Utility and Effectiveness of the Context Manipulation Techniques: Police Investigators' Perspectives



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Abstract

The foremost goal of conducting an investigative interview is to obtain as much accurate information as possible. To achieve this, investigators employ a variety of interviewing techniques. Kelly et al. (Psychol Public Policy Law 19:165–178, 2013) proposed a taxonomy interviewing techniques, grouping them into six domains (i.e., Rapport and Relationship Building, Context Manipulation, Emotion Provocation, Collaboration, Confrontation/Competition, and Presentation of Evidence). In this study, we focused on assessing the Context Manipulation domain (e.g., considering seating arrangements, time of day, clothing). Specifically, we sought to examine police investigators' use and beliefs about the effectiveness of context manipulation techniques. A sample of 81 police investigators completed the survey. Our findings provide evidence that investigators believe the interview setting to have importance and are already employing some context manipulation techniques in their practice. Techniques mentioned most often were related to seating arrangement, investigators' clothing, and item availability for suspects (e.g., water, coffee). This survey also provides evidence that investigators are receptive to using context manipulation techniques in their practice, despite how little they are currently taught during trainings. Understanding what context manipulation techniques investigators use and believe to be useful in their interviewing practice may have implications for future training, as well as for the (re)design of interview rooms.

Keywords Context manipulation techniques · Interview environment · Interview context · Police survey · Interviewing techniques

Investigative interviews are complex and dynamic social interactions (Kelly et al. 2016), and investigators must prepare how to best manage the flow of information with the suspect. Part of this preparation involves considering the setting in which the interview occurs—or *context management* (Brandon et al. 2018). Contextual aspects are thus related to the physical environment, and examples include the furniture arrangement within the interview room, the room size, physical isolation of the suspect, and the investigators' physical appearance. Because police investigators can manipulate these aspects to aid their interviewing practice, Kelly et al. (2013) referred to them as *context manipulation techniques*.

Context management is mentioned in some North American police manuals. In criminal investigations, the

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Reid manual (Inbau et al. 2013) provides specific recommendations for how to arrange the interview room. For example, the lighting should not be excessive or glaring and there should be no distractions (e.g., no wall decorations, no loose objects like paperclips). The seating arrangement between the suspect and interviewer should be at a close distance (approximately 122 cm) with no desk or table separating them-so to facilitate the detection of deception through the suspect's body movements. Additionally, the investigator should be dressed in civilian clothes rather than in uniform to reduce the suspect's stress level (Inbau et al. 2013). Besides the Reid manual, other interviewing manuals also consider contextual manipulations. In the military setting, the US Army Field Manual (Department of the Army 2006) cites the change-of-scenery approach as a recommended technique to obtain information. Contrary to the Reid method, this approach consists of removing the suspect from a formal and intimidating atmosphere (i.e., interview room) and placing them in a setting where they may be more comfortable.

To what extent context manipulation is used in police's interviewing practice has been a subject of a few police surveys. For example, Kassin et al. (2007) questioned

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631 North American investigators on the most frequently used interrogation techniques, and found the two most used were, in fact, contextual techniques. These techniques corresponded well with the Reid method: physically isolating the suspect from family and friends (66%) and conducting the interrogations in a small, private room (42%). In a more recent international survey, Miller et al. (2018) found that police investigators from European countries (i.e., UK, Finland, Ireland, The Netherlands, and Norway) and Oceania (i.e., Australia and New Zealand) reported manipulating the context at a lower rate than US and Canadian investigators. As for specific contextual manipulations, across all countries, the most frequently used were considering the time of day for the interview, strategically positioning the suspect in a specific part of the room, and similar to Kassin et al. (2007), conducting interviews in a small room.

While these studies provide information on the prevalence of context manipulation techniques, it remains unclear why investigators employ these techniques or what their beliefs are on their usefulness and effectiveness. The goal of the present study was thus to provide a focused assessment of police investigators' use and beliefs regarding contextual aspects. To achieve this, we asked investigators the degree to which they consider the interview context to be important, and to report on contextual aspects they already consider prior to interviews. We then focused on the specific contextual manipulation techniques proposed by Kelly et al. (2013) to gauge the degree to which investigators consider these techniques useful and effective.

The findings from this survey are important for two reasons. First, emerging research hints at positive effects of context manipulations in interview quality. Dawson et al. (2017) manipulated the interview room's size and found that larger physical spaciousness resulted in higher information disclosure. Similarly, Hoogesteyn et al. (2019) found that interviewees who perceived the interview room as more spacious also reported more positive perceptions of rapport building. Yet, these studies have focused on just one (i.e., physical spaciousness) of the many contextual aspects relevant to investigative interviewing practice. The data from this survey may yield useful insight on what other contextual aspects are deemed important by police investigators and could be considered for future research. Secondly, contextual aspects should be accounted for when designing interview rooms. If useful, contextual aspects are feasible to manipulate (e.g., re-arranging the room's furniture) without requiring extensive training efforts for investigators. Again, data from this survey may yield important information on what aspects to consider when (re)designing interview rooms.

Method

Participants

A total of 81¹ responses were included in this study. The majority of the sample was male (n = 49), with an average age of 44 years (SD = 9.80, n = 79). The sample comprised officers from five countries. The majority were from Sweden (n = 31, 38.3%) and The Netherlands (n = 29, 35.8%) and the rest included investigators from the USA (n = 12, 14.8%), Canada (n = 8, 9.9%), and one response came from England (1.2%). Of the participants that provided their current rank, majority reported being officers (n = 17), followed by detectives (n = 12), inspectors (n = 12), sergeants (n = 6), head officers (n = 6), corporals (n = 2), lieutenants (n = 2), and one chief of police. All participants had interviewing experience, ranging from 1 to 40 years (M = 15 years, SD = 10.30, n = 79). Fifty-four participants (66.7%) reported receiving special training in conducting interviews. When asked to specify, some reported having received a general interviewing/ interrogation course (n = 22), followed by Reid training (n =6), PEACE training (n = 5), RCPM's phased training (n = 5), High-value Detainee group training (n = 5), Cognitive Interview training (n = 4), RIMOZ² (n = 3), and Motivational Interviewing training (n = 3).

We also asked our participants if they were up to date with the scientific literature on interviewing. Eighteen-and-a-half percent (n = 15) of participants reported not being at all up to date, 33.3% (n = 27) reported being somewhat up to date, 27.2% (n = 22) reported being moderately up to date, 13.6% (n = 11) reported being mostly up to date, and 7.4% (n = 6)reported being extremely up to date.

Procedure and Materials

For recruitment, we approached contacts we had in each country who then distributed the online survey link among colleagues (i.e., snowball sampling). Participants received the link to the survey's secure website along with a short explanation of the purpose of the study (see Appendix for full survey). The survey was offered in three different languages: English, Dutch, and Swedish. After consenting, participants first completed some demographic queries (e.g., age, years of experience, current rank). The rest of the survey was divided into two sections.

Section 1 of the survey first asked investigators "Is there anything you do on purpose, in relation to the interview environment/setting, to prepare for a suspect interview? For

¹ A total of 124 officers began the survey; only 81 provided any information past demographics. Two of the final 81 recruited officers did not report age, and 23 did not their report rank. ² "Broadening of questioning" ("RIMOZ") is an interviewing training officers

receive as part of the Police Academy in The Netherlands

example, arranging the chairs in a particular way, deciding on a specific location to conduct the interview, changing out of uniform to wear something informal." This question was provided through an open-ended prompt. Participants first generated their own list of techniques and then assigned an effectiveness rating on a 7-point Likert scale (1 = not effective to 7)= *very effective*) to each technique. For each technique they generated, participants also described the purpose or the reason why they considered the technique effective. We also asked them, "How important do you consider the environment/setting of the interview to be during an investigative interview?" with possible responses ranging from 1 ("not at all important") to 7 ("extremely important"). Following that, participants were presented with an openended question "Thinking about the aims and purposes of an interview, what do you consider to be the most important characteristics when designing an interview room?"

Section 2 of the survey included the context manipulation techniques provided by Kelly et al. (2013). Four techniques were added to the original list: "Sitting at a close, intimate distance," "Make interview room appear warm and comfortable," "Make interview room appear cold and authoritarian," and "Interview suspects outside of police station." Participants were asked to respond with a "Yes" or "No" on the following: "Do you consider this a technique?" and "Is this a useful technique?" If the participants thought the technique was useful, they were prompted, "For what purposes? Explain." Participants were also asked, "Was [the technique] taught during your trainings?" and "Is this technique available to you? Meaning this is something you can control." Participants were also requested to rate on a 7-point Likert-type scale (1 = never to 7 = always), how often they employ the selected techniques on a regular basis. Finally, participants were asked, "Are you currently satisfied with the interview rooms at your station?" and if not, to elaborate why not. At the end, participants were debriefed and thanked for their participation. Completion of the survey took approximately 20 min.

Coding

All qualitative responses to open-ended questions were first translated into English by research assistants who were native Dutch and Swedish speakers. The first author initially reviewed all responses for each question and devised appropriate general categories that best represented the data. Categories were initially informed by the context manipulation domain of Kelly et al.'s (2013) taxonomy, including categories such as seating arrangement, clothing, and conducting an interview in a formal location. Data-derived categories were also formed to account for responses that did not fit into any category in the taxonomy, and included, for example, checking the auxiliary equipment and ensuring the room's cleanliness (see Tables 1 and 2 for all categories). For

interrater reliability purposes, an independent coder verified 20% of the responses, achieving between 85 and 100% agreements across all categories.

Results

Due to attrition and omission of responses, the numbers of respondents differ for some survey items. The number of respondents (n) is therefore reported and all percentages represent the proportion of respondents who answered the question.

Overall Importance of Interview Setting/Environment

Out of our total sample, 72 participants reported on how important they considered the interview setting to be on a 1 to 7 ($1 = not \ at \ all \ important$ to 7 = *extremely important*) Likert-type scale. The majority (54.2%) considered the setting to have moderate importance. The rest of participants reported it to be extremely important (15.3%), very important (25%), slightly important (4.2%), and not important at all (1.4%).

Interview Setting/Environment Preparations for an Investigative Interview

Participants reported on contextual aspects they consider at the planning stage prior to the interviews. This resulted in 17 categories (displayed in Table 1). The three most frequently mentioned considered (1) seating arrangement (i.e., interpersonal distance, chair positions), (2) clothing (i.e., wearing informal clothes, uniform), and (3) having items such as water, coffee, cigarettes, and tissues to provide suspects with. Looking into the effectiveness scores (ranging from 1 = not at all to 7 = extremely), the techniques were overall judged as moderately effective (the means ranged between 4.62 and 5.85; see Table 1).

The top three techniques judged as effective were limiting distractions (i.e., papers, personal items, noise; M = 5.85, SD = 1.38), the investigator's clothing (i.e., wearing casual or formal clothes depending on their aims; M = 5.48, SD = 1.16), and how the room is set up (i.e., furniture available; M = 5.30, SD = .95). Of note, the "room setup" category was broad; it was assigned all responses that alluded to arranging the room but were not specific (i.e., "two chairs and a table") as opposed to the "seating arrangement" category which was assigned to responses that specifically mentioned the positioning of chairs or interpersonal distances.

Participants also provided the purposes for why they took each contextual consideration. Overall, investigators took into account the suspect's physical comfort, especially when providing purposes for considering the seating arrangements, for having items to provide suspects with, and for conducting interviews in either a formal or more neutral location.

| Table 1 | List of reported | contextual | considerations | s prior to | o interview |
|---------|------------------|------------|----------------|------------|-------------|
|---------|------------------|------------|----------------|------------|-------------|

| Category | Number of times mentioned | Mean effectiveness (1 = not effective, 4 = neutral, 7 = very effective) | Purposes for using | |
|--|---------------------------|--|--|--|
| Seating arrangement | 40 | 5.18 (1.43) | For suspect's visibility $(n = 7)$ | |
| | | <i>n</i> = 25 | To facilitate the interaction $(n = 7)$ | |
| | | | To increase overall comfort $(n = 6)$ | |
| Clothing | 36 | 5.48 (1.16) | To facilitate the interaction $(n = 7)$ | |
| | | <i>n</i> = 23 | To show professionalism $(n = 5)$ | |
| | | | To maintain control $(n = 5)$ | |
| Have items to provide suspect with (water/coffee/cigarettes/tissues) | 19 | 5.21 (1.25) n = 14 | To increase suspect's comfort $(n = 19)$ | |
| Ensure there are no distractions | 15 | 5.85 (1.38) n = 10 | To limit distractions $(n = 6)$ | |
| Conduct interview in a formal or neutral location | 14 | 4.62 (2.56) <i>n</i> = 4 | To increase overall comfort $(n = 3)$ | |
| Check auxiliary equipment (audio, video) | 12 | 4.67 (1.22) <i>n</i> = 9 | Shows professionalism $(n = 3)$ | |
| The room setup (broad) | 12 | 5.30 (.95) | To facilitate seating re-arrangement $(n = 3)$ | |
| | | <i>n</i> = 10 | To increase overall comfort $(n = 3)$ | |

Categories that received less than 10 mentions were omitted from the table. These included the following: the interview location (n = 7), the number of people inside the room (n = 7), removing barriers between suspect and investigator (n = 6), the room cleanliness (n = 5), the size of the room (n = 4), the room's safety (n = 3), seating suspects in a comfortable chair (n = 3), illustrating evidence in the room's walls (n = 1), considering the temperature (n = 1), considering the room lighting (n = 1), and removing weapons (n = 1). Not all participants who provided a category provided an effectiveness measure; we note the number of people who provided it under the mean and standard deviation. We provide the top three most cited purposes for each category; purpose categories that reached less than 3 mentions were omitted

Important Aspects When Designing Interview Rooms

We asked participants to describe the characteristics they consider most important when designing interview rooms. These were fully unstructured, open-ended responses that we then coded into data-derived categories to best represent our data. Participants most commonly reported the importance of creating a comfortable, informal, or relaxing setting (n = 21), accounting for the investigator's safety (n = 19), designing a setting free of distractions (e.g., clocks, noise from neighboring rooms, obstacles in the room; n = 15), considering chair placements (i.e., to facilitate seating arrangements; n = 10), and for the interview room to be of an appropriate size (i.e., a size that is not too small to feel oppressive and not too big as to not be intimate; n = 10).³

Beliefs About Context Manipulation Techniques

Participants were asked about thirteen contextual manipulations adapted from Kelly et al.'s (2013) taxonomy. The results are displayed in Table 2. All the proposed manipulations, except conducting the interview in a small room, were perceived as actual interviewing techniques by the majority of respondents. Considering their physical appearance (i.e., wearing formal or casual clothing), the seating distance, and making the room appear warm and comfortable were (respectively) reported to be the three most useful techniques. Conducting the interview in a small room was reported as the least useful technique, followed by the effects of sounds and colors. These two were also the least frequently taught during trainings.

Paying attention to the physical appearance and seating distance were the most reported as being taught during trainings, as well as the most frequently used. Making the room appear warm and comfortable, although rated as third most useful, was one of the least reported as being taught in trainings.

Current Satisfaction with Interview Rooms

Lastly, 69.2% (n = 52) participants reported not being satisfied with the interview rooms at their current station. Among the participants who provided reasons for why they were not satisfied, the most cited one was that the rooms are too sterile (n = 11), followed by the rooms being too small (n = 6) and not having enough options to adapt within the rooms (n = 5).

³ Other aspects mentioned for designing an interview room included as follows: creating a setting that is flexible and easy to adapt depending on the suspect and/or circumstances (n = 9), a neutral setting (n = 9), ensuring auxiliary equipment is functional (n = 9), having good conditions, such as ventilation and lighting (n = 6), privacy (n = 3), comfortable furniture (n = 3), and a room that reinforces the investigator's authority or control (n = 3). *We report these in a footnote as they were cited less than 10 times.

| | Considered it a technique (%) | Taught during trainings (%) | Under their control (%) | Mean frequency of use (1 = never, 4 = neutral, 7 = always) | Think is useful (%) | Why useful |
|--|--|--------------------------------------|----------------------------------|--|------------------------------|---|
| Conducting interview in a small room | 43 | 17.3 | 41.5 | 2.72 (1.92) | 31 | Increases pressure $(n = 3)$ |
| Interviewing suspect in a formal room | 68 | 47.1 | 71.2 | 4.28 (2.08) | 65.4 | Shows the seriousness of the interview $(n = 5)$ |
| | | | | | | Increases comfort $(n = 5)$ |
| | | | | | | Limits distractions $(n = 3)$ |
| Leave suspect alone in room for a period of time | 66 | 45.1 | 73.1 | 3.15 (2.05) | 59 | Give suspect time to think $(n = 15)$ Breaks are mentally or emotionally necessary $(n = 7)$ Investigator can watch suspect's behavior $(n = 4)$ |
| Alter specific aspects | 72 | 55 | 71.2 | 4.00 (2.27) | 69.2 | To limit distractions $(n = 10)$ |
| of the physical | | | | | | Increase safety $(n = 7)$ |
| space | | | | | | To control the suspect's movements $(n = 6)$ |
| | | | | | | Facilitate interaction $(n = 6)$ |
| Consider the time of | 66 | 29 | 75 | 3.31 (1.90) | 61.5 | Suspect should be rested/ fed $(n = 11)$ |
| day | | | | | | Late interviews considered coercive in court $(n = 7)$ |
| Consider your physical | 85 | 56 | 88.5 | 5.11 (1.7) | 83 | Impression management ($n = 16$), for the most part depends on the suspect and situation ($n = 11$) |
| appearance, such as clothing | | | | | | Casual clothes help the interaction $(n = 10)$ |
| | | | | | | To show professionalism $(n = 6)$ |
| Sitting at a close, intimate distance | 72 | 49 | 75 | 3.89 (2.19) | 72.5 | Shows interest or care $(n = 12)$, but need to be careful with how close $(n = 4)$ |
| | | | | | | To appease emotional suspects $(n = 7)$ |
| | | | | | | Helps build bond or rapport $(n = 4)$ |
| Use a setting that is | 57 | 21.6 | 32.7 | 2.54 (1.80) | 55 | Facilitates disclosure $(n = 6)$ |
| culturally attractive | | | | | | Helps put suspect at ease $(n = 6)$ |
| to the suspect | | | | | | Helps build a bond or rapport $(n = 6)$ |
| Consider the effects of sounds and colors | 52 | 18 | 18 | 2.38 (1.82) | 42 | Sounds from other rooms can be distracting $(n = 3)$ |
| Consider the sitting distance between you and the suspect | 77.4 | 60 | 73.1 | 4.45 (2.17) | 79 | This is dynamic and depends on the situation $(n = 14)$ and appropriate distance can help to build bond or rapport $(n = 5)$ and to show empathy $(n = 5)$, or the seriousness of situation $(n = 3)$ |
| Make interview room | 77.4 | 37.3 | 44.2 | 3.49 (2.13) | 77 | Helps put suspect at ease $(n = 15)$ |
| appear warm and comfortable | | | | | | Facilitates disclosure $(n = 8)$ |
| Make interview room appear cold and authoritarian | 68 | 39.2 | 48.1 | 2.77 (2.02) | 52 | To increase the tension/seriousness of situation $(n = 8)$ |
| Interview suspects | 75.5 | 39.2 | 61.5 | 3.3 (1.84) | 67 | Helps put suspect at ease $(n = 8)$ |
| outside of police | | | | | | Facilitates disclosure $(n = 5)$ |
| station | | | | | | Convenience factor $(n = 5)$ |

 Table 2
 Percentage of YES responses to considering manipulation as a technique, taught during training, manipulation under their control, think it is useful as well as frequency of use, and if useful, why

Out of the 81 participants, between 50 and 54 provided responses in this section; thus, the percentages reported represent the amount of people who responded rather than the whole sample. Categories that reached less than 3 mentions were omitted

Discussion

In this survey, we explored police investigators' use of context manipulation techniques and beliefs on their effectiveness. Overall, the majority of respondents indicated the interview setting to be of importance, and to already employ some context manipulation techniques in their practice. Examples of these include the seating arrangements, their clothing (i.e., formal vs. casual), and having items such as water and coffee handy to provide suspects with. Investigators also indicated contextual considerations to be effective. More specifically, removing distractions (i.e., no papers, clocks, personal items), considering their clothing, and considering the room's setup (i.e., location of table) were rated as the three most effective contextual considerations.

Regarding the specific context manipulation techniques outlined in Kelly et al.'s (2013) taxonomy, the majority of respondents indicated all but one (conducting interviews in a small room) to be actual techniques, but their usage frequencies were rated moderate to low. This aligns with Kelly et al.'s (2015) findings, where the context manipulation techniques were reported among the least used. This is not surprising considering how little the context manipulation techniques were reported to be taught during trainings. Actively thinking about, and using contextual aspects of the interview as techniques, may be a relatively recent notion. Rather than thinking of them as techniques, some contextual aspects may be thought of as routine matters (Kelly et al. 2015). Nonetheless, the majority of the techniques were rated to be useful, and while this may be a result of afterthought, it shows that investigators are receptive to the use of context manipulation techniques. Therefore, contextual manipulations could be potential targets for interviewing training reform because of the positive beliefs that investigators already have.

Investigators' responses aligned more with an informationgathering approach to interviewing over an interrogative or accusatorial approach. For example, making the room "appear warm and comfortable" was reported to be among the most useful techniques, whereas conducting the interview in a small room was reported as the least useful technique. Investigators reported that leaving suspects alone in the interview room was helpful for allowing them time to think and take a mental break from the interview. This alignment with an information-gathering style is noteworthy, because for the most part, the contextual manipulations outlined in interviewing manuals can be interpreted as an attempt to exert control over suspects (Kelly et al. 2019). For example, isolating suspects and interviewing them in small rooms can create a sense of being trapped, instilling a sense of loss of control, and lean toward psychological manipulation (Gudjonsson 2003). Nonetheless, context manipulation techniques can be used to foster a productive investigator-suspect relationship, rather than control, and research examining this idea is moving forward (Kelly et al. 2019).

The results from this survey offer insight into what context manipulation techniques require further empirical examination. For example, based on the contextual considerations most reported, future research should examine what seating arrangements are optimal in an investigative interviewing scenario. While the Reid manual recommends a close proximity and instructs investigators to gradually move closer to the suspect because "the closer a person is to someone physically, the closer he becomes to that person psychologically" (p. 283; Inbau et al. 2013), there is no empirical evidence to support this statement, or the benefits of close proximity. To examine contextual influences, future research will need to tease apart the dynamic nature of interviews and isolate the effect originating from contextual aspects (e.g., seating arrangements) while controlling for suspects' individual differences and/or situational factors.

This survey offers considerations for (re)designing interview rooms. Majority of investigators reported being unsatisfied with their current interview rooms, mostly due to the rooms' sterility. Considering that investigators spend a significant amount of their working time inside these rooms, future research should explore how such sterile environments affect investigators, their interviewing procedures, and their well-being. When asked what they considered most important for designing an interview room, majority of investigators mentioned creating a comfortable, informal, or relaxing setting. Creating a more comfortable setting may actually be beneficial for interviewing suspects as well. Goodman-Delahunty et al. (2014) found the interview setting to be linked to perceptions of non-coercion. Interviews that were conducted in a comfortable setting were associated with an increase in detainees' disclosure of incriminating information. Goodman-Delahunty and colleagues noted that the comfortable setting may have fostered rapport, which in turn facilitated disclosure.

Seventy-seven percent of investigators rated making the interview room "appear warm and comfortable" as a useful technique, while in contrast, 52% also reported making interview room "appear cold and authoritarian" as useful. This finding may represent a heterogeneity of opinions among investigators, but also suggests that investigators view the usefulness of the room's coldness/ warmth as adaptable between different suspects and interview goals. This speaks for the need for adaptability within the interview contexts, and lack of adaptability was a reason for investigators' dissatisfaction with their current station's rooms. Investigators may only be provided cold and authoritarian spaces without an influence over the room's design. Future research could further examine the characteristics of interviewing settings that investigators would design if they had the influence to do so.

This survey was subject to limitations. First, it was limited in its scope and length. While this was intended to maintain the survey's brevity, some respondents may have needed additional explanation of probes, or additional data could have been collected using other methods such as interviews. Second, we relied on a snowball recruitment method starting with police contacts who had previous experience with other researchers. Therefore, our sample largely comprised investigators who were, to some degree, familiar with the interviewing literature. This could clarify why the responses aligned with an information-gathering (as opposed to accusatorial) style to interviewing. Still the finding that 52% reported making interview room "appear cold and authoritarian" as useful testifies to the generalizability of our data, as does the range in rank and experience. Third, we relied on investigator's selfreports. Studies that use alternative approaches, such as shadowing investigators as they prepare for interviews or observing recorded interviews, are needed to more accurately assess the use of contextual manipulation techniques in practice.

In sum, we found that majority of investigators believed the interview setting to be of importance, with most investigators already employing some context manipulation techniques in their practice (i.e., considering seating arrangements, their clothing). This highlights the need for future research to consciously and systematically examine how investigators can effectively use context manipulation techniques. Moreover, this survey provides evidence that investigators are receptive to using context manipulation techniques in their practice, as they consider them useful despite how little they are taught during trainings. Communicating evidence-based findings on context manipulation techniques that, to some degree, investigators already employ, or on an aspect that they already consider to have importance, increases the feasibility of investigators incorporating them into their practice.

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Compliance with Ethical Standards

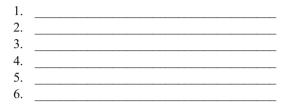
Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval This study was approved by our standing ethical committee at Maastricht University. All procedures performed involving human participants were in accordance with the ethical standards of the institutional committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Appendix. Police survey (English version)

Thank you for taking the time to complete the following short questionnaire. This survey will focus on your perceptions, knowledge, and current use of techniques specific to the environment/setting in which investigative interviews take place. Please answer thoroughly and truthfully. 1. Is there anything you do on purpose, in relation to the interview environment/setting, to prepare for a suspect interview? For example, arranging the chairs in a particular way, deciding on a specific location to conduct the interview, changing out of uniform to wear something informal, etc.



2. For each thing you mentioned above, place a number from 1 to 7 in the box to indicate how effective you consider this to be (1 = not effective, 4 = neutral, 7 = very effective).

On the 'Purpose' column, please write why you consider it effective. For example, for making the interviewee more comfortable, or for showing interest in what they have to say, etc.

| | Effectiveness 1 = not effective, 4 = neutral, 7= very effective | Purpose Why do you consider it effective? |
|----|---|--|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |

3. In your opinion, how important do you consider the environment/setting of the interview to be during an investigative interview. Please check one:

Extremely important Very important Moderately important Slightly important Not at all important

4. Thinking about the aims and purposes of an interview, what do you consider to be the most important characteristics when designing an interview room?

The following questions will ask you about a specific interview domain: *context manipulation*. This term refers to the altering of the physical and temporal space where the interviewing occurs to maximize the probability of a successful outcome (the techniques listed below all fall under the context manipulation category). Q5. Please select **YES** or **NO** for the following. Please respond to all questions.

| | Do you consider this a technique? | Is this a useful technique? | If useful, for what purposes? Explain | Was it taught during your trainings? | Is this technique available to you? Meaning, is this something you can control? | On a scale from 1 to 7, how often do you do this on a REGULAR basis? (1 = never, 4 = neutral, 7 = always) |
|---|---|-----------------------------------|--|--|---|---|
| 1. Conducting suspect interview in a small room | YES/NO | YES/NO | | YES/NO | YES/NO | noulai, (antajo) |
| 2. Interviewing suspect in a formal room | YES/NO | YES/NO | | YES/NO | YES /NO | |
| 3. Leave suspect alone in room for a period of time | YES/NO | YES/NO | | YES/NO | YES/NO | |
| Alter specific aspects of the physical space. For example, arrangement of furniture or removing objects from room | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 5. Consider the time of day | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 6. Consider your physical appearance, such as clothing | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 7. Sitting at a close, intimate distance | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 8. Use a setting that is culturally attractive to the suspect | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 9. Consider the effects of sounds and colors | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 10. Consider the sitting distance between you and the suspect | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 11. Make interview room appear warm and comfortable | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 12. Make interview room appear cold and authoritarian | YES/NO | YES/NO | | YES/NO | YES/NO | |
| 13. Interview suspects outside of police station | YES/NO | YES/NO | | YES/NO | YES/NO | |

6. Are you currently satisfied with the interview rooms in your station? if not, what would you change?

Yes

No

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