guidelines (or specific questions to broad outlines) as I am able to specifically control the amount of information I provide.

Q37 I tend to get anxious easily when I don't know an outcome (or the amount of information held, or the outcome of a conversation)

Q38 I feel stressful when I cannot predict consequences (or amount of information held, amount of evidence against me)

Q39 I would not take risks when an outcome cannot be predicted (or I would not take risks when I am uncertain if I can convince the interrogator of my innocence or uncertain about the amount of information or evidence held).

Q40 I don't like ambiguous situations.

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